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# Logicube® CellIDEK® TEK



## CellIDEK TEK User's Manual

**Version: 1.29**

**MAN-CDTEK**

**07/2014**

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## 1. Introduction to CellIDEK TEK

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### Introduction

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Congratulations on your purchase of CellIDEK TEK from the manufacturers of the CellIDEK fully integrated extraction system.

CellIDEK TEK is designed for the technically proficient forensic investigator and uses the same advanced technology as CellIDEK, but allows the user to have full control in a windows environment. CellIDEK TEK can be installed on any type of Windows PC or laptop running Windows XP (See minimum specifications below).

TEK stands for Technical Extraction Kit. It is designed to carry out data extractions from cell phones, PDAs, SIM cards, flash memory and GPS devices. Data can be extracted from phones and PDA devices using three connection methods; data cables, infrared ports or Bluetooth<sup>®</sup> radio frequency communications. The target devices may connect to CellIDEK TEK by one, two or all three of these methods.

The CellIDEK TEK software also helps with easy identification of the target device and informs the user of available connection methods. The user can select the preferred connection method. Historically, data cable connection has been time-consuming as it can be difficult to locate and identify the correct data cable for the target device. CellIDEK TEK eliminates this by using a set of intelligent data cable connectors. Once the target device has been identified, CellIDEK TEK automatically selects the correct data cable connector from the connector rack. This is a fast and reliable data cable connector selection process.

#### **Recommended use of CellIDEK TEK**

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CellIDEK TEK is a forensically sound mobile phone and PDA data extraction tool, able to obtain real time intelligence from a mobile handset in the field or in the laboratory. It is not designed to extract every piece of information from

the phone as a full forensic examination would provide, but is designed to obtain key information. It is aimed at getting information immediately from the mobile handset to help move an investigation forward. CellIDEK TEK has been designed with a full audit trail allowing users to demonstrate when actions were taken.

CellIDEK TEK has been tested on a large range of handsets and its capabilities are displayed during the data extraction process. These tests have verified that CellIDEK TEK extracts data reliably.

Users should consider using CellIDEK TEK in an appropriate environment to prevent the suspect handset from receiving any messages or calls that will change its data. This can also be considered as interception and hamper an investigation. The user should consult with their local authorities for recommendations on the legal implications of intercepting data in the context of their examinations.

### **Minimum PC Requirements**

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- PC/Laptop with Pentium 300 megahertz (MHz) or higher processor clock speed.
- System Memory: 256Mb RAM Minimum.
- Windows XP compatible PC/Laptop with Service Pack 2.
- 500Mb of Available Hard drive space (Minimum to install and run application. Note: amount of data downloadable from a device will be limited upon hard disk space available for storage of transferred data).
- Internal/External CD drive (For Installation only).
- USB Port.
- XGA (1024 x 768) or higher resolution video adapter and monitor.

### **Features**

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- Able to connect to a wide variety of cellular phones, GPS devices and PDA (Personal Digital Assistant) devices.
- Direct connection via cable, IR (Infrared) or Bluetooth.
- Built-in cellular phone identification module.
- Water-resistant, rugged carrying case.
- MD5 Hash to ensure that captured data is not tampered with.
- Works in tandem with user's own desktop or laptop PC.

### **Using this guide**

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This user guide is made up of 6 sections:

- Introduction
- Getting Started (Fast Start)
- Capturing Data
- Analyzing Captured Data
- Other Features
- FAQs and Troubleshooting Guide

**Contents**

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- CellIDEK TEK hardware in a rugged, water-resistant carrying case.
- A set of intelligent data cables, which are able to connect to a variety of popular cellular phones.
- 1 Nokia CA-42 Cable.
- 8 Nokia Flash Adapters  
(CBL-CDNK1 through 3 and CBL-CDNK5 through 9)
- 1 Internal Battery Pack (Installed)
- 1 IR/Bluetooth Module (Installed)
- 1 Network Isolation Card (NIC)
- An AC adapter
- A USB Cable
- A 12V Power Cable that connects to a military-style battery
- 2 CDs containing CellIDEK TEK software, Core Components and a copy of the Users' Manual
- A Quick-start Guide



**CellIDEK TEK**

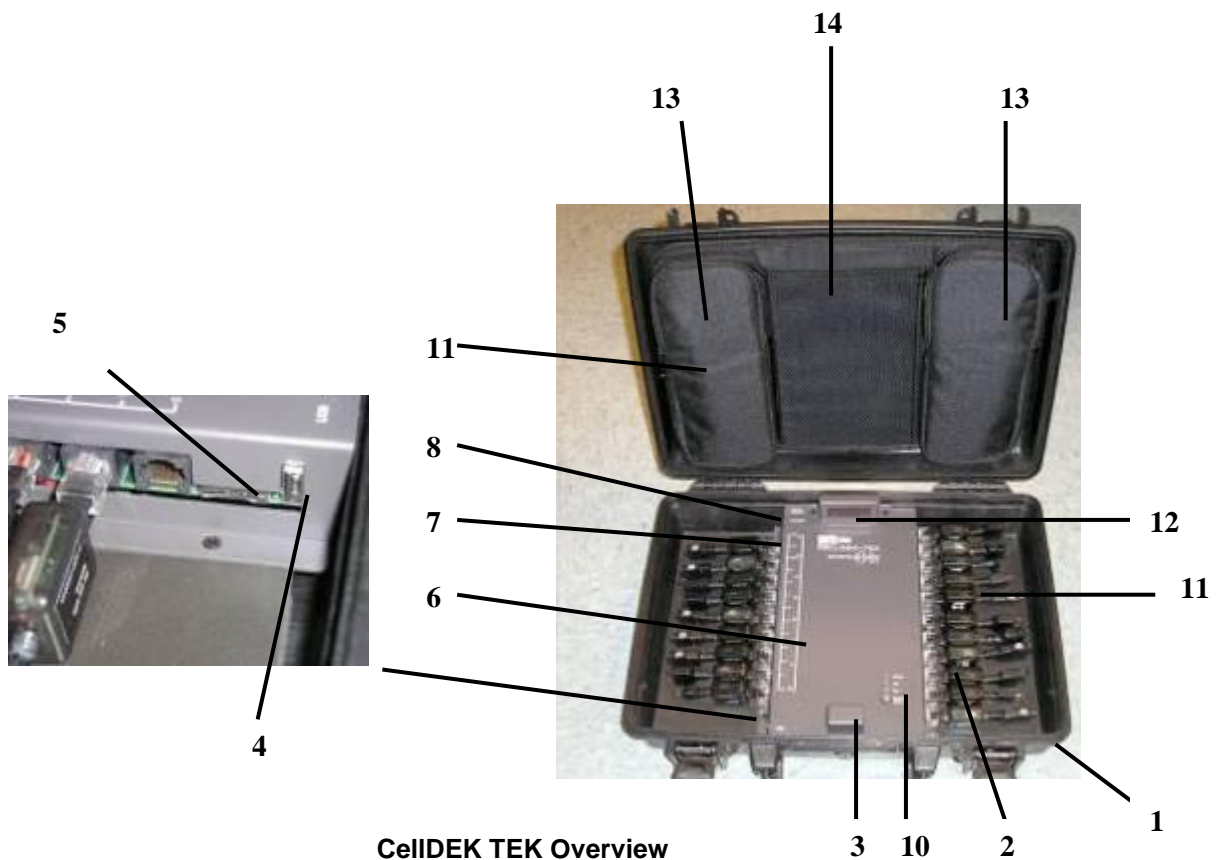
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## 2. Getting Started (Quick Start)

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### Overview of the CellIDEK TEK

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CellIDEK TEK Overview

1. **CARRYING CASE** – This rugged carrying case protects the CellIDEK TEK hardware from moisture and other environmental hazards.
2. **PHONE CABLE ADAPTER RACK** – This rack is for cell phone adapter cables that are not currently in use. It is also where the CellIDEK TEK detects the adapter cable prior to a capture. The rack can hold up to 20 Adapters.
3. **PHONE CABLE JACK** – When CellIDEK TEK lights the correct adapter; plug it into this slot.
4. **USB PORT #1** – This USB port is used to connect an external USB drive for data backup purposes. When used to extract data from a USB drive, the port becomes write-protected.

5. **SIM CARD SLOT** – This port allows users to capture data directly off the SIM or USIM card.
6. **MEASURING TOOL** – Use this ruler to measure a handset’s dimensions in inches or centimeters.
7. **USB PORT #2** – This USB port connects the CellIDEK TEK hardware to the laptop or desktop PC that is running CellIDEK software.
8. **AC POWER SOCKET** – The AC power supply plugs into this socket. The power supply charges the optional CellIDEK TEK battery.
9. **EXPANSION SLOT** – This slot is where the IR / Bluetooth module connects.
10. **BATTERY TEST METER** – This button tests the current life of the internal battery. Three LED’s show the battery’s status.
11. **PHONE ADAPTER CABLES** – These adapter cables connect the CellIDEK TEK to a large variety of handsets. 20 adapters fit on the rack.
12. **EXPANSION PORT COVER PLATE** – This plate protects the expansion slot when the IR / Bluetooth module is not being used.
13. **STORAGE BAG** – These storage bags can hold extra phone adapters, cables and other items.
14. **QUICK START GUIDE** – This laminated card sits in a mesh bag for easy reference.

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## Setting up the CellIDEK TEK

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Proper setup of the CellIDEK TEK requires two major steps:

- Install the CellIDEK TEK software on a host PC.
- Attach the CellIDEK TEK to the host PC.

Both of these procedures are outlined below.

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## Software Installation Instructions

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The enclosed **CellIDEK TEK** software CD-ROM and the Core Components CD-ROM can be installed on any Desktop or laptop PC that meets the minimum system requirements.

**IMPORTANT NOTE:** Do not attach the USB cable and the **CellIDEK TEK** device to your computer system until the software is fully installed and the computer system has been restarted. Please refer to the **Connecting the CellIDEK TEK to a PC** Setup Instructions.

### Minimum and Recommended PC Requirements

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#### Minimum Specification

- PC/Laptop with Pentium 300 megahertz (MHz) or higher processor clock speed.
- System Memory: 256MB RAM Minimum.
- Windows XP with Service Pack 2 or higher
- 500MB of Available Hard drive space (Minimum to install and run application. Note: amount of data downloadable from a device will

be limited upon hard disk space available for storage of transferred data).

- Internal/External CD drive (For Installation only).
- USB Port.
- XGA (1024 × 768) or higher resolution video adapter and monitor.

### Recommended Specification

In addition to the above minimum specifications, recommended are:

- Processor: Intel Pentium m Processor 1.10GHz or higher.
- System Memory: 512 MB RAM or higher recommended.
- Windows XP with Service Pack 2 or higher.
- USB 2.0 port.
- 40GB or larger hard drive.

### Possible Issues/Conflicts

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#### Installing on a System without Windows XP Service Pack 2 or higher

Windows XP itself does not support USB 2.0. This was updated in Service Pack 2. Systems not running Service Pack 2 will still be able to install the software but may not be able to connect to the hardware.

#### Installing on a System without Windows XP Service Packs 1 or 2

Windows XP again does not support Bluetooth Devices. This was updated with Service Pack 1. Again systems would be able to install the software but may not be able to connect to the hardware.

#### Pre-Existing Software

It is strongly recommend that you uninstall all previously installed phone applications and phone extraction software before performing the CellIDEK TEK software installation.

Doing so will prevent any previously loaded phone device drivers loaded by other phone software applications from conflicting with those the CellIDEK TEK software uses. Problems and delays may result if pre-existing drivers are selected for phone extractions instead of the correct drivers installed by the CellIDEK TEK software.

To resolve a driver conflict, follow the *Conflicting Driver Instructions in the Other Features & Technical Notes* section of this manual.

### Step by step CellIDEK TEK Installation Instructions

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1. Insert the CellIDEK TEK CD-ROM into your computer's CD-ROM drive.
2. The CellIDEK TEK Setup software will launch automatically. If not,
  - a. Double-click the **My Computer** icon.
  - b. Right-click the CD- ROM drive letter.

**NOTE:** Where X:\ it represents the letter drive assigned to your CD-ROM drive by the operating system.

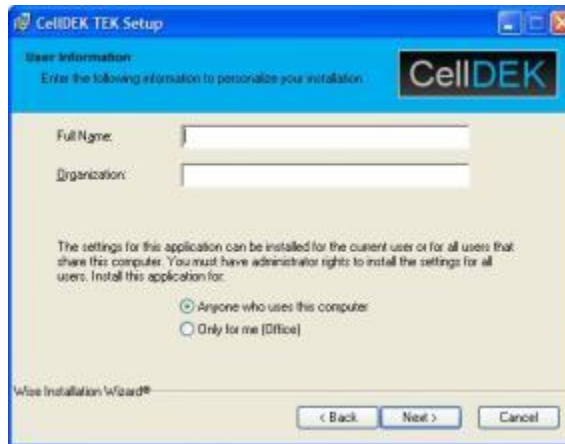
- c. Click **Open**.

- d. Double-click the **CeIIDEKTEK.exe** icon
- 3. On the Welcome to the *CeIIDEK TEK Installation Wizard* screen click the *Next* button.



**Installation Wizard**

- 4. On the **User Information** screen enter your *Full Name:* and your *Organization:* information and chose either the *Anyone who uses this computer* option or *Only for me* option settings then click the **Next** button.



**User Information**

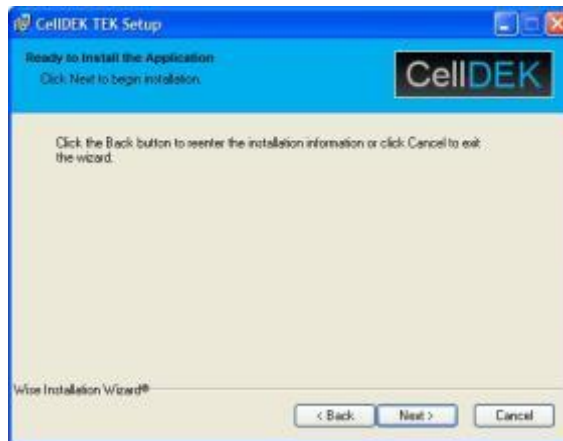
- 5. Click the **Next** button on the Destination Folder screen.



**Destination Folder**

**NOTE:** The CellIDEK.exe file can manually be found at *C:\Program Files\FSS Software\CellIDEK Tek\CellIDEK.exe* and the data files containing capture reports can manually be found at *C:\Program Files\FSS Software\CellIDEK Tek\Datafiles*.

6. Click the **Next** button at the **Ready to install the Application** screen to start the updating system process. This portion will take several minutes to complete.



**Ready to Install**

**NOTE:** During the installation, you may see a screen appear stating the software has not passed Windows Logo testing to verify its compatibility with Windows XP. Click the **Continue Anyway** button if this appears.



**Software Installation pop-up**

At the CellIDEK TEK has been successfully installed screen click the **Finish** button.



**Installation Complete**

The installer will check to see if the 21 required components have been installed. If the Core Components are installed the installation is complete and you can click **Exit**. If all of the required Core Components have not been installed a note will appear indicating: *Setup has detected X of 21 required components have been installed*. Click **Exit** and eject the Software Installation Disk.

If you received a message indicating some or all of the core components are not installed, insert the CellIDEK TEK Core Components Software Ver. 1.3.0 CD-ROM into your computer's CD-ROM drive. At the **CellIDEK TEK** Main setup screen click the **Install** button next to **Install CellIDEK TEK core components**.



**Installation Menu**

**NOTE:** To prevent unnecessary Windows security warnings it is recommended that you disable driver signing. This option can be re-enabled after the installation. Instructions to turn off driver signing can be found in the next section called **How to Remove Driver Signing in Windows XP**.

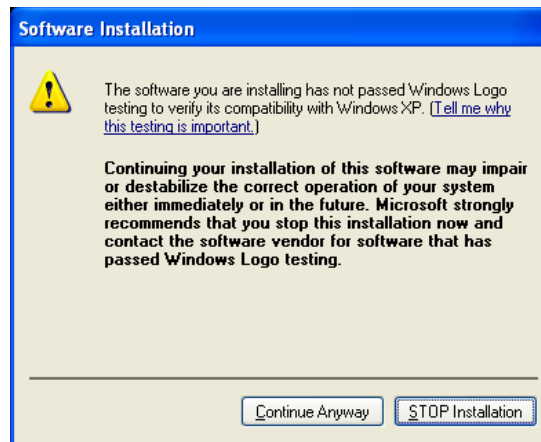
Click the **Install** button on the Component Installer screen and accept the third party application installation by clicking Continue.

On the **Select Components to Install** screen ensure that all items are selected by placing a check mark on each option available. Click the Install button.

**NOTE:** The **Install CellIDEK TEK Core Components** install procedure will install 21 required components which will take several minutes to complete.

During the automated installation procedure many dialog boxes will appear on the computer screen copying the necessary files to the computer system.

**NOTE:** If the driver signing warning option was **NOT** switched to off from Windows then the install procedure will display several dialog boxes like the one shown below. This window is simply requesting that the user click the **Continue Anyway** button each time it appears.



**Driver Signing Warning**

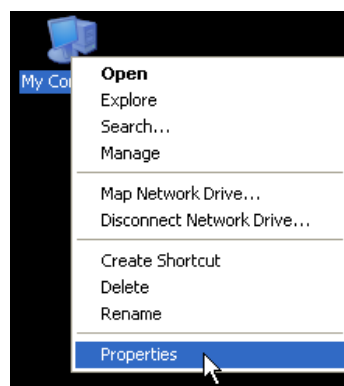
Click the **Finish** button at the All components have been installed dialog box.

Click Exit and remove the CellIDEK TEK Core components CD-ROM.

Restart the computer system to install the Core Components and CellIDEK TEK software.

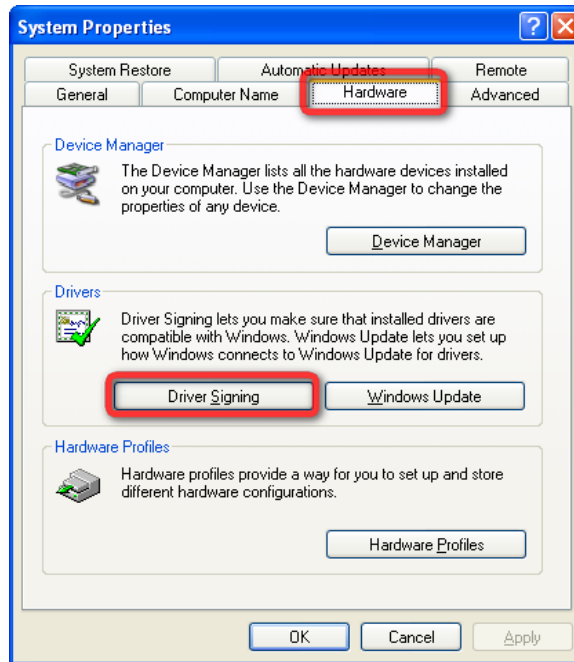
**How to Remove Driver Signing in Windows XP**

1. On the Desktop (or from your Start Menu), right-click the **My Computer** icon and select **Properties** from the menu to display the System Properties window.



**My Computer Properties**

- On the System Properties window, select the **Hardware** tab then click the **Driver Signing** button.



**System Properties Window**

- In the Driver Signing Options window, select **Ignore – Install the software anyway and don't ask for my approval** then click the **OK** button.



**Driver Signing Options**

### Connecting the CellIDEK TEK to the Host PC

Once the software installation is complete, follow the procedure below to connect the CellIDEK TEK unit to the host PC for the first time.

**IMPORTANT NOTE:** Do not attach the USB cable and the **CellIDEK TEK** device to your computer system until the software is fully installed and the computer system has been restarted.

#### Step by step Instructions

1. Power up the PC that has the CellIDEK TEK software installed.
2. Power up the CellIDEK TEK hardware.
3. Plug in the USB Cable between USB Port #2 on the CellIDEK TEK and an open USB Port on the PC.  
**NOTE:** USB Port #2 is next to the DC Power Socket on the CellIDEK TEK.
4. The CellIDEK TEK will immediately be recognized as a USB device and the Phone Adapter Cables will flash red.

**NOTE:** During the USB detection process of the CellIDEK TEK device Windows will display the Welcome to the found new hardware wizard. During the initial detection process the user will be prompted to respond and interact with the on screen prompts.

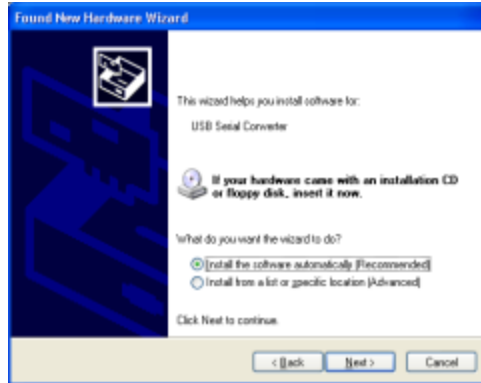
If the CellIDEK TEK hardware is connected to a different USB port on the computer this process will need to be repeated.

5. **Prompt #1-** Click **Yes, This time only**, and then click the **Next** button. See below.



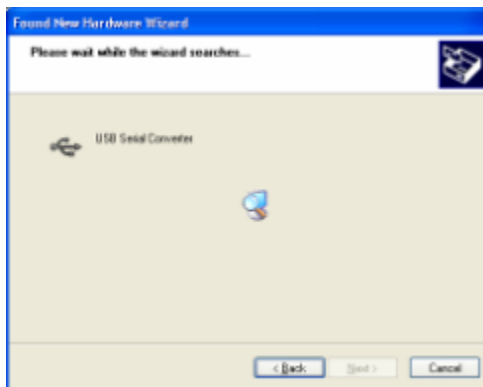
**New Hardware Wizard**

6. At the **USB Serial Converter** screen below select **Install Software Automatically (Recommended)** option and click the **Next** button.



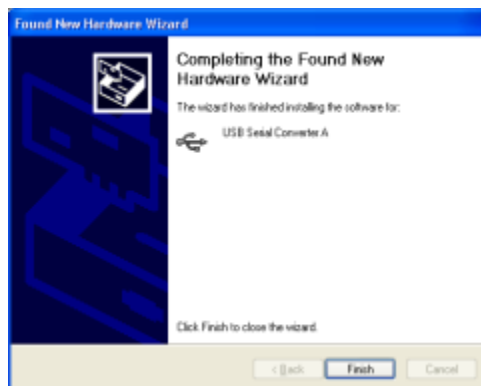
**Install Options Menu**

7. The **Found New Hardware Wizard** will perform a search for the USB Serial Converter.



**Driver Search Screen**

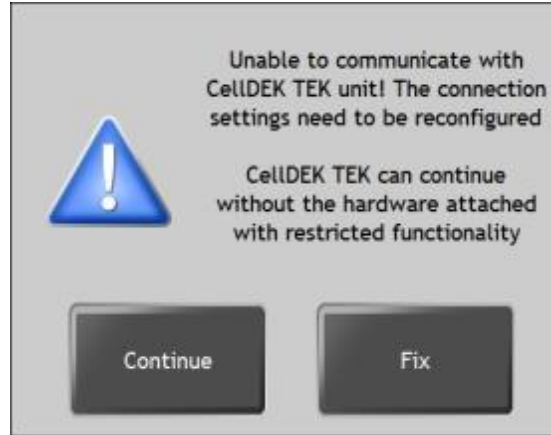
8. When the installation is complete, click the **Finish** button.



**Installation Complete**

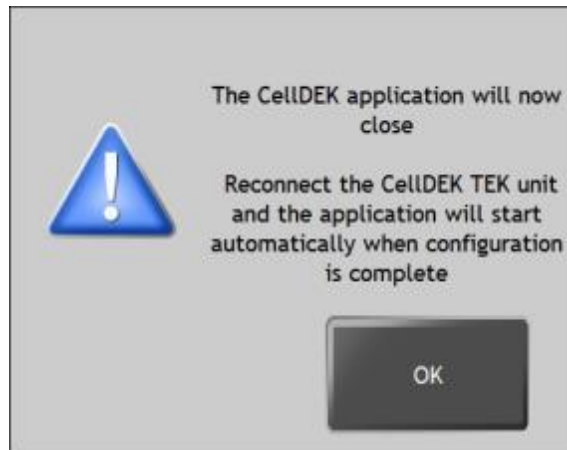
9. Repeat Steps 5 - 8 for the **USB converter, USB Serial Port** and any other hardware that is detected. Several USB devices will be detected. Do not cancel out of any prompts.
10. After the USB detection is complete Double-click the CellIDEK shortcut on the Desktop to Launch the CellIDEK TEK software application.

11. CellIDEK TEK software will automatically launch the EULA End User License Agreement if the CellIDEK TEK hardware is detected. If the hardware is not detected, the following notification screen will appear. Click the **Fix** button to attempt to re-detect the CellIDEK TEK.



**CellIDEK TEK Notification**

12. The following instruction window will appear. Click the **OK** button to close the CellIDEK TEK application.



**CellIDEK Port Config Screen**

13. Disconnect the USB cable coming from the CellIDEK TEK to the PC.
14. Wait about 10 seconds then re-connect the USB cable to the PC.
15. The CellIDEK TEK software should automatically start.

**IMPORTANT NOTE:** There is a small possibility that the Windows Hardware Device Manager may fail to locate the USB Serial Converter Device drivers. If USB Port detection problems occur, call Logicube Technical Support using the contact information on the last page of this manual for assistance.

## Installing Accessories

The CellIDEK TEK currently has two accessories that may require installation: (if these accessories were pre-installed at the factory skip this section)

**Infra-red (IR) and Bluetooth module** – This module enables the CellIDEK TEK to capture handset information via IR and Bluetooth.

**Internal battery** – This rechargeable battery can run the CellIDEK TEK up to ten hours on a single charge.

Please contact your reseller or Logicube if you need to purchase these accessories.

### Installing the IR / Bluetooth Module

1. Use a Phillips-head screwdriver to remove the screws from the Expansion Port Cover Plate and remove the plate.
2. You will notice a socket underneath the plate for the IR / Bluetooth Module.
3. Plug the IR / Bluetooth Module into the socket as shown below.



**Attaching IR / Bluetooth Module**

### Installing the Internal Battery

If you wish to purchase an internal battery for your CellIDEK TEK, you will need to ship the CellIDEK TEK device back to Logicube, Inc. for installation. The battery cannot be installed by the User.

## Starting CellIDEK TEK

### Battery Status (Internal Battery)

**NOTE:** This section only applies if your CellIDEK TEK has the internal battery.

Attach the DC power supply cable into the DC input socket and connect the other end to an AC wall outlet. If a battery is used, allow the battery to charge for approximately 24 hours before first use.

The CellIDEK TEK main application screen displays the battery life of the unit. When the battery has depleted to around 5%, CellIDEK TEK will alert the user to recharge the battery. When the battery level drops below this state, the CellIDEK TEK application will close and will not restart correctly until the unit is charged. The image below shows that the CellIDEK TEK battery is about 60% charged:



**Battery Recharge State**

---

### Charging CellIDEK TEK

**NOTE:** This section only applies if your CellIDEK TEK has the optional internal battery.

The CellIDEK TEK hardware may be charged with its AC power supply. The power supply can be plugged into 110 or 230V AC power.

Normal charge time = 3-4 Hours (fast charge) – A full charge will give up to 10 hours of usage.

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### Connecting CellIDEK TEK to a PC

1. Power up the PC that has the CellIDEK TEK software installed.
2. Power up the CellIDEK TEK hardware.
3. Plug in the USB Cable between USB Port #2 on the CellIDEK TEK and an open USB Port on the PC.

**NOTE:** USB Port #2 is next to the DC Power Socket on the CellIDEK TEK.

4. The CellIDEK TEK will immediately be recognized as a USB device and the Phone Adapter Cables will flash red.
5. Launch the CellIDEK TEK software application.

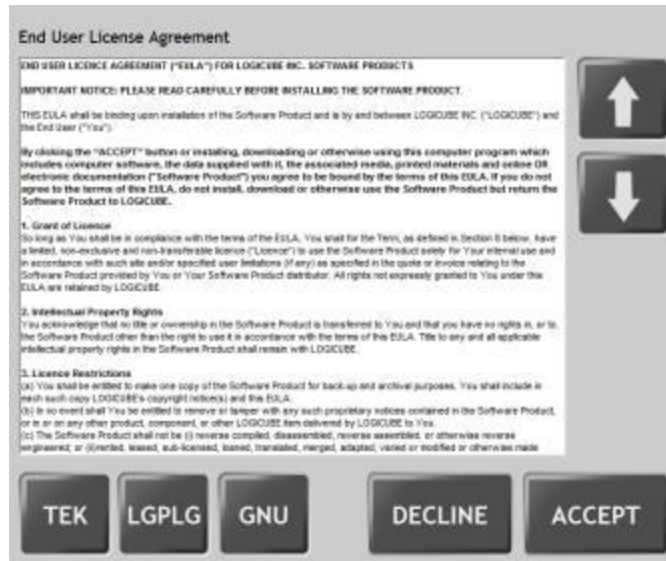
**NOTE:** After software ver. 1.10.0.1., the CellIDEK TEK software will automatically launch once the hardware is connected.

---

### Launching the CellIDEK TEK Application

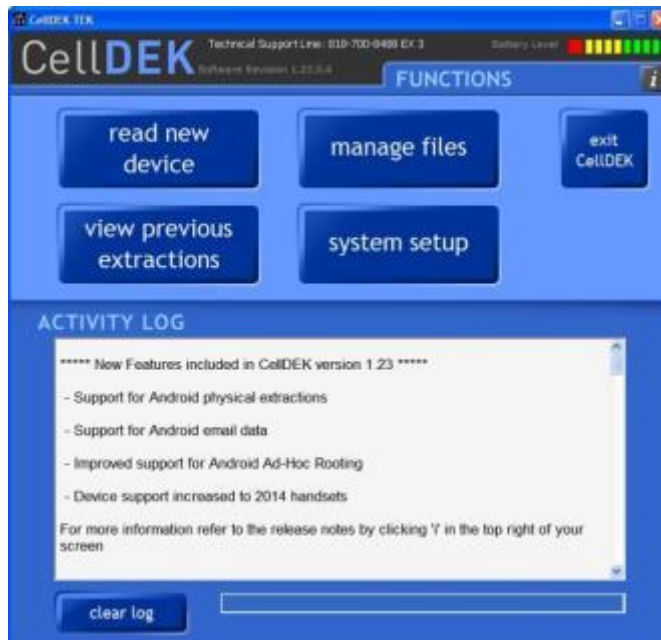
Follow the instructions below to launch the CellIDEK TEK application:

1. After connecting the CellIDEK TEK, the CellIDEK TEK application will launch. The EULA (End User License Agreement) will appear.



End User License Agreement

2. After accepting the EULA, CellIDEK TEK will load to the Main Application Menu.



CellIDEK TEK Main Application Screen

### Shutting Down CellIDEK TEK

To shut down CellIDEK TEK after use, be sure to close the CellIDEK TEK application by clicking the **exit CellIDEK** button on the PC before you shut down the CellIDEK TEK hardware.

---

### Important Notes

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If the PC goes into Sleep or Hibernation Mode, or the laptop lid is closed and re-opened, the CellIDEK TEK software will hang. You will need to close the application from the Task Manager in Windows. Once it is closed, re-start the application and continue working. DO NOT reboot the PC.

To set the Power Options in Windows XP to avoid going into sleep or hibernation, follow the steps below:

1. Right-click the **Desktop** and click **Properties**.
2. Click the **Screen Saver tab** and in the Monitor Power section, click the **Power** button.
3. In the **Power Schemes** tab, set **Turn off monitor**, **Turn off hard disks**, **System standby**, and **System hibernates** options to **Never**.

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### Identifying a Target Device

---

Target devices can be difficult to identify. Many show the manufacturer's name or logo, but not the model name or number. This information is usually displayed behind the battery of the target device. To view the label, the target device would be powered down and the battery removed.

On power-up a PIN or PUK number may be required to unlock the target device. This number can be obtained from the device's network service provider by authorized law enforcement personnel.

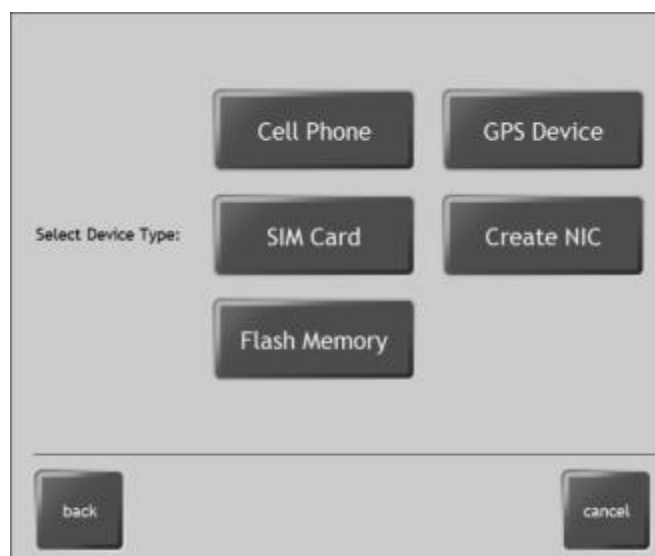
Identification of the target device is required to determine which connection methods are available (e.g. cable, infrared or Bluetooth) and for data cables, the specific cable connector.

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### Attaching a Cellular Phone

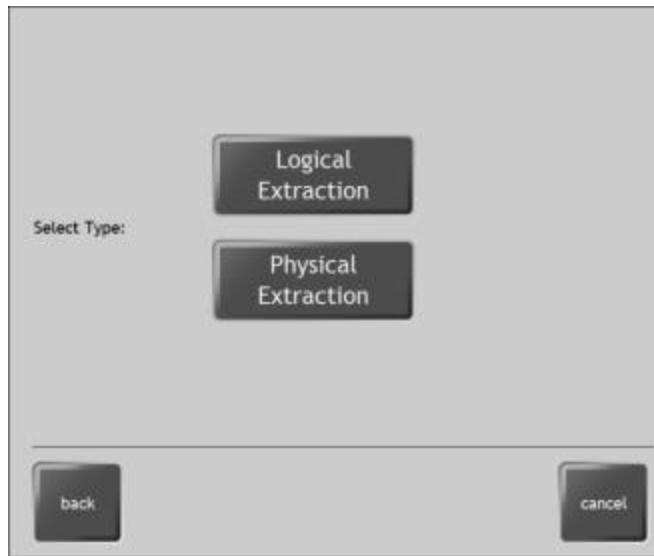
---

1. Begin by clicking the **Read New Device** button on the Main Application Screen. The Device Type Selection screen will appear.



**Device Type Selection**

- Click the **Cell Phone** button. The next screen prompts the user to choose either logical or physical extraction



**Extraction type**

- Select Logical Extraction for most phones. Physical Extraction is available for Android devices and the Nokia 1100 only.

**Physical Extraction**

If Physical Extraction is selected, the following screen will appear:



**O/S or Chipset screen**

Select **By O/S**. This is the only option that is selectable. 'By Chipset' is only available with the Logicube CellXtract-TNT. Visit <http://www.logicube.com/shop/cellxtract-tnt/> for more information on the CellXtract-TNT



**O/S Type**

Select either Android O/S or Nokia 1100. If Android O/S is selected, follow the on-screen instructions on an Android O/S physical extraction.

**Logical Extraction**

If Logical Extraction is selected, the manufacturer list will appear. If the manufacturer is unknown, the search is carried out on all manufacturers.

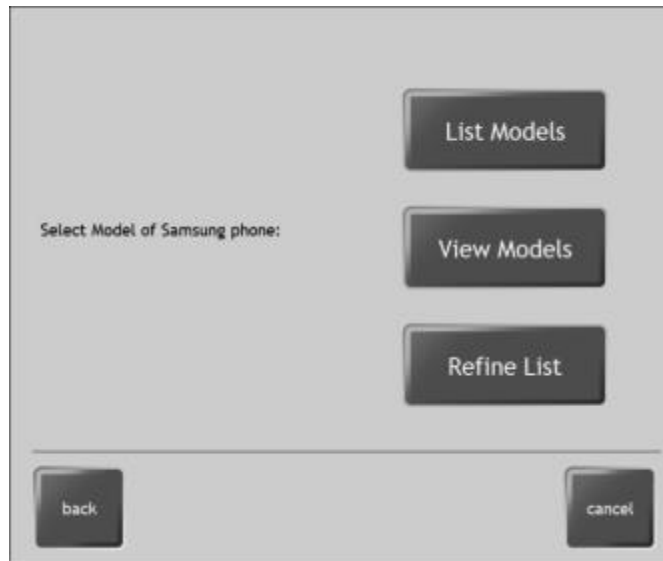
For a given manufacturer, CellIDEK helps to identify the target cellular phone as follows:

- Selection from a model list
- Selection from model images
- Selection from a “short list” of model images based on entered dimensions.



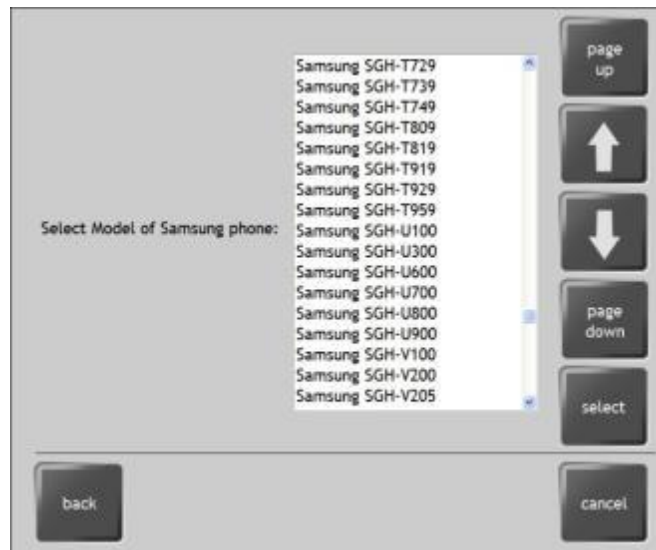
**Cell Phone Manufacturer**

Once the manufacturer is chosen, the Cell Phone Selection Screen will appear.



**Cell Phone Selection**

If the user knows the model of the cell phone, then the ***list models*** option should be selected. A list will come up of all known models.



**Cell Phone Model List**

Scroll down the list and select the model number of the cell phone.

If the model is unknown, images of all models for the chosen manufacturer are obtained by selecting ***View Models***.



Cell Phone Models

**NOTE:** Fully verified and supported handsets are indicated by green “check marks”. Handsets that are not supported but are expected to work are indicated by amber check marks. Unverified handsets have no check mark; so treat extractions from these handsets as a minimum data extraction.

**NOTE:** Some handsets can use a Network Isolation Card (NIC) card during capture. This feature is further explained in the **Network Isolation (NIC) Card** section later in this chapter.

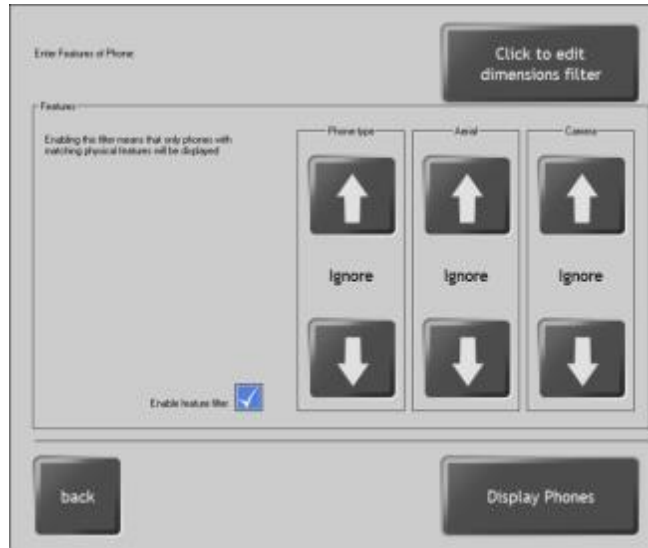
Scroll down the list and choose the image that looks like the target cell phone.

You may be faced with a large list of cell phones. To narrow down the search, click the **Back** button.

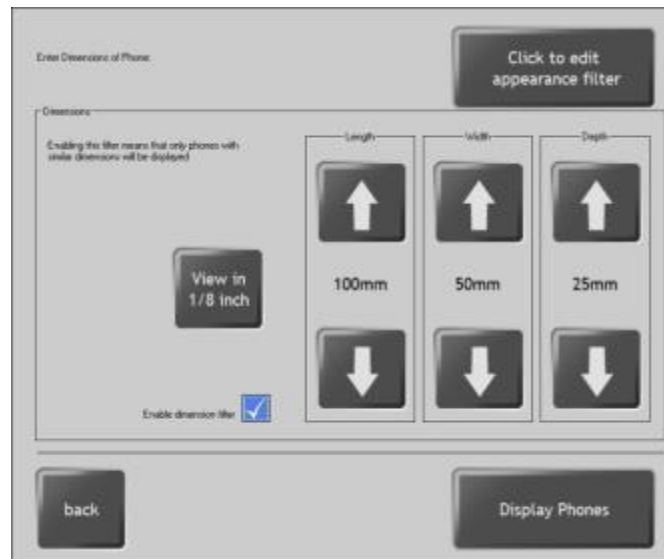
Select **Refine List**. The user has the option to apply two filters. The user can choose to apply either or both of these filters.

The first will narrow down the images shown using physical features of the phone (e.g. Does the phone have an antenna or camera and what type of phone is it? Clamshell, swivel, slide or bar).

The second, or Input Dimensions filter is used to enter the physical dimensions of the target device (length, width, depth) using mm or inches. CellIDEK TEK will display the models matching those dimensions or features (within a given tolerance and depending on which filter is used).



Enter Features



Enter Dimensions

**NOTE:** There is a measuring ruler printed on the CellIDEK TEK in inches and mm.

**NOTE:** This screen will allow the user to enter the dimensions in mm, 1/8 inch or 1/16 inch increments.

Click the Up and Down Arrows to change each filter. If the handset does not have one of the features, such as a camera, set the filter to “Ignore”.

When finished, click the **Display Phones** button. CellIDEK will display models matching those features.

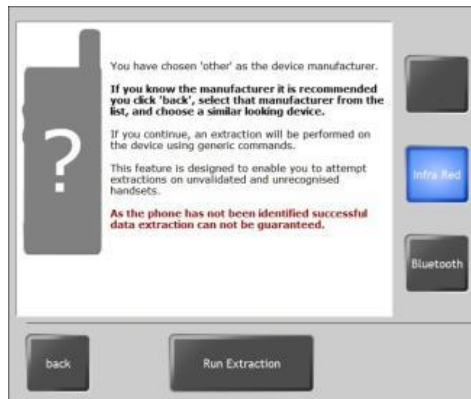
Click the model number or image to highlight it, and then click the Select button. Refer to the “**Connection Options**” section later in this chapter.

**Generic Extraction Module**

If the “Other” Button is chosen on the Cellphone Extraction Screen, the Generic Extraction Module appears. This is used to extract from handsets that have not been identified or verified with CellDEK TEK. This includes handsets where data could not be obtained from the known manufacturers as well as from unknown manufacturers.

The time taken for data extraction can take over 30 minutes, depending on the amount of data.

The Generic Extraction Module only supports Bluetooth and Infrared connections

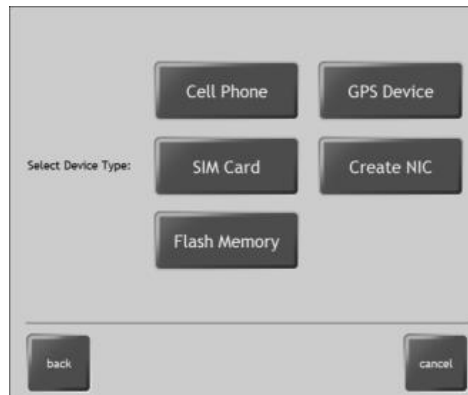


**Generic Extraction Module**

**NOTE:** Users should be aware that data extracted with the Generic Extraction Module is NOT validated. It is recommended that any data extracted using this method is visually verified by the User to ensure that no data is missed or misrepresented.

**Attaching a PDA**

1. Begin by clicking the **Read New Device** button on the Main Application Screen. The Device Type Selection screen will appear.



**Device Type Selection**

2. Click the **Cell Phone** button. The next screen prompts the user to choose the type of PDA. The choices are Windows Mobile, Blackberry, Palm OS, and Android.



Select PDA Type

3. Palm OS based PDA devices are supported by software version 1.10.0.0. and higher with the following caveats:
  - Extraction of SMS messages is currently not supported.
  - Extraction of user files is currently not supported.
  - Some Palm 680 handsets may not extract with CellIDEK TEK even though it supports most Palm 680 handsets. Incompatible models include AT&T Palm 680.

CellIDEK TEK is able to collect the following information from Palm devices: Contact Details, Call Logs (if available), Calendars, Tasks, Notes and Palm Database (PDB) files. PDB files are where Palm OS keeps data stored in RAM. The data is kept in database format. These files can contain user data.

4. Windows-based PDA devices need to have Active Sync enabled before they can be set to Infrared mode. Please refer to the **Connecting via Infrared** section later in this chapter.
5. Blackberry devices can only connect via Cable. Please refer to the **Cable Connection** section later in this chapter.

**NOTE:** Blackberry devices that are password-protected will need to be unlocked before data can be extracted. Please refer to the **Unlocking a Blackberry Device** section later in this chapter.

6. Most PDAs will need to connect to CellIDEK TEK via Bluetooth. Please refer to the **Connecting via Bluetooth** section later in this chapter.
7. Additional Cable Support for PDAs:

A set of 5 new PDA cable tips and a USB cable are available from:

<http://www.gomadic.com/celldek.html>

These tips will enable the User to connect to a number of PDAs that are not supported by the current CellIDEK TEK cables. However, it must be noted that, although many of these PDAs are already supported by CellIDEK TEK via Infrared, an extraction using a cable with provide a faster extraction. Appendix C lists the 150 PDAs that are supported by these cable tips.

Each tip can be attached to the customized USB cable allowing a large range of tips to be connected to the same USB cable.

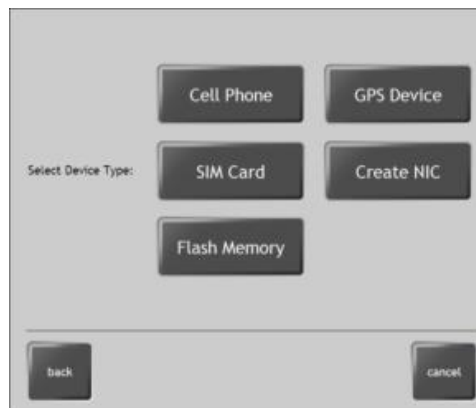


**Attaching a SIM Card**

**NOTE:** CellIDEK supports, with software release 1.20.0.0, the ability to clone an existing SIM card. This and other features using the Network Isolation Card (NIC) are described in detail in the Network Isolation (NIC) Cards section called “**Network Isolation Cards (NIC) and SIM Card ID Cloning**”

SIM Card extraction supports both SIM and USIM cards.

1. Begin by clicking the **Read New Device** button on the Main Application Screen. The Device Type Selection screen will appear.



**Device Type Selection**

2. Click the **SIM Card** button.

3. Remove the SIM Card from the target cell phone. It is usually located under the battery.



**Removing SIM card from cell phone**

4. Slide the SIM card into the SIM card slot that is located on the CellIDEK TEK next to USB Port #1. Align the SIM Card as shown below.



**SIM Card in Slot**

**SIM PIN and PUK Codes**

---

CellIDEK TEK enables an investigator to unlock SIM cards via the PIN code and the PUK code, if they are known.

When CellIDEK TEK is used to unlock a SIM card via the PIN code it does not relock the card afterwards.

When unlocking the SIM card via the PUK code CellIDEK TEK will reset the PIN number to "0000". To enable the feature to enter the PUK code, the PIN code needs to be entered incorrectly several times. The PIN-input screen displays the number of attempts remaining before the PUK code is required.

**Dual SIM Extracted Data**

---

Dual SIM handsets can contain two SIM cards; however the handsets are fully operational with only one SIM. Dual SIM handsets will have the following data:

- 2 IMEI Numbers
- Up to 2 IMSI Numbers
- Up to two lots of SIM Contacts
- Up to two lots of SIM Messages

These handsets make use of two SIM card slots and are referred to as Slot 1 and Slot 2. Either slot can be used if only one SIM card is present.

There are a number of ways the user can switch between SIM cards including a software menu option or a hardware button.

The handsets also have the functionality to set which SIM card is initially used on start-up irrespective of the Slot it is in. Therefore the SIM card in Slot 2 can be set to be used before that in Slot 1.

The SIM cards will be referred to as Primary SIM and Secondary SIM, where the Primary SIM is the one set to be used first.

The following data has been tested and can be extracted from these handsets:

**IMEI** – Each Dual SIM handset has two IMEI numbers, one for each SIM card Slot. The IMEI numbers are associated to the SIM card slots on the handset NOT the SIM Cards. The CellIDEK TEK will only extract the IMEI number of Slot 1 regardless of how many SIM cards are present or which card is set as the Primary SIM.

**IMSI** – Each Dual SIM handset can have up to two IMSI numbers, one for each SIM card inserted. The CellIDEK TEK will only extract the IMSI of the Primary SIM card, regardless of which slot it is inserted into.

**SIM Contacts** – Dual SIM handsets can store contacts to either SIM card. The CellIDEK TEK can retrieve contacts from both SIM cards and identify which card they were stored on. Contacts stored on the Primary SIM will be labeled “[Primary SIM]”. Contacts stored on the Secondary SIM will be labeled “[Secondary SIM]”.

**SMS Messages** – Dual SIM handsets can store SMS messages on either SIM card. The CellIDEK TEK will only extract messages stored on the Primary SIM card, regardless of which slot it is inserted into. CellIDEK will extract all handset SMS messages but cannot determine which SIM card they were sent to/from, this can be determined by viewing the SMS on the handset.

**Call Logs** – Dual SIM handsets store all call logs on the handset and can be dialed or received from either SIM card. The CellIDEK TEK will extract all call log entries but cannot determine which SIM card was used to dial or receive the call. This can be determined by viewing the call logs on the handset. Any LDN's stored on the SIM cards will not be extracted, a separate SIM card extraction will obtain this data.

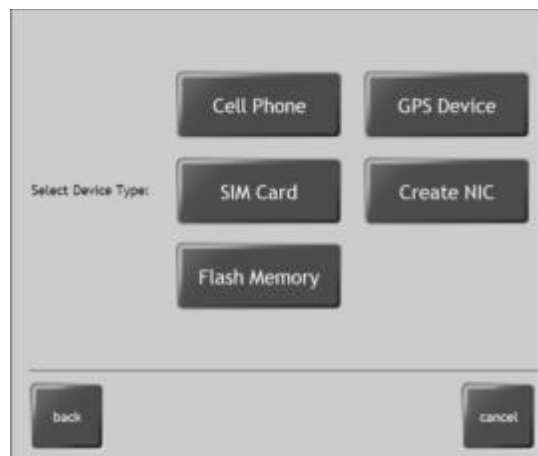
**NIC Card Functionality** – Where NIC card support is verified, a NIC card will need to be created for each SIM card used in a Dual SIM handset. The NIC card will need to be returned to the same Slot from which the SIM card taken from. Placing a NIC card in the wrong slot will result in a loss of data.

**NOTE:** A separate extraction should always be performed on all SIM cards.

**Attaching a Memory Flash Card**

The CellIDEK TEK is able to capture Memory Flash Cards through USB Port #1 and the use of an adapter (sold separately). When capturing, the CellIDEK TEK software application does not allow data to be written to the Memory Card Reader slots.

1. Begin by clicking the **Read New Device** button on the Main Application Screen. The Device Type Selection screen will appear.



**Device Type Selection**

2. Click the **Flash Memory** button. The next screen will prompt the user to insert the Flash Memory card into USB Port #1
3. Insert the memory card into a USB adapter (not included) and insert the adapter into USB Port #1.

**Imaging Flash Media**

After capturing data, CellIDEK TEK will ask the user if it should perform a complete image capture of the flash memory card. If the user chooses to do this, CellIDEK TEK will run this procedure:

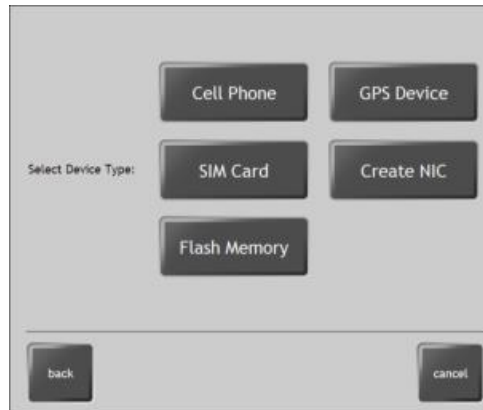
- CellIDEK TEK will make a sector-by-sector copy of the entire flash media drive.
- The copy will be stored as an image file in the “\_resource” folder of the extraction directory.

- CellIDEK TEK will then scan the image file for the following types of .jpeg files:
  - Extant jpeg: Normal, readable .jpeg files.
  - Deleted jpeg
  - Embedded jpeg: .jpeg files embedded in emails or other files.
- Any found .jpeg files will be displayed by CellIDEK TEK in the Extended Data screen.
- The image file can be copied to a thumb drive and investigated further with hex-editing or forensic software.

**NOTE:** The CellIDEK TEK cannot distinguish between Extant, deleted or embedded JPEG files. The image file should be further investigated to determine the status of any found files, and whether similar files exist in other formats.

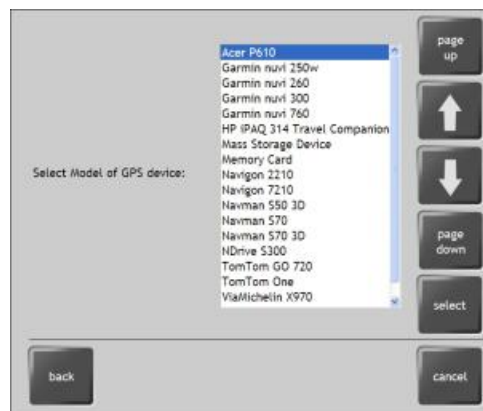
**Attaching a GPS Device**

1. Begin by clicking the **Read New Device** button on the Main Application Screen. The Device Type Selection screen will appear.



**Device Type Selection**

2. Click the **GPS Device** button. The next screen prompts the user to choose the type of GPS.



**Select GPS Type**

3. If a TomTom GO 720 is to be selected, choose “TomTom GO 720”. After capture, you will get an opportunity to capture the memory card separately.

**NOTE:** The following TomTom devices are supported: TomTom GO 720 and ONE V3. Other TomTom devices are not supported.

4. If present, remove the memory card from the GPS device. This will be captured later.

**WARNING:** ALWAYS remove the Memory Card from a TomTom device prior to capture.

**NOTE:** TomTom can store the same information in the device and on the Memory Card. For that reason, the device and card may contain different sets of the same type of data (i.e. application info, favorite destinations, etc.)

5. Connect Cable 9 to the GPS Device and follow the prompts to extract data. The following information can be extracted from the supported GPS Devices:

**Device information**

Manufacturer, Model, Serial Number

**Owner information**

Owner’s Name, Owner’s Street, Owner’s Town, Owner’s City

**GPS location information**

‘Home’ address with GPS coordinate, ‘Favorite’ addresses with GPS coordinates, ‘Destination’ addresses with GPS coordinates, ‘Recent’ addresses with GPS coordinate, ‘Miscellaneous’ addresses with GPS coordinates

**Telecommunication information \***

Telephone contact information stored on TomTom, Telephone numbers called via the TomTom, Telephone numbers of calls received via the TomTom, SMS messages received via the TomTom, SMS messages sent via the TomTom

**Files \***

MP3 files, JPEG files

\*Only on supported devices.

The following information can be extracted from Garmin devices: manufacturer, model, serial number, “favorite” addresses with GPS coordinates.

After the GPS Device is extracted, click “Memory Card” on the screen that appears. Follow the directions for Connecting a Memory Flash Card earlier in this chapter.

The following information can be extracted from HP satellite navigation devices

**GPS location information**

‘Favorite’ addresses with GPS coordinates,

Route ‘Waypoint’ addresses with GPS coordinates.

‘Search History’ addresses with GPS coordinates.

**Telecommunication information**

Contact information.

Call Registers.

**Files**

User files can also be retrieved from the device by performing a separate Flash Media extraction.

**IMPORTANT NOTE:** CellIDEK TEK can only support Memory Cards up to 1GB in size.

**Generic GPS Extraction**

---

CellIDEK TEK can search certain devices for GPS data generated by any of the following GPS Software:

- CoPilot 6
- Garmin
- Navman Smart ST
- NavNGo
- NDrive
- TomTom

The data files generated by this software can be stored on devices without any GPS software installed. This data can still be extracted using CellIDEK TEK.

Devices which GPS Data can be extracted from are:

- Sat-Nav GPS Devices
- Windows Mobile Devices
- Flash Media Cards
- Mass Storage Devices

**NOTE:** Devices can be used to store data generated from other devices. Therefore, care must be taken when linking data to a specific device.

The following GPS Data can be extracted:

- 'Favourite Locations' - These are a list of addresses and/or coordinates which a user has chosen to store on the device. They can contain Home and Work locations.
- 'Recent Destinations' – These are a list of previous destinations the owner has selected to navigate to.
- 'Route Waypoint Data' – These are a list of addresses and/or coordinates which form set locations along a route that the user has created.
- 'History' - This is a list of addresses and/or coordinates that the owner has previously searched for or viewed. This list may also contain Favourite and Route Waypoint Locations. This list differs from Recent Destinations in that the owner may not have selected to navigate to the location.

**NOTE:** The presence of any of the above data on a device does not indicate that the owner has been to that location. Only that the owner chose to view and/or save that location on the device.

CellIDEK TEK will also extract Telecommunications data from some Sat-Nav GPS Devices.

The following Telecommunications data can be extracted:

- Contact information
- Telephone numbers called via the GPS Device
- Telephone numbers of calls received via the GPS Device
- SMS sent and received via the GPS device

This information is extracted from the data files created by the above software only. Mobile communication devices may have a separate store for this information.

**NOTE:** It is recommended that a separate PDA extraction be performed on all WinMobile devices to obtain Telecommunication Data.

### **GPS Track Logs**

---

CellIDEK TEK now extracts GPS track logs from devices manufactured by:

- Garmin
- Navman
- HP

Track logs record the GPS coordinates of the device every 1-2 seconds giving an accurate description of where the device has been and when.

The CellIDEK TEK report shows only the start point of each stored track log, as each track can potentially store thousands of points.

Track log data is best viewed by importing the GPSPData.gpx into Google Earth.

**NOTE:** Some devices start logging as soon as they are turned on, however other devices require the user to initiate logging to record track log data.

### **Opening GPSPData.gpx Output Files in Google Earth**

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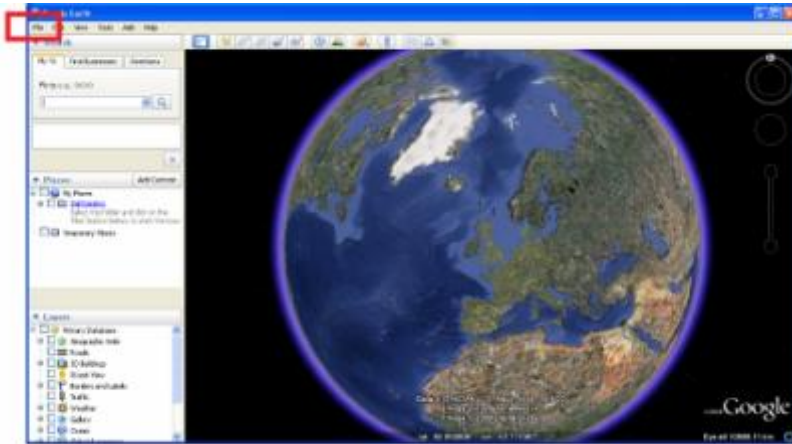
CellIDEK TEK generates an additional data file when extracting GPS Data. This file contains GPS data and can be imported into Google Earth to display the data.

The data file GPSPData.gpx is created within the extraction folder automatically when a GPS extraction is performed.

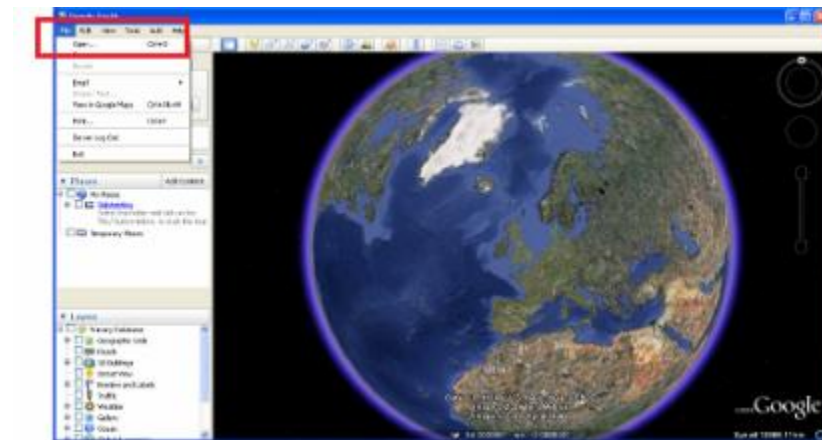
The data file stores all waypoints, routes and track log data in a format which can be used by Google Earth to display all of the GPS data in the report.

**NOTE:** Google Earth 5.0 will need to be installed on a PC to view the GPSTData.gpx file. This can be downloaded from: <http://earth.google.com>

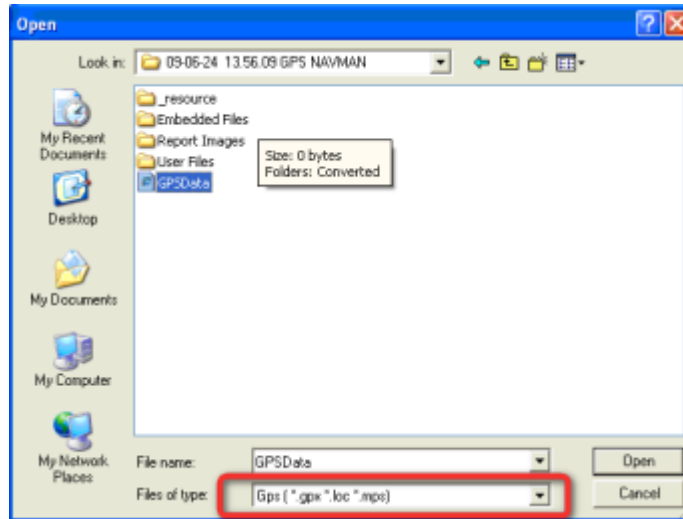
Open Google Earth and click the **File menu**.



Then select **Open**.



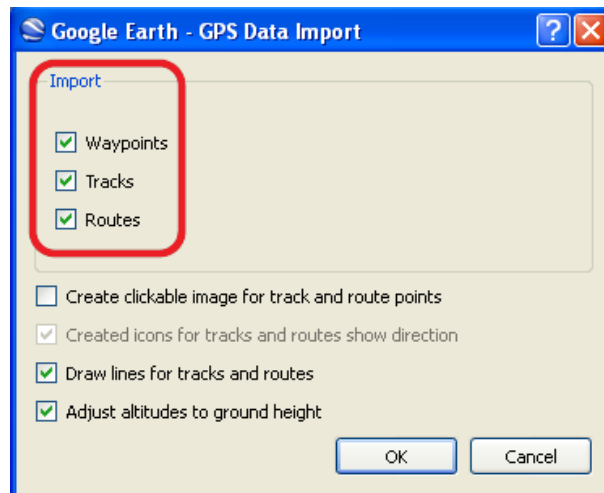
Navigate to the location where the extracted data files are stored.



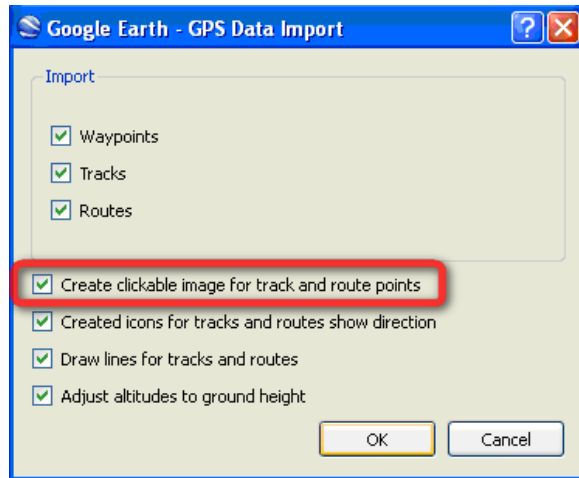
In the Files of type drop down box select **Gps (\*.gpx \*.loc \*.mps)** and then select the GPSData file and click open.

Alternatively you can drag the GPSData.gpx file into Google Earth

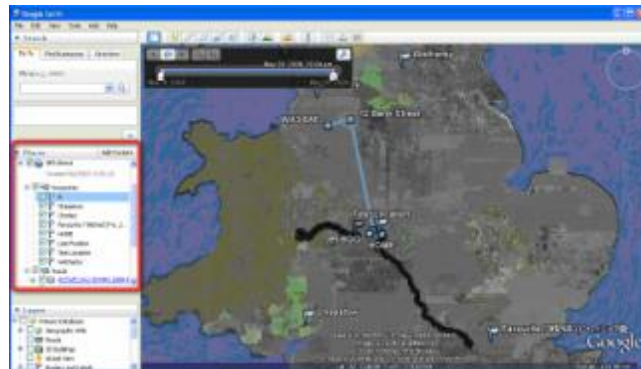
The GPS Data Import window appears allowing you to choose what types of data you want to import.



To display all GPS fixes along a saved track log make sure you check the Create clickable image for track and route points.



The data is then displayed on the map and can be selected using the Places navigation panel.



A full Google Earth User Guide can be viewed at: <http://earth.google.com/intl/en/userguide/v5/>

**NOTE:** Google Earth imports GPS coordinates, Time and Data, Altitude and Waypoint Name data only. Any other information displayed in Google Earth has been inferred by the Google Earth software.

### Geo-Tag Data from Images

CellIDEK TEK will now display Geo-Tag data for images that have been captured using a device with a GPS receiver. A Geo-Tag consists of latitude and longitude coordinates and adds geographical identification to an image.

Geo-Tag information is automatically extracted and appears in the metadata section associated with an image.



Geo-Tag

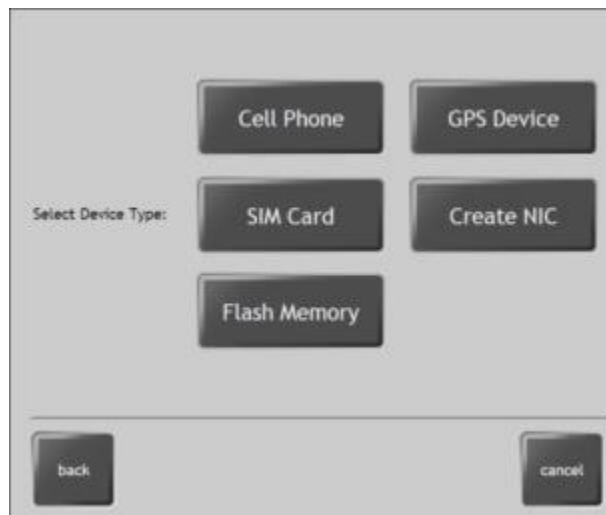
**NOTE:** Geo-Tagging is only displayed if the image has been captured using a device that supports geo-tagging.

**Attaching an Apple iPhone**

CellIDEK TEK software ver. 1.12.0.0. and newer is able to capture data from Apple devices such as the iPhone and iPod Touch.

**IMPORTANT NOTE:** iTunes must be installed on the CellIDEK TEK before it can support Apple devices. **See the section “Data Capture from Apple iPhone” for information on which version of iTunes to install.**

Begin by clicking the “Read New Device” button on the Main Application Screen. The Device Type Selection screen will appear.



Device Type Selection

Click the **Cell Phone** button then select **Apple** from the list of handset manufacturers.

CellIDEK will illuminate the correct data cable with a green light. A prompt will appear on the screen asking the user to attach the cable to the Phone Cable Jack.

**NOTE:** DO NOT attach the Apple device until prompted by CellIDEK.

Remove the cable from the rack and insert it into the Phone Cable Jack. The cable's LED will turn red. Click **OK** on the screen.

The cable's LED will turn green and a new prompt will appear. Attach the target cell phone at this time. Click the **OK** button once the phone is connected.

---

## Connection Options

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Once the correct target device has been chosen, the next screen will show the different connection options that are available. The three different methods of connection are **Cable**, **Infrared** or **Bluetooth**.

**NOTE:** Infrared and Bluetooth connections are only possible with the optional IR / Bluetooth Module.

The Connectivity Option screen also shows the type of data that can be extracted from the target device. This information is shown as a series of icons that are listed at the end of this chapter. Any data types that cannot be extracted have a red "X" through the icon.

The Connectivity option Screen will also alert the user if the target device supports memory cards.

**NOTE:** The Connectivity Option screen will show items that can be downloaded from the SIM card if the chosen handset is a GSM phone.



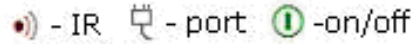
**Connectivity Option Screen**

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### Helper Icons

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The Connectivity Option Screen also has three “Helper Icons” that indicate the location of the handsets On/Off switch, Cable Port and IR Port (if available).



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### Cable Connection

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1. Select “Cable” from the Connectivity Option Screen and click the “Run Extraction” button. CellIDEK TEK will access the Cable Adapters that are stored in the Adapter Rack.
2. CellIDEK TEK will illuminate the correct data cable with a green light. A prompt will appear on the screen asking the user to attach the cable to the Phone Cable Jack.

**NOTE:** DO NOT attach the cell phone until prompted by the CellIDEK TEK software.

3. Remove the cable from the rack and insert it into the Phone Cable Jack. The cable’s LED will turn red. Click the *OK* button.
4. The cable’s LED will turn green and a new prompt will appear. Attach the target cell phone at this time. Click the *OK* button once the phone is connected.



**Data Cable Connected to Device**

On completion of data extraction, the data cable must be replaced into any of the twenty storage sockets. It does not matter which socket the cable is attached to.

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### Bluetooth Connection

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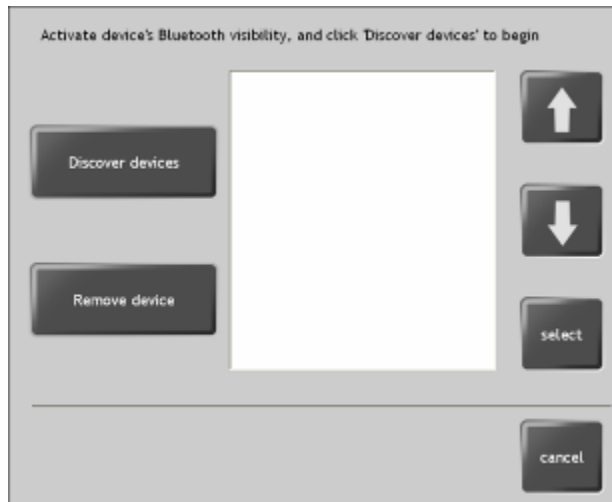
Many cell phones have Bluetooth capability, which can be used to transfer data from the target device. CellIDEK TEK’s range is 60 feet for connectivity.

Bluetooth extraction is a wireless communication link. On initiation, CellIDEK TEK will produce a list of all Bluetooth enabled devices. Caution is therefore required when selecting the correct device name list, particularly if two devices in the area have the same name. Any connection will require confirmation/acceptance on the handset in question before the extraction process can commence. This prevents accidental connection to other devices.

Bluetooth capability can only extract data once the handset has been 'paired' with the CellIDEK TEK unit. Pairing is when you enter a 4-digit code into the phone/handset to accept the connection. If the 4-digit code is incorrectly entered you cannot access any data from the device. Data can only be extracted covertly over Bluetooth if the device is PAIRED FIRST, before returning it to the target owner. The data could then be extracted remotely without the target owner's knowledge (depending on phone type).

**Connecting to a Cell Phone via Bluetooth**

1. Set the target device to Bluetooth mode. Select "Bluetooth" from the Connectivity Option Screen and press the "Run Extraction" button. If the device is a recognized cell phone, CellIDEK TEK will display instructions on how to set the handset to Bluetooth mode.
2. A prompt will appear asking the User to "Click Discover Devices to Begin".



**Discover Device List Screen**

3. Once the target device has Bluetooth enabled, click the “Discover Devices” button.
4. A Bluetooth Activity screen will appear as CellIDEK TEK searches for Bluetooth devices.
5. After 20-30 seconds, CellIDEK TEK will display a list of found devices. Select the name of the target device and click the Select button.

**NOTE:** If the target device does not appear in the list, click the “Discover Devices” button again. It may take more than one attempt to access the device.

6. Once connected, the Target device will prompt the user to allow connection. When requested, enter the 4-digit code as **1234** on the target device. Once the pairing process is complete, data extraction will commence automatically.

**NOTE:** The target device screen must be monitored during this stage of the process. Some target devices require confirmation at various stages to continue through the extraction process.

7. After data extraction, a reminder will appear for the user to remove the CellIDEK TEK from the Device’s Bluetooth History list.

### Infrared (IR) Connection



**PDA Connected via Infrared**

Some Cell Phones and PDAs have a built-in infrared (IR) port, which can be used to transfer data from the target device.

1. Select “Infrared” from the Connectivity Option Screen and press the “Run Extraction” button.
2. A prompt will appear on the screen asking the user to set the target device to infrared. If the device is a recognized cell phone, CellIDEK TEK will display instructions to set it to infrared mode.

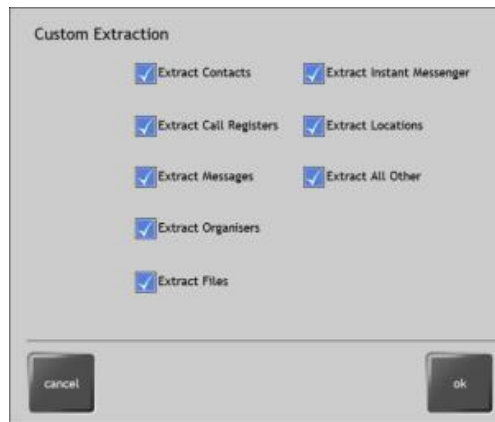


**Instructions for Infrared Mode**

3. Once the device is in infrared mode, place it next to the Infrared emitter on the IR / Bluetooth Module. Make sure that the device's IR port is facing the emitter.
4. After 5 – 20 seconds, the CellIDEK TEK will emit a tone to indicate that the IR connection has been made.

**Custom Extraction**

Pressing “Custom Extraction” instead of the “Run Extraction” on the Connectivity Option screen allows the user to decide what data is downloaded from a handset. This is handy when the user only needs the call log from a handset, for example.



**Custom Extraction Screen**

Click the radio buttons to download or skip different data types. Press “OK” when finished.

Any data not read will appear in the capture report as “User chose not to extract \_\_\_\_\_”.

**NOTE:** “Extract Files” refers to all image, movie, sound and other files found in the Extended Data portion of a capture.

**SIM Card connection**

SIM Cards do not require any special Connection procedures. Once the card is connected, data will begin to extract as outlined in **Chapter 3 – Capturing Data**.

**Connectivity Icons**

The Connectivity Option Screen uses distinct icons to show what data can be pulled from supported phones with different connection options.

ICON	DESCRIPTION	ICON	DESCRIPTION
	IMEI Number		Sent SMS Message
	Time		Saved SMS Message
	Date		Calendar Entries
	Contact List (ADN)		Tasks
	Dialed Calls		Audio Files
	Received Calls		Image Files
	Missed Calls		Video Files
	Read SMS Message		Other Files
	Unread SMS Message		<b>NOTE:</b> Presence of this symbol next to the icon denotes that the data is extracted with relevant timestamps.
	Multimedia Message – SMS messages that can include attachments.		Other Files

**Connectivity Icon Table**

**Note:** Some phones will display the Other Files folder icon on the CellIDEK TEK software within the Connectivity Options Screen. These phones can have files such as Images, Audio and Video extracted. Extraction capability for these phones is limited by the models architecture and feature set.

## Other connectivity icons

The Connectivity Option Screen also tells whether a handset supports extraction through a NIC card or if the handset can be accessed without its SIM card.

## Network Isolation Cards (NIC) and SIM Card ID Cloning

CellIDEK TEK has the ability to isolate many handsets from the mobile network by using a Network Isolation Card (NIC). NIC cards are placed in the SIM card slot of the handset.

There are three categories of support for this feature.

- Handsets that support this feature are displayed with a blue NIC icon.
- Handsets that do not support this feature are displayed with a blue NIC icon crossed with a red line.
- Handsets that are untested for this feature are displayed with no NIC icon.



**Phone Model Selection Screen**



**Connectivity Option Screen**

A NIC card is included with each CellIDEK TEK. Additional Network Isolation Cards can be purchased from your CellIDEK TEK supplier.

Any CellIDEK TEK unit running software ver. 1.7.0.0 or later is able to support Network Isolation Cards (NIC). These cards replace the handsets SIM card and isolate the handset from its network while allowing a normal examination to take place.

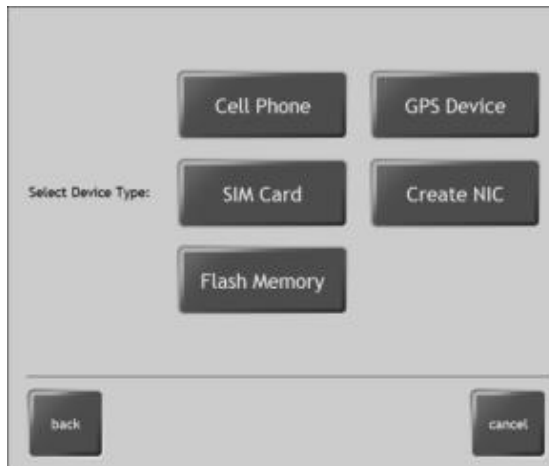
CellIDEK TEK ver. 1.20.0 and higher include the following features:

- Create from Existing SIM
- Manually enter NIC data
- Create Test NIC

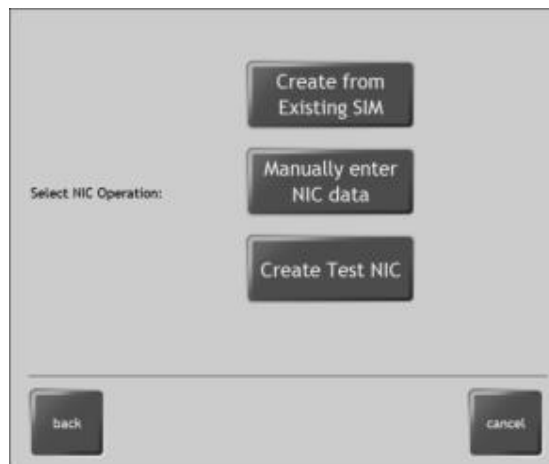
An explanation and summary for each method is included in the step-by-step instructions below.

**Sim Card ID Cloning Step-by-step**

To access the NIC menu, click **Read New Device** from the main menu. The device type selection screen will appear.



Click **Create NIC**. The NIC Operation screen will appear.



**Create from Existing SIM**

CellIDEK TEK will clone the original SIM card ID. It will copy the ICCID and IMSI from original SIM card onto a NIC (SIM ID Card). The ICCID and IMSI on NIC must be identical to original SIM. NIC (SIM ID Card) ICCID and IMSI values can be checked by performing a SIM Card Extraction of NIC.

This method is useful when the original SIM card is available.

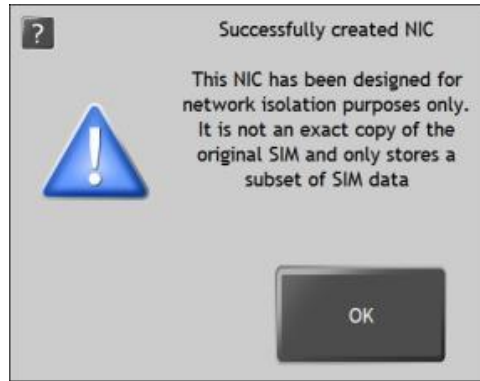
1. From the NIC Operation screen, click **Create from Existing SIM**.
2. Place the SIM card into the SIM card slot. Click **OK**.



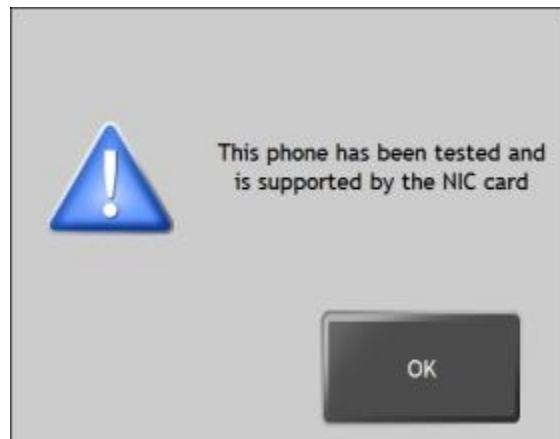
3. CellIDEK TEK will read the inserted SIM card. After this process, the following screen will appear:



4. Remove the SIM card from the slot and place the NIC (SIM ID Card) into the same slot. then click **OK**. CellIDEK TEK will now create the NIC (SIM ID Card). When this process finishes, the screen below will appear. Click **OK**.



5. CellIDEK TEK will prompt whether a phone is compatible with Network Isolation Cards. Selecting **No** will finish the process and bring the user back to the CellIDEK TEK main screen. Selecting **YES** to the screen below will prompt the user to identify the phone to be used with the NIC (SIM ID Card). After selecting the phone, one of the following two screens will appear. Click **OK** to finish the process and go back to the CellIDEK main screen.



**Manually enter NIC data**

CellIDEK TEK will create a NIC (SIM ID Card) by writing valid ICCID and IMSI values entered by the user.

This method is useful when the original SIM card is not available. To find out the correct ICCID or IMSI numbers, please contact the handset's network provider.

Valid ICCID numbers are 19 or 20 digits long and include the following:

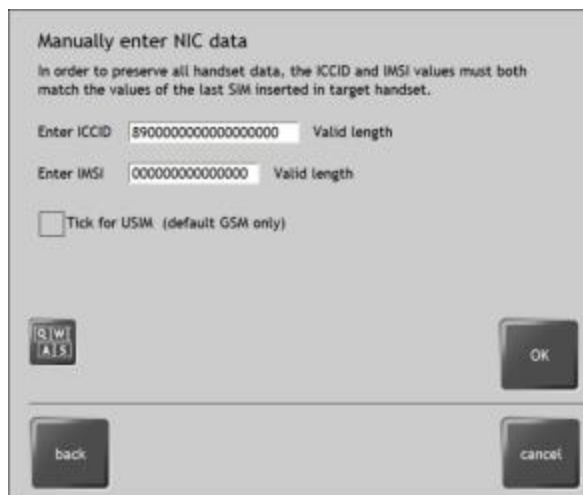
- The first 2 digits represent the Major industry identifier (89 for telecommunications)
- 1-3 digit Country Code
- 1-4 digit Issuer ID
- Variable length individual Account ID

Valid IMSI numbers are 15 digits long and include the following:

- The first 3 digits represent the Mobile Country Code (MCC).
- The next 2 or 3 digits represent the Mobile Network Code (MNC).
- The next digits represent the mobile station identification number. Normally there will be 10 digits but would be fewer in the case of a 3-digit MNC or if national regulations indicate that the total length of the IMSI should be less than 15 digits.

NIC (SIM ID Card) ICCID and IMSI values can be checked by performing a SIM Card Extraction of NIC (SIM ID Card).

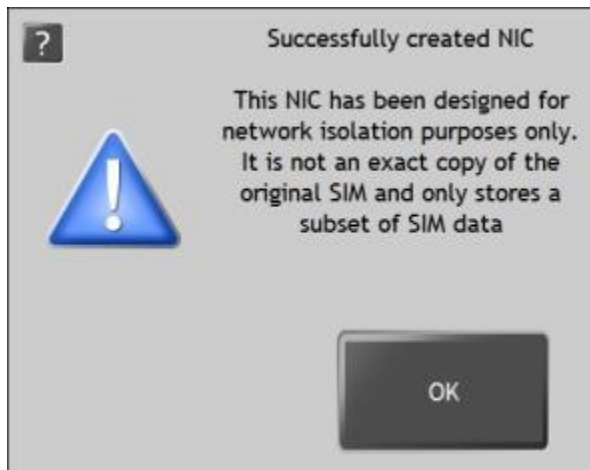
1. From the NIC Operation screen, click **Manually enter NIC data**.
2. Use the virtual keyboard (or an attached USB keyboard) and enter the ICCID and IMSI values. When finished, click **OK**.



- Place the NIC (SIM ID Card) into the SIM card slot. Click **OK**.



- CellIDEK TEK will now create the NIC (SIM ID Card). When this process finishes, the screen below will appear. Click **OK**.



- CellIDEK TEK will prompt whether a phone is compatible with Network Isolation Cards. Selecting **No** will finish the process and bring the user back to the CellIDEK TEK main screen. Selecting **YES** to the screen below will prompt the user to identify the phone to be used with the NIC (SIM ID Card). After selecting the phone, one of the following two screens will appear. Click **OK** to finish the process and go back to the CellIDEK TEK main screen.



**Create a test NIC**

CellIDEK TEK will attempt to write default ICCID and IMSI onto a NIC. The default values are:

ICCID = 894900050701001429

IMSI = 001010123456789

A warning will appear after creating a test NIC:

“A Test NIC can be used to access handset data but should only be used as a last resort. Inserting into a handset may cause data to be lost or changed”

NIC ICCID and IMSI values can be checked by performing a SIM Card Extraction of NIC.

This method should be used as a last resort if none of the previous methods work. It is important to understand that incorrect ICCID or IMSI data may cause data on the handset to be lost or changed.

1. From the NIC Operation screen, Click **Create Test NIC**.
2. Place the NIC into the SIM card slot. Click **OK**



3. CellIDEK TEK will now create the NIC (SIM ID Card). When this process finishes, the screen below will appear. Click **OK** to finish the process.




---

## Extraction without a SIM Card

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CellIDEK TEK can extract data from many handsets with the SIM card removed. If a handset's SIM is PIN locked this feature allows an extraction of the handset with the SIM removed. If supported, this feature is displayed in the Connectivity Screen as seen below:



**Connectivity Option Screen showing SIMless extraction support.**

## Capturing Nokia Handsets - Adapters

Certain Nokia Handsets require special adapters in order to extract data. This section deals with two major topics: Installing the CA-42 Cable and using Nokia Flash adapters to connect to a handset.

### Nokia CA-42 Cable Installation

The Nokia CA-42 Cable is an optional cable for CellDEK TEK that is different than the other cables. It resides in the storage compartment and not in the connector rack. As such it needs to be installed on the CellDEK TEK prior to use. To install the cable:

1. Boot CellDEK TEK to the Main Application Screen.
2. Attach the CA-42 Cable to USB port #2 on CellDEK TEK. Wait for the USB connection tone. (It may take over a minute for the tone to be heard).
3. Remove the cable. It is now ready to be used for extractions.

### Nokia Flash Adapters

The CellDEK TEK is able to connect to certain Nokia handsets through the use of specialized adapters from Nokia. Table 2 below lists nine different adapters and the handsets that they fit:

Adaptor Label Reference	Supported Models
CD-NOK1 (1100)	1100
	1101
	2300
	1110
	1110i
	1112
CD-NOK2 (EZFL)	1600
	2310
	2610
	2626
	6030
	6060
CD-NOK3 (8210)	2100
	8210
CD-NOK4 (3300)	3300
CD-NOK5 (3510i)	3510i
	6010
CD-NOK6 (2650)	2650
	2652

	5110
	6110
	6130
CD-NOK7 (6110)	6150
	6210
	6360
	7110
CD-NOK8 (3210)	3210
	3310
CD-NOK9 (3310)	3410
	3330

**Nokia Flash Adapters**

**Attaching Nokia Flash Adapters**

Follow these steps to attach a flash adapter to a Nokia handset:

**NOTE:** This demonstration uses a Nokia 1100, but the procedure is similar for other models.



**Nokia 1100 Handset**

1. Power the handset off.
2. Remove the back cover and the battery. Leave the SIM card in place.



**Handset Battery Removed**

**NOTE:** The time and date on the handset may be changed when the battery is removed.

3. Locate the data pins in the battery compartment of the handset. You may need to remove a small, black plastic cover.



**Data Pins**

4. Place the appropriate adapter inside the handset so that the adapter's data pins touch the pins of the handset.



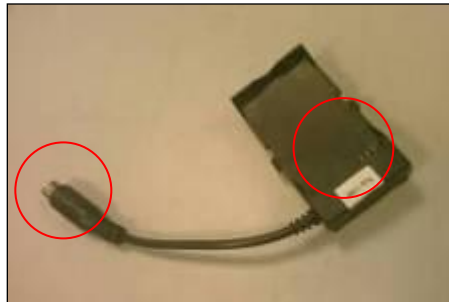
**Adapter Data Pins**

5. Insert the lower part of the adapter first, then snap the upper part of the adapter into place.



**Adapter in Handset**

6. Insert the handset's battery into the adapter by aligning the battery pins. Push the battery in and down until it snaps into place.



**Battery Pins on Adapter and Battery (circled)**

7. When properly assembled, the handset should look like the picture below:



**Installed Flash Adapter**

8. Power the handset on, and perform the data extraction with Cable 25 as outlined in the "Cable Connection" section earlier in this chapter.



Connected to Cable 25

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### Other Handsets That Require Adapters

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The following Handsets also require special adapters. These adapters plug into Cable 25 and are sold separately.

**SAGEM – myC-2**

This handset uses the CD-SAG 1 adapter to connect to Cable 25.

**SAGEM – 9xx Models**

This handset uses the CD-SAG 2 adapter to connect to Cable 25.

**NOTE:** Cable 25 does not connect directly to any handsets.

Please contact your distributor or Logicube if you wish to purchase any of these adapters.

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## 3. Capturing Data

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### Case Details

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Once the target device has been successfully connected, the Case Details input form appears:

The screenshot shows a window titled "CellIDEK TEK Case Details". It contains the following fields and values:

Field Name	Value
Case Reference Number	
CellIDEK Operator	
Investigating Officer	
Exhibit ID	
Bag Seal Number	
Bag Reseal Number	
ICCID Printed on SIM	
Service Provider	
IMEI Number Printed on Handset	
Time on Device	
Date on Device	
Time of Extraction	15.08.16
Date of Extraction	12-10-08
Notes	Please note: Time and date data displayed in this report may be subject to time-zone offsets and may differ from the time/date data that is displayed on the device. It is

Buttons: Later, OK

**Case Details Input Form**

1. If the report will be filled out later, click the “Later” button to continue on to data extraction.
2. If the report is to be filled out now, click the line that needs to be filled out and use the computers keyboard to enter information in the data fields.
3. Repeat steps 1 – 2 for each line that needs to be filled out.
4. Click the “OK” button once all of the information is filled out. The fields entered will be built into the final report, which is generated on completion of the extraction.

#### Other Notes

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The Case Details Form can be opened and edited for previous extractions.

## Data Extraction

### Searching for Drivers

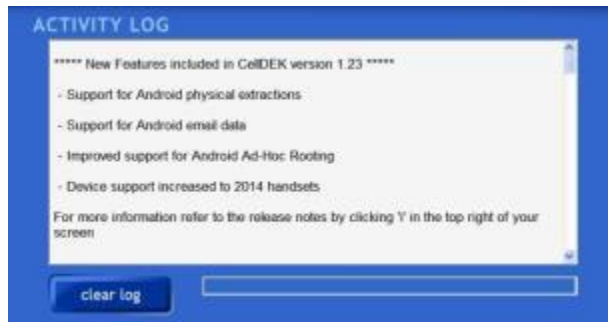
Sometimes drivers are required for a handset that has never been attached before. Drivers must be installed fully prior to the extraction

### Standard Data Extraction

Once a target device has been identified and connected, the CellDEK TEK software will prompt the user to continue. Doing so starts the extraction process for “standard data”.

Standard data includes such information as Contacts, Call Logs, SMS Text Messages and Organizer data.

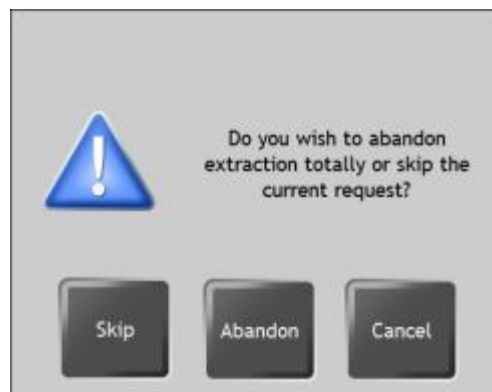
As the data is being extracted, CellDEK TEK will show the progress in the Activity Log on the screen:



**Activity Log**

### Abort Capture

The capture process can always be aborted by clicking the “Cancel” button during the capture operation. This button is located underneath the Activity Log. If the “Cancel” button is pressed the following prompt will appear:



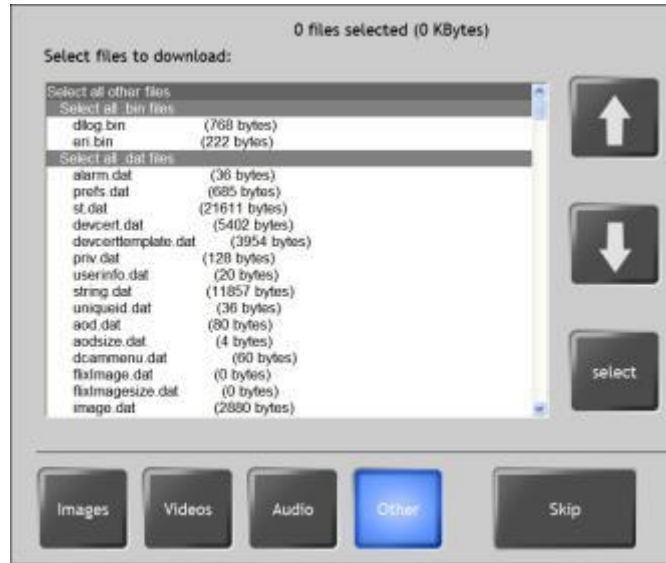
**Abort Capture Prompt**

This prompt will allow the user to skip the current capture operation (i.e. downloading contacts) or abandon the whole capture session. Pressing the Abandon button will go back to the Main Application Screen.

**Extended Data Extraction**

“Extended Data” refers to such items as Image files, Video files, Audio files and any other files such as themes, screensavers, etc.

When the standard data has been extracted, the user is given the option to select and download other files from the target device.



**Data Download Selection Screen**

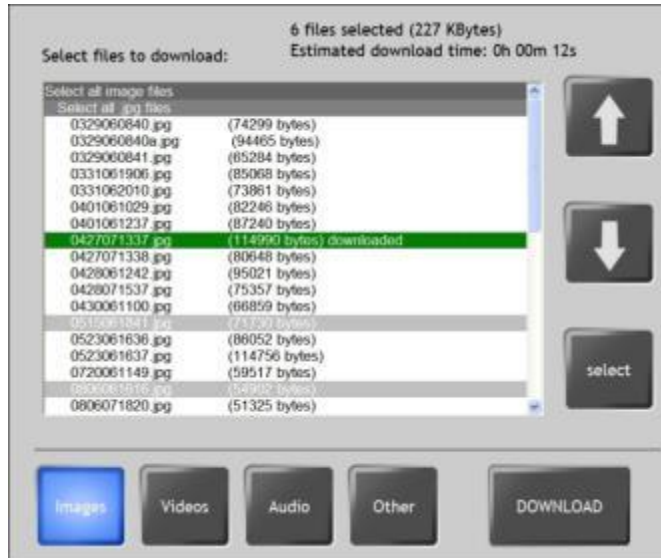
1. Click the “Images” Button at the bottom of the screen, CellIDEK TEK will display all supported Image files that were found in the target device’s memory.
2. Select an Image file for download by clicking once on it. Click a second time to deselect the file. Scroll through the list and click any other files that are desired.
3. Repeat Steps 1 – 2 for the “Video”, “Audio” and “Other” buttons.  
**NOTE:** Select all files of a particular type by clicking the “Select all <.ext> files” bar.
4. As files are selected, CellIDEK TEK shows the number and size of total files at the top of the screen.
5. Once all needed files have been selected, click the Download button. The Download Manager will show progress as the files are downloaded to CellIDEK TEK.



**Download Manager**

6. At any time, click the “Change Selection” button to stop downloading and re-select the files to download.

- As the files download, the Activity Log will indicate downloaded files in green, selected files not downloaded in gray and unselected files in white.



Activity Log During Download

On completion of the download, a summary of all files, including listings for files not selected for download, will be displayed. The data received from the target device is written into an .XML and a .CSV file, then stored in the case unique folder.

**NOTE:** The CSV data file only contains data for Device Info, Call Logs, Contacts, and Messages.

### Support for Non-Latin Languages

All handsets supported by CellIDEK TEK have had full validation of each feature carried out for the full range of Latin character sets (ASCII programming language).

CellIDEK TEK has also been further developed to extract information from Unicode languages that provide non-Latin character sets such as Greek and Arabic characters.

These extractions have not been verified although tests indicate the following:

- SIM cards (supported natively)
- Windows (supported natively)
- Nokia (supported natively)
- Sony Ericsson (full support, Unicode development implemented: an option has been implemented to allow the user to extract in ASCII if required)
- Samsung (partial validated Unicode support - for messages only)
- Motorola (partial support, Unicode development implemented: an option has been implemented to allow the user to extract in ASCII if required)

- Siemens (partial i.e. validated Unicode support for handsets contacts and notes)

If CellIDEK TEK does not extract a character, it will appear as a square on the screen.

**Special Note for Motorola and Sony Ericsson**

The extraction of Unicode characters for all data sets has not been verified for Motorola and Sony Ericsson devices.

Before an extraction begins with one of these devices the CellIDEK TEK will offer the user a choice:

1. Extract validated data set only. This means that some Unicode data will not be extracted.
2. Attempt to extract all Unicode data. Software will try to extract Unicode characters for all data sets on the device. At this time the output in this case is not guaranteed by validation testing.

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**Other Data Extraction Notes**

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This section contains extraction information and notes regarding specific handsets, phone Operating Systems, or devices.

**SQLite Viewer**

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CellIDEK TEK has an SQLite Viewer which allows SQLite databases to be explored – SQLite databases can be found in Apple, Android OS devices, BlackBerry and Symbian OS Series 60 smartphones. Apps such as Apple Safari and Opera store data in SQLite databases.

An SQLite database looks like the following screen when viewing extracted data.



Click the link in the extracted data entry (in this example, click “view file content as HEX/ASCII”. The following screen will appear:

The screenshot shows a hex editor interface. On the left, there is a column of hexadecimal values from 00000000 to 00000190. On the right, there is a column of corresponding ASCII characters, including "SQLite format 3", "ø", "#", "%", "(", "ø", "h", "I", "-", "[]", "ø", "ö", "÷", "e", "g", "n", "Ê", "Ë", "A", "U/", "indexsqlite\_au", "toindex\_ABPerson", "SearchKey\_1ABPer", "sonSearchKey\_", "tableABRec", "entABRecent CREA", "TE TABLE ABRecen", "t(date INTEGER,", "name, property I", "NTEGER, value)]-", "55 }tableLas", "tSortSectionCou", "tLastSortSection". At the bottom, there are five buttons: an up arrow, a down arrow, "ASCII", "SQLite Viewer" (circled in red), and "Close".

Click the **SQLite Viewer** button to open the SQLite Viewer.

The screenshot shows the SQLite Viewer application window. The title bar reads "SQLite3Viewer - Y:\CellIDEK\Datafiles\10-08-25 17.11.10 iPhone\User Files\AddressBook.sqlite3db". The main area displays a table with the following data:

CreationDate	ModificationDate	CompositeNameFallback	ExternalIdentifie
294123649	294123679		
294123684	294123724		
294123935	294124015		
294124061	294124085		
294124091	294124111		
294124117	294124142		
294124149	294124478		
294124185	294124227		
294124232	294124253		
294124272	294124304		
294124308	294124325		
294124328	294124376		
294124390	294124427		
294124433	294124460		
294124515	294124532		
294124569	301041575		
294124603	302724273		

Below the table is a details pane with the following data:

Type	Value
UTF-8 value	294124061
Unix Epoch Time	4/28/1979 5:07:41 AM
Unix Epoch Time (ms)	1/4/1970 9:42:04 AM
Apple Time	4/28/2010 5:07:41 AM
BlackBerry Time	4/28/1909 5:07:41 AM
Base64 value	

## Android Devices

---

CellIDEK TEK has the capacity to extract information from mobile devices that use Google's Android operating system. Extracted data includes: Contact details, Call Logs, SMS messages, Calendar/Tasks and Files. CellIDEK supports extraction of contacts database on handsets running on Android 2.2 operating system.

Before an extraction can be performed, users must:

1. Tick "Unknown Sources" and "USB debugging" in the target devices application settings.
2. Ensure the target device has a formatted SD Card inserted.

The Android extraction process requires the use of an application (Agent) which is automatically installed onto the target device and executed. The Agent extracts data from the device and stores in a temporary file called ANDDAT on the devices SD Card. (`\\sdcard\\ANDDAT`). At the end of the extraction, the ANDDAT file is deleted from the card and the Agent is automatically uninstalled.

- Supports physical extraction and decoding of Android phones
- Supports Android O/S 1.6 through 2.3.4
- Supports Android file systems EXT3, EXT4 and RFS, and provides limited support for YAFFS2. YAFFS2 is expected to be fully supported in a future release
- Supports dumping and decoding of contacts, call logs, SMS, emails and user files
- Can extract deleted file items such as databases, images, video, audio and documents

It is expected that most Android phones using the above mentioned Android O/S and/or file systems will be supported.

## Samsung Galaxy S3

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The following Samsung Galaxy S3 devices can be rooted. To root a Samsung Galaxy S3, you must select Android Generic from the Android model list, and use an original Samsung USB data cable. Connect the cable into any available USB port on the computer where the CellIDEK software is running. **Using the CellIDEK adapter 26 will NOT work.**

**NOTE:** Rooting Samsung Galaxy S3 requires permanently flashing a new insecure bootloader image onto the device. The device will remain permanently rooted.

**NOTE:** 100% successful rooting is not guaranteed. In rare instances rooting can render the handset inoperable. Proceed with caution.

- SAMSUNG I9300 4.0.4 build IMM76D
- SAMSUNG I9300 4.0.4 build IMM76D

- SAMSUNG I9300 4.0.4 build IMM76D
- SAMSUNG I9300 4.1.1 build JRO03C
- SAMSUNG I9300 4.1.1 build JRO03C
- SAMSUNG I9300 4.1.2 build JZO54K
- SAMSUNG I9300T 4.1.2
- SAMSUNG I9305 4.1.1 build JRO03C
- SAMSUNG I9305 4.1.1 build JRO03C
- SAMSUNG I9305 4.1.1 build JRO03C
- SAMSUNG I9305 4.1.1 build JRO03C
- SAMSUNG I9305 4.1.2 build JZO54K
- SAMSUNG I9305 4.1.2 build JZO54K
- SAMSUNG I9305N 4.1.1 build JRO03C
- SAMSUNG I9305N 4.1.2
- SAMSUNG I9305T 4.1.2
- SAMSUNG SPH-L710 4.0.4 build IMM76D
- SAMSUNG SPH-L710 4.1.1 build JRO03C
- SAMSUNG SPH-L710 4.1.2
- SAMSUNG SGH-I747 4.0.4 build IMM76D
- SAMSUNG SGH-I747 4.1.1 build JRO03C
- SAMSUNG SGH-I747 4.1.1 build JRO03L
- SAMSUNG SGH-I747M 4.0.4 build IMM76D
- SAMSUNG SGH-I747M 4.0.4 build IMM76D
- SAMSUNG SGH-I747M 4.1.1 build JRO03C
- SAMSUNG SGH-I747M 4.1.2
- SAMSUNG SGH-T999 4.0.4 build IMM76D
- SAMSUNG SGH-T999 4.1.1 build JRO03C
- SAMSUNG SGH-T999 4.1.2
- SAMSUNG SGH-T999V 4.0.4 build IMM76D
- SAMSUNG SGH-T999V 4.1.1 build JRO03C
- SAMSUNG SCH-R530 4.0.4 build IMM76D
- SAMSUNG SCH-R530 4.1.1 build JRO03C
- SAMSUNG SCH-R530 4.1.2
- SAMSUNG SCH-R530M 4.0.4 build IMM76D
- SAMSUNG SCH-I535 4.0.4 build IMM76D
- SAMSUNG SCH-I535 4.1.2
- SAMSUNG SCH-I535 4.1.1 build JRO03C
- SAMSUNG SCH-I939 4.1.2

---

### Android Ad-hoc Device Rooting

CellIDEK TEK software version 1.21.x.x and newer can temporarily root Android OS devices. This allows access to all user data stored on the device. Ad-hoc rooting does not work with all Android devices. Rooting is removed after the

device is restarted. Please check with local laws governing rooting prior to using.

- Compatible with the majority of Android OS devices
- Android OS versions 1.6-2.3 are supported
- Gives access to the whole file system. After rooting/data/data and/data/misc folders of Android device internal memory are available for analysis. Without root permissions these folders are inaccessible.
- 100% successful rooting is not guaranteed

**NOTE: 100% successful rooting is not guaranteed. In rare instances rooting can render the handset inoperable. Proceed with caution.**

Ad-hoc rooting will provide the following features:

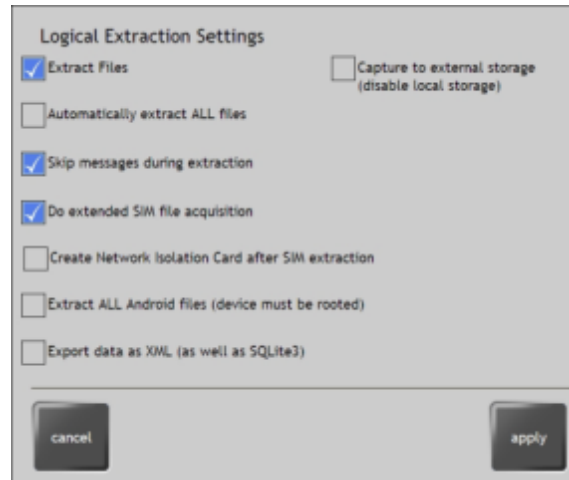
- Allows user to access the whole device file system
- Deleted data in database tables (deleted contacts, messages, etc.)
- Pre-installed and custom applications with user data
- Yahoo! Mail and Google Mail application data
- Google Maps, Google Talk and Google Calendar application data
- Dropbox application data
- Other application data mentioned in this section.

Ad-hoc device rooting is not required for the data extraction of Call Logs, Phonebook and Messages.

When performing an Android extraction, CellIDEK TEK will ask if you want to temporarily "Root" the Android device. If successful, the device will remain rooted until turned off.

In the **Logical Extraction Settings** there is a option called **"Extract ALL Android Files (device must be rooted)"**.

When checked, and the Android device is rooted, ALL file locations will be extracted. Please note this may take a long time to complete the extraction.



If the device is not rooted, only the following file locations will be extracted:

/sdcard/

If the device is rooted and the checkbox for 'Extract ALL Android files' is not checked, only the following file locations will be extracted:

/sdcard/  
/data/data/  
/data/misc/

---

### Android Email

CellIDEK TEK can extract data from the default email and Gmail databases.

- Device must be temporarily rooted
- Email attachments not supported
- Email body preview only

---

### Android App Data

The Android extraction can extract data from the following apps if the Android device is rooted:

- Dolphin Browser
- eBuddy Messenger
- DropBox application data
- Facebook Messenger
- Firefox Browser
- Google Calendar, Google Hangouts, Google Mail, Google Maps, and Google Talk application data
- Line
- Skype

- Skyfire Browser
- Tumblr
- Viber
- WhatsApp Messenger
- Yahoo! Mail application data
- Yahoo Messenger

**NOTE:** The Android device must be rooted for the above data to be extracted.

- eBuddy Messenger, Facebook Messenger, Google Hangouts, Google Talk, Line, Skype, Tumblr, Viber, WhatsApp Messenger, and Yahoo Messenger are categorized as IM Data and can be found in the following report sections: IM Contacts, IM Calls and IM Chat.
- Dolphin Browser, Firefox Browser, and Skyfire Browser data can be found in the URLs report section.
- Google Maps data can be found in the Locations report section.

### **Android Location Information**

---

The Android extraction can extract Cell and WIFI connection location information which includes GPS coordinates and timestamps. This information is shown in the Location Information section of the report. CellIDEK also generates a Google Earth .KML file called GPSTData.kml which is created in the extracted data files folder. This file can be imported into Google Earth. Note: The device must be rooted to acquire location information.

### **Android files of Interest**

---

The Android extraction can extract system files \*. Some of these files may contain useful information. These files are described below: -

- ***\\data\data\com.google.android.location\files\cache.wifi***  
Contains cached WIFI details.
- ***\\data\data\com.android.providers.userdictionary\databases\user\_dict.db***  
Containing cached user entered text
- ***\\data\data\com.google.android.gm\databases\gmail.db***
- ***\\data\data\com.google.android.gm\databases\mailstore.\*.db***  
Contains Google email account and mailstore databases
- ***\\data\data\com.google.android.talk\shared\_prefs\BuddyList.xml***  
Contains Google Talk contact details
- ***\\data\data\com.android.providers.calendar\databases\calendar.db***  
Contains Google calendar details

- **data\data\com.yahoo.mobile.client.android.mail\databases\mail.db**  
Contains Yahoo email details

**NOTE:** Device must be rooted to acquire some of these files.

### Data Capture from Apple iPhone

Apple iOS 7 is supported with CellDEK TEK software 1.27.x.x. iTunes version 11.1.x.x will need to be manually installed on the computer with the CellDEK TEK software.

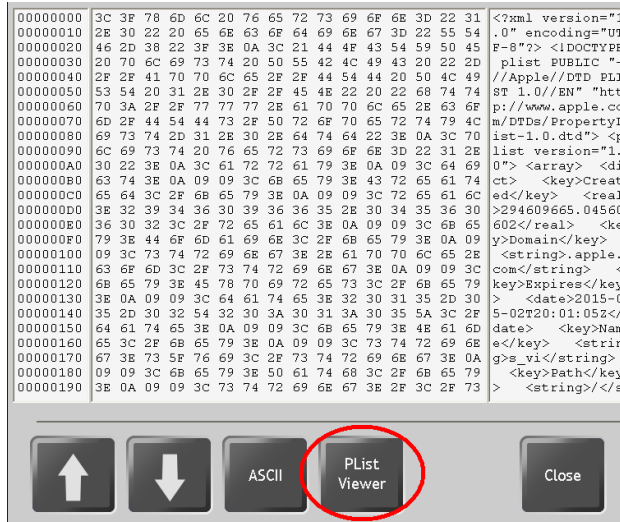
### PList Viewer

CellDEK TEK includes a PList Viewer which allows Apple Property List binary XML files to be viewed. Plist files may contain a lot of valuable forensic information such as browser history, Wi-Fi access points, speed dials, Bluetooth settings, global applications settings, Apple Store settings etc.

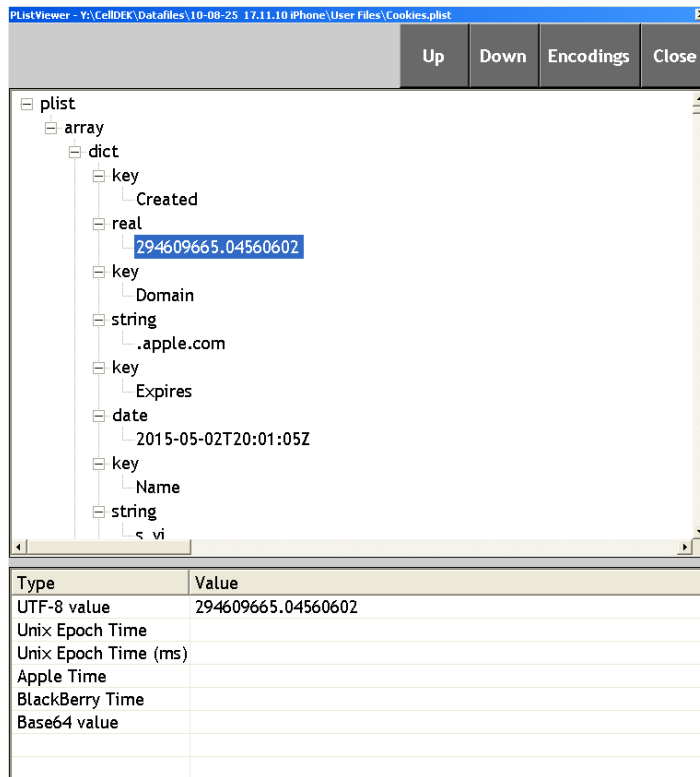
A PList database looks like the following screen when viewing extracted data.



Click the link in the extracted data entry (in this example, click "view file content as HEX/ASCII". The following screen will appear:



Click the **PList Viewer** button to open the PList Viewer.



### iPhone Passcode Bypass

CellIDEK TEK can extract data from a passcode locked iPhone if specific iTunes .plist files from a PC or Mac are available. The iPhone's passcode must have been enabled then synced with the PC or Mac after the passcode was enabled. The PList files will need to be copied from the PC or Mac to a specific folder/directory on a USB drive.



1. Locate iTunes .plist files from synced PC or Mac. These can be found in the following locations:

- Windows 98/ME/2000/XP iTunes Users:

**C:\Documents and Settings\All Users\Application Data\Apple\Lockdown\**

- Windows Vista iTunes Users:

**C:\Users\**

- Windows 7 iTunes Users:

**C:\ProgramData\Apple\Lockdown\**

**NOTE:** Windows file locations are hidden by the Operating System by default. There are different ways of showing hidden files depending on the Operating System. Please search the Internet or contact Microsoft support for instructions on how to show hidden files.

- Mac OS X iTunes Users:

**VolumeName\Users\**

**Or**

**/var/db/lockdown**

2. Copy all iTunes .plist files to the following directory on a USB drive (It is recommended that the USB drive is formatted before creating \CellIDEK\Lockdown directory and copying .plist files):

- **:\CellIDEK\Lockdown\**

3. Insert USB drive into CellIDEK and perform a regular iPhone extraction. CellIDEK will then search the USB drives for any .plist files and import them if found.

---

### iPhone App Data

---

The iPhone extraction can extract data from the following apps:

- Apple Maps (iOS 6 and above only)
- eBuddy Messenger
- FaceTime
- Line
- Skype
- Tumblr
- Viber
- WhatsApp Messenger
- Yahoo Messenger

Apple maps report will contain GPS coordinates and Google Maps hyperlinks (added to the “Locations” section of the report). Data is exported in KML format, which can be opened using Google Earth, Google Maps, and Google Maps for mobile.

eBuddy Messenger, Line, Skype, Tumblr, Viber, WhatsApp Messenger, and Yahoo Messenger data are categorized as IM Data and can be found in the following report sections: IM Contacts, IM Calls and IM Chat.

FaceTime data can be found in the Calls report section.

---

### iPhone Dictionary Data

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CellIDEK TEK software version 1.21.x.x and newer reports a list of keywords extracted from the following iPhone file: *dynamic-text.dat*. These keywords are shown in the report under the dictionary heading.

---

### Apple Location Information

---

The file GPSData.kml is created when extracting an iPhone. This file can be opened using Google Earth.

---

### iPhone files of Interest

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During the iPhone extraction process a number of ‘other’ files can be extracted. Some of these files may contain useful information.

A selection of these files is shown below:

- **\\private\\var\\mobile\\Library\\Cookies\\Cookies.plist**  
Contains website cookies saved by the Safari browser.
- **\\private\\var\\mobile\\Library\\Safari\\Bookmarks.db**  
Contains website bookmarks saved by the Safari browser.
- **\\private\\var\\mobile\\Library\\Safari\\History.plist**  
Contains website history saved by the Safari browser.

- **`\private\var\mobile\Library\Mail\Accounts.plist`**  
Contains email server account details, this does not include actual emails.
- **`\private\var\mobile\Library\maps\History.plist`**  
Contains a 'Google Maps' history file which includes addresses, route directions and other useful data.
- **`\private\var\mobile\Library\Keyboard\dynamic-text.dat`**  
A keyboard cache containing user entered text.
- **`\private\var\mobile\Library\Preferences\com.apple.Maps.plist`**  
Contains the last longitude/latitude coordinates viewed in the 'Google maps' application.
- **`\private\var\mobile\Library\Preferences\com.apple.mobilesafari.plist`**  
Contains a list of recent searches performed using the Safari browser
- **`\private\var\root\Library\caches\locationd\consolidated.db`**  
Contains a list of web connections and location services
- **`\private\var\mobile\Library\Calendar\Calendar.sqlitedb`**
- **`\private\var\mobile\Library\Preferences\com.apple.mobilecal.plist`**  
Contains Google calendar details
- **`\private\var\mobile\Library\WebKit\Databases\Databases.db`**
- **`\private\var\mobile\Library\WebKit\Databases\http_m.yahoo.com_0\*.db`**
- **`\private\var\mobile\Library\WebKit\Databases\https_mail.google.com_0\*.db`**  
Contains email database details
- **`\private\var\mobile\Applications\com.yahoo.messenger\Library\Preferences\com.yahoo.messenger.plist`**
- **`\private\var\mobile\Applications\com.yahoo.messenger\Documents\*.db`**  
Contains a list of Yahoo Instant Messenger files

**Note:** The content of these files has not been verified.

### Data Capture from Symbian OS

---

CellIDEK TEK now has the capacity to extract information from mobile handsets that use the Symbian operating system (Series 60 / Nokia Symbian OS V 8.1). Extracted data includes Contact Details, Call Logs, SMS messages, Calendar, Tasks and Files.

This data capture is possible with the following caveats:

- No SIM data is extracted from Symbian handsets.
- "Nicknames" are not extracted.
- Cannot extract any SMS messages stored in 'My Folders' directory or other user created folders.

To extract data, it is necessary for CellIDEK TEK to write temporary .dat files to the target phone. These files are removed at the end of capture.

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### Capture from Symbian UIQ 2<sup>nd</sup> & 3<sup>rd</sup> Edition OS

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CellIDEK TEK now has the capacity to extract information from mobile handsets that use the Symbian UIQ 2<sup>nd</sup> and 3<sup>rd</sup> Edition OS. Extracted data includes Contact Details, Messages, Calendar, Tasks and Files.

Data capture requires a handset Agent and the use of a CellIDEK TEK UIQ memory card. This is a specially prepared card by CellIDEK TEK to temporarily store and transfer data.

**WARNING:** Do not create the UIQ memory card from the card used inside the handset. Always use a separate blank, formatted card that is not write protected.

Use these memory cards for best results:

#### **Sony Ericsson**

P800 / P900 Memory Stick Duo, minimum size 16MB

P910i / P990i Memory Stick PRO Duo, minimum size 64MB

M600i / P1i Memory Stick Micro (M2), minimum size 256MB

#### **Motorola**

Z8 / Z10 Micro SD, minimum size 128 MB

Follow these steps to capture data:

1. User inserts spare memory card into the memory card reader.
2. CellIDEK TEK generates and formats a UIQ card and installs the Agent.
3. User then inserts the UIQ card into handset.
4. User locates the Agent installer on the UIQ card using the file browser application and then installs the agent onto the device.
5. User locates and runs the Agent application, then waits for the data extraction to complete. **Extracted data is now stored on the UIQ card.**
6. User removes the UIQ card from the handset and inserts it back into the memory card reader.
7. CellIDEK TEK automatically copies and decodes all data from the UIQ card.
8. CellIDEK TEK formats the UIQ card.
9. CellIDEK TEK instructs the user to uninstall the agent from the handset. q
10. CellIDEK TEK presents the results to the user.
11. This data capture is possible with the following caveats:

Extraction of Call Logs is not supported.

Extraction of SMS messages stored in user created folders is not supported.

Extraction of MMS / Email messages is not supported.

Memory cards within these phones need to be captured separately. (Please refer to “Capturing a Flash Memory Card” earlier in this chapter).

### Symbian Event Logs

---

Symbian S60 2<sup>nd</sup> Edition and 3<sup>rd</sup> Edition handsets have the ability to record events which CellIDEK TEK can extract.

The following information can be extracted:

- Voice Call events – ID, Number, Date, Time, Direction and Duration
- SMS events – ID, Number, Date, Time, Direction, Message Fragment and Status
- MMS events – ID, Name, Date, Time, Direction and Duration

These events are normally accessed by the handset’s Log Viewer application. These events have a validity period set in the Log Viewer settings. Once this duration period has expired, events will no longer be accessible.

#### Points of Interest

- Timestamps extracted by CellIDEK TEK are always reported in Greenwich Mean Time (GMT) whereas the timestamps shown in the handset’s Log Viewer application are set to the handset’s current time zone.
- CellIDEK TEK is able to extract message fragments for SMS events. These are not displayed by the Log Viewer application. Only the first 64 characters of a message are reported any messages greater than 64 characters are truncated in the event log, including multipart messages where only the first 64 characters of the first message part are reported.
- Incoming MMS messages are shown as 2 separate events, 1 incoming SMS event and 1 outgoing MMS event. CellIDEK TEK extracts both of these events. The SMS event has a body fragment of *Data Message*

The following Symbian S60 handsets are verified on CellIDEK TEK:

**NOKIA:** 3230, 3250 5320XpressMusic, 5500 Sport, 5700, 6120, 6220 Classic, 6260, 6290, 6620, 6630, 7610, E50, E51, E61, E63, E65, E66, E70, E71, N70, N71, N72, N73, N76, N77, N79, N80, N81, N82, N85, N90, N91, N93, N93i, N95, N95 8GB

**SAMSUNG:** I8510, SGH-D720, SGH-G810

**Data Capture from Sony Ericsson Phones**

If the User runs into trouble capturing data from a Sony Ericsson phone (or any other handset that connects to Cable #18), users should make sure that the “Default Contacts” setting on the target handset is set to “Phone Contact” before an extraction is performed.

This is done by navigating manually on the phone’s menus as follows:

**Menu > Contacts > Options > Advanced > Default Contact > Select “Phone Contact”.**

Once this setting is enabled, users should have no trouble extracting data from the handset.

**Blackberry PIN Lock**

The CellIDEK TEK allows the user to input the PIN lock for a Blackberry device directly through the CellIDEK TEK interface rather than the device itself. The CellIDEK TEK will automatically detect if a PIN lock is enabled and bring up the Enter Password Prompt.



**Enter Password Prompt**

**TIP:** Click “Hide Password” to turn it on or off. If Hide Password is on, the password will appear.



**Hide Password Turned On**

**NOTE:** The password or the PIN of the Blackberry device will need to be entered. CellIDEK cannot unlock the device without it.

### **BlackBerry PIN Numbers**

---

Each BlackBerry device is assigned a unique personal identification number (PIN) which allows identification of each device. The PIN number of other BlackBerry users is stored in the devices phonebook with their contact information and allows direct PIN-to-PIN emailing and messaging. CellIDEK TEK extracts each contact PIN number from the phonebook as well as the PIN numbers associated with messages sent from other BlackBerry users.

### **Time/Date Stamps from Motorola Phones**

---

Users should note that Motorola timestamps / date stamps are not reported due to current limitations in how file "modified" and file "created" timestamps are reported in the Motorola OS. This will be remedied in a future software update.

### **Null Response from Siemens handsets**

---

Occasionally, Siemens handsets have been known to return a NULL response when asked for data of a particular type (i.e. SMS messages). If this happens, the following error message will appear under the relevant data type:

**Handset has been known to occasionally return a null response. Please refer to handset and retry extraction.**

Users should check the affected field(s) on the handset and retry the extraction.

### **SMS Attached Content**

---

SMS Messages can contain extra content other than standard text.

CellIDEK TEK notifies the user when any extra content appears within an SMS Message.

**NOTE:** This feature is currently only supported for SMS extracted through handsets supporting AT commands. Reporting of attached content functionality is not supported for Blackberry, Symbian or WinMobile handsets.

Notifications appear within the body part of the message and describe the type of attached content.

Notifications appear in the following form:

**[CONTAINS CLIPART REFER TO HANDSET]**

SMS Messages may contain more than one type of attached content. CellIDEK TEK will display a notification for each piece of attached content within the message.

### VCard and VCalendar Content

VCards and VCalendars are used to exchange information between application.

VCards store address book entries while VCalendars store organiser entries.

VCards and VCalendars can be attached to SMS Messages. CellIDEK TEK will now display the raw data of attached VCards and VCalendars within the body of the SMS Message.

VCard and VCalendar data will appear between the tags

**[ATTACHEMENT: CONTACT DATA]**

Or

**[ATTACHMENT: CALENDAR DATA]**

And will end with

**[END ATTACHMENT]**

As SMS Messages have a limited size VCards and VCalendars may span several messages.

In this case each part of the VCard or VCalendar will start with the tag

**[ATTACHMENT CONT..]**

To indicate the content follows from a previous message.

Each message part will also end with the tag

**[...]**

To indicate that more content will follow in the next message.

**NOTE:** VCard and VCalendar content is displayed in its raw format. Where VCards and VCalendars span more than one SMS Message, each part will need to be manually put together to form a valid VCard or VCalendar entry. More information on VCards and VCalendars can be found at [www.imc.org/pdi/](http://www.imc.org/pdi/)

### Various WinMobile Devices

---

The following mobile GPS software has been verified and can be extracted from supported devices using CellIDEK TEK:

- Google Maps Mobile (Various Windows Mobile devices)

**Other Extraction Notes**

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CellIDEK TEK can play back W4A files that have been extracted from devices.

W4A files are audio files that can be created on some mobile handsets.

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## 4. Analyzing Captured Data

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### Displaying Extracted Data











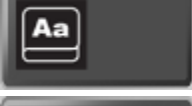



---

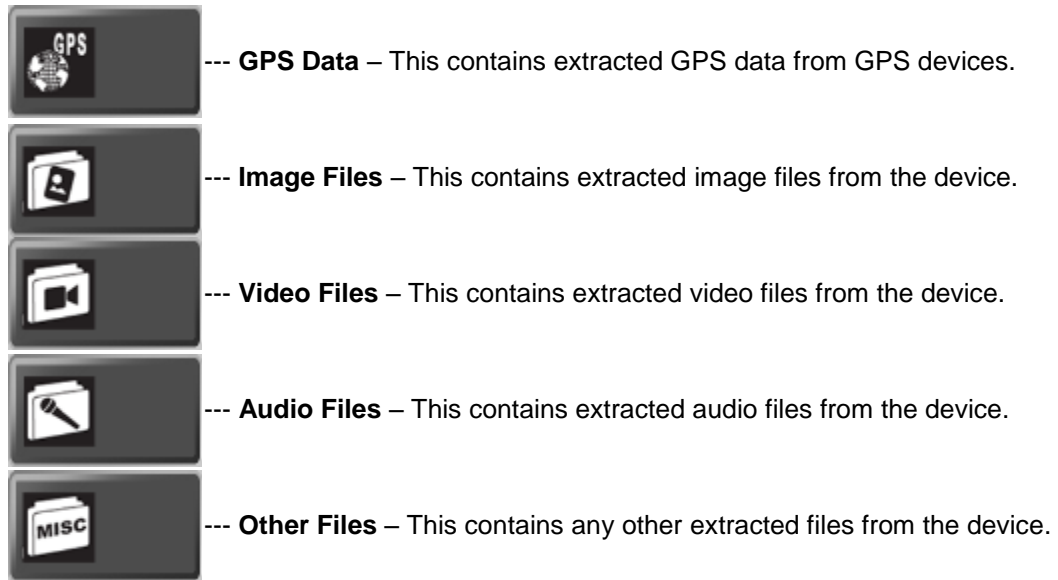
Once the extraction for standard and extended data is complete, the data is displayed onscreen prior to the generation of the CellIDEK TEK report. All data is individually hashed using the MD5 algorithm to ensure that the data can be verified as unchanged.

As of CellIDEK TEK software 1.25.x.x, the extracted data is viewable in a new on-screen report:



The on-screen report can have different icons showing depending on the type of device extracted. Each button will have a number showing how much data was extracted. Here is a list of available icons:

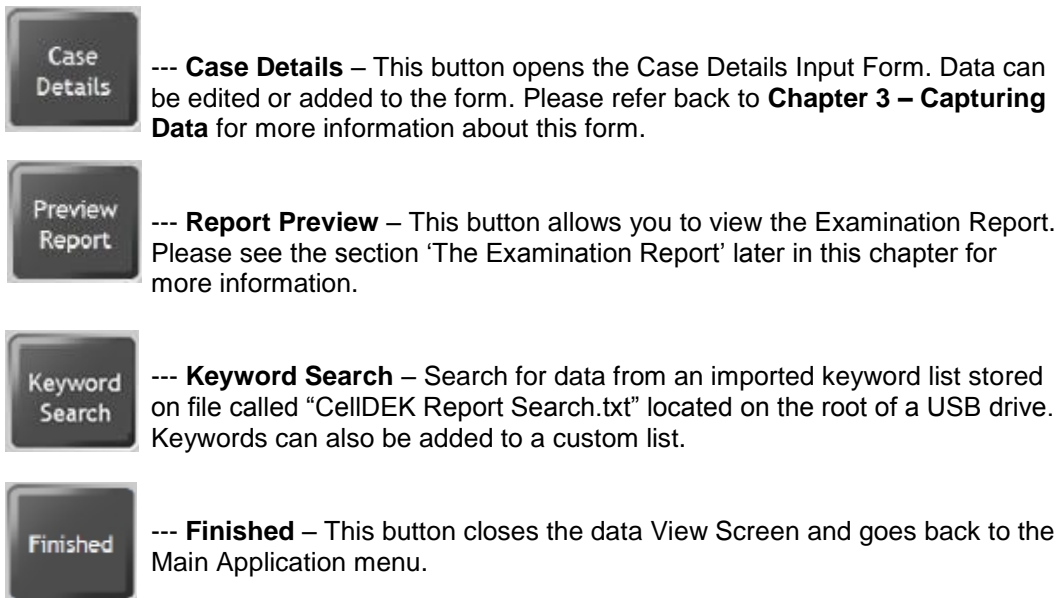
- 
--- **Device Information** – Shows information about the device including the Manufacturer, Model, IMEI/ESN, SIM Card information (if a SIM card is included), etc.)
- 
--- **Contacts** – This contains extracted contacts from the device.
- 
--- **Call Logs** – This contains extracted call logs from the device.
- 
--- **Messages** – This contains extracted messages from the device.
- 
--- **Event Logs** – This contains extracted event logs from the device.
- 
--- **Calendars** – This contains extracted calendar entries from the device.
- 
--- **Tasks** – This contains extracted tasks from the device.
- 
--- **Notes** – This contains extracted notes from the device.
- 
--- **URLs** – This contains extracted URLs from the device.
- 
--- **Locations** – This contains extracted locations from the device.
- 
--- **Dictionaries** – This contains extracted dictionaries from the device.
- 
--- **IM Contacts** – This contains extracted contacts from Instant Messengers.
- 
--- **IM Call Logs** – This contains extracted call logs from Instant Messengers.
- 
--- **IM Chat** – This contains extracted chat entries from Instant Messengers.



**NOTE:** Depending on the device, you may only see some of the icons above. For example:

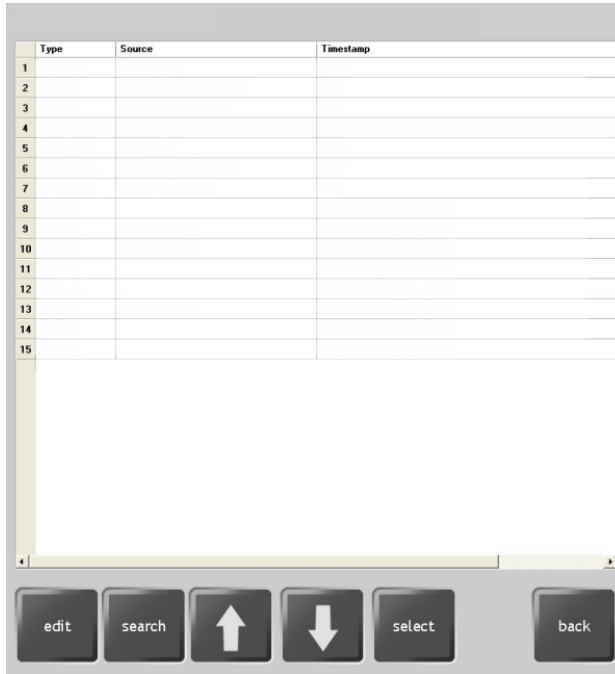
- SIM cards will only show the following buttons: Device Information, Contacts, Call Logs, and Messages.
- Memory Cards will only show the following buttons: Image Files, Audio Files, Video Files, and Other Files.
- Phones will show all buttons (except GPS Data).
- GPS will show all buttons.

There are also three icons located at the bottom of the screen:

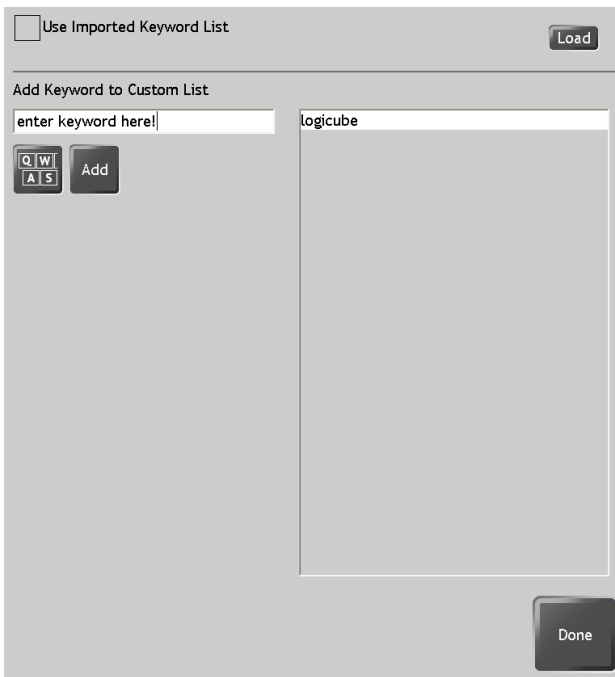


**Keyword Search**

To perform a keyword search from the on-screen report, click the **Keyword Search** button. A keyword search window will appear.



Click the **Edit** button to edit the keyword search. Using the on-screen keyboard or an attached keyboard, add keywords to the custom list. As you click the **Add** button, the keyword entered should appear on the right side. Click the **Done** button when finished.

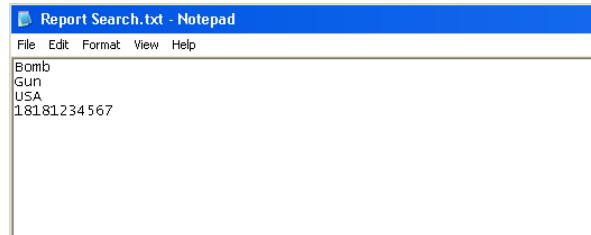


To use an imported keyword list, a keyword list file must first be created then saved somewhere on the computer connected to the CellIDEK TEK. Place a check mark on the **Use Imported Keyword List** box then click **Load** button. An Open Dialog Window will open and you can browse to where you have stored the file "CellIDEK Report Search.txt" and select it.

When finished, click the **Done** button.

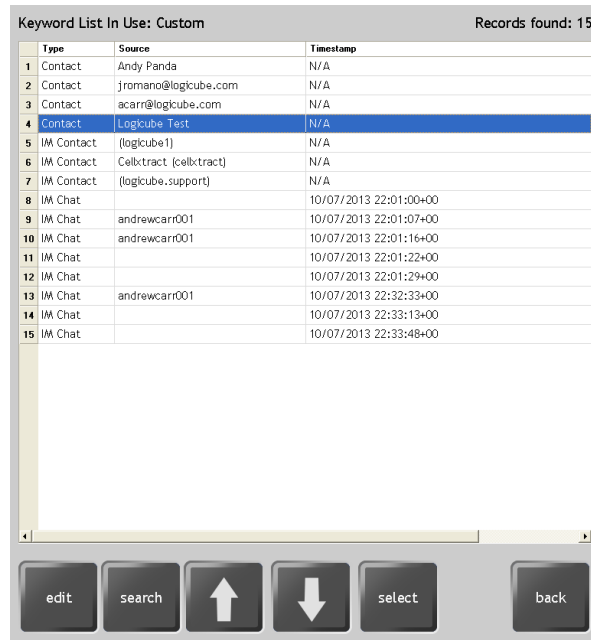
To create the keyword list, on a computer, open Notepad or a similar text editor.

Type a simple list of words as shown in the next screen shot below. Words are not case sensitive so type in all lower-case.



Save the file as "Report Search.txt" and save it somewhere on the computer connected to the CellIDEK TEK.

After entering the keywords or selecting the imported keyword list, click the **Search** button. CellIDEK will now search all extracted records for the chosen keywords and display the results. To view the each individual record, highlight the record then click the **Select** button.



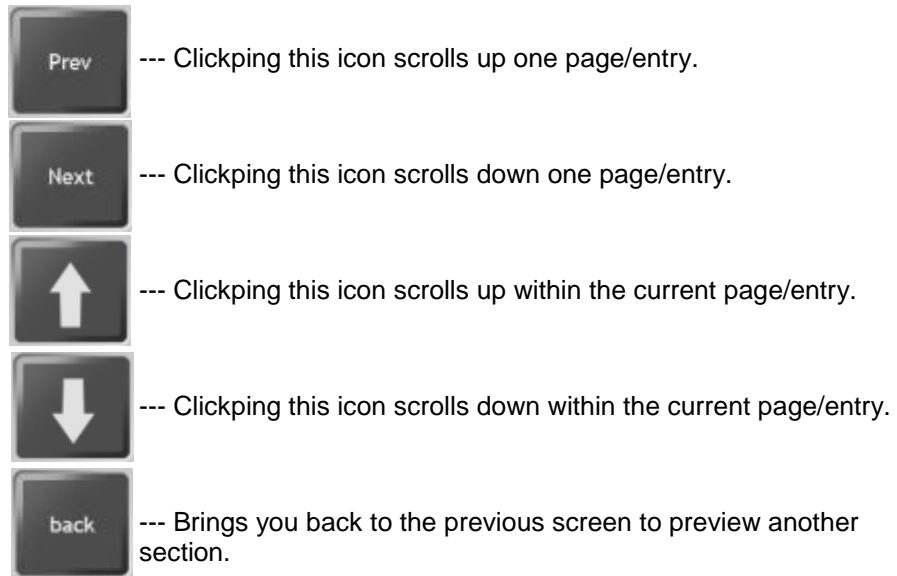
Viewing Extracted Data



To view the extracted data, click one of the icons on the report screen. CellIDEK TEK will display all the extracted data based on your selection.



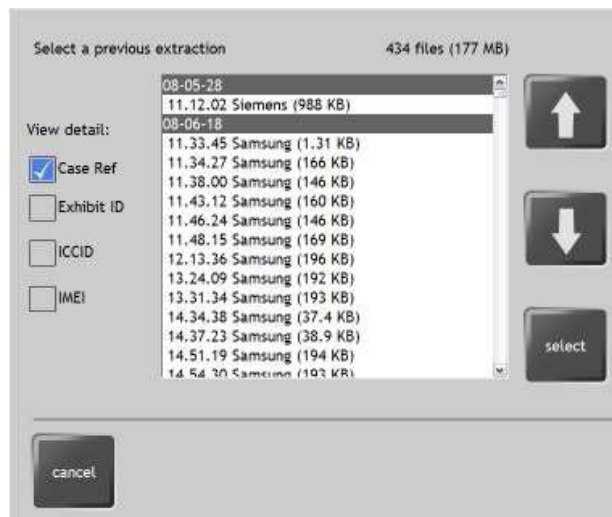
Five buttons are available on each section viewed:



**Displaying Previous Extractions**

Previously extracted data files can be viewed by selecting “View Previous Extractions” from the main CellIDEK TEK window. Previous extractions are organized by date. Additionally, the user can search for a particular extraction by one of these choices:

- Case Reference Number
- Exhibit ID
- ICCID Number
- IMEI Number



**Previous Extraction List**

1. From the Main Application Screen, click the **View Previous Extractions** button. A list of all previous capture sessions will appear.
2. Choose the desired search criteria from the **View Detail** list on the side of the screen.
3. Scroll to the desired capture session and click it once to select.
4. Click the **Select** button. The CellIDEK TEK will show the report via the on-screen report preview.

---

## The Audit Trail

---

The audit trail is a set of two files that are generated along with the capture session.

**Log.dat** records all commands sent to and received from the target device. This includes ATA commands.

**Audittrail.txt** records all data received from the target device.

All three files are stored and moved with the extracted data. They can be accessed once the capture session has been backed up to a USB storage device. They cannot be accessed from within CellIDEK TEK. Please refer to **Chapter 5 – Other Features & Technical Notes** for more information on backing up files.

**NOTE:** Logicube Technical Support may ask the user to send a copy of **log.dat** for troubleshooting purposes.

---

## The Report

---

The Examination Report is generated as an SQLite3 file. This SQLite3 file is then translated and converted to an HTML file for easy viewing,

**NOTE:** XML format is available and can be selected in the CellIDEK Setup Screen. See the section 'System Setup' in Chapter 5: Other Features.

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## 5. Other Features

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### Main Application Screen

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This chapter discusses those features of the CellIDEK TEK application that were not covered in previous chapters.



**Main Application Buttons**

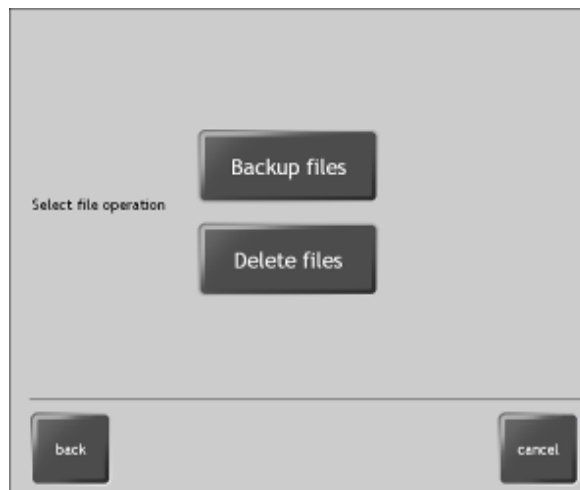
---

### Managing Files

---

From time to time, previous capture sessions should be copied to an external storage device. This archives the data and frees up space in the computer's drive. Note all handsets must be disconnected from CellIDEK prior to any file management tasks are performed.

1. From the Main Application screen, click the "Manage files" button.
2. The first prompt that appears asks whether the User wishes to "Backup" or "Delete Files".



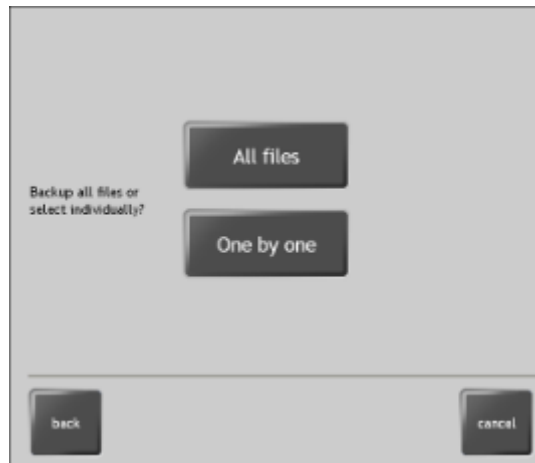
**Back-Up/Delete Files Selection**

3. If “Backup files” is selected, two buttons will appear. “Move files” and “Copy Files”.



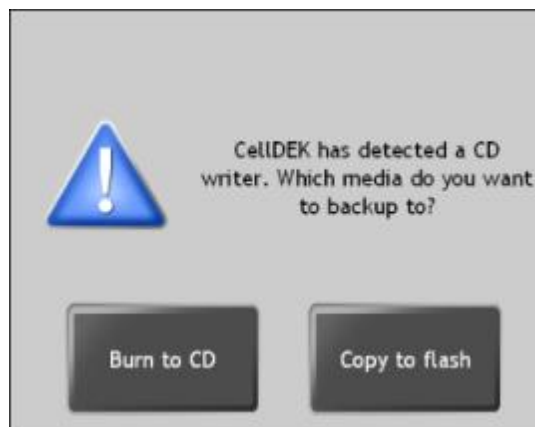
**Move or Copy Files Selection**

4. No matter which button is chosen, two buttons will appear, “All files” or One by One”.



**Back-Up Files Selection**

5. After making a selection (“All Files” or “One by one”), and the PC the CellIDEK TEK is attached to has a CD writer, you will be able to choose between backing up to a CD or to a flash drive.



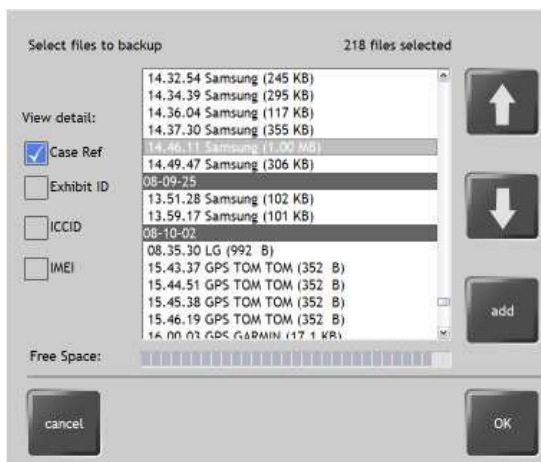
**Media choices**

**NOTE:** Depending on the choice made, one of these two screens will appear:



**CD or USB Thumb Drive Instructions**

6. If the “All files” button is clicked, all of the stored data from capture sessions will be copied to the target storage device area. The activity log will show files copied.
7. If the “One by one” button is clicked, a list of all previous capture sessions will appear



**Previous Extraction List**

**NOTE:** The “Free Space” bar underneath the file list shows the amount of free space available on the USB Flash Drive where the files are to be backed up.

If “One by one” is selected the user must highlight the individual extractions to be moved and then click OK. Repeat this step for any additional extractions that needs to be copied.

**NOTE:** It is recommended that old extractions get backed up from time to time.

**Deleting Files**

If under “manage files”, “Delete files” is selected, two buttons will appear. “All files” and “One by one”.



**Deleting Files Selection**

1. If the “All files” button is clicked, the stored data from all capture sessions will be deleted.
2. If the “One by one” button is selected a list of all previous capture sessions will appear. The user must highlight individual extractions to be deleted and click OK.
3. In both instances the software will ask, Are you sure you wish to delete the chosen data files? The operator must click “OK” in order to proceed with both types of deletions.

---

## Software Update Instructions

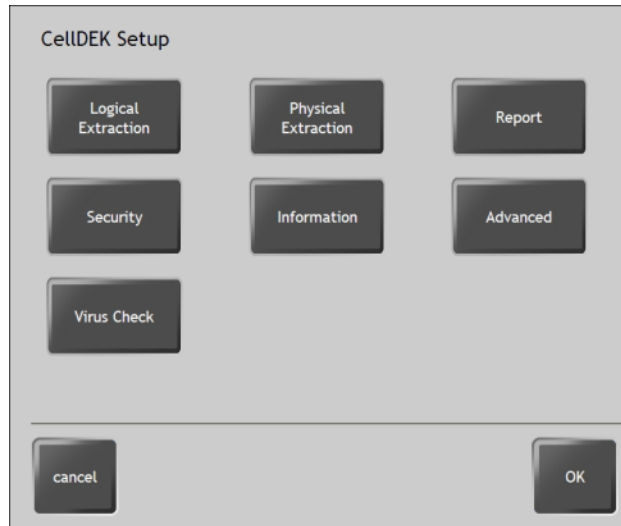
---

As new cell phones, PDAs and other devices are developed, the CellIDEK TEK application software will need to be updated from time to time. Software updates for CellIDEK TEK will be obtainable on an installation CD.

The file **CellIDEKTEK.msi** with the file type of “Windows Installer Package” must be used to update the CellIDEK TEK software. Please refer to the CD contents for instructions on upgrading the CellIDEK TEK software in the file called **CellIDEK TEK SW Upgrade Sheet.pdf**.

## System Setup

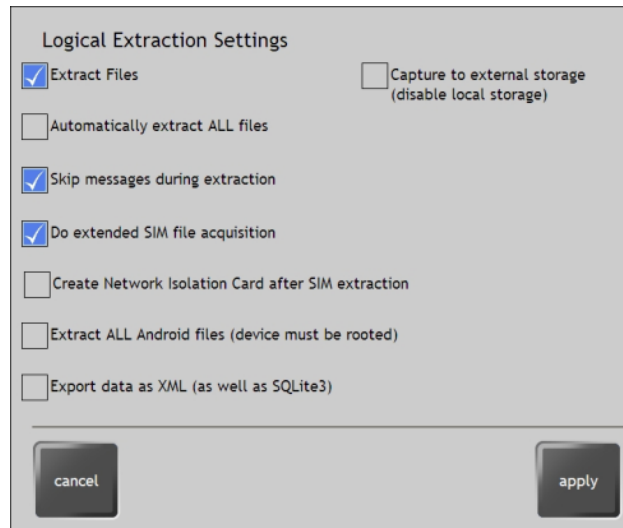
The System Setup brings up a Setup Menu as seen below:



**System Setup Menu**

## Logical Extraction

Clicking this button brings up the Logical Extraction settings screen.



**Extraction Settings Menu**

**Extract Files** – Checking this box will cause CellIDEK TEK to extract the target device’s file listing.

**Automatically Extract All Files** – Checking this box will automatically download all Extended Data files without prompting the user. This includes all image, video, audio and other files.

**Skip Messages During Extraction** – Checking this box gives the option to skip unread SMS messages during extraction. During a capture session, the following prompt will appear:



**Skip Unread SMS Prompt**

The prompt gives the user 15 seconds to skip or download unread SMS messages. If none of the buttons are pressed, then the messages are skipped.

**Do Extended SIM file acquisition** – This feature will pull all available data off of the SIM card.

**Create Network Isolation Card after SIM Capture** – Checking this box will allow selective SIM data to be copied post SIM extraction to a target Network Isolation Card (NIC). The newly created NIC installed in the handset and contains enough information to appear to be the original SIM card, but it will not have the necessary information to allow the handset to connect to the network. This effectively provides Network Isolation for the phone. For additional information please refer to the supplied NIC v3.0 User Notes.

**Extract ALL Android Files** – When checked, and the Android device is rooted, ALL file locations will be extracted. Please note this may take a long time to complete the extraction.

If the device is not rooted, only the following file locations will be extracted:

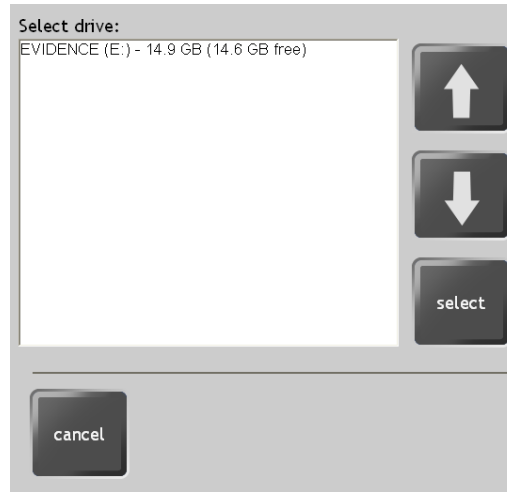
/sdcard/

If the device is rooted and the checkbox for 'Extract ALL Android files' is not checked, only the following file locations will be extracted:

/sdcard/  
/data/data/  
/data/misc/

**Export data as XML (as well as SQLite3)** – Checking this box will instruct CellIDEK to export the data as XML and SQLite3. Check this box if you prefer an XML output file.

**Capture to external storage** – CellIDEK TEK 1.18.0.0 and newer versions support capturing data directly to a USB thumb drive. When this selection is checked and you perform a new extraction by clicking '**Read New Device**', you will be asked to choose where the extraction files should be stored.



**Drive Selection Screen**

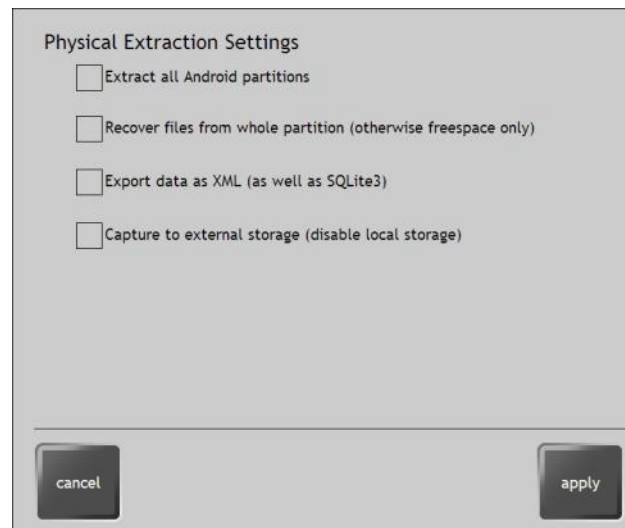
Once a drive is selected, CellIDEK TEK will continue with the extraction process as normal. CellIDEK TEK will store the extraction files in the following directory: '[DRIVE]:\CellIDEK\Datafiles\'.

CellIDEK TEK is capable of detecting encrypted thumb drive software which it will execute allowing you to enter the encryption password. Once the password is entered correctly the drive will appear in the list above.

To view previous extractions which were stored directly on a USB thumb drive, enable '**Capture to external storage**' in Extraction Settings, and then select 'View previous extractions'. You will be asked to choose where the extraction files are stored (which drive they are on). Once you have done this, CellIDEK TEK will list the previous extractions stored on the thumb drive for you to choose from.

**Physical Extraction**

Clicking this button brings up the Physical Extraction settings screen.



**Extract all Android partitions** – When checked, and the Android device is rooted, ALL partitions will be extracted.

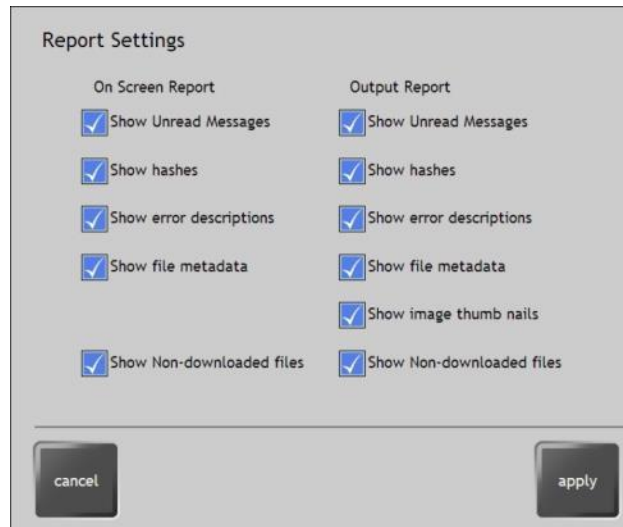
**Recover files from whole partition** – This option attempts to recover files from the different partitions.

**Export data as XML (as well as SQLite3)** – Checking this box will instruct CellIDEK TEK to export the data as XML and SQLite3. Check this box if you prefer an XML output file.

**Capture to external storage** – This option allows you to save the captured data to an external storage device such as a USB flash drive or USB external drive.

**Report Button**

Clicking this button brings up the Report Settings screen. Checked items are represented by a blue box.



**Report Settings Menu**

**On Screen Report Settings**

**Show Unread Messages** – Un-checking this box prevents CellIDEK TEK from showing any unread SMS messages on screen. This setting can be used for any phones that change extracted unread messages to read status.

**Show Hashes** – Checking this box will display the MD5 Hash Value for all extracted data files.

**Show Error Descriptions** – Checking this box will show detailed error descriptions for any failure to extract data. If unchecked, failure messages will read: "An error occurred during the extraction of this section of data".

**Show Image Metadata** – Checking this box will include metadata information with any downloaded images.

**NOTE:** All metadata may not be retrieved from every image extraction.

**Show Non-downloaded Files** – Un-checking this box replaces the list of non-downloaded files on the screen with a statement that the user has chosen not to show non-downloaded data.

### Output Report Settings

---

**Show Unread Messages** – Un-checking this box prevents CellIDEK TEK from showing any unread SMS messages on the report.

**Show Hashes** – Checking this box will display the MD5 Hash Value for all extracted data files.

**Show Error Descriptions** – Checking this box will show detailed error descriptions for any failure to extract data. If unchecked, failure messages will read: "An error occurred during the extraction of this section of data".

**Show Image Metadata** – Checking this box will include metadata information with any downloaded images on the report.

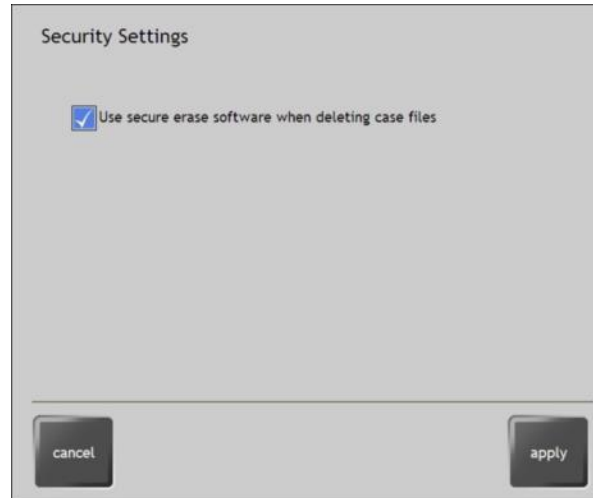
**Show Image Thumb Nails** – Checking this box will show thumb nail images of any downloaded image files on the report.

**Show Non-downloaded Files** – Un-checking this box replaces the list of non-downloaded files on the report with a statement that the user has chosen not to show non-downloaded data.

### Security Button

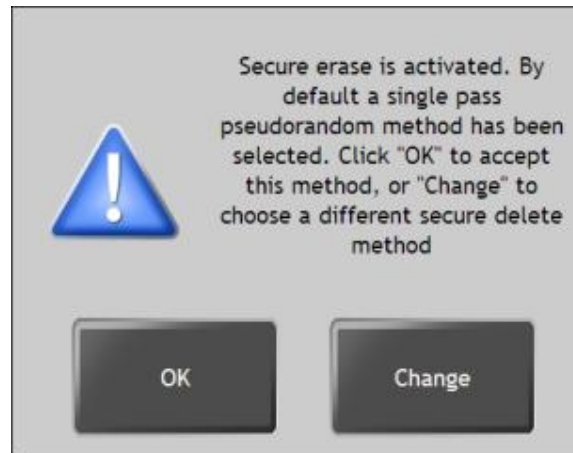
---

This button is activated if the Erase program is loaded on the CellIDEK TEK. A single menu choice will appear that asks if secure erase should be used when deleting case files.



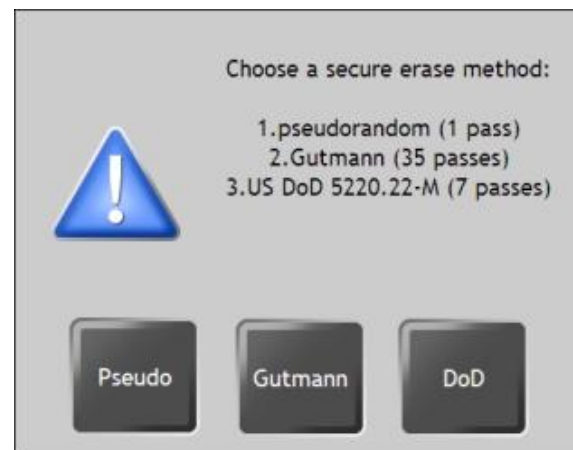
**Security Settings Menu**

If “Use secure erase” is checked, a prompt appears asking the user to change or accept default settings.



**Secure Erase Default Prompt**

If Change is clicked, another prompt appears asking the user which level of security erase should be used.



**Secure Erase Settings**

The settings are:

**Pseudo** – Erase performs a single pass over the data and writes a pattern of random characters over it.

**Gutmann** – Erase copies an alternating random pattern 35 times over the data. This verifies that all magnetic traces of the data is gone.

**US DoD 5220.22-M** – Erase copies an alternating random pattern 7 times over the data. This level of erase conforms to DoD (Department of Defense) specifications.

**Security Erase:**

CellIDEK utilizes a third party utility called Eraser by Heidi Computers, Ltd. This utility is installed separately from the CellIDEK software and is available as a part of software update 1.8.1.0 and up.

CellIDEK automatically detects Erase when it is installed on the unit and activated in the Security Settings Menu.

**Information Button**

Clicking this button will bring up a screen that shows Logicube Technical Support contact information.



**CellIDEK TEK Information Screen**

It also allows the user to insert his or her company logo into the printed reports.

1. On the user’s PC, rename the logo to **LOGO.jpg**. Make sure that it is less than 1MB in size.

**NOTE:** The logo’s name is case sensitive, so it needs to be written exactly as LOGO.jpg.

2. Copy the logo to the root directory of a USB storage device.
3. In the “About CellIDEK” Screen, click the “Update Logo” button.
4. Insert the USB storage device into USB port #1.
5. Click the OK button.
6. The logo will be automatically copied to CellIDEK TEK and overwrite any existing logo.

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## Technical Notes

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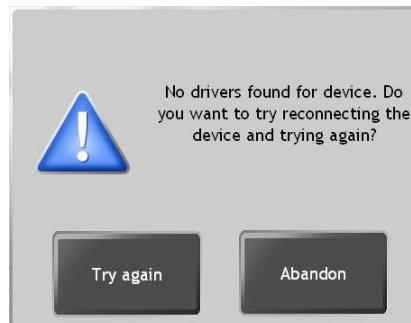
### Conflicting Driver Instructions

---

The CellIDEK TEK's software installer has been developed to recognize if any of its device drivers already exist on a PC and if so, it does not reinstall them. However, some device drivers may already exist on your computer system due to pre-existing forensic tool installations or from previously installed handset applications created by various manufacturers.

Operating the CellIDEK TEK on a computer containing these types of additional drivers can potentially cause what is referred to as a driver conflict. Conflicts between these existing drivers and the ones installed during the CellIDEK TEK installation process could occasionally cause problems if not corrected.

Devices with conflicting drivers will report the following message.



#### Conflicting Device Driver Message

To fix this problem the conflicting driver already installed on your computer needs to be changed.

The driver will only need to be changed once per device model. The next time that model type is connected the correct driver will be used automatically.

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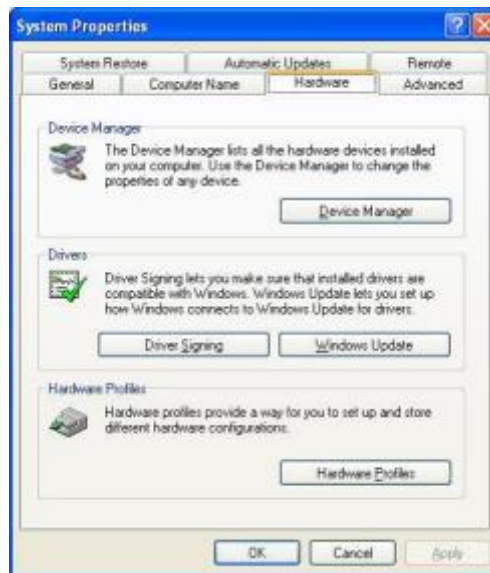
## How to Change Device Drivers

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1. Click "Start", right-click **My Computer** and select **Properties**.



2. Select the **Hardware Tab**.



3. Click **Device Manager**. In the list of devices go to the one whose driver you would like to change. Right-click the device's name and select **Update Driver...**



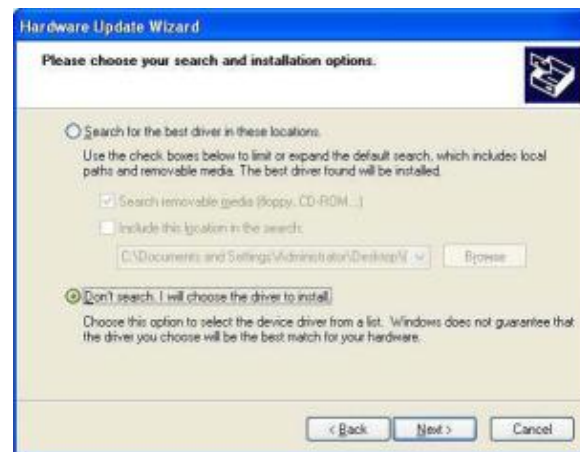
- For Nokia devices look under “wireless communication devices”. and right click Nokia ‘device type’ phone parent.
  - For Sony Ericsson devices look under “Universal Serial Bus controllers” and right click Sony Ericsson Device ##.
  - For Other devices, look under “Modems”.
4. On the first Hardware Update Wizard screen select **No, not this time** and click **Next**.



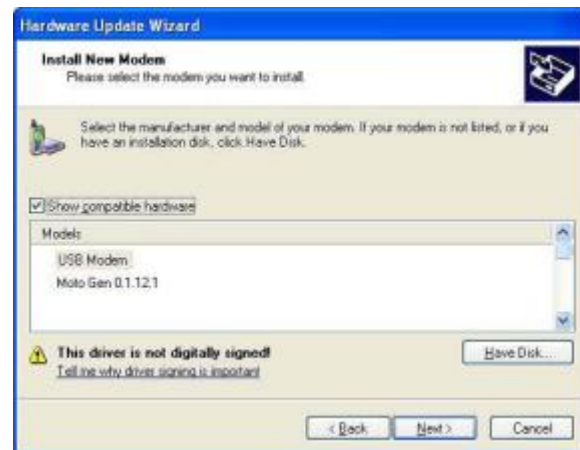
5. On the next Hardware Update Wizard screen select **Install from a list or specific location** and click **Next**.



6. On the next screen select **Don't search. I will choose the driver to install** and click **Next**.



7. The next screen will show a list of suitable drivers for the selected device. In the list a driver entry should appear with the name "[Manufacturer] Gen 0.1.12.1"– for example "Moto Gen 0.1.12.1". This is the driver required for use with CellIDEK TEK. Select the driver name and click **Next**.



8. When installation is complete click **Finish**.



The device manage list will now display a new entry under "LibUSB-Win32 Devices". The device is now set up correctly to work with CellIDEK TEK.

To change the drive back repeat this process but select the original driver at **Step 7**.

---

### Supported Manufacturers

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CellDEK TEK is able to directly support many different wireless devices. Many of these major brands are supported now or will be in the near future:

- Nokia
- Motorola
- Sony Ericsson
- Samsung
- Siemens
- Audiovox
- Kyocera
- Palm
- LG
- Sanyo
- Blackberry
- Windows
- O2
- Sharp
- Thuraya
- Vodafone
- Apple iPhone
- Thuraya Satellite Phones
- TomTom Satellite Navigation Devices
- Garmin Satellite Navigation Devices

## Glossary

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**SIM (Subscriber Identity Module)** - Essentially a small computer on a card that sits within the mobile phone and controls various functions of call making. It also has enough memory to hold information such as ADN and SMS.

**ADN (Abbreviated Dialing Numbers)** - more commonly known as the phonebook or contacts.

**SMS (Short Message Service)** – SMS is a form of textual conversation permitted by a network carrier. The service allows a user to send and receive textual messages direct to their handsets. The storage capacity depends on the handset and SIM. The date and time of received messages is generated by the network, all other date and time stamps are generated from the handset time. The maximum character length is 160 per SMS. Some handsets allow longer messages to be compiled and therefore are split into relevant parts when sent, these messages are known as concatenated.

**Deleted SMS (Short Message Service)** - These are text messages that have been deleted from the SIM card by the cell phone user. However, most mobile phones do not remove the message, but mark the message to be overwritten by incoming messages from the network.

**MMS (Multimedia Messaging Service)** – A service which allows Multimedia messages to be sent from one mobile to another via one or more call centers or network providers. A Multimedia message is stored on the handset and can contain a combination of text, video clips, images and sound clips.

**ICCID (Integrated Circuit Card Identifier)** - The serial number of the SIM card stored electronically within the SIM. A similar number or shortened version is often found printed on the SIM card.

**IMEI (International Mobile Equipment Identifier)** - This is a unique number given to each handset. This is usually printed somewhere on the handset, (typically in the battery compartment) and stored electronically in the phone handset memory. It can be viewed typing \*#06# on the keypad.

**PIN (Personal Identification Number)** - The SIM card has been locked against unauthorized access using the PIN number. When PIN security is activated, the correct PIN number must be entered in order to use any of the features of the handset (make calls, access ADN etc.) The only calls that can be made without a PIN are calls to the emergency services.

**PUK (Personnel Unblocking Key)** - If the PIN is unknown the PUK is used to unblock the SIM card and enable a new PIN code to be entered.

**MSISDN (Mobile Station ISDN Number)** - This number is the standard international number used to identify a given subscriber. However, the number stored in the MSISDN location on a SIM Card can be changed without affecting the actual telephone number. Therefore, the MSISDN number downloaded from the SIM card can only be used as an indicator.

**IMSI (International Mobile Subscriber Identity)** – This is a unique number allocated to each mobile phone subscriber, stored electronically within the SIM Card. It is used by the network to look up the telephone number associated to the SIM Card.

**GSM (Global System for Mobile Communications)** - A digital mobile telephone system that is widely used in Europe and other parts of the world. GSM uses a variation of time division multiple access (TDMA) and is the most widely used of the three digital wireless telephone technologies (TDMA, GSM, and CDMA).

**CDMA (Code Division Multiple Access)** - refers to any of several protocols used in so-called second-generation (2G) and third-generation (3G) wireless communications. As the term implies, CDMA is a form of multiplexing, which allows numerous signals to occupy a single transmission channel, optimizing the use of available bandwidth. The technology is used in ultra-high-frequency (UHF) cellular telephone systems in the 800-MHz and 1.9-GHz bands.

**TDMA (Time Division Multiple Access)** - is a technology used in digital cellular telephone communication that divides each cellular channel into three time slots in order to increase the amount of data that can be carried.

**Cluster** The smallest block of memory in a drive that can be written to individually by the file system.

**Allocation table** Table that keeps track of the contents of each cluster on the drive. The allocation table is used to combine clusters in the correct order to construct the files in the file system.

**Allocated space** Any cluster that is being used to store a file and has a written entry in the allocation table

**Unallocated Space** Any clusters that have an empty entry in the allocation table (i.e. are not assigned to any file) and are marked as being available for over writing by the file system.

**Extant File** A files that is still active in the file system and has appropriate entries in the allocation table to be reconstructed.

**Contiguous File** A file stored using clusters that are located next to each other in the drive's memory.










## 7. Supported Handsets

### Handsets tested on CellIDEK and the results verified

















































These handsets are assigned a green tick next to their image on CellIDEK TEK.

The following handsets have been tested on CellIDEK TEK using the standard validation procedures of Logicube. The results below display the data sets that can be extracted from CellIDEK TEK for the specific handset. There may be additional data sets available from handsets and these will require further examination.

Key:

Phone ID		SMS	
Phone ID w timestamp		SMS w timestamp	
Contacts		MMS	<b>MMS</b>
Call Logs		Files	
Call Logs w timestamp		Organizer	

- Handsets that appear with no cable number assigned are supported via Infrared or Bluetooth methods.
- Cable Number 999 refers to the external Nokia CA-42 cable

No.	Manufacturer	Model	Phone ID	Contacts	Call Logs	Messages	Files	Organiser	Mobile Standard	Cable No.	Date Added
1	ACER	beTouch E101							GSM	9	Jan-10
2	ACER	F900							GSM	9	Jan-10
3	ACER	n50							GSM		Jul-06
4	ACER	X960							GSM	9	Oct-09
5	ALCATEL	OT-C707							GSM		Apr-08
6	AMOI	WP-S1							GSM	9	Apr-09
7	ANDROID	G1							GSM	9	Jul-08
8	APPLE	iPhone							GSM	31	Oct-08

9	APPLE	iPhone 3G							GSM	31	Oct-09
10	APPLE	iPhone 4							GSM	31	May-11
11	APPLE	iPad							N/A	31	Sep-12
12	BENQ	E72							GSM	9	Jan-09
13	BENQ	P50							GSM	9	Jul-06
14	BENQ SIEMENS	EF81							GSM		Apr-07
15	BENQ SIEMENS	S68							GSM		Jul-06
16	BENQ SIEMENS	S88							GSM		Jul-07
17	BLACKBERRY	7230							GSM	9	Apr-08
18	BLACKBERRY	7250							GSM	9	Jul-07
19	BLACKBERRY	7290							GSM	9	Jan-07
20	BLACKBERRY	8100							GSM	9	Jul-07
21	BLACKBERRY	8120							GSM	9	Jan-09
22	BLACKBERRY	8300							GSM	9	Jan-09
23	BLACKBERRY	8310							GSM	9	Jul-08
24	BLACKBERRY	8320							GSM	9	Apr-08
25	BLACKBERRY	8330							CDM A	9	Jan-09
26	BLACKBERRY	8520							GSM	26	Jan-10
27	BLACKBERRY	8800							GSM	9	Jan-10
28	BLACKBERRY	8800							GSM	9	Oct-08
29	BLACKBERRY	8820							GSM	9	Apr-08
30	BLACKBERRY	8830							CDM A	9	Oct-08
31	BLACKBERRY	8900							GSM	26	Jul-09
32	BLACKBERRY	9000							GSM	9	Jan-09
33	BLACKBERRY	9500							GSM	26	Jul-09
34	BLACKBERRY	9530							GSM	26	Jul-09
35	BLACKBERRY	9700							GSM	26	Sep-10
36	BLACKBERRY	7100t							GSM	9	Apr-06
37	BLACKBERRY	7100v							GSM	9	Apr-06
38	BLACKBERRY	7100x							GSM	9	Apr-06
39	BLACKBERRY	8700f							GSM	9	Jan-07

40	BLACKBERRY	8700g							GSM	9	Jan-07
41	BLACKBERRY	8700v							GSM	9	Oct-07
42	BLACKBERRY	8707g							GSM	9	Oct-09
43	BLACKBERRY	8707v							GSM	9	Jul-07
44	BLACKBERRY	9780							GSM	26	Dec-11
45	BLACKBERRY	9800							GSM	26	Dec-11
46	BLACKBERRY	9650							GSM	26	Dec-11
47	DELL	AXIM X51v							GSM		Oct-06
48	E-TEN	P300B							GSM		Oct-07
49	GLOFIISH	M810							GSM	9	Oct-09
50	GLOFIISH	X600							GSM	9	Oct-08
51	HP	iPAQ 514							GSM	9	Oct-07
52	HP	iPAQ H5550							GSM		Jul-06
53	HP	iPAQ HW6915							GSM		Oct-06
54	HP	iPAQ rx1950							GSM		Jul-07
55	HP	iPAQ rz1710							GSM		Jul-06
56	HTC	Desire							GSM	26	May-11
57	HTC	EVO 4G							CDM A	26	May-11
58	HTC	Hero							GSM	9	Oct-09
59	HTC	Incredible							CDM A	26	May-11
60	HTC	Kaizer							GSM	9	Jan-08
61	HTC	Magic							GSM	9	Oct-09
62	HTC	NEXUS ONE							GSM	26	Dec-10
63	HTC	P3300							GSM	9	Oct-07
64	HTC	P3450							GSM	9	Jul-09
65	HTC	P3470							GSM	9	Oct-08
66	HTC	P5500							GSM	9	Oct-08
67	HTC	S310							GSM	9	Jul-07
68	HTC	S620							GSM	9	Oct-08
69	HTC	S710							GSM	9	Jul-08
70	HTC	S740							GSM	9	Jul-09

			☎	📖	📶	✉	📁	📄				
71	HTC	S743	☎	📖	📶	✉	📁	📄	GSM	18	Dec-10	
72	HTC	Shadow	☎	📖	📶	✉	📁	📄	GSM	9	Oct-08	
73	HTC	SMT5800	☎	📖	📶	✉	📁	📄	CDM A	9	Sep-10	
74	HTC	Snap	☎	📖	📶	✉	📁	📄	GSM	9	Oct-09	
75	HTC	Tattoo	☐	📖	📶	✉	📁	☐	GSM	9	Jan-10	
76	HTC	Tornado	☐	📖	📶	✉	📁	📄	GSM	9	Jan-08	
77	HTC	Touch	☐	📖	📶	✉	📁	📄	GSM	9	Oct-07	
78	HTC	TOUCH CRUISE	☎	📖	📶	✉	📁	📄	GSM	9	Apr-09	
79	HTC	TOUCH DIMOND	☎	📖	📶	✉	📁	📄	GSM	9	Jul-09	
80	HTC	Inspire	☐	📖	📶	✉	📁	☐	GSM	26	Dec 2011	
81	HTC	ThunderBolt	☎	📖	📶	✉	📁	☐	CDM A	26	Dec 2011	
82	HTC	Sensation	☎	📖	📶	✉	📁	☐	GSM	26	Apr-12	
83	HTC	Amaze 4G	☎	📖	📶	✉	📁	☐	GSM	26	Apr-12	
84	HTC	Status	☎	📖	📶	✉	📁	☐	GSM	26	Apr-12	
85	HUAWEI	U8150	☎	📖	📶	✉	📁	☐	GSM	26	Dec 2011	
86	HUAWEI	M735	☎	📖	📶	✉	☐	📄	CDM A	26	Dec 2011	
87	HUAWEI	U8800	☎	📖	📶	✉	📁	☐	GSM	26	Apr-12	
88	HUAWEI	M860	☎	📖	📶	☐	📁	☐	CDM A	26	Sep-12	
89	IMATE	JAM	☐	📖	📶	✉	📁	📄	GSM	9	Jul-06	
90	IMATE	JAMin	☐	📖	📶	✉	📁	📄	GSM	9	Jul-06	
91	IMATE	JASJAR	☎	📖	📶	✉	📁	📄	GSM	9	Oct-06	
92	IMATE	K-JAM	☐	📖	📶	✉	📁	📄	GSM	9	Jul-06	
93	IMATE	PDA2K	☎	📖	📶	✉	📁	📄	GSM		Jul-08	
94	IMATE	SP3i	☎	📖	📶	✉	📁	📄	GSM	9	Jul-06	
95	IMATE	SP5	☎	📖	📶	✉	📁	📄	GSM	9	Jul-06	
96	IMATE	SPL	☎	📖	📶	✉	📁	📄	GSM	9	Jul-07	
97	KYOCERA	K323	☎	📖	☐	✉	📁	☐	CDM A		Jan-09	
98	KYOCERA	K342	☎	📖	☐	✉	📁	☐	CDM A		Jan-09	
99	KYOCERA	K404	☎	📖	📶	✉	☐	☐	CDM A	3	Jul-06	
100	KYOCERA	K9	☎	📖	☐	✉	📁	☐	CDM	3	Jan-09	

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101	KYOCERA	KX1								CDM A	3	Jan-09
102	KYOCERA	KX160								CDM A	3	Jan-09
103	KYOCERA	KX5								CDM A		Jan-09
104	KYOCERA	KX9a								CDM A	3	Jan-09
105	KYOCERA	S1300								CDM A	26	Sep-10
106	KYOCERA	S4000								CDM A	26	Sep-10
107	KYOCERA	SE47								CDM A	19	Jul-06
108	KYOCERA	M1400								CDM A	26	Dec 2011
109	LG	A7110								GSM	5	Jul-06
110	LG	AX380								CDM A	27	Jul-09
111	LG	C1300i								GSM	19	Jan-07
112	LG	C1500								GSM	19	Jan-07
113	LG	C2000								GSM	19	Jan-07
114	LG	C2500								GSM	9	Jul-10
115	LG	CE500								GSM	5	Jul-06
116	LG	CG225								GSM	19	Jan-07
117	LG	CG300								GSM	19	Jan-07
118	LG	F2500								GSM		Apr-08
119	LG	F9100								GSM	19	Jan-07
120	LG	F9200								GSM	19	Jan-07
121	LG	G4020								GSM	19	Apr-08
122	LG	G4050								GSM	19	Jan-07
123	LG	GD900								GSM	26	Jan-10
124	LG	GS170								GSM	26	Dec-10
125	LG	GT365								GSM	27	Sep-10
126	LG	GT950 (Arena)								GSM	26	May-11
127	LG	GW300								GSM	26	Jan-10
128	LG	GW520								GSM	26	Jan-10
129	LG	GW820 (Expo)								GSM	26	May-11
130	LG	KC550								GSM	27	Oct-08

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131	LG	KC780	☎	📖	☐	⊕	📁	📄	GSM	27	Oct-09	
132	LG	KC910	☎	📖	☐	⊕	📁	📄	GSM	27	Apr-09	
133	LG	KE500	☎	📖	☐	⊕	📁	📄	GSM	27	Oct-08	
134	LG	KE770	⌚	📖	☐	⊕	📁	📄	GSM	27	Apr-08	
135	LG	KE800	⌚	📖	☐	⊕	📁	📄	GSM	27	Apr-08	
136	LG	KE820	⌚	📖	☐	⊕	📁	📄	GSM	27	Apr-08	
137	LG	KE850	⌚	📖	☐	⊕	📁	📄	GSM	27	Apr-08	
138	LG	KE970	⌚	📖	☐	⊕	📁	📄	GSM	27	Apr-08	
139	LG	KF510	⌚	📖	☐	⊕	📁	📄	GSM	27	Jan-09	
140	LG	KF600	⌚	📖	☐	⊕	📁	📄	GSM	27	Jan-09	
141	LG	KG200	⌚	☐	⌚	⊕	📁	☐	GSM	9	Sep-10	
142	LG	KG300	⌚	☐	⌚	⊕	📁	☐	GSM	9	Sep-10	
143	LG	KG320	⌚	📖	☐	⊕	📁	📄	GSM	27	Jul-07	
144	LG	KG800	⌚	📖	☐	⊕	📁	📄	GSM	27	Oct-06	
145	LG	KG810	☎	📖	☐	⊕	☐	📄	GSM	27	Apr-08	
146	LG	KG920	⌚	📖	☐	⊕	📁	📄	GSM	5	Oct-06	
147	LG	KM710	☎	📖	☐	⊕	☐	📄	GSM	27	Oct-08	
148	LG	KM900	☎	📖	☐	⊕	📁	📄	GSM		Jan-10	
149	LG	KP170	⌚	📖	☐	⊕	📁	📄	GSM	27	Jan-10	
150	LG	KP500	☎	📖	☐	⊕	📁	📄	GSM	27	Apr-09	
151	LG	KU990	☎	📖	☐	⊕	📁	📄	GSM	27	Apr-09	
152	LG	L1150	☎	📖	☐	⊕	☐	📄	GSM	19	Apr-08	
153	LG	L1200	☎	📖	☐	⊕	☐	📄	GSM	19	Jan-07	
154	LG	L1400i	☎	📖	☐	⊕	☐	📄	GSM	19	Jan-07	
155	LG	LG6190	☎	📖	⌚	⊕	📁	📄	CDM A	6	Sep-10	
156	LG	LX150	☎	📖	⌚	⊕	☐	📄	CDM A	27	Apr-08	
157	LG	LX160	☎	📖	⌚	⊕	☐	📄	CDM A	27	Apr-08	
158	LG	LX550	☎	📖	⌚	⊕	📁	📄	CDM A	6	Apr-08	
159	LG	LX5550	☎	📖	⌚	⊕	📁	📄	CDM A	5	Oct-07	
160	LG	MM535	☎	📖	⌚	⊕	📁	📄	CDM	6	Apr-06	

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161	LG	MN240 (Imprint)							CDM A	26	May-11
162	LG	MT310							CDM A	26	Dec-10
163	LG	P7200							GSM	5	Apr-06
164	LG	PM225							CDM A	6	Apr-06
165	LG	PM325							CDM A	6	Apr-06
166	LG	S5200							GSM	5	Apr-06
167	LG	U8110							GSM	5	Apr-09
168	LG	U8120							GSM	5	Apr-09
169	LG	U8130							GSM	5	Apr-09
170	LG	U8138							GSM	5	Apr-09
171	LG	U8360							GSM	5	Apr-09
172	LG	U8380							GSM	5	Apr-09
173	LG	UN430							CDM A	26	Dec-10
174	LG	UX260							CDM A	27	Oct-09
175	LG	UX300							CDM A	26	Dec-10
176	LG	UX355							CDM A	6	Jul-07
177	LG	UX390							CDM A	6	Jul-07
178	LG	UX4750							CDM A	6	Jan-08
179	LG	UX5000							CDM A	6	Jan-08
180	LG	VI125							CDM A	6	Apr-06
181	LG	VX10000							CDM A	27	Jan-09
182	LG	VX4500							CDM A	19	Jul-06
183	LG	VX4600							CDM A	19	Jul-06
184	LG	VX4700							CDM A	6	Apr-06
185	LG	VX5200							CDM A	6	Apr-06
186	LG	VX5300							GSM	21	Oct-06
187	LG	VX5400							CDM A	27	Jan-09
188	LG	VX5500							CDM A	26	Sep-10
189	LG	VX5600							CDM A	26	Dec-10

190	LG	VX6000							CDM A	5	Jul-06
191	LG	VX6100							CDM A	6	Apr-06
192	LG	VX6190							CDM A	6	Sep-10
193	LG	VX7000							CDM A	6	Jul-06
194	LG	VX8000							CDM A	6	Jul-06
195	LG	VX8100							CDM A	6	Apr-06
196	LG	VX8300							CDM A	21	Oct-06
197	LG	VX8350							CDM A	27	Apr-08
198	LG	VX8500							CDM A	27	Oct-08
199	LG	VX8575							CDM A	26	Sep-10
200	LG	VX8610							CDM A	26	Oct-09
201	LG	VX8700							CDM A	27	Jan-09
202	LG	VX8800							CDM A	27	Jan-09
203	LG	VX9100							CDM A	26	Jan-09
204	LG	VX9200							CDM A	26	Dec-10
205	LG	VX9400							CDM A	27	Apr-08
206	LG	VX9700							CDM A	26	Dec-10
207	LG	VX9800							CDM A	6	Jan-07
208	LG	VX9900							CDM A	27	Oct-08
209	LG	P509							GSM	26	Dec 2011
210	LG	KS20							GSM	27	Dec 2011
211	LG	VS750							CDM A	26	Dec 2011
212	LG	UX310							CDM A	26	Dec 2011
213	LG	MT375							CDM A	26	Dec 2011
214	LG	VN530							CDM A	26	Dec 2011
215	LG	P505							GSM	26	Apr-12
216	LG	C729							GSM	26	Apr-12
217	LG	LG670							CDM A	26	Apr-12
218	LG	AX145							CDM A	19	Apr-12
219	LG	P925							GSM	26	Apr-12

220	LG	P930							GSM	26	Apr-12
221	LOBSTER	700TV							GSM	9	Jan-08
222	MIO	A501							GSM	9	Jul-09
223	MIO	A701							GSM	9	Apr-07
224	MOTOROLA	MB810 (DROID X)							CDM A	26	May-11
225	MOTOROLA	A555 (Devour)							CDM A	26	May-11
226	MOTOROLA	A835							GSM	24	Dec-05
227	MOTOROLA	A855							CDM A	26	Sep-10
228	MOTOROLA	C332							GSM	9	Jul-07
229	MOTOROLA	C343							CDM A	24	Apr-06
230	MOTOROLA	C350							GSM	9	Apr-06
231	MOTOROLA	C385							GSM	9	Dec-05
232	MOTOROLA	C390							GSM	9	Dec-05
233	MOTOROLA	C550							GSM	9	Dec-05
234	MOTOROLA	C650							GSM	9	Dec-05
235	MOTOROLA	C975							GSM	24	Dec-05
236	MOTOROLA	E1							GSM	24	Apr-06
237	MOTOROLA	E1000							CDM A	24	Oct-06
238	MOTOROLA	E1070							GSM	9	Jan-07
239	MOTOROLA	E398							GSM	24	Dec-05
240	MOTOROLA	E8							GSM		Jan-10
241	MOTOROLA	E815							CDM A		Oct-06
242	MOTOROLA	K1							GSM	9	Oct-07
243	MOTOROLA	K1m							CDM A		Apr-07
244	MOTOROLA	K3							GSM	9	Jul-07
245	MOTOROLA	L2							GSM	9	Oct-06
246	MOTOROLA	L6							GSM	9	Apr-06
247	MOTOROLA	L7							GSM	9	Apr-06
248	MOTOROLA	maxx Ve							CDM A		Jan-10
249	MOTOROLA	MPX200							GSM	9	Jul-06

250	MOTOROLA	MPX220							GSM	24	Jul-06
251	MOTOROLA	Q							GSM	9	Jan-08
252	MOTOROLA	Q9h							GSM	26	Apr-08
253	MOTOROLA	QA1							GSM	26	Sep-10
254	MOTOROLA	T280i							GSM		Oct-06
255	MOTOROLA	T300p							CDM A	24	Dec-05
256	MOTOROLA	U6							GSM	9	Apr-06
257	MOTOROLA	V1050							GSM	24	Oct-06
258	MOTOROLA	V120c							CDM A	24	Apr-06
259	MOTOROLA	V180							GSM	9	Dec-05
260	MOTOROLA	V188							GSM	9	Apr-06
261	MOTOROLA	V190							GSM	9	Jul-07
262	MOTOROLA	V195							GSM	9	Oct-06
263	MOTOROLA	V220							GSM	9	Apr-06
264	MOTOROLA	V235							GSM	9	Jan-07
265	MOTOROLA	V260							CDM A	24	Jan-08
266	MOTOROLA	V265							CDM A	24	Apr-08
267	MOTOROLA	V3							GSM	9	Dec-05
268	MOTOROLA	V300							GSM	24	Dec-05
269	MOTOROLA	V360							GSM	9	Apr-06
270	MOTOROLA	V3a							CDM A	9	May-11
271	MOTOROLA	V3c							CDM A		Jan-10
272	MOTOROLA	V3i							GSM	9	Apr-06
273	MOTOROLA	V3m							CDM A		Apr-08
274	MOTOROLA	V3x							GSM	9	Jul-06
275	MOTOROLA	V3xx							GSM	9	Oct-09
276	MOTOROLA	V400							GSM	24	Jan-08
277	MOTOROLA	V500							GSM	24	Jul-08
278	MOTOROLA	V525							GSM	24	Dec-05
279	MOTOROLA	V540							GSM	24	Jul-07

280	MOTOROLA	V550							GSM	24	Apr-06
281	MOTOROLA	V551							GSM	24	Apr-06
282	MOTOROLA	V6							GSM	9	Jul-07
283	MOTOROLA	V600							GSM		Dec-05
284	MOTOROLA	V60p							CDM A	24	Dec-05
285	MOTOROLA	V60v							CDM A	24	Jul-07
286	MOTOROLA	V620							GSM	24	Apr-06
287	MOTOROLA	V635							GSM	24	Dec-05
288	MOTOROLA	V65p							CDM A	24	Apr-08
289	MOTOROLA	V66i							GSM	24	Dec-05
290	MOTOROLA	V70							GSM	24	Dec-05
291	MOTOROLA	V710							CDM A	24	Apr-06
292	MOTOROLA	V8							GSM		Jan-10
293	MOTOROLA	V80							GSM	24	Dec-05
294	MOTOROLA	V860 (Barrage)							CDM A	26	May-11
295	MOTOROLA	V9							GSM	26	Apr-08
296	MOTOROLA	V950							CDM A		Jan-10
297	MOTOROLA	V975							GSM	24	Jul-08
298	MOTOROLA	V980							GSM	24	Dec-05
299	MOTOROLA	V9m							CDM A		Apr-08
300	MOTOROLA	VE240							CDM A	9	May-11
301	MOTOROLA	W385							CDM A		Apr-08
302	MOTOROLA	W450							GSM		Oct-09
303	MOTOROLA	W510							GSM	9	Jan-08
304	MOTOROLA	W755							CDM A		Jan-10
305	MOTOROLA	W840 (Quantico)							CDM A	26	May-11
306	MOTOROLA	Z3							GSM	9	Apr-07
307	MOTOROLA	Z6							GSM		Jan-10
308	MOTOROLA	Z6m							CDM A		Apr-08
309	MOTOROLA	Z6tv							CDM A		Sep-10

310	MOTOROLA	Z8							GSM		Jul-08
311	MOTOROLA	Z9							GSM	26	Apr-09
312	MOTOROLA	ZN4							CDM A		Jan-10
313	MOTOROLA	MB860							GSM	26	Dec 2011
314	MOTOROLA	XT610							CDM A	26	Dec 2011
315	MOTOROLA	MB865							GSM	26	Sep-12
316	NDRIVE	S300							GSM	9	Apr-09
317	NEO	808i							GSM		Jan-09
318	NOKIA	1100							GSM	25(CD - NOK1 )	Oct-07
319	NOKIA	1101							GSM	25(CD - NOK1 )	Oct-07
320	NOKIA	1110							GSM	25(CD - NOK2 )	Oct-07
321	NOKIA	1112							GSM	25(CD - NOK2 )	Oct-07
322	NOKIA	1200							GSM	25(CD - NOK1 )	Jan-08
323	NOKIA	1208							GSM	25(CD - NOK1 )	Jan-08
324	NOKIA	1209							GSM	25(CD - NOK1 )	Apr-09
325	NOKIA	1600							GSM	25(CD - NOK2 )	Oct-07
326	NOKIA	2100							GSM	25(CD - NOK3 )	Oct-07
327	NOKIA	2285							CDM A	999	Oct-06
328	NOKIA	2300							GSM	25(CD - NOK1 )	Oct-07
329	NOKIA	2310							GSM	25(CD - NOK2 )	Oct-07

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330	NOKIA	2600							GSM		Jul-08
331	NOKIA	2610						GSM		25(CD - NOK2 )	Oct-07
332	NOKIA	2626						GSM		25(CD - NOK2 )	Oct-07
333	NOKIA	2630						GSM			Apr-08
334	NOKIA	2650						GSM		25(CD - NOK6 )	Oct-07
335	NOKIA	2652						GSM		25(CD - NOK6 )	Oct-07
336	NOKIA	2680						GSM			Jan-09
337	NOKIA	2760						GSM			Jan-08
338	NOKIA	3100						GSM	999		Oct-06
339	NOKIA	3109						GSM	9		Oct-07
340	NOKIA	3110						GSM	9		Jul-07
341	NOKIA	3120						GSM	999		Jul-08
342	NOKIA	3200						GSM	999		Apr-06
343	NOKIA	3210						GSM		25(CD - NOK8 )	Oct-07
344	NOKIA	3220						GSM	999		Apr-07
345	NOKIA	3230						GSM	12		Apr-07
346	NOKIA	3250						GSM	12		Apr-07
347	NOKIA	3310						GSM		25(CD - NOK9 )	Oct-07
348	NOKIA	3330						GSM		25(CD - NOK9 )	Jan-08
349	NOKIA	3410						GSM		25(CD - NOK9 )	Oct-07
350	NOKIA	3510						GSM		25(CD - )	Jan-08

											NOK5 )	
351	NOKIA	3555							CDMA		26	Oct-08
352	NOKIA	5000							GSM			Oct-08
353	NOKIA	5070							GSM	999		Jul-07
354	NOKIA	5100							GSM	999		Dec-05
355	NOKIA	5110							GSM		25(CD - NOK7 )	Oct-07
356	NOKIA	5140							GSM	999		Jul-08
357	NOKIA	5200							GSM	9		Apr-07
358	NOKIA	5210							GSM			Apr-07
359	NOKIA	5220							GSM	26		Oct-08
360	NOKIA	5230							GSM	26		Sep-10
361	NOKIA	5300							GSM	9		Apr-07
362	NOKIA	5310							GSM	26		Jan-08
363	NOKIA	5320							GSM	26		Jan-09
364	NOKIA	5500							GSM	12		Apr-07
365	NOKIA	5610							GSM	26		Apr-08
366	NOKIA	5700							GSM	9		Jul-07
367	NOKIA	5800							GSM	26		Jul-09
368	NOKIA	6010							GSM		25(CD - NOK5 )	Oct-07
369	NOKIA	6020							GSM	999		Dec-05
370	NOKIA	6021							GSM	999		Apr-06
371	NOKIA	6030							GSM		25(CD - NOK2 )	Oct-07
372	NOKIA	6060							GSM		25(CD - NOK2 )	Oct-07
373	NOKIA	6061							GSM		25(CD - NOK2 )	Apr-08
374	NOKIA	6070							GSM	999		Oct-06

375	NOKIA	6080							GSM	999	Jan-07
376	NOKIA	6085							GSM	12	Jul-07
377	NOKIA	6086							GSM	12	Apr-08
378	NOKIA	6100							GSM	999	Dec-05
379	NOKIA	6101							GSM	999	Dec-05
380	NOKIA	6103							GSM	999	Oct-06
381	NOKIA	6108							GSM	999	Oct-07
382	NOKIA	6111							GSM	12	Apr-06
383	NOKIA	6120							GSM	9	Jan-08
384	NOKIA	6125							GSM	12	Oct-06
385	NOKIA	6130							GSM	25(CD - NOK7 )	Oct-07
386	NOKIA	6131							GSM	12	Jul-06
387	NOKIA	6136							GSM	12	Jan-07
388	NOKIA	6150							GSM	25(CD - NOK7 )	Oct-07
389	NOKIA	6151							GSM	12	Oct-06
390	NOKIA	6170							GSM	12	Dec-05
391	NOKIA	6200							GSM	999	Jul-07
392	NOKIA	6210							GSM	26	Jul-09
393	NOKIA	6210							GSM	25(CD - NOK7 )	Oct-07
394	NOKIA	6220							GSM	999	Dec-05
395	NOKIA	6225							CDM A	999	Jul-07
396	NOKIA	6230							GSM	12	Apr-06
397	NOKIA	6233							GSM	12	Oct-06
398	NOKIA	6234							GSM	12	Jul-07
399	NOKIA	6260							GSM	12	Jan-07
400	NOKIA	6263							CDM A	9	Oct-08
401	NOKIA	6267							GSM	9	Jan-08
402	NOKIA	6270							GSM	12	Jul-06

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403	NOKIA	6280	☎ ⊕	📖 ⊕	📶 ⊕	✉ ⊕	📁	☐	GSM	12	Apr-06	
404	NOKIA	6282	☎ ⊕	📖 ⊕	📶 ⊕	✉ ⊕	📁	☐	GSM	12	Jul-07	
405	NOKIA	6288	☎ ⊕	📖 ⊕	📶 ⊕	✉ ⊕	📁	☐	GSM	12	Jul-07	
406	NOKIA	6290	☎ ⊕	📖 ⊕	📶 ⊕	✉ ⊕	📁	☐	GSM	9	Oct-07	
407	NOKIA	6300	☎ ⊕	📖 ⊕	📶 ⊕	✉ ⊕	📁	☐	GSM	9	Jul-07	
408	NOKIA	6301	☎ ⊕	📖 ⊕	📶 ⊕	✉ ⊕	📁	☐	GSM	9	Jan-09	
409	NOKIA	6310	☎ ⊕	📖 ⊕	📶 ⊕	✉ ⊕	☐	📄	GSM		Apr-06	
410	NOKIA	6360	☐	📖 ⊕	📶 ⊕	✉ ⊕	☐	📄	CDM A	25(CD - NOK7 )	Oct-07	
411	NOKIA	6510	☎ ⊕	📖 ⊕	📶 ⊕	✉ ⊕	☐	📄	GSM		Apr-07	
412	NOKIA	6555	☎ ⊕	📖 ⊕	📶 ⊕	✉ ⊕	📁	☐	GSM	26	Jan-08	
413	NOKIA	6610	☎ ⊕	📖 ⊕	📶 ⊕	✉ ⊕	☐	📄	GSM	999	Apr-06	
414	NOKIA	6620	☎ ⊕	📖 ⊕	📶 ⊕	✉ ⊕	📁	📄	GSM	12	Apr-07	
415	NOKIA	6630	☎ ⊕	📖 ⊕	📶 ⊕	✉ ⊕	📁	📄	GSM		Jan-08	
416	NOKIA	6650	☎ ⊕	📖 ⊕	📶 ⊕	✉ ⊕	📁	📄	GSM	26	Jul-09	
417	NOKIA	6670	☎ ⊕	📖 ⊕	📶 ⊕	✉ ⊕	📁	📄	GSM	12	Jan-07	
418	NOKIA	6680	☎ ⊕	📖 ⊕	📶 ⊕	✉ ⊕	📁	📄	GSM	12	Jan-07	
419	NOKIA	6790	☎ ⊕	📖 ⊕	📶 ⊕	✉ ⊕	📁	📄	GSM	26	Sep-10	
420	NOKIA	6800	☎ ⊕	📖 ⊕	📶 ⊕	✉ ⊕	📁	☐	GSM	999	Oct-07	
421	NOKIA	6810	☎ ⊕	📖 ⊕	📶 ⊕	✉ ⊕	📁	☐	GSM	999	Jul-07	
422	NOKIA	6820	☎ ⊕	📖 ⊕	📶 ⊕	✉ ⊕	📁	☐	GSM	999	Apr-06	
423	NOKIA	6822	☎ ⊕	📖 ⊕	📶 ⊕	✉ ⊕	📁	☐	GSM	999	Dec-05	
424	NOKIA	7020	☎ ⊕	📖 ⊕	📶 ⊕	✉ ⊕	📁	☐	GSM	26	Dec-10	
425	NOKIA	7110	☎ ⊕	📖 ⊕	📶 ⊕	✉ ⊕	☐	📄	GSM	25(CD - NOK7 )	Oct-07	
426	NOKIA	7200	☎ ⊕	📖 ⊕	📶 ⊕	✉ ⊕	📁	☐	GSM	999	Oct-06	
427	NOKIA	7210	☎ ⊕	📖 ⊕	📶 ⊕	✉ ⊕	📁	☐	GSM	26	Jan-09	
428	NOKIA	7210	☎ ⊕	📖 ⊕	📶 ⊕	✉ ⊕	📁	📄	GSM	999	Dec-05	
429	NOKIA	7260	☎ ⊕	📖 ⊕	📶 ⊕	✉ ⊕	📁	☐	GSM	999	Apr-06	
430	NOKIA	7270	☎ ⊕	📖 ⊕	📶 ⊕	✉ ⊕	📁	☐	GSM	12	Dec-05	

431	NOKIA	7280							GSM		Dec-05
432	NOKIA	7360							GSM	999	Apr-06
433	NOKIA	7370							GSM	12	Apr-06
434	NOKIA	7373							GSM	12	Apr-07
435	NOKIA	7380							GSM		Apr-06
436	NOKIA	7390							GSM	9	Apr-07
437	NOKIA	7500							GSM	9	Jan-08
438	NOKIA	7510							GSM	26	Jul-09
439	NOKIA	7600							GSM	12	Dec-05
440	NOKIA	7610							GSM	12	Jan-07
441	NOKIA	7900							GSM	26	Apr-08
442	NOKIA	8210							GSM	25(CD - NOK3 )	Apr-07
443	NOKIA	8310							GSM		Apr-07
444	NOKIA	8800							GSM		Dec-05
445	NOKIA	8850							GSM		Apr-07
446	NOKIA	8910							GSM		Dec-05
447	NOKIA	1110i							GSM	25(CD - NOK2 )	Oct-07
448	NOKIA	2323 Classic							GSM		Oct-09
449	NOKIA	2330 Classic							GSM		Oct-09
450	NOKIA	2700 Classic							GSM	26	Oct-09
451	NOKIA	2720 Fold							GSM		Jan-10
452	NOKIA	2730 Classic							GSM	26	Jan-10
453	NOKIA	2865i							CDM A	12	Jan-08
454	NOKIA	3120 Classic							GSM	26	Apr-09
455	NOKIA	3155i							CDM A	12	Apr-08
456	NOKIA	3500 classic							GSM	9	Jan-08
457	NOKIA	3510i							GSM	25(CD - NOK5 )	Oct-07
458	NOKIA	3600 Slide							GSM	26	Oct-08

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459	NOKIA	3720 Classic	☎	📖	📶	✉	📁	📄	GSM	26	Jan-10	
460	NOKIA	5130 Xpress Music	☎	📖	📶	✉	📁	📄	GSM	26	Oct-09	
461	NOKIA	5140i	☎	📖	📶	✉	📄	📄	GSM	999	Dec-05	
462	NOKIA	5530 Xpress Music	☎	📖	📶	✉	📁	📄	GSM	26	Oct-09	
463	NOKIA	5630 Xpress Music	☎	📖	📶	✉	📁	📄	GSM	26	Oct-09	
464	NOKIA	5730 Xpress Music	☎	📖	📶	✉	📁	📄	GSM	26	Oct-09	
465	NOKIA	6015i	☎	📖	📶	✉	📁	📄	CDM A	999	Oct-06	
466	NOKIA	6030b	☎	📖	📶	✉	📄	📄	GSM	25(CD - NOK2)	Jan-10	
467	NOKIA	6110 Navigator	☎	📖	📶	✉	📁	📄	GSM	9	Oct-07	
468	NOKIA	6124c	☎	📖	📶	✉	📁	📄	GSM	9	Jan-09	
469	NOKIA	6155i	☎	📖	📶	✉	📁	📄	CDM A	12	Apr-08	
470	NOKIA	6165i	☎	📖	📶	✉	📁	📄	CDM A	12	Jan-07	
471	NOKIA	6208 Classic	☎	📖	📶	✉	📁	📄	GSM	26	Oct-09	
472	NOKIA	6212 Classic	☎	📖	📶	✉	📁	📄	GSM	26	Oct-09	
473	NOKIA	6220 Classic	☎	📖	📶	✉	📁	📄	GSM	26	Apr-09	
474	NOKIA	6230i	☎	📖	📶	✉	📄	📄	GSM	12	Apr-06	
475	NOKIA	6235i	☎	📖	📶	📄	📁	📄	CDM A	12	Apr-06	
476	NOKIA	6255i	☎	📖	📶	📄	📁	📄	CDM A	12	Apr-06	
477	NOKIA	6260 Slide	☎	📖	📶	✉	📁	📄	GSM	26	Oct-09	
478	NOKIA	6265i	☎	📖	📶	✉	📁	📄	CDM A	12	Jan-08	
479	NOKIA	6275i	☎	📖	📶	✉	📁	📄	GSM	12	Apr-08	
480	NOKIA	6303 Classic	☎	📖	📶	✉	📁	📄	GSM	26	Oct-09	
481	NOKIA	6310i	☎	📖	📶	✉	📄	📄	GSM		Apr-07	
482	NOKIA	6500 classic	☎	📖	📶	✉	📁	📄	GSM	26	Jan-08	
483	NOKIA	6500 Slide	☎	📖	📶	✉	📁	📄	GSM	26	Apr-08	
484	NOKIA	6600 fold	☎	📖	📶	✉	📁	📄	GSM	26	Jan-09	
485	NOKIA	6600 slide	☎	📖	📶	✉	📁	📄	GSM	26	Jan-09	
486	NOKIA	6600i Slide	☎	📖	📶	✉	📁	📄	GSM	26	Jan-10	
487	NOKIA	6610i	☎	📖	📶	✉	📁	📄	GSM	999	Dec-05	

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488	NOKIA	6700 Classic	☎	📖	🕒	✉	📁	📄	GSM	26	Jan-10	
489	NOKIA	6720 Classic	☎	📖	🕒	✉	📁	📄	GSM	26	Oct-09	
490	NOKIA	6730 Classic	☎	📖	🕒	✉	📁	📄	GSM	26	Oct-09	
491	NOKIA	6760 Slide	☎	📖	🕒	✉	📁	📄	GSM	26	Jan-10	
492	NOKIA	7100 Supernova	☎	📖	🕒	✉	📁	📄	GSM		Apr-09	
493	NOKIA	7250i	☎	📖	🕒	✉	📁	📄	GSM	999	Dec-05	
494	NOKIA	7310 Supernova	☎	📖	🕒	✉	📁	📄	GSM	26	Oct-08	
495	NOKIA	7610 Supernova	☎	📖	🕒	✉	📁	📄	GSM	26	Oct-08	
496	NOKIA	8600 Luna	☎	📖	🕒	✉	📁	📄	GSM	26	Oct-08	
497	NOKIA	8910i	☎	📖	🕒	✉	📁	📄	GSM		Dec-05	
498	NOKIA	E50	☎	📖	🕒	✉	📁	📄	GSM	12	Apr-07	
499	NOKIA	E51	☎	📖	🕒	✉	📁	📄	GSM	9	Apr-08	
500	NOKIA	E55	☎	📖	🕒	✉	📁	📄	GSM	26	Jan-10	
501	NOKIA	E60	☎	📖	🕒	✉	📁	📄	GSM	12	Apr-07	
502	NOKIA	E61	☎	📖	🕒	✉	📁	📄	GSM	12	Apr-07	
503	NOKIA	E63	☎	📖	🕒	✉	📁	📄	GSM	26	Apr-09	
504	NOKIA	E65	☎	📖	🕒	✉	📁	📄	GSM	12	Apr-07	
505	NOKIA	E66	☎	📖	🕒	✉	📁	📄	GSM	26	Oct-08	
506	NOKIA	E70	☎	📖	🕒	✉	📁	📄	GSM	12	Apr-07	
507	NOKIA	E71	☎	📖	🕒	✉	📁	📄	GSM	26	Oct-08	
508	NOKIA	E75	☎	📖	🕒	✉	📁	📄	GSM	26	Jul-09	
509	NOKIA	N70	☎	📖	🕒	✉	📁	📄	GSM	12	Jan-07	
510	NOKIA	N71	☎	📖	🕒	✉	📁	📄	GSM	12	Jul-07	
511	NOKIA	N72	☎	📖	🕒	✉	📁	📄	GSM	12	Jan-07	
512	NOKIA	N73	☎	📖	🕒	✉	📁	📄	GSM	12	Apr-07	
513	NOKIA	N76	☎	📖	🕒	✉	📁	📄	GSM	9	Jul-07	
514	NOKIA	N77	☎	📖	🕒	✉	📁	📄	GSM	12	Oct-08	
515	NOKIA	N79	☎	📖	🕒	✉	📁	📄	GSM	26	Jan-09	
516	NOKIA	N80	☎	📖	🕒	✉	📁	📄	GSM	12	Apr-07	
517	NOKIA	N81 8GB	☎	📖	🕒	✉	📁	📄	GSM	26	Apr-08	

518	NOKIA	N82							GSM	26	Jul-08
519	NOKIA	N85							GSM	26	Apr-09
520	NOKIA	N90							GSM	12	Jan-07
521	NOKIA	N91							GSM	9	Apr-07
522	NOKIA	N93							GSM	12	Apr-08
523	NOKIA	N93i							GSM	12	Jul-07
524	NOKIA	N95							GSM	9	Jan-08
525	NOKIA	N95 8GB							GSM	9	Jul-08
526	NOKIA	N96							GSM	26	Oct-08
527	NOKIA	N97							GSM	26	Oct-09
528	NOKIA	N97 mini							GSM	26	Sep-10
529	NOKIA	X3							GSM	26	Dec-10
530	NOKIA	X6							GSM	26	May-11
531	NOKIA	6350							GSM	26	Dec 2011
532	NOKIA	X2-01							GSM	26	Dec 2011
533	O2	ICE							GSM	5	Oct-07
534	O2	XDA							GSM		Jul-06
535	O2	XDA Ili							GSM		Jul-06
536	ORANGE	SPV C500							GSM	9	Jul-06
537	ORANGE	SPV C550							GSM	9	Jul-06
538	ORANGE	SPV C600							GSM	9	Jul-06
539	PALM	700P							CDM A	11	Jan-10
540	PALM	Centro							GSM	11	Jan-09
541	PALM	Treo 500							GSM	9	Jan-09
542	PALM	Treo 680							GSM	11	Apr-08
543	PALM	Treo 750							GSM		Jul-07
544	PALM	Treo Pro							GSM	9	Jan-09
545	PANTECH	P8000							GSM	26	Apr-12
546	SAGEM	my302X							GSM		Apr-07
547	SAGEM	my401C							GSM		Jan-08
548	SAGEM	my401V							GSM		Apr-07

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549	SAGEM	my401X	☎ ⊕	📖	📶	✉ ⊕	📁	📄	GSM			Apr-07	
550	SAGEM	my411C	☎ ⊕	📖	📶	✉ ⊕	📁	📄	GSM			Jan-08	
551	SAGEM	my411Cv	☎ ⊕	📖	📶	✉ ⊕	📁	📄	GSM			Jan-08	
552	SAGEM	my411X	☎ ⊕	📖	📶	✉ ⊕	📁	📄	GSM			Jan-08	
553	SAGEM	my501C	☎ ⊕	📖	📶	✉ ⊕	📁	📄	GSM			Apr-07	
554	SAGEM	my511X	☎ ⊕	📖	📶	✉ ⊕	📁	📄	GSM			Jan-08	
555	SAGEM	my600v	☎ ⊕	📖	⊕	✉ ⊕	📁	📄	GSM			Jul-07	
556	SAGEM	my700X	☎ ⊕	📖	📶	✉ ⊕	📁	📄	GSM			Apr-07	
557	SAGEM	myV-55	☎ ⊕	📖	📶	✉ ⊕	📁	📄	GSM			Jan-08	
558	SAGEM	myV-65	☎ ⊕	📖	📶	✉ ⊕	📁	📄	GSM			Jan-08	
559	SAGEM	myX5-2	☎ ⊕	📖	📶	✉ ⊕	📁	📄	GSM			Jan-08	
560	SAGEM	myX-6	☎ ⊕	📖	📶	✉ ⊕	📁	📄	GSM			Jan-08	
561	SAMSUNG	B2100	☎ ⊕	📖	📶	✉ ⊕	📁	📄	GSM	29		Jul-09	
562	SAMSUNG	B2700	☎ ⊕	📖	📶	✉ ⊕	📁	📄	GSM	29		Apr-09	
563	SAMSUNG	B3310	☎ ⊕	📖	📶	✉ ⊕	📁	📄	GSM	26		Oct-09	
564	SAMSUNG	B5702	☎ ⊕	📖	📶	✉ ⊕	📁	📄	GSM	29		Oct-09	
565	SAMSUNG	B7300	☎ ⊕	📖	⊕	✉ ⊕	📁	📄	GSM	26		Jan-10	
566	SAMSUNG	C3050	☎ ⊕	📖	📶	✉ ⊕	📁	📄	GSM	29		Jul-09	
567	SAMSUNG	C6625	☎ ⊕	📖	⊕	✉ ⊕	📁	📄	GSM	29		Oct-09	
568	SAMSUNG	E1360	☎ ⊕	📖	⊕	✉ ⊕	📁	📄	GSM			Oct-09	
569	SAMSUNG	E2210	☎ ⊕	📖	📶	✉ ⊕	📁	📄	GSM			Oct-09	
570	SAMSUNG	I8000	☎ ⊕	📖	⊕	✉ ⊕	📁	📄	GSM	26		Jan-10	
571	SAMSUNG	i8510	☎ ⊕	📖	⊕	✉ ⊕	📁	📄	GSM			Apr-09	
572	SAMSUNG	M3200	☎ ⊕	📖	⊕	✉ ⊕	📁	📄	GSM	29		Jan-10	
573	SAMSUNG	M7500	☎ ⊕	📖	📶	✉ ⊕	📁	📄	GSM	26		Jul-09	
574	SAMSUNG	M7600	☎ ⊕	📖	📶	✉ ⊕	📁	📄	GSM	26		Jul-09	
575	SAMSUNG	M8800	☎ ⊕	📖	📶	✉ ⊕	📁	📄	GSM	29		Apr-09	
576	SAMSUNG	S3030	☎ ⊕	📖	📶	✉ ⊕	📁	📄	GSM	29		Oct-09	
577	SAMSUNG	S3100	☎ ⊕	📖	⊕	✉ ⊕	📁	📄	GSM	29		Jan-10	
578	SAMSUNG	S3500	☎ ⊕	📖	📶	✉ ⊕	📁	📄	GSM	29		Apr-09	

579	SAMSUNG	S3600							GSM		Jan-10
580	SAMSUNG	S3650							GSM	29	Jan-10
581	SAMSUNG	S5050							GSM	29	Oct-09
582	SAMSUNG	S5230							GSM	29	Oct-09
583	SAMSUNG	S5600							GSM	26	Oct-09
584	SAMSUNG	S7220							GSM	26	Jul-09
585	SAMSUNG	S7330							GSM	29	Apr-09
586	SAMSUNG	S8000							GSM	26	Oct-09
587	SAMSUNG	S8300							GSM	26	Jul-09
588	SAMSUNG	SCH-A310							CDM A	13	Apr-06
589	SAMSUNG	SCH-A530							CDM A	13	Apr-06
590	SAMSUNG	SCH-A570							CDM A	13	Oct-06
591	SAMSUNG	SCH-A630							CDM A	23	Oct-06
592	SAMSUNG	SCH-A650							CDM A	13	Apr-06
593	SAMSUNG	SCH-A670							CDM A	13	Apr-06
594	SAMSUNG	SCH-A795							CDM A	23	Apr-08
595	SAMSUNG	SCH-A850							CDM A	23	Apr-08
596	SAMSUNG	SCH-A870							CDM A	23	Apr-08
597	SAMSUNG	SCH-A930							CDM A	23	Apr-08
598	SAMSUNG	SCH-A950							CDM A	23	Apr-08
599	SAMSUNG	SCH-A990							CDM A	23	Apr-08
600	SAMSUNG	SCH-i220							CDM A	26	May-11
601	SAMSUNG	SCH-i600							GSM		Jul-06
602	SAMSUNG	SCH-i730							CDM A		Jul-06
603	SAMSUNG	SCH-i760							GSM	30	Jul-08
604	SAMSUNG	SCH-i920							CDM A	26	Dec-10
605	SAMSUNG	SCH-R450							CDM A	29	Jul-09
606	SAMSUNG	SCH-U340							CDM A	23	Jul-09
607	SAMSUNG	SCH-U350							CDM A	29	Dec-10
608	SAMSUNG	SCH-U410							CDM A	23	Apr-08

609	SAMSUNG	SCH-U650							CDM A	29	Jul-09
610	SAMSUNG	SCH-U740							CDM A	22	Jan-10
611	SAMSUNG	SCH-U820							CDM A	26	Dec-10
612	SAMSUNG	SCH-U940							CDM A	29	Jul-09
613	SAMSUNG	SGH-A177							GSM	29	Jan-10
614	SAMSUNG	SGH-A300							GSM	14	Dec-05
615	SAMSUNG	SGH-A517							GSM	29	Apr-08
616	SAMSUNG	SGH-A687							GSM	29	Dec-10
617	SAMSUNG	SGH-A707							GSM	22	Jan-08
618	SAMSUNG	SGH-A717							GSM	22	Jan-08
619	SAMSUNG	SGH-A727							GSM	22	Jan-08
620	SAMSUNG	SGH-A737							GSM	29	Oct-08
621	SAMSUNG	SGH-A747							GSM	29	Oct-08
622	SAMSUNG	SGH-A767							GSM	29	Jul-09
623	SAMSUNG	SGH-A777							GSM	29	Dec-10
624	SAMSUNG	SGH-A827							GSM	29	Oct-08
625	SAMSUNG	SGH-A837							GSM	29	Jul-09
626	SAMSUNG	SGH-A877							GSM	29B	Dec-10
627	SAMSUNG	SGH-A887							GSM	29B	Dec-10
628	SAMSUNG	SGH-C100							GSM	14	Dec-05
629	SAMSUNG	SGH-C207							GSM	14	Jul-06
630	SAMSUNG	SGH-C225							GSM	14	Dec-05
631	SAMSUNG	SGH-C300							GSM	14	Jan-08
632	SAMSUNG	SGH-D307							GSM	13	Jul-06
633	SAMSUNG	SGH-D357							GSM	13	Jul-07
634	SAMSUNG	SGH-D407							GSM		Oct-07
635	SAMSUNG	SGH-D410							GSM	14	Dec-05
636	SAMSUNG	SGH-D500							GSM	13	Dec-05
637	SAMSUNG	SGH-D520							GSM	22	Apr-07
638	SAMSUNG	SGH-D600							GSM	13	Apr-06
639	SAMSUNG	SGH-D720							GSM	5	Jul-07

640	SAMSUNG	SGH-D780							GSM	29	Jan-09
641	SAMSUNG	SGH-D800							GSM	22	Oct-06
642	SAMSUNG	SGH-D807							GSM	22	Apr-08
643	SAMSUNG	SGH-D820							GSM	22	Oct-06
644	SAMSUNG	SGH-D830							GSM	22	Apr-07
645	SAMSUNG	SGH-D840							GSM	22	Jul-07
646	SAMSUNG	SGH-D880							GSM	29	Jul-08
647	SAMSUNG	SGH-D900							GSM	22	Apr-07
648	SAMSUNG	SGH-D900i							GSM	22	Oct-07
649	SAMSUNG	SGH-D980							GSM	29	Apr-09
650	SAMSUNG	SGH-E105							GSM	14	Apr-06
651	SAMSUNG	SGH-E210							GSM		Jan-08
652	SAMSUNG	SGH-E250							GSM	22	Apr-07
653	SAMSUNG	SGH-E330							GSM	20	Oct-06
654	SAMSUNG	SGH-E335							GSM	20	Oct-06
655	SAMSUNG	SGH-E350							GSM	13	Dec-05
656	SAMSUNG	SGH-E370							GSM	13	Jan-07
657	SAMSUNG	SGH-E390							GSM	22	Apr-07
658	SAMSUNG	SGH-E530							GSM		Dec-05
659	SAMSUNG	SGH-E570							GSM	22	Apr-07
660	SAMSUNG	SGH-E590							GSM	22	Oct-07
661	SAMSUNG	SGH-E600							GSM	14	Jul-07
662	SAMSUNG	SGH-E630							GSM	20	Apr-06
663	SAMSUNG	SGH-E700							GSM	20	Dec-05
664	SAMSUNG	SGH-E715							GSM	14	Oct-06
665	SAMSUNG	SGH-E720							GSM	5	Dec-05
666	SAMSUNG	SGH-E730							GSM	13	Dec-05
667	SAMSUNG	SGH-E740							GSM	22	Jan-08
668	SAMSUNG	SGH-E760							GSM	13	Dec-05
669	SAMSUNG	SGH-E770							GSM	13	Apr-06
670	SAMSUNG	SGH-E800							GSM	20	Dec-05

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671	SAMSUNG	SGH-E830	☎ ⊕	📖	📶 ⊕	✉ ⊕	📁	📄	GSM	22	Apr-08	
672	SAMSUNG	SGH-E840	☎ ⊕	📖	📶 ⊕	✉ ⊕	📁	📄	GSM	22	Oct-07	
673	SAMSUNG	SGH-E870	☎ ⊕	📖	📶 ⊕	✉ ⊕	📁	📄	GSM	22	Oct-06	
674	SAMSUNG	SGH-E880	☎ ⊕	📖	📶 ⊕	✉ ⊕	📁	📄	GSM		Jul-07	
675	SAMSUNG	SGH-E900	☎ ⊕	📖	📶 ⊕	✉ ⊕	📁	📄	GSM	22	Jan-07	
676	SAMSUNG	SGH-E950	☎ ⊕	📖	📶 ⊕	✉ ⊕	📁	📄	GSM	22	Jan-08	
677	SAMSUNG	SGH-F110	☎ ⊕	📖	📶 ⊕	✉ ⊕	📁	📄	GSM	29	Oct-08	
678	SAMSUNG	SGH-F210	☎ ⊕	📖	📶 ⊕	✉ ⊕	📁	📄	GSM		Jan-08	
679	SAMSUNG	SGH-F250	☎ ⊕	📖	📶 ⊕	✉ ⊕	📁	📄	GSM	29	Jan-09	
680	SAMSUNG	SGH-F300	☎ ⊕	📖	📶 ⊕	✉ ⊕	📁	📄	GSM	22	Jul-07	
681	SAMSUNG	SGH-F330	☎ ⊕	📖	📶 ⊕	✉ ⊕	📁	📄	GSM	29	Jul-08	
682	SAMSUNG	SGH-F400	☎ ⊕	📖	📶 ⊕	✉ ⊕	📁	📄	GSM	29	Jul-08	
683	SAMSUNG	SGH-F480	☎ ⊕	📖	📶 ⊕	✉ ⊕	📁	📄	GSM	29	Jan-09	
684	SAMSUNG	SGH-F490	☎ ⊕	📖	📶 ⊕	✉ ⊕	📁	📄	GSM	29	Jul-08	
685	SAMSUNG	SGH-F500	☎ ⊕	📖	📶 ⊕	✉ ⊕	📁	📄	GSM	22	Oct-07	
686	SAMSUNG	SGH-F700	☎ ⊕	📖	📶 ⊕	✉ ⊕	📁	📄	GSM	29	Apr-09	
687	SAMSUNG	SGH-G400	☎ ⊕	📖	📶 ⊕	✉ ⊕	📁	📄	GSM	29	Apr-09	
688	SAMSUNG	SGH-G600	☎ ⊕	📖	📶 ⊕	✉ ⊕	📁	📄	GSM		Jan-08	
689	SAMSUNG	SGH-G800	☎ ⊕	📖	📶 ⊕	✉ ⊕	📁	📄	GSM	29	Jul-08	
690	SAMSUNG	SGH-G810	☎ ⊕	📖	📶 ⊕	✉ ⊕	📁	📄	GSM	26	Apr-09	
691	SAMSUNG	SGH-i200	☎ ⊕	📖	📶 ⊕	✉ ⊕	📁	📄	GSM	29	Jan-09	
692	SAMSUNG	SGH-i300	☎ ⊕	📖	📶 ⊕	✉ ⊕	📁	📄	GSM	5	Oct-07	
693	SAMSUNG	SGH-i320	☎ ⊕	📖	📶 ⊕	✉ ⊕	📁	📄	GSM		Jan-07	
694	SAMSUNG	SGH-i325	☎ ⊕	📖	📶 ⊕	✉ ⊕	📁	📄	GSM	29	Jan-09	
695	SAMSUNG	SGH-i600	☎ ⊕	📖	📶 ⊕	✉ ⊕	📁	📄	CDM A	9	Oct-07	
696	SAMSUNG	SGH-i607	☎ ⊕	📖	📶 ⊕	✉ ⊕	📁	📄	GSM	22	Jul-07	
697	SAMSUNG	SGH-i617	☎ ⊕	📖	📶 ⊕	✉ ⊕	📁	📄	GSM	29	Oct-08	
698	SAMSUNG	SGH-i620	☎ ⊕	📖	📶 ⊕	✉ ⊕	📁	📄	GSM	22	Jan-09	
699	SAMSUNG	SGH-i710	☎ ⊕	📖	📶 ⊕	✉ ⊕	📁	📄	GSM	22	Oct-07	
700	SAMSUNG	SGH-i780	☎ ⊕	📖	📶 ⊕	✉ ⊕	📁	📄	GSM	29	Jul-09	

701	SAMSUNG	SGH-i900							GSM	29	Jan-09
702	SAMSUNG	SGH-J600							GSM	22	Jan-08
703	SAMSUNG	SGH-J610							GSM	29	Oct-08
704	SAMSUNG	SGH-J700							GSM	29	Jul-08
705	SAMSUNG	SGH-L700							GSM	29	Jan-10
706	SAMSUNG	SGH-L760							GSM	29	Oct-08
707	SAMSUNG	SGH-L770							GSM		Jan-09
708	SAMSUNG	SGH-M150							GSM	29	Oct-08
709	SAMSUNG	SGH-M610							GSM	29	Oct-08
710	SAMSUNG	SGH-P207							GSM	13	Oct-06
711	SAMSUNG	SGH-P300							GSM	22	Apr-06
712	SAMSUNG	SGH-P310							GSM	22	Apr-07
713	SAMSUNG	SGH-P400							GSM	14	Dec-05
714	SAMSUNG	SGH-P510							GSM		Dec-05
715	SAMSUNG	SGH-P520							GSM	29	Apr-08
716	SAMSUNG	SGH-P735							GSM	5	Dec-05
717	SAMSUNG	SGH-P777							GSM		Jul-06
718	SAMSUNG	SGH-P850							GSM	13	Oct-06
719	SAMSUNG	SGH-S300M							GSM	14	Oct-06
720	SAMSUNG	SGH-S307							GSM	14	Dec-05
721	SAMSUNG	SGH-S400i							GSM	13	Apr-07
722	SAMSUNG	SGH-S401i							GSM	13	Apr-07
723	SAMSUNG	SGH-T301							GSM	29	Jan-10
724	SAMSUNG	SGH-T309							GSM	13	Jul-06
725	SAMSUNG	SGH-T349							GSM		Jan-10
726	SAMSUNG	SGH-T369							GSM	26	May-11
727	SAMSUNG	SGH-T429							GSM	29	Jul-08
728	SAMSUNG	SGH-T439							GSM	29	Oct-08
729	SAMSUNG	SGH-T469							GSM		Sep-10
730	SAMSUNG	SGH-T509							GSM	22	Jan-07
731	SAMSUNG	SGH-T539							GSM	29	Apr-08

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732	SAMSUNG	SGH-T609	☎	☎	☎	☎	☎	☎	☎	GSM	13	Jan-07
733	SAMSUNG	SGH-T639	☎	☎	☎	☎	☎	☎	☎	GSM	29	Oct-08
734	SAMSUNG	SGH-T719	☎	☎	☎	☎	☎	☎	☎	GSM	13	Jan-07
735	SAMSUNG	SGH-T729	☎	☎	☎	☎	☎	☎	☎	GSM	29	Apr-08
736	SAMSUNG	SGH-T739	☎	☎	☎	☎	☎	☎	☎	GSM	29	Oct-08
737	SAMSUNG	SGH-T749	☎	☎	☎	☎	☎	☎	☎	GSM	29	Dec-10
738	SAMSUNG	SGH-T809	☎	☎	☎	☎	☎	☎	☎	GSM	22	Jul-06
739	SAMSUNG	SGH-T819	☎	☎	☎	☎	☎	☎	☎	GSM	29	Oct-08
740	SAMSUNG	SGH-T919	☎	☎	☎	☎	☎	☎	☎	GSM	29	Jul-09
741	SAMSUNG	SGH-U100	☎	☎	☎	☎	☎	☎	☎	GSM		Jul-07
742	SAMSUNG	SGH-U600	☎	☎	☎	☎	☎	☎	☎	GSM	22	Jul-07
743	SAMSUNG	SGH-U700	☎	☎	☎	☎	☎	☎	☎	GSM	22	Jan-08
744	SAMSUNG	SGH-U800	☎	☎	☎	☎	☎	☎	☎	GSM	29	Jan-09
745	SAMSUNG	SGH-U900	☎	☎	☎	☎	☎	☎	☎	GSM	29	Jul-08
746	SAMSUNG	SGH-X100	☎	☎	☎	☎	☎	☎	☎	GSM	20	Oct-07
747	SAMSUNG	SGH-X427m	☎	☎	☎	☎	☎	☎	☎	GSM	14	Apr-06
748	SAMSUNG	SGH-X450	☎	☎	☎	☎	☎	☎	☎	GSM	14	Dec-05
749	SAMSUNG	SGH-X460	☎	☎	☎	☎	☎	☎	☎	GSM	20	Apr-07
750	SAMSUNG	SGH-X475	☎	☎	☎	☎	☎	☎	☎	GSM	20	Oct-06
751	SAMSUNG	SGH-X495	☎	☎	☎	☎	☎	☎	☎	GSM	20	Jul-08
752	SAMSUNG	SGH-X497	☎	☎	☎	☎	☎	☎	☎	GSM	20	Jul-08
753	SAMSUNG	SGH-X500	☎	☎	☎	☎	☎	☎	☎	GSM	13	Apr-08
754	SAMSUNG	SGH-X507	☎	☎	☎	☎	☎	☎	☎	GSM	13	Apr-07
755	SAMSUNG	SGH-X530	☎	☎	☎	☎	☎	☎	☎	GSM	14	Apr-07
756	SAMSUNG	SGH-X600	☎	☎	☎	☎	☎	☎	☎	GSM	20	Oct-06
757	SAMSUNG	SGH-X640	☎	☎	☎	☎	☎	☎	☎	GSM	20	Oct-06
758	SAMSUNG	SGH-X650	☎	☎	☎	☎	☎	☎	☎	GSM	20	Jul-07
759	SAMSUNG	SGH-X660	☎	☎	☎	☎	☎	☎	☎	GSM	13	Apr-07
760	SAMSUNG	SGH-X680	☎	☎	☎	☎	☎	☎	☎	GSM	13	Jul-08
761	SAMSUNG	SGH-X700	☎	☎	☎	☎	☎	☎	☎	GSM		Oct-07

762	SAMSUNG	SGH-X820							GSM	22	Oct-06
763	SAMSUNG	SGH-X830							GSM	22	Apr-07
764	SAMSUNG	SGH-Z240							GSM	22	Jul-08
765	SAMSUNG	SGH-Z320i							GSM	30	Apr-09
766	SAMSUNG	SGH-Z510							GSM	22	Jul-06
767	SAMSUNG	SGH-Z720							GSM	22	Jul-08
768	SAMSUNG	SPH-A513							CDM A	29	Jul-09
769	SAMSUNG	SPH-A580							CDM A	13	Jan-07
770	SAMSUNG	SPH-A600							CDM A	13	Jul-07
771	SAMSUNG	SPH-A620							CDM A	13	Oct-06
772	SAMSUNG	SPH-A640							CDM A	13	Jul-07
773	SAMSUNG	SPH-A660							CDM A	13	Apr-06
774	SAMSUNG	SPH-A680							CDM A	13	Jul-07
775	SAMSUNG	SPH-A740							CDM A	13	Apr-06
776	SAMSUNG	SPH-A760							CDM A	13	Apr-06
777	SAMSUNG	SPH-A820							CDM A	13	Apr-07
778	SAMSUNG	SPH-A840							CDM A	13	Apr-06
779	SAMSUNG	SPH-A900							CDM A	13	Jul-08
780	SAMSUNG	SPH-A920							CDM A	13	Jul-08
781	SAMSUNG	SPH-A960							CDM A	13	Jul-08
782	SAMSUNG	SPH-M500							CDM A	13	Jul-08
783	SAMSUNG	SPH-M540							CDM A	26	Jul-09
784	SAMSUNG	SPH-M610							CDM A	22	Dec-10
785	SAMSUNG	SGH-T959V							GSM	26	Dec-12
786	SAMSUNG	SGH-T249							GSM	26	Dec-12
787	SAMSUNG	SCH-i400							CDM A	26	Apr-12
788	SAMSUNG	SPH-D700							CDM A	26	Apr-12
789	SAMSUNG	SGH-T589							GSM	26	Apr-12
790	SAMSUNG	SPH-M910							CDM A	26	Apr-12
791	SAMSUNG	SCH-R350							CDM A	26	Apr-12

792	SAMSUNG	SGH-i727							GSM	26	Apr-12
793	SAMSUNG	SGH-i897							GSM	26	Apr-12
794	SAMSUNG	SGH-i997							GSM	26	Apr-12
795	SAMSUNG	SCH-i515							CDMA A	26	Sep-12
796	SAMSUNG	GT-I9100							GSM	26	Sep-12
797	SHARP	FX PLUS							GSM	26	May-12
798	SIEMENS	A60							GSM	16	Jul-08
799	SIEMENS	A65							GSM	16	Dec-05
800	SIEMENS	A75							GSM	16	Apr-06
801	SIEMENS	C35							GSM	17	Dec-05
802	SIEMENS	C35i							GSM	17	Oct-06
803	SIEMENS	C55							GSM	16	Apr-06
804	SIEMENS	C60							GSM	16	Apr-06
805	SIEMENS	C61							GSM	16	Apr-06
806	SIEMENS	C62							GSM	16	Dec-05
807	SIEMENS	C65							GSM	16	Dec-05
808	SIEMENS	C72							GSM	16	Jul-06
809	SIEMENS	CF110							GSM	16	Apr-06
810	SIEMENS	CF75							GSM	16	Apr-06
811	SIEMENS	CL75							GSM	16	Apr-06
812	SIEMENS	CT66							GSM	16	Apr-06
813	SIEMENS	CX65							GSM	16	Dec-05
814	SIEMENS	M55							GSM	16	Jul-06
815	SIEMENS	M65							GSM	16	Dec-05
816	SIEMENS	M75							GSM	16	Apr-06
817	SIEMENS	MC60							GSM	16	Dec-05
818	SIEMENS	ME45							GSM	17	Jul-08
819	SIEMENS	ME75							GSM	16	Apr-06
820	SIEMENS	S55							GSM	16	Apr-06
821	SIEMENS	S65							GSM	16	Dec-05
822	SIEMENS	S75							GSM	16	Apr-06

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823	SIEMENS	SF65	☎ ⌚	📖	📶	✉ ⌚	📁	📄	GSM		Jul-06	
824	SIEMENS	SK65	☎ ⌚	📖	📶	✉ ⌚	📁	📄	GSM	16	Dec-05	
825	SIEMENS	SL55	☎ ⌚	📖	📶	✉ ⌚	📁	📄	GSM	16	Dec-05	
826	SIEMENS	SL65	☎ ⌚	📖	📶	✉ ⌚	📁	📄	GSM	16	Dec-05	
827	SIEMENS	SP65	☎ ⌚	📖	📶	✉ ⌚	📁	📄	GSM		Jul-09	
828	SONIM	XP3	☎ ⌚	📖	📶	✉ ⌚	📁	📄	GSM		Oct-09	
829	SONY ERICSSON	C510	☎ ⌚	📖	📶	✉ ⌚	📁	📄	GSM	18	Apr-09	
830	SONY ERICSSON	C702	☎ ⌚	📖	📶	✉ ⌚	📁	📄	GSM		Oct-08	
831	SONY ERICSSON	C901	☎ ⌚	📖	📶	✉ ⌚	📁	📄	GSM	18	Oct-09	
832	SONY ERICSSON	C902	☎ ⌚	📖	📶	✉ ⌚	📁	📄	GSM		Oct-08	
833	SONY ERICSSON	C903	☎ ⌚	📖	📶	✉ ⌚	📁	📄	GSM	18	Oct-09	
834	SONY ERICSSON	C905	☎ ⌚	📖	📶	✉ ⌚	📁	📄	GSM	18	Apr-09	
835	SONY ERICSSON	D750i	☎ ⌚	📖	📶	✉ ⌚	📁	📄	GSM	18	Apr-06	
836	SONY ERICSSON	F305	☎ ⌚	📖	📶	✉ ⌚	📁	📄	GSM		Oct-09	
837	SONY ERICSSON	F500i	☎ ⌚	📖	📶	✉ ⌚	📁	📄	GSM	2	Dec-05	
838	SONY ERICSSON	G502	☎ ⌚	📖	📶	✉ ⌚	📁	📄	GSM	18	Oct-08	
839	SONY ERICSSON	G700	☎ ⌚	📖	📶	✉ ⌚	📁	📄	GSM	18	Jan-09	
840	SONY ERICSSON	G705	☎ ⌚	📖	📶	✉ ⌚	📁	📄	GSM	18	Apr-09	
841	SONY ERICSSON	G900	☎ ⌚	📖	📶	✉ ⌚	📁	📄	GSM	18	Jan-09	
842	SONY ERICSSON	J105i	☎ ⌚	📖	📶	✉ ⌚	📁	📄	GSM	18	Sep-10	
843	SONY ERICSSON	J300i	☎ ⌚	📖	📶	✉ ⌚	📁	📄	GSM	2	Dec-05	
844	SONY ERICSSON	K300i	☎ ⌚	📖	📶	✉ ⌚	📁	📄	GSM	2	Dec-05	
845	SONY ERICSSON	K310i	☎ ⌚	📖	📶	✉ ⌚	📁	📄	GSM	18	Oct-06	
846	SONY ERICSSON	K320i	☎ ⌚	📖	📶	✉ ⌚	📁	📄	GSM	18	Jan-09	
847	SONY ERICSSON	K500i	☎ ⌚	📖	📶	✉ ⌚	📁	📄	GSM	2	Dec-05	
848	SONY ERICSSON	K510i	☎ ⌚	📖	📶	✉ ⌚	📁	📄	GSM	18	Jan-07	
849	SONY ERICSSON	K530i	☎ ⌚	📖	📶	✉ ⌚	📁	📄	GSM	18	Jan-08	
850	SONY ERICSSON	K550i	☎ ⌚	📖	📶	✉ ⌚	📁	📄	GSM	18	Jul-07	
851	SONY ERICSSON	K550im	☎ ⌚	📖	📶	✉ ⌚	📁	📄	GSM	18	Jul-07	

852	SONY ERICSSON	K600i							GSM	2	Dec-05
853	SONY ERICSSON	K608i							GSM	2	Oct-06
854	SONY ERICSSON	K610i							GSM	18	Oct-06
855	SONY ERICSSON	K630i							GSM	18	Jul-08
856	SONY ERICSSON	K660i							GSM	18	Jul-08
857	SONY ERICSSON	K700i							GSM	2	Dec-05
858	SONY ERICSSON	K750i							GSM	18	Dec-05
859	SONY ERICSSON	K770i							GSM	18	Jan-08
860	SONY ERICSSON	K800i							GSM	18	Jul-06
861	SONY ERICSSON	K810i							GSM	18	Jul-07
862	SONY ERICSSON	K850i							GSM	18	Jan-08
863	SONY ERICSSON	M600							GSM	18	Jan-09
864	SONY ERICSSON	P1i							GSM	18	Jan-09
865	SONY ERICSSON	P800							GSM		Apr-08
866	SONY ERICSSON	P900i							GSM		Jul-08
867	SONY ERICSSON	P990i							GSM	18	Jan-09
868	SONY ERICSSON	S302							GSM		Oct-09
869	SONY ERICSSON	S312							GSM		Jan-10
870	SONY ERICSSON	S500i							GSM	18	Oct-07
871	SONY ERICSSON	S700i							GSM	2	Dec-05
872	SONY ERICSSON	S710a							GSM	2	Apr-06
873	SONY ERICSSON	T230							GSM	2	Jul-07
874	SONY ERICSSON	T290i							GSM	2	Dec-05
875	SONY ERICSSON	T300							GSM	2	Dec-05
876	SONY ERICSSON	T310							GSM	2	Dec-05
877	SONY ERICSSON	T610							GSM	2	Dec-05
878	SONY ERICSSON	T630							GSM	2	Dec-05
879	SONY ERICSSON	T650i							GSM	18	Jan-08
880	SONY ERICSSON	T68							GSM	2	Dec-05
881	SONY	T68i							GSM	2	Oct-06

	ERICSSON		⌚		⌚	⌚						
882	SONY ERICSSON	T700	☎	📖	📶	✉	📁	📄	GSM	18	Jan-09	
883	SONY ERICSSON	T707	☎	📖	📶	✉	📁	📄	GSM	18	Oct-09	
884	SONY ERICSSON	T715	☎	📖	📶	✉	📁	📄	GSM	18	Jan-10	
885	SONY ERICSSON	TM506	☎	📖	📶	✉	📁	📄	GSM	18	Dec-10	
886	SONY ERICSSON	U100i Yari	☎	📖	📶	✉	📁	📄	GSM	18	Jan-10	
887	SONY ERICSSON	U10i Aino	☎	📖	📶	✉	📁	📄	GSM	18	Jan-10	
888	SONY ERICSSON	U1i Satio	☎	📖	📶	✉	📁	📄	GSM		Jan-10	
889	SONY ERICSSON	U5i (Vivaz)	☎	📖	📶	✉	📁	📄	GSM	26	May-11	
890	SONY ERICSSON	V600i	☎	📖	📶	✉	📁	📄	GSM	2	Apr-06	
891	SONY ERICSSON	V630i	☎	📖	📶	✉	📁	📄	GSM	18	Jul-07	
892	SONY ERICSSON	V640i	☎	📖	📶	✉	📁	📄	GSM	18	Jul-08	
893	SONY ERICSSON	V800	☎	📖	📶	✉	📁	📄	GSM	2	Dec-05	
894	SONY ERICSSON	W200i	☎	📖	📶	✉	📁	📄	GSM	18	Jul-07	
895	SONY ERICSSON	W300i	☎	📖	📶	✉	📁	📄	GSM		Jul-06	
896	SONY ERICSSON	W302	☎	📖	📶	✉	📁	📄	GSM		Oct-09	
897	SONY ERICSSON	W350	☎	📖	📶	✉	📁	📄	GSM	18	Oct-08	
898	SONY ERICSSON	W380i	☎	📖	📶	✉	📁	📄	GSM	18	Jul-08	
899	SONY ERICSSON	W395	☎	📖	📶	✉	📁	📄	GSM		Oct-09	
900	SONY ERICSSON	W508	☎	📖	📶	✉	📁	📄	GSM	18	Oct-09	
901	SONY ERICSSON	W518A	☎	📖	📶	✉	📁	📄	GSM	18	Dec-10	
902	SONY ERICSSON	W550i	☎	📖	📶	✉	📁	📄	GSM	18	Dec-05	
903	SONY ERICSSON	W580i	☎	📖	📶	✉	📁	📄	GSM	18	Oct-07	
904	SONY ERICSSON	W595	☎	📖	📶	✉	📁	📄	GSM	18	Jan-09	
905	SONY ERICSSON	W610i	☎	📖	📶	✉	📁	📄	GSM	18	Jul-07	
906	SONY ERICSSON	W660i	☎	📖	📶	✉	📁	📄	GSM	18	Jan-08	
907	SONY ERICSSON	W705	☎	📖	📶	✉	📁	📄	GSM	18	Apr-09	
908	SONY ERICSSON	W710i	☎	📖	📶	✉	📁	📄	GSM	18	Oct-06	
909	SONY ERICSSON	W760	☎	📖	📶	✉	📁	📄	GSM		Oct-08	
910	SONY ERICSSON	W800i	☎	📖	📶	✉	📁	📄	GSM	18	Dec-05	

911	SONY ERICSSON	W810i							GSM	18	Jul-06
912	SONY ERICSSON	W850i							GSM	18	Oct-06
913	SONY ERICSSON	W880i							GSM	18	Apr-07
914	SONY ERICSSON	W890i							GSM	18	Jul-08
915	SONY ERICSSON	W900i							GSM	18	Apr-06
916	SONY ERICSSON	W902							GSM	18	Apr-09
917	SONY ERICSSON	W910i							GSM	18	Jan-08
918	SONY ERICSSON	W950i							GSM	18	Jan-09
919	SONY ERICSSON	W960							GSM	18	Jan-09
920	SONY ERICSSON	W980							GSM	18	Jan-09
921	SONY ERICSSON	W995							GSM	18	Oct-09
922	SONY ERICSSON	X1							GSM	9	Jan-09
923	SONY ERICSSON	X10							GSM	26	May-11
924	SONY ERICSSON	Z1010							GSM	2	Jul-07
925	SONY ERICSSON	Z310i							GSM	18	Jul-07
926	SONY ERICSSON	Z500a							GSM	2	Apr-06
927	SONY ERICSSON	Z520a							GSM	18	Oct-06
928	SONY ERICSSON	Z520i							GSM	18	Dec-05
929	SONY ERICSSON	Z530i							GSM	18	Jul-06
930	SONY ERICSSON	Z550i							GSM	18	Oct-06
931	SONY ERICSSON	Z555i							GSM	18	Jul-08
932	SONY ERICSSON	Z600							GSM	2	Dec-05
933	SONY ERICSSON	Z610i							GSM	18	Apr-07
934	SONY ERICSSON	Z710i							GSM	18	Apr-07
935	SONY ERICSSON	Z770							GSM		Oct-08
936	SONY ERICSSON	Z800i							GSM	2	Dec-05
937	T-MOBILE	MDA Vario II							GSM	9	Jul-08
938	TOSHIBA	G810							GSM	9	Jul-09
939	TOSHIBA	G910							GSM	9	Jul-09
940	TOSHIBA	Portege G500							GSM	9	Jul-07

941	TOSHIBA	Portege G710							GSM	9	Apr-09
942	UBiQUIO	401							GSM	9	Jul-07
943	UBiQUIO	501							GSM	9	Jul-07
944	VERIZON	XV6700							GSM	9	Oct-07
945	VISOA	Spiderphone							GSM		Jan-10
946	VODAFONE	527							GSM		Jul-09
947	VODAFONE	533							GSM		Jul-09
948	VODAFONE	710							GSM		Oct-07
949	VODAFONE	725							GSM		Jul-09
950	VODAFONE	810							GSM		Jul-08
951	VODAFONE	830							GSM		Jul-09
952	ZTE	C78							CDMA		Sep-10

### Handsets – Expected Support

The following handsets have not been verified on CellDEK however their appearance or technology indicates that data extraction will be possible as shown by the icons on CellDEK. These handsets are assigned an amber tick. It is recommended that all data is treated as a minimum extraction as there may be additional data sets available that require further examination.

Data can be extracted from these handsets as normal by selecting the device from the Manufacturers list and extracting over Bluetooth, Infrared or Cable as required.

All Windows Mobile devices can be extracted using the PDA option and selecting Windows. All Windows Mobile devices are supported by Infrared and/or Cable.

MFG	MODEL	MFG	MODEL	MFG	MODEL
ACER	beTouch E100	ASUS	H502	AT&T	2125
ACER	beTouch E200	ASUS	M530W	AT&T	3125
ACER	c510	ASUS	M356	AT&T	5700
ACER	c530	ASUS	M930	AT&T	8125

ACER	c531	ASUS	Mars II	AT&T	8500
ACER	DX650	ASUS	Mypal A626	AT&T	8525
ACER	DX900	ASUS	MyPal A632	AT&T	SX56
ACER	Liquid	ASUS	MyPal A636	AT&T	SX66
ACER	M900	ASUS	MyPal A636N	AUDIOVOX	5050
ACER	n10	ASUS	MyPal A639	AUDIOVOX	5600
ACER	n30	ASUS	MyPal A686	AUDIOVOX	6601
ACER	n35	ASUS	P305	AUDIOVOX	XV6600
ACER	n300	ASUS	P320	AUDIOVOX	XV6700
ACER	n310	ASUS	P505	BENQ-	
ACER	n311	ASUS	P525	SIEMENS	P51
ACER	n320	ASUS	P526	BLACKBERR	
ACER	n321	ASUS	P527	Y	8110
ACER	neoTouch	ASUS	P535	BLACKBERR	
AIRIS	T610	ASUS	P550	Y	8130 (Pearl)
AIRIS	T620	ASUS	P552	BLACKBERR	
AIRO	A25	ASUS	P560	Y	8220
AMOI	E72	ASUS	P565	BLACKBERR	
AMOI	E75	ASUS	P735	Y	8230 (Pearl)
AMOI	E76	ASUS	P750	BLACKBERR	
AMOI	E78	ASUS	P835	Y	8230 (Pearl)
AMOI	E850	ASUS	V88i	BLACKBERR	
AMOI	E860	ASUS	Z801	Y	8230 (Pearl)
AnexTEK	3160	ASUS	Z810	BLACKBERR	
AnexTEK	3360	ASUS	ZX1	Y	Pearl 3G
AnexTEK	3380	AT Mobile	AT Bear	BLACKBERR	
AnexTEK	SP310	AT Mobile	AT Cobra	Y	9100
Apple	iPod Touch	AT Mobile	AT Eagle	BLACKBERR	
Apple	iPhone 5	AT Mobile	AT Falcon	Y	9105 (Pearl 3G)
ASUS	A696	AT Mobile	AT Pelican	BLACKBERR	
ASUS	J501			Y	9300
CINGULAR	R iPAQ	DOPOD	CHT 9100	BLACKBERR	
COMPAQ	iPAQ	DOPOD	D600	Y	9520
COMPAQ	iPAQ	DOPOD	D802	BLACKBERR	
COMPAQ	iPAQ			Y	9550
				BLACKBERR	
				Y	9630
				BLACKBERR	
				Y	9650 (Bold)
				BLACKBERR	
				Y	9670 (Style)
				BLACKBERR	
				Y	Torch 9800
				BLACKBERR	
				Y	9900
				CINGULAR	
					2125
				CINGULAR	
					3125
				CINGULAR	
					8100
				CINGULAR	
					8125
				CINGULAR	
					SX66
				CINGULAR	
				iPAQ	
					h6320
				FUJITSU	
				SIEMENS	
					C550
				FUJITSU	
				SIEMENS	
					N100
				FUJITSU	
				SIEMENS	
					N110

COMPAQ				FUJITSU	
iPAQ	3835	DOPOD	D8110	SIEMENS	N500
COMPAQ				FUJITSU	
iPAQ	3850	DOPOD	M700	SIEMENS	N520
COMPAQ				FUJITSU	
iPAQ	3870	DOPOD	P100	SIEMENS	N520c
COMPAQ				FUJITSU	
iPAQ	3875	DOPOD	P800W	SIEMENS	N520e
COMPAQ				FUJITSU	
iPAQ	3900	DOPOD	S300	SIEMENS	N520p
COMPAQ				FUJITSU	
iPAQ	3950	DOPOD	U1000	SIEMENS	N560
COMPAQ				FUJITSU	
iPAQ	3955	E-PLUS	PDA III	SIEMENS	N560c
COMPAQ				FUJITSU	
iPAQ	3970	E-PLUS	PDA IV	SIEMENS	N560e
COMPAQ				FUJITSU	
iPAQ	3975	ETEN	600	SIEMENS	T810
				FUJITSU	
DAXIAN	CU928	ETEN	600e	SIEMENS	T830
				FUJITSU	
DELL	AXIM	ETEN	DX900	SIEMENS	V70
	Pocket DJ			GARMIN-	
DELL	20GB	ETEN	E500	ASUS	Garminfone
	Pocket DJ				
DELL	30GB	ETEN	E900	GIGABYTE	g-Smart
DELL	X3	ETEN	G500	GIGABYTE	g-Smart i
DELL	X3i	ETEN	G500+	GIGABYTE	g-Smart i+
					g-Smart
DELL	X30	ETEN	M500	GIGABYTE	i120
					g-Smart
DELL	X5	ETEN	M550	GIGABYTE	i128
					g-Smart
DELL	X50	ETEN	M600	GIGABYTE	i300
					g-Smart
DELL	X50v	ETEN	M600+	GIGABYTE	i350
					g-Smart
DELL	X51	ETEN	M700	GIGABYTE	MS800
					g-Smart
DOCOMO	htc Z	ETEN	M800	GIGABYTE	MS802
					g-Smart
DOPOD	310	ETEN	M810	GIGABYTE	MS804
					g-Smart
DOPOD	515	ETEN	N100	GIGABYTE	MS808
					g-Smart
DOPOD	535	ETEN	P100	GIGABYTE	MS820
					g-Smart
DOPOD	565	ETEN	P100w	GIGABYTE	MW700
					g-Smart
DOPOD	566	ETEN	P120	GIGABYTE	MW702
					g-Smart
DOPOD	575	ETEN	P300	GIGABYTE	MW998
DOPOD	585	ETEN	P600	GIGABYTE	g-Smart q60
					g-Smart
DOPOD	586	ETEN	P603	GIGABYTE	S1200
DOPOD	595	ETEN	P610	GIGABYTE	g-Smart

DOPOD	686	ETEN	P700	GOOGLE	t600
DOPOD	696	ETEN	P700i	HP iPAQ	NEXUS 7
DOPOD	699	ETEN	T470	HP iPAQ	114
DOPOD	700	ETEN	T500	HP iPAQ	214
DOPOD	710	ETEN	V900	HP iPAQ	500
DOPOD	818	ETEN	X500	HP iPAQ	510
DOPOD	830	ETEN	X500+	HP iPAQ	512
DOPOD	838	ETEN	X600	HP iPAQ	610c
DOPOD	900	ETEN	X610	HP iPAQ	614
DOPOD	577W	ETEN	X650	HP iPAQ	614c
DOPOD	586W	ETEN	X800	HP iPAQ	9120c
DOPOD	696i	EVEREX	NEON	HP iPAQ	Glisten
DOPOD	818 Pro	FITH MEDIA	A308	HP iPAQ	h1900
DOPOD	828+	FLY	IQ-110	HP iPAQ	h1910
		FUJITSU		HP iPAQ	h1915
DOPOD	838 Pro	SIEMENS	410	HP iPAQ	h1920
		FUJITSU		HP iPAQ	h1930
DOPOD	C500	SIEMENS	420	HP iPAQ	h1935
		FUJITSU		HP iPAQ	h1937
DOPOD	C720W	SIEMENS	600	HP iPAQ	h1940
		FUJITSU		HP iPAQ	h1945
DOPOD	C730	SIEMENS	710	HP iPAQ	h1945
		FUJITSU		HP iPAQ	h2200
DOPOD	C800	SIEMENS	718		
		FUJITSU			
DOPOD	C858	SIEMENS	720		
		FUJITSU			
DOPOD	CHT 9000	SIEMENS	610BT		
HP iPAQ	h2210	HP iPAQ	hx2490	HTC	Galaxy
HP iPAQ	h2215	HP iPAQ	hx2495	HTC	Gene
HP iPAQ	h3630	HP iPAQ	hx2700	HTC	Harrier
HP iPAQ	h3670	HP iPAQ	hx2750	HTC	HD2
HP iPAQ	h3800	HP iPAQ	hx2790	HTC	Herald
HP iPAQ	h3830	HP iPAQ	hx2795	HTC	Hermes
HP iPAQ	h3835	HP iPAQ	hx4700	HTC	Himalaya
HP iPAQ	h3850	HP iPAQ	hx4705	HTC	Hurricane
HP iPAQ	h3870	HP iPAQ	hx4710	HTC	Imagio
HP iPAQ	h3875	HP iPAQ	K3 Obsidian	HTC	Inspire 4G
HP iPAQ	h3900	HP iPAQ	rw6815	HTC	Libra
HP iPAQ	h3950	HP iPAQ	rw6818	HTC	Love
HP iPAQ	h3955	HP iPAQ	rw6828	HTC	Magician
HP iPAQ	h3970	HP iPAQ	rx1700	HTC	MAX 4G
HP iPAQ	h3975	HP iPAQ	rx1950	HTC	Monet
HP iPAQ	h4140	HP iPAQ	rx1955	HTC	MTeoR
HP iPAQ	h4150	HP iPAQ	rx3100	HTC	Nike
HP iPAQ	h4155	HP iPAQ	rx3110	HTC	Oxygen
HP iPAQ	h4350	HP iPAQ	rx3115	HTC	Ozone
HP iPAQ	h4355	HP iPAQ	rx3400	HTC	P3350
HP iPAQ	h5100	HP iPAQ	rx3415	HTC	P3400
HP iPAQ	h5150	HP iPAQ	rx3417	HTC	P3600

HP iPAQ	h5155	HP iPAQ	rx3700	HTC	P4000
HP iPAQ	h5400	HP iPAQ	rx3710	HTC	P4350
HP iPAQ	h5450	HP iPAQ	rx3715	HTC	P4450
HP iPAQ	h5455	HP iPAQ	rx4240	HTC	P4500
HP iPAQ	h5500	HP iPAQ	rx5700	HTC	P6300
HP iPAQ	h5555	HP iPAQ	rx5900	HTC	P6500
HP iPAQ	h6310	HP iPAQ	rz1700	HTC	Panda
HP iPAQ	h6315	HP iPAQ	rz1715	HTC	Polaris
HP iPAQ	h6320	HTC	Advantage X7500	HTC	Prophet
HP iPAQ	h5325	HTC	Advantage X7501	HTC	Pure
HP iPAQ	h6340	HTC	Advantage A7510	HTC	Robbie
HP iPAQ	h6365	HTC	Alphine	HTC	S320
HP iPAQ	h6500	HTC	Amadeus	HTC	S630
HP iPAQ	hw6510	HTC	Apache	HTC	S720
HP iPAQ	hw6515	HTC	Aria	HTC	S730
HP iPAQ	h6515a	HTC	Artemis	HTC	Sensation 4G
HP iPAQ	h6710	HTC	Athena	HTC	Shadow
HP iPAQ	h6715	HTC	Atlas	HTC	Hotspot
HP iPAQ	hw6900	HTC	Blue Angel	HTC	Shift
HP iPAQ	hw6910	HTC	Breeze	HTC	Sirius
HP iPAQ	hw6920	HTC	Canary	HTC	Sonata
HP iPAQ	hw6925	HTC	Cavalier	HTC	Star Trek
HP iPAQ	h6940	HTC	Charmer	HTC	Surround
HP iPAQ	hw6945	HTC	Dash 3G	HTC	Tanager
HP iPAQ	h6965	HTC	Dream	HTC	Thunderbolt
HP iPAQ	hx2000	HTC	Elf	HTC	Tilt2
HP iPAQ	hx2090	HTC	EVO View 4G (Tablet)	HTC	Touch2
HP iPAQ	nx2110	HTC	Excalibur	HTC	Touch 3G
HP iPAQ	hx2190	HTC	Falcon	HTC	Touch
HP iPAQ	hx2400	HTC	Faraday	HTC	Touch 09
HP iPAQ	hx2410	HTC	Feeler	HTC	Touch Dual
HP iPAQ	hx2415	HTC	Flyer (tablet)	HTC	Touch HD
HTC	Touch Viva	IZENMOBILE	KRMA KSMT	MITAC	Touch Pro
HTC	Tilt	KINPO	iDO S601	MITAC	Touch Pro 2
HTC	Trinity	KINPO	IDO S630	MITAC	8380
HTC	Typhoon	KINPO	SP70	MITAC	8390
HTC	TyTN	KINPO	SP70R	MITAC	8870
HTC	Universal	KINPO	SP90	MITAC	168RS
HTC	Volans	KROME	Intellekt iQ200	MITAC	336BT
HTC	Vox	KROME	Intellekt iQ700	MITAC	338 Plus
HTC	Voyager	KROME	Mega M900i	MITAC	A201
HTC	Wallaby	KROME	Navigator F1	MITAC	A501
HTC	Wizard	KROME	Spy	MITAC	A700
HTC	XV6900	KYOCERA	E1100	MITAC	A701
				MITAC	A702
				MITAC	P3400

IMATE	JAM Black	LENOVO	ET960	MITAC	P350
IMATE	JAMA	LENOVO	ET980	MITAC	P550
IMATE	JAMA101	LENOVO	i921	MITAC	OP550m
IMATE	JAMA 201	LG	Incite	MITAC	P560
					Trium
IMATE	JAQ	LG	AX145	MITSUBISHI	Mondo
IMATE	JAQ3	LG	KB770	MOTOROLA	A845
IMATE	JAQ4	LG	KC1	MOTOROLA	A3100
IMATE	JASJAM	LG	KE990	MOTOROLA	C250
IMATE	PDA-2	LG	KF300	MOTOROLA	C343a
IMATE	EDVO	LG	KF310	MOTOROLA	C353
IMATE	PDAL	LG	KF350	MOTOROLA	C353t
IMATE	PDA-N Phone	LG	KF700	MOTOROLA	C380
IMATE	Edition	LG	KF750	MOTOROLA	E550
IMATE	Pocket PC	LG	KF755	MOTOROLA	i275
IMATE	Smartflip Smartphon e	LG	KF770	MOTOROLA	i720
IMATE	Smartphon e2	LG	KF900	MOTOROLA	i733
IMATE	SP2	LG	KP100	MOTOROLA	i740
IMATE	SP3	LG	KP501	MOTOROLA	i920
IMATE	SP4m	LG	KS20	MOTOROLA	i920
IMATE	SP5m	LG	KT610	MOTOROLA	i930
IMATE	SPJAS Ultimate	LG	KU380	MOTOROLA	MC35
IMATE	5150 Ultimate	LG	Optimus GT540 P509 (Optimus T)	MOTOROLA	MPx
IMATE	6150 Ultimate	LG	U8100	MOTOROLA	MPx100
IMATE	7150 Ultimate	LG	U8150	MOTOROLA	T720i
IMATE	8150 Ultimate	LG	U8180	MOTOROLA	V1150
IMATE	8502 Ultimate	LG	U8210	MOTOROLA	V120e
IMATE	9150 Ultimate	LG	U8290	MOTOROLA	V120t
IMATE	9502	LG	U8300	MOTOROLA	V120x
IMATE	810-F	LG	Quantum	MOTOROLA	V186
INTERME C	730	MIO	A502	MOTOROLA	V191
INTERME C	730B	MIO	A702	MOTOROLA	V330
INTERME C	741B	MIO	P3600	MOTOROLA	V505
INTERME C	751B	MIO	P560	MOTOROLA	V535
INTERME C	761B	MITAC	168	MOTOROLA	V545
INTERME C	CN2B	MITAC	169	MOTOROLA	V547
INTERME C	CN3	MITAC	180	MOTOROLA	V555
				MOTOROLA	V557

C					
INTERME					
C	CN30	MITAC	336	MOTOROLA	V60
INTERME					
C	Mercury	MITAC	338	MOTOROLA	V60c
i-teq	Bond	MITAC	339	MOTOROLA	V60g
i-teq	Laser	MITAC	558	MOTOROLA	V60i
i-teq	X-Bond	MITAC	728	MOTOROLA	V60s
MOTORO					
LA	V60t	NOKIA	N8	ORANGE	SPV C220
MOTORO					
LA	V60x	NOKIA	N75	ORANGE	SPV C700
MOTORO					
LA	V66	NOKIA	N78	ORANGE	SPV Classic
MOTORO					
LA	Z10	NOKIA	N81	ORANGE	SPV E100
MOTORO					
LA	Backflip	NOKIA	N92	ORANGE	SPV E200
MOTORO					
LA	Bravo	NOKIA	X5	ORANGE	SPV E600
MOTORO					
LA	Charmer	O2	Cosmo	ORANGE	SPV E610
MOTORO					
LA	Cliq 2	O2	Pocket PC	ORANGE	SPV E650
MOTORO					
LA	Defy	O2	XDA Argon	ORANGE	SPV F600
MOTORO					
LA	Flipout	O2	XDA Atom	ORANGE	SPV M1000
MOTORO					
LA	Flipside	O2	XDA Atom Exec	ORANGE	SPV M2000
MWG	Atom Life	O2	XDA Atom Life	ORANGE	SPV M2500
MWG	Atom V	O2	XDA Atom Pure	ORANGE	SPV M3000
MWG	Zinc II	O2	XDA Comet	ORANGE	SPV M3100
NEONOD					
E	N1	O2	XDA Cosmo	ORANGE	SPV M500
NEONOD					
E	N1m	O2	XDA Exec	ORANGE	SPV M5000
NEONOD					
E	N2	O2	XDA Flame	ORANGE	SPV M600
NEXIO	S160	O2	XDA Graphite	ORANGE	SPV M650
NEXIO	XP40	O2	XDA Guide	ORANGE	SPV M700
	2320				SPV
NOKIA	Classic	O2	XDA Ignito	ORANGE	Smartphone
NOKIA	2605	O2	XDA II	ORSiO	G735
	2705				
NOKIA	Shade	O2	XDA ii mini	ORSiO	GN725
NOKIA	3205	O2	XDA iis	ORSiO	N725 GPS
NOKIA	3606	O2	XDA mini S	ORSiO	P745
NOKIA	3711	O2	XDA NEO	PALM	Treo 700w
NOKIA	5030	O2	XDA Nova	PALM	Treo 700wx
NOKIA	5250	O2	XDA Orbit	PALM	Treo 750V
NOKIA	6012	O2	XDA Orbit II	PALM	Treo 755p
NOKIA	6102	O2	SDA Orion	PALM	Treo 800w

NOKIA	6121	O2	XDA Phone	PALM	Tungsten E2
NOKIA	6126	O2	XDA Stealth	PALM	Tungsten T5
NOKIA	6205	O2	XDA Serra	PANASONIC	X700
NOKIA	6350	O2	XDA Stellar	PANASONIC	X800
NOKIA	6560	O2	XDA Terra	PANTECH	PN820
NOKIA	6590	O2	XDA Trion	PARAGON WIRELESS	HIPI-2200 600 GPS
NOKIA	6600	O2	XDA Zest	PHAROS	Phone Traveller
NOKIA	6681	O2	XDA Zinc	PHAROS POCKET	GPS 525
NOKIA	6682 6710	O2	Xphone	NAVIGATOR POCKET	PN-3550
NOKIA	Navigator	O2	Xphone ii	NAVIGATOR POCKET	PN-3560
NOKIA	6750	O2	Xphone iim	NAVIGATOR POCKET	PN-P201
NOKIA	7205	OKWAP	K728	NAVIGATOR POCKET	PN-P550 A
NOKIA	7250	OKWAP	K868	NAVIGATOR PSION	PN-P550 A Workabout
NOKIA	8801	OKWAP	K860	TEKLOGIX PSION	PRO Workabout
NOKIA	8890	OKWAP	K871	TEKLOGIX	PRO G2
NOKIA	6236i	OKWAP	S868	QOOL LABS	QDA Icon
NOKIA	C5	OPTICON	H-16B	QOOL LABS	QDA Lite
NOKIA	C6	OPTICON	H-19A	QOOL LABS	Twins 178
NOKIA	E5	OPTICON	H-19-B	QTEK	1010
NOKIA	E52	OPTICON	PHL-5400	QTEK	2020
NOKIA	E61i	OPTICON	PHL-7111	QTEK	2060
NOKIA	E62	OPTICON	PHL-7114	QTEK	7070
NOKIA	E66	OPTICON	PHL-7142	QTEK	8010
NOKIA	E72	ORANGE	SPV C100	QTEK	8020
NOKIA	E90	ORANGE	SPV C200	QTEK	8060
QTEK	8080	SAMSUNG	S5230W	SONY ERICSSON	K610im
QTEK	8100	SAMSUNG	S5233	SONY ERICSSON	K700c
QTEK	8200	SAMSUNG	S5600v Blade	SONY ERICSSON	K750c
QTEK	8300	SAMSUNG	S5603	SONY ERICSSON	K758c
QTEK	8310	SAMSUNG	S7350	SONY ERICSSON	K790a
QTEK	8500	SAMSUNG	SCH-i830	SONY ERICSSON	K790c
QTEK	8600	SAMSUNG	SCH-M400	SONY ERICSSON	K790i
QTEK	9000	SAMSUNG	SGH-A257	SONY ERICSSON	M608i

QTEK	9090	SAMSUNG	SGH-A877	SONY	ERICSSON	S700c
QTEK	9100	SAMSUNG	SGH-A887	SONY	ERICSSON	T226
QTEK	9600	SAMSUNG	SGH-D300	SONY	ERICSSON	T237
QTEK	2020i	SAMSUNG	SGH-D730(Symbian)	SONY	ERICSSON	T290a
QTEK	G100	SAMSUNG	SGH-E808	SONY	ERICSSON	T616
QTEK	S100	SAMSUNG	SGH-i250	SONY	ERICSSON	T637
QTEK	S110	SAMSUNG	SGH-i300x	SONY	ERICSSON	W300c
QTEK	S200	SAMSUNG	SGH-i400(Symbian)	SONY	ERICSSON	W550c
QTEK	S310	SAMSUNG	SGH-i450(Symbian)	SONY	ERICSSON	W600
QUEST	PC6700	SAMSUNG	SGH-i718	SONY	ERICSSON	W600c
ROVER	PC C6	SAMSUNG	SGH-i750	SONY	ERICSSON	W710c
ROVER	PC E5	SAMSUNG	SGH-i760	SONY	ERICSSON	W715a
ROVER	PC G5	SAMSUNG	SGH-i770	SONY	ERICSSON	W800c
ROVER	PC G6	SAMSUNG	SGH-i897	SONY	ERICSSON	W810c
ROVER	PC M5	SAMSUNG	SGH-i917	SONY	ERICSSON	W830
ROVER	PC N6	SAMSUNG	i9000 (Galaxy S 4G)	SONY	ERICSSON	W880c
ROVER	PC N7	SAMSUNG	i9100 (Galaxy S 2)	SONY	ERICSSON	W888c
ROVER	PC P6	SAMSUNG	SGH-L870(Symbian)	SONY	ERICSSON	W900c
ROVER	PC P745	SAMSUNG	SGH-P730	SONY	ERICSSON	Xperia X10
ROVER	PC Q5	SAMSUNG	SGH-T929	SONY	ERICSSON	Xperia X10 mini
ROVER	PC Q6	SAMSUNG	SGH-T589 (Gravity Smart)	SONY	ERICSSON	Xperia X8
ROVER	PC R5	SAMSUNG	SGH-T759 (Exhibit 4G)	SONY	ERICSSON	Z502a
ROVER	PC S5	SAMSUNG	SGH-T959	SONY	ERICSSON	Z520c
ROVER	PC S6	SAMSUNG	SGH-Z600	SONY	ERICSSON	Z525a
ROVER	PC S7	SHARP	W-ZERO3	SONY	ERICSSON	Z525i
ROVER	PC W5	SIEMENS	A62	SONY	ERICSSON	Z530c
SAMSUN	GALAXY S3	SIEMENS	C6620	SONY	ERICSSON	Z550a
SAMSUN	GALAXY S4	SIEMENS	L56	SONY	ERICSSON	Z550c

SAMSUNG				SONY	
G	B7320	SIEMENS	S56	ERICSSON	Z710c
SAMSUNG	B7330,			SONY	
G	OmniaPRO	SIEMENS	S66	ERICSSON	Z712a
SAMSUNG	B7610				
G	OmniaPRO	SIEMENS	SX45	SPRINT	Ace
SAMSUNG					
G	C6620	SIEMENS	SX45i	SPRINT	PPC-6600
SAMSUNG					
G	C3010	SIEMENS	SX56	SPRINT	PPC-6601
SAMSUNG					
G	C3110	SIEMENS	SX66	SPRINT	PPC-6700
SAMSUNG		SOCKET			
G	E1310	MOBILE	SoMo 650	SPRINT	PPC-6800
SAMSUNG	i520(Symbian)	SONY	C901		
G		ERICSSON	GreenHeart	SPRINT	XV6600
SAMSUNG	i550(Symbian)	SONY			Nomad
G		ERICSSON	G900	TDS	800B
SAMSUNG	i560(Symbian)	SONY			Nomad
G		ERICSSON	J300a	TDS	800L
SAMSUNG		SONY			Nomad
G	i640	ERICSSON	J300c	TDS	800LC
SAMSUNG	i7110(Symbian)	SONY			Nomad
G		ERICSSON	K300a	TDS	800LE
SAMSUNG	i7500(Android)	SONY			Ranger
G		ERICSSON	K300c	TDS	300X
SAMSUNG		SONY			Ranger
G	i8910	ERICSSON	K310a	TDS	500X
SAMSUNG		SONY			
G	i907	ERICSSON	K310c	T-MOBILE	Ameo
SAMSUNG		SONY			
G	M7610	ERICSSON	K500c	T-MOBILE	Comet
SAMSUNG		SONY			
G	Propel Pro	ERICSSON	K506c	T-MOBILE	Dash
SAMSUNG		SONY			
G	S3110	ERICSSON	K510a	T-MOBILE	G2
SAMSUNG		SONY			
G	S3310	ERICSSON	K510c	T-MOBILE	G2x
T-MOBILE	MDA	T-MOBILE	h6315	VODAFONE	VDA V
	MDA				VPA
T-MOBILE	Compact	TOSHIBA	G900	VODAFONE	Compact
	MDA				VPA II
T-MOBILE	Compact II	TOSHIBA	TG01	VODAFONE	Compact
	MDA				
T-MOBILE	Compact III	UBIQUIO	601	VODAFONE	VPA III
T-MOBILE	MDA II	UBIQUIO	503G	VOXTEL	W210
		VELOCITY			
T-MOBILE	MDA III	MOBILE	103	VOXTEL	W420
		VELOCITY			
T-MOBILE	MDA Mail	MOBILE	111	VOXTEL	W520
		VERIZON			
T-MOBILE	MDA Pro	WIRELESS	PN-820	VOXTEL	W740
	MDA	VERIZON			
T-MOBILE	Pocket PC	WIRELESS	XV6600		
		VERIZON			
T-MOBILE	MDA Touch	WIRELESS	XV6800		

T-MOBILE	MDA Vario	VODAFONE	v1210
T-MOBILE	MDA Vario III	VODAFONE	v1240
T-MOBILE	myTouch 3G slide	VODAFONE	v1415
T-MOBILE	myTouch 4G	VODAFONE	v1605
T-MOBILE	SDA	VODAFONE	v1620
T-MOBILE	SDA II	VODAFONE	v1640
T-MOBILE	SDA Music	VODAFONE	VDA VDA Compact
T-MOBILE	Shadow 2	VODAFONE	GPS VDA Compact
T-MOBILE	Sidekick 4G	VODAFONE	IV
T-MOBILE	Wing	VODAFONE	VDA II

**Handsets – Other**

Other handsets can be tested on CellIDEK TEK, however the amount of data extracted has not been assessed and all information should be treated as a minimum data extraction.

**GPS Device – Verified CellIDEK Support**

The following GPS Devices have been tested on CellIDEK TEK using the standard verification procedures of Logicube. The results below display the data sets that can be extracted from CellIDEK TEK for the specific handset. There may be additional data sets available from handsets and these will require further examination.

Key:

Phone ID		Home		Routes	
Contacts		Favourites		Routes with Waypoints	
Call Logs		Recent Destinations		Track Logs	
Call Logs w timestamp		Location History		Track Logs with Waypoints	
SMS					
SMS w timestamp					

	Manufacturer	Model	GPS ID	Contacts	Call Logs	Incoming SMS	Outgoing SMS	Home	Favourite	Recent Destinations	Location History	Routes	Tracks	
1	ACER	P610												Apr 2009

2	GARMIN	nuvi 250W							★						Oct 2008
3	GARMIN	nuvi 300							★						Oct 2008
4	GARMIN	nuvi 760							★						Apr 2009
5	HP	iPAQ 314							★						Jan 2009
6	NAVIGON	7210							★						Jul 2009
7	NAVMAN	S50 3D							★						Jul 2009
8	NAVMAN	S70							★						Jul 2009
9	NAVMAN	S70 3D							★						Jul 2009
10	NDRIVE	S300							★						Apr 2009
11	TOMTOM	G0 720							★						Jul 2008
12	TOMTOM	ONE							★						Jul 2008
13	<b>TOMTOM</b>	<b>ONE XL</b>							★						<b>Jan 2010</b>
14	<b>VIAMICHELIN</b>	<b>X970</b>							★						<b>Jan 2010</b>

### GPS Device – Expected Support

The following GPS Devices have not been verified on CellDEK TEK however their appearance or technology indicates that data extraction will be possible. It is recommended that all data is treated as a minimum extraction as there may be additional data sets available that require further examination.

Data can be extracted from these handsets as normal by selecting either Mass Storage Device or Windows PDA from the GPS Device list.

**GARMIN nuvi:** 200, 200W, 205, 205W, 250, 255W, 260, 260W, 265T, 265WT, 270, 275T, 350, 360, 370, 500, 550, 600, 610, 650, 660, 670, 680, 750, 755T, 765T, 770, 775T, 780, 785T, 850, 855, 855T, 880, 885T, 1200, 1250, 1260T, 1300, 1350T, 1370T, 1390T, 1490T, 5000

**NAVIGON:** 1200, 1210, 2100 max, 2110 max, 2150 max, 2200, 2310, 3300 max, 3310 max, 4310 max, 4350 max, 7310, 8110, 8310

**NAVMAN:** S30, S30 3D, S50, S80, S90i

**NDRIVE:** G280R, G280S, G400, G800R, S400, Touch, Touch XL

**TOMTOM:** GO, GO 300, GO 500, GO 510, GO 520, GO 530, GO 540  
LIVE, GO 700, GO 710, GO 730, GO 740 LIVE, GO 910, GO 920, GO 940  
LIVE, XL

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## **Additional Cable Support for PDAs**

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The set of 5 cable tips can be purchased from <http://www.gomadic.com/celldek.html> This will enable the User to extract data from the following 150 PDAs:

### **PDA Cable Tip 1**

**DELL:** Axim X5

### **PDA Cable Tip 2**

**CINGULAR iPAQ:** h6320, h6325

**COMPAQ iPAQ:** 3800, 3830, 3835, 3850, 3870, 3875, 3900, 3950, 3955, 3970, 3975

**HP iPAQ:** h1900, h1910, h1915, h1920, h1930, h1935, h1937, h1940, h1945, h2200, h2210, h2215, h3800, h3830, h3835, h3850, h3870, h3875, h3900, h3950, h3955, h3970, h3975, h4140, h4150, h4350, h4355, h5100, h5150, h5155, h5400, h5450, h5455, h5500, h5550, h5555, h6315, h6320, h6325, h6340, h6365, hw6500, hw6510, hw6515a, hw6515, hw6710, hw6715, hw6910, hw6915, hw6925, hw6940, hw6965, hx2000-Series, hx2090, hx2110, hx2190, hx2410, hx2415, hx2490, hx2495, hx2700-Series, hx2750, hx2790, hx2795, hx4700, hx4705, hx4710, rx1700-Series, rx1950, rx1955, rx3100, rx3110, rx3115, rx3400, rx3415, rx3417, rx3700, rx3710, rx3715, rz1700, rz1710, rz1715

**MOTOROLA:** C250

**T-MOBILE iPAQ:** h6315

### **PDA Cable Tip 8**

**AT&T:** SX56, SX66

**AUDIOVOX:** 5050, 6601, XV6600

**CINGULAR:** SX66

**HTC:** Blue Angel, Canary, Falcon, Harrier, Himalaya, Tanager, Voyager, Wallaby

**I-MATE:** PDA2k, PPC Phone, Smartphone 1, Smartphone 2

**O2:** XDA Ili, XDA IIs, XDA-II, XDA PPC Phone, XPhone I

**ORANGE:** SPV-E100, SPV-E200, SPV-M1000, SPV-M2000, SPV-Smartphone

**QTEK:** 1010, 2020, 7070, 8060, 8080, 9090

**SIEMENS:** SX56, SX66

**SPRINT:** 6601, XV6600

**T-MOBILE:** MDA, MDA II, MDA III, PPC Edition

**VERIZON:** XV6600

**PDA Cable Tip 11**

**DELL:** Axim X30, Axim X3i, Axim X3, Pocket DJ 20GB, Pocket DJ 30GB

**PDA Cable Tip 13**

**DELL:** Axim X50v, Axim X50, Axim X51v, Axim X51

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## 9. CellIDEK Software License

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### CellIDEK TEK Software License - EU

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#### EU CUSTOMER LICENCE (Used for all regions apart from US)

**BETWEEN FORENSIC SCIENCE SERVICE LTD.** a company incorporated in England under number 05607780 and having its registered office at Trident Court, 2920 Solihull Parkway, Birmingham Business Park, Birmingham B37 7YN (the “**Licensor**”); and the End User (“**You**”).

#### RECITAL

- (A) The Licensor is engaged in creating and is the owner of the Software (as hereinafter defined).
- (B) The Licensor has agreed to grant You a non-exclusive licence to use the Software (as hereinafter defined) upon the terms and conditions of this Agreement.
- (C) The Licensor has provided You with a copy of the End User Software Licence (as hereinafter defined) which grants You a licence to use the Microsoft and related software contained within the PC embedded in the CellIDEK device.

#### OPERATIVE PROVISIONS

##### 1 DEFINITIONS AND INTERPRETATION

1.1 In this Agreement including the Schedule hereto the following words shall have the following meanings:

**“Agreement”**

means this agreement, including its Schedule;

**“Business Day”**

means any day other than Saturdays, Sundays or public holidays in England;

**“Commencement Date”**

means the date of the Contract;

**“Contract”**

means the contract between the Parties for the purchase of the Goods in which the Software is embedded;

**“Customer”**

means a third party who is licensed by the Licensor to use the Software when it is installed into the Goods;

**“End User Licence”**

means the paper licence provided with the CellIDEK device for software within the embedded PC;

**“Executable Code”**

means the fully compiled version of a software programme that can be executed by a computer and used by a Customer without further compilation;

**“Force Majeure”**

means the following:

- (a) Acts of God;
- (b) outbreak of hostilities, riot, civil disturbance, acts of terrorism;

- (c) an act of any government or authority (including refusal or revocation of any licence or consent);
- (d) fire, explosion, flood, fog or bad weather;
- (e) power failure, failure of telecommunication lines, failure or breakdown of plant, machinery or vehicles;
- (f) default of suppliers or sub-contractors;
- (g) theft, malicious damage, strike, lock-out or industrial action of any kind; and
- (h) any cause or circumstance whatsoever beyond the reasonable control of a Party;

**“Goods”**

means CellDEK mobile phone and PDA data extraction kit;

**“Intellectual Property Rights”**

means all inventions (whether patentable or not), patents, utility models, designs (both registered and unregistered and including rights in semiconductor topographies), copyright, database rights, trade and service marks (both registered and unregistered) together with all applications for, right to the grant of and extensions of the same, and all other intellectual and industrial property including but not limited to all similar or analogous rights throughout the world, in each case for the full term of the relevant right;

**“Licensed Software Materials”**

means the Software, the Software Documentation, the Periodic New Releases, any Releases and any fixes created and which are provided to You pursuant to the Contract;

**“Periodic New Releases”**

means a release of the Software that is made available to all Customers and that corrects errors or changes or improves the Software’s utility, efficiency or capability and associated cable upgrade specifications and which is provided to You pursuant to the Contract;

**“Party”**

means each of the persons identified as parties to this Agreement and jointly **“the Parties”**;

**“Release”**

means the most recent standard version of the Software made available to all Customers and which is provided to You pursuant to the Contract;

**“Software”**

means the software programs in Executable Code only and which are listed in the Schedule;

**“Software Documentation”**

means the instruction manuals, user guides and other information and any modifications or additions thereto to be made available by the Licensor at its discretion to You in either printed or machine readable form;

**“Software Specifications”**

means the technical specifications from time to time published by the Licensor in respect of the Software; and

**“Use”**

means the copying or transmission of the Software or (where in machine readable form) the Software Documentation for use in accordance with the instructions contained in the Software or (as the case may be) the Software Documentation.

1.2 In this Agreement unless the context requires otherwise:

1.2.1 the singular includes the plural and vice versa and any gender includes any other gender;

1.2.2 references to Clauses and Schedules are to Clauses of, and

schedules to, this Agreement;

1.2.3 any reference to an enactment, order, regulation or other similar instrument includes a reference to that enactment, order, regulation or instrument as from time to time amended, extended or re-enacted;

1.2.4 references to persons include bodies corporate, unincorporated associations and partnerships, and any reference to the Parties include their respective successors, permitted assigns and personal representatives; and

1.2.5 any reference to “company”, “subsidiary” and “holding company” shall be as defined in section 736 of the Companies Act 1985.

1.3 The headings of this Agreement are for ease of reference only and shall not affect its interpretation or construction.

1.4 In the event of a conflict between any of the terms of this Agreement including its Schedules and appendices, the conflict shall be resolved according to the following order of priority:

1.4.1 the Clauses of this Agreement;

1.4.2 the Schedules of this Agreement; and

1.4.3 the Recitals.

## 2 GRANT OF LICENCE

2.1 The Licensor hereby grants to You a non-exclusive non-transferable licence to Use the Software (and where appropriate the Software Documentation, any Periodic New Releases and any Releases) and to possess and refer to the Software Documentation (the “**Licence**”) in accordance with and subject to the terms and conditions of this Agreement.

2.2 The Licensor has provided a copy of the the End User Licence to You. By using the Software You are granted a licence to the software in PC embedded in the CellDEK device and You agree to be bound by the terms of the End User Licence agreement.

## 3 TERM

This Agreement shall commence on the Commencement Date and shall continue in force unless or until terminated by either Party in accordance with the provisions of Clause 10.

## 4 PROPERTY AND CONFIDENTIALITY IN THE LICENSED SOFTWARE MATERIALS

4.1 The Licensed Software Materials contain Confidential Information (as defined in Clause 9.1 below) of the Licensor and all Intellectual Property Rights in the Licensed Software Materials are the exclusive property of or are licensed to the Licensor.

4.2 You shall not:

4.2.1 save as provided in Clause 5 below copy the whole or any part of the Licensed Software Materials;

4.2.2 save as required to be permitted by law modify, merge or combine the whole or any part of the Licensed Software Materials with any other software or documentation;

4.2.3 remove or tamper with any proprietary notice contained in the Licensed Software Materials;

4.2.4 assign, license, transfer, sell, lease, rent, charge or otherwise deal in or encumber the Licensed Software Materials nor use on behalf of or make available the same to any third party; or

4.2.5 save as required to be permitted by law reverse compile the whole or any part of the Licensed Software Materials from object code into source code.

4.3 You shall:

4.3.1 keep confidential the Licensed Software Materials and limit access to the same to those of its employees, agents and sub-contractors who either have a need to know or who are engaged in the Use of the

- Software (including where appropriate the Software Documentation);
- 4.3.2 reproduce on any copy of the Software or Licensed Software Materials the Licensor's copyright and trade mark notices;
  - 4.3.3 maintain an up-to-date record of the number of copies of the Licensed Software Materials and their location and upon request forthwith produce such record to the Licensor;
  - 4.3.4 only use the Software in accordance with the number of copies licensed to You (and as set out in the Schedule);
  - 4.3.5 without prejudice to the foregoing take all such other steps as shall from time to time be necessary to protect the Confidential Information (as defined in Clause 9.1 below) and Intellectual Property Rights of the Licensor in the Licensed Software Materials;
  - 4.3.6 in its Use of the Licensed Software Materials comply with all present and future statutes, laws, ordinances, regulations and/or guidelines of any applicable jurisdiction or agency;
  - 4.3.7 ensure that its personnel are, at all times, educated and trained in the proper Use and operation of the Licensed Software Materials;
  - 4.3.8 ensure that the Licensed Software Materials are used in accordance with any and all applicable Software Documentations; and
  - 4.3.9 indemnify and hold harmless the Licensor from and against all claims, damages, losses, judgments, fees, expenses and costs, including legal costs, arising out of or resulting from Your acts, negligence or failure to comply with this Clause 4 or any other provision of this Agreement.

- 4.4 You shall inform all relevant employees, agents and sub-contractors that the Licensed Software Materials constitute Confidential Information (as defined below) of the Licensor and that all Intellectual Property Rights therein are the property of or are licensed to the Licensor and the You shall take all such steps as shall be necessary to ensure compliance by its employees agents and sub-contractors with the provisions of this Clause 4.

## 5 COPYING OF THE LICENSED SOFTWARE MATERIALS

- 5.1 You shall be entitled to make one back-up copy of the Software. Any such copy shall in all respects be subject to the terms and conditions of this Agreement and shall be deemed to form part of the Software.
- 5.2 You shall not be entitled to copy in whole or in part the Software Documentation.

## 6 WARRANTY

- 6.1 Subject to the exceptions set out in Clause 6.3 below and the limitations upon its liability in Clause 7 below the Licensor warrants that:
  - 6.1.1 it has the right, power and authority to license the Licensed Software Materials upon the terms and conditions of this Agreement; and
  - 6.1.2 the Software will for a period of twelve (12) months from the date it is delivered to You conform to the Software Specifications.
- 6.2 You shall give notice to the Licensor as soon as it is reasonably able upon becoming aware of a breach of warranty. If no such notice is given within 30 days of You becoming aware of a breach of warranty, the Licensor shall not be liable for such breach of warranty.
- 6.3 The Licensor shall have no liability to remedy a breach of warranty where such breach arises:
  - 6.3.1 in respect of Software that is not properly licensed pursuant to Clause 2 of this Agreement;
  - 6.3.2 in circumstances where You is not in conformity with the minimum technical requirements and prerequisites set out in the Software Specifications; or
  - 6.3.3 as a result of:
    - a) the improper use, operation or neglect of either the Software or the Goods upon which the Software is installed

- or used;
- b) the modification of the Software or its merger (in whole or in part) with any other software;
- c) the failure by You to implement recommendations in respect of or solutions to faults previously advised by the Licensor;
- d) any repair, adjustment, alteration or modification of the Software by any person other than the Licensor without the Licensor's prior consent;
- e) failure by You adequately to back-up the Software;
- f) any breach by You of any of its obligations under any maintenance agreement in respect of the Goods upon which the Software is installed or used;
- g) any failure, accident, neglect or misuse of equipment, software or media not supplied by the Licensor;
- h) Your failure to install and Use in substitution for the previous release any New Release of the Software within ninety (90) days of receipt of the same;
- or
- i) the use of the Software for a purpose for which they were not designed.

6.4 Without prejudice to the foregoing the Licensor does not warrant that the Use of the Software will meet Your requirements or that the operation of the Software (including where in machine-readable form the Software Documentation) will be uninterrupted or error free.

6.5 Nothing in this Agreement shall obligate the Licensor to improve or otherwise support the Licensed Software Materials.

6.6 Subject to the foregoing all conditions, warranties, terms, representations (unless fraudulent) and undertakings express or implied, statutory or otherwise in respect of the Licensed Software Materials are hereby excluded to the fullest extent permissible by law.

## **7 LIMITATION OF LIABILITY**

7.1 Where any sustainable claim is made by You in respect of any breach of the warranties given by the Licensor pursuant to clause 6 above, the Licensor shall be entitled at its option either to replace or repair the Software free of charge. This shall be Your sole and exclusive remedy and the Licensor shall have no further liability to You for breach of such warranties.

7.2 Subject to Clause 7.1 above and without prejudice to Clause 7.4, and except as otherwise provided in this Agreement, the total liability of the Licensor in contract, tort (including negligence or breach of statutory duty) or otherwise arising by reason of or in connection with this Agreement shall be limited in aggregate to the total price paid and payable by You for the Goods under the Contract.

7.3 Without prejudice to Clause 7.4, in no event shall the Licensor be liable to You for loss of revenue, loss of anticipated savings, loss of profits, loss of data, damage to goodwill, loss of reputation or for any type of indirect, economic or consequential loss or damage whatsoever or howsoever caused.

7.4 Neither party excludes or limits liability to the other for death or personal injury caused by its negligence or for fraud.

7.5 Save as expressly stated in this Agreement, all conditions, warranties and representations (unless fraudulent) expressed or implied by statute, common law or otherwise in relation to the Licensed Software Materials are hereby excluded to the fullest extent permissible by law.

## **8 RISK IN THE LICENSED SOFTWARE MATERIALS**

Risk in the Licensed Software Materials will pass to You upon

the date of delivery of the Licensed Software Materials to You.  
If subsequently the Licensed Software Materials are (in whole or in part) destroyed, damaged or lost the Licensor will upon written request replace the same subject to You paying its then prevailing charges.

## 9 CONFIDENTIALITY

9.1 Neither Party shall use, copy, adapt, alter, disclose or part with possession of any information or data of the other Party which is disclosed or otherwise comes into its possession directly or indirectly as a result of this Agreement and which is of a confidential nature (“**Confidential Information**”) without the prior written consent of the disclosing Party except as strictly necessary to perform its obligations or exercise its rights under this Agreement.

9.2 The receiving Party undertakes not to disclose any Confidential Information of the disclosing Party to any third party other than employees, professional advisors and approved sub-contractors of the receiving Party on a “need to know” basis only and to whom disclosure is necessary for the proper performance of their duties under this Agreement.

9.3 The foregoing obligations shall not apply to Confidential Information that:

9.3.1 was known to the receiving Party prior to receipt from the disclosing Party; or

9.3.2 is received from a third party without breach of any other confidentiality arrangements; or

9.3.3 is or becomes public knowledge other than by breach of this Clause or is independently developed by or for the receiving Party; or

9.3.4 is required to be disclosed by any applicable law or by order of any Court of competent jurisdiction or any government body, agency or regulatory body, provided that the receiving Party shall use all reasonable endeavours to give the other Party not less than two business days’ written notice of the disclosure.

9.4 The Parties shall ensure that their respective employees, agents and sub-contractors comply with the provisions of this Clause and are bound by terms and conditions of use and non-disclosure at least as onerous as those contained in this Clause.

9.5 The obligations in this Clause shall continue in force notwithstanding termination of this Agreement for any reason.

9.6 If this Agreement is terminated, the receiving Party shall return or destroy at the request of the disclosing Party all Confidential Information of the disclosing Party.

## 10 TERMINATION

10.1 This Agreement may be terminated:

10.1.1 by either Party upon giving not less than sixty (60) days written notice to the other;

10.1.2 forthwith by either Party upon giving written notice to the other if the other commits any material breach of this Agreement and which (in the case of a breach capable of remedy) shall not have been remedied within thirty (30) days of a written request to remedy the same (and non-payments of sums when due to the Licensor shall be a material breach);

10.1.3 forthwith by either Party upon giving written notice to the other Party if the other Party makes or proposes to make any arrangement or composition with its creditors or has a receiver, administrative receiver, administrator, liquidator, manager or similar officer appointed in respect of all or any part of its assets or passes a resolution for winding-up (otherwise than for the purpose of a solvent amalgamation or reconstruction where the resulting entity assumes all of the obligations of the relevant party under this Agreement), or (in the case of an individual) commits any act of bankruptcy or dies, or (in the case of a partnership)

is dissolved, or undergoes or suffers any analogous acts or proceedings under any foreign law;

10.1.4 if the other Party shall commit any act of bankruptcy, shall have a receiving order made against it, shall make or negotiate for any composition or arrangement with or assignment for the benefit of its creditors or if the other party being a body corporate, shall present a petition or have a petition presented by a creditor for its winding up or shall enter into any liquidation (other than for the purpose of reconstruction or amalgamation), shall call any meeting of its creditors, shall have a receiver of all or any of its undertakings or assets appointed, shall be deemed by virtue of section 123 of the Insolvency Act 1986 to be unable to pay its debts, or shall cease to carry on business; or

10.1.5 forthwith by either Party upon giving written notice to the other if the other shall cease to carry on its business or substantially the whole of its business.

10.2 Any termination of this Agreement (however occasioned) shall not operate so as to affect any accrued rights or liabilities of either Party.

10.3 Within fourteen (14) days of the termination of this Agreement (howsoever and by whomsoever occasioned) You shall return or destroy (as the Licensor shall instruct) all copies of the Licensed Software Materials in its possession and a duly authorised officer of You shall certify in writing to the Licensor that You has complied with such obligation.

**11 FORCE MAJEURE**

11.1 Neither Party shall be liable to the other Party for any delay or non-performance of its obligations under this Agreement to the extent that its performance is interrupted or prevented by Force Majeure.

11.2 Such delay or failure shall not constitute a breach of this Agreement and the time for performance shall be extended by a period equivalent to that during which performance is so prevented provided that if such delay or failure persists for sixty (60) days or more, the Party not affected may, at its option and if it is reasonable for it to do so, terminate this Agreement by giving fourteen (14) days written notice to the other Party.

**12 WAIVER**

Any failure or delay on the part of either Party to exercise any power or right under this Agreement shall not operate as a waiver of it, nor shall any single or partial exercise of any such right or power preclude any other or further exercise of the right or power. Any of the rights and remedies of either Party under this Agreement may at any time be enforced separately or concurrently with any other rights and remedies, whether under this Agreement or arising by operation of law with the effect that the rights and remedies are cumulative and not exclusive of each other.

**13 NOTICES**

13.1 Any notices required to be given under this Agreement shall be in writing and delivered personally or by first class post or transmitted by facsimile to the Parties as set out below:

13.1.1 The Licensor:

Address: The Forensic Science Service Ltd  
 Trident Court  
 2920 Solihull Parkway,  
 Birmingham Business Park,  
 Birmingham B37 7YN

For attention of: Science Manager - Programming  
 Telephone: +44 (0) 845 120 7272

E-mail: sales.office@fss.pnn.police.uk

13.1.2 You:  
to the address or facsimile number that You provided for Your purchase of the Software.

13.2 Any notice served by:

13.2.1 personal delivery, shall be deemed served at the time of delivery;

13.2.2 first class post, shall be deemed served at the start of the fifth business day after posting; and

13.2.3 facsimile, shall be deemed served on the day of transmission (or the next following business day if transmitted outside the Party's normal working hours) provided that the sender shall have received a transmission report indicating that all the pages of the notice have been transmitted to the correct facsimile number.

13.3 Any Party may change any details of its address or facsimile number by notice in the manner described above.

14 **SEVERABILITY**

If any term or provision of this Agreement or its application to any Party or circumstances shall, to any extent, be invalid or unenforceable, the remainder of this Agreement or the application of the term or provision to any other Party or circumstances, other than those as to which it is already invalid or unenforceable, shall not be affected, and each term and provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law. The Parties shall negotiate in good faith to replace any invalid or unenforceable provisions by substitute provisions.

15 **ENTIRE AGREEMENT**

15.1 This Agreement and the Contract constitute the entire agreement between the Parties with respect to the subject matter hereof and supersede and invalidate all prior oral or written communications, understandings, representations or warranties relating to the subject matter hereof.

15.2 Each Party warrants to the other that it has not relied on any such communications, understandings, representations or warranties in entering into this Agreement.

15.3 Notwithstanding anything contained herein to the contrary, the provisions of Clauses 4, 7, 9 and any other Clauses which are intended to survive termination shall survive termination of the Agreement and shall continue in full force and effect thereafter.

16 **ASSIGNMENT/SUB-CONTRACTING/AGENCY**

16.1 You shall not be entitled to assign, sub-contract or otherwise transfer your rights or obligations under this Agreement whether in whole or in part without the Licensor's prior written consent.

16.2 The Licensor shall be entitled to assign its rights hereunder (in whole or in part) to any person, partnership or company.

16.3 This Agreement shall be binding upon and inure for the benefit of the Parties and their respective permitted successors and assigns.

17 **THIRD PARTY RIGHTS**

A person who is not a Party to this Agreement has no rights under the Contracts (Rights of Third Parties) Act 1999 to enforce any term of this Agreement but this does not affect any right or remedy of a third party which exists or is available apart from that Act.

18 **PUBLICITY**

The Parties agree to keep confidential the terms of this Agreement, and neither Party shall make any announcement in relation to this Agreement or otherwise publicise its existence or its contents or use or refer to the name, trade mark or trade name of the other Party in any disclosure

without the prior written consent of the other Party such consent not to be unreasonably withheld or delayed. A Party shall be entitled to withhold such consent and shall be under no obligation to provide any explanation for such action.

19 **AMENDMENTS**

No amendment to this Agreement whether oral or written shall be binding on either Party unless in writing and signed on behalf of the Parties.

20 **GOVERNING LAW AND JURISDICTION**

20.1 This Agreement shall be governed by and construed in accordance with English law.

20.2 It is irrevocably agreed that the English courts shall have non-exclusive jurisdiction as regards any claim or matter arising out of or in connection with this Agreement.

21 **NO PARTNERSHIP/AGENCY**

Nothing in this Agreement is intended to or shall operate to create a partnership or joint venture of any kind between the Parties, or to authorise either Party to act as agent for the other.

22 **THIRD PARTY SOFTWARE**

22.1 CellIDEK software uses libraries and other components from the LibUSB-Win32 project.

The library is distributed under the terms of the GNU Lesser General Public License (LGPL).

The other components are distributed under the terms of the GNU General Public License (GPLv2).

These licences are available to read at the LibUSB-Win32 project home-page [www.libusb-win32.sourceforge.net](http://www.libusb-win32.sourceforge.net).

22.2.1 This product includes software developed by the Apache Software Foundation (<http://www.apache.org/>) and is licensed under the Apache License, Version 2.0 (the "Apache License"); you may not use this file except in compliance with the Apache License. You may obtain a copy of the Apache License at <http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the Apache License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

22.2.2 The End User License is provided as a paper licence along with the CellIDEK device. By using the Software You agree to be bound by the terms of the End User Licence Agreement. Additional copies of this licence are also available from Logicube.

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## CellIDEK TEK Software License - US

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**THIS AGREEMENT** shall be binding on installation of the Software and is by and between **THE FORENSIC SCIENCE SERVICE** ("Licensor") and the End User ("You").

**1. Grant of License.** So long as You shall be in compliance with the terms hereof, You shall have a limited, perpetual, non-exclusive and non-transferable license ("License") to use the Software solely in the course of lawfully operating the device with which the Software is integrated, and for no other purpose. You are also granted a license to use the Microsoft and related software contained within the PC embedded in the CellIDEK device and by using such software You agree to be bound by the terms of the End User License agreement, a copy of which is provided to You with the device. Additional copies of the End User License are also available from Logicube.

**2. Title.** No title or ownership in the Software is transferred to You. Title to all applicable rights in patents, copyrights, trademarks and trade secrets in the Software shall remain in Licensor. Software licensed hereunder is property of Licensor, unless listed separately in section 12, Third Party Licences,, and You shall be bound by

and observe such nature thereof as herein provided. You shall take appropriate action by instruction to and agreement with its employees, agents, consultants or any other end users who are permitted access to the Software to fulfill its obligations hereunder. Without limiting the foregoing, You shall ensure that any end user license agreement provided with the Software is brought to the reasonable attention of all such end users. You shall not provide, or otherwise make available, the Software or copies thereof to any third party. All ownership rights to any developments or improvements to the Software made by You shall belong solely to Licensor.

### **3. Copying.**

(a) You shall be entitled to make one copy the Software for back-up and archival purposes. You shall include in each such copy the Licensor's copyright notice(s) and trademark(s).

(b) In no event shall You be entitled to remove or tamper with any such proprietary notices contained in the Software.

(c) Software shall not be reverse compiled, disassembled, reverse assembled, or otherwise reverse engineered. All rights in or to the Software not expressly granted to You under this Agreement are retained by Licensor.

### **4. Warranty.**

(a) Subsection 4(b) hereof provides Licensor's twelve month limited warranty for the Software.

(b) Licensor warrants that for a period of twelve (12) months from installation of the Software, the Software will perform in accordance with the Software documentation. In the event the Software does not perform in accordance with such documentation, then during such twelve month period, Licensor shall at its option: (i) correct any variance between the Software performance and its documentation; or (ii) replace the Software media. The foregoing shall be Your sole and exclusive remedy with respect to the Software or otherwise hereunder.

EXCEPT AS WARRANTED BY THE PRECEDING THREE SENTENCES, THE SOFTWARE IS LICENSED AS IS, AND NO WARRANTY OF ANY KIND, EXPRESS, IMPLIED OR STATUTORY, WHETHER IN RELATION TO MERCHANTABILITY, HIDDEN DEFECTS, FITNESS FOR PARTICULAR PURPOSE, COURSE OF PERFORMANCE, COURSE OF DEALING, USAGE OF TRADE, NONINFRINGEMENT, THAT THE SOFTWARE'S OPERATION SHALL BE ERROR FREE OR UNINTERRUPTED, OR OTHERWISE IS GIVEN BY LICENSOR TO YOU OR ANY OTHER PARTY. LICENSOR SHALL NOT UNDER ANY CIRCUMSTANCES BE RESPONSIBLE FOR ANY LOSSES OR DAMAGES, DIRECT, INDIRECT, SPECIAL, ORDINARY, EXEMPLARY, CONSEQUENTIAL OR OTHERWISE (INCLUDING, BUT NOT LIMITED TO, LOSS OF DATA, LOSS OF REVENUE, PROFIT OR USE OR COST OF CAPITAL OR OF SUBSTITUTE USE OF PERFORMANCE), ARISING OUT OF OR RELATED IN ANY WAY TO THE TRANSACTIONS CONTEMPLATED HEREUNDER, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. UNDER NO CIRCUMSTANCES SHALL LICENSOR'S TOTAL LIABILITY OF ALL KINDS ARISING OUT OF OR RELATED TO THIS AGREEMENT (INCLUDING BUT NOT LIMITED TO ANY WARRANTY OR SUPPORT-RELATED CLAIMS HEREUNDER), REGARDLESS OF WHETHER ANY ACTION OR CLAIM IS BASED ON CONTRACT, STRICT LIABILITY, TORT OR OTHERWISE, EXCEED THE TOTAL AMOUNT PAID BY YOU FOR THE DEVICE WITH WHICH THE SOFTWARE IS PROVIDED (DETERMINED AS OF THE DATE OF ANY FINAL JUDGMENT IN SUCH ACTION).

(c) This limited warranty shall be valid and remain in effect only if: (i) the Software is used and maintained by You as directed by all applicable documentation; (ii) You promptly notify Licensor in writing of the claim and is able to reproduce it; (iv) the Software has not in any way been modified and You have not installed any other hardware or software affecting the Software; (v) the claim is unrelated to the failure by You to follow the most current instructions issued by Licensor or its authorized reseller; (vi) the claim is unrelated to the negligence, accident or act of You or any third party; (vii) You provide reasonable access to the Software; (viii) there has been no operation of the Software under conditions more severe than those for which the Software was designed; (ix) the claim is unrelated to force majeure; (x) the claim is unrelated to operator error or to any software, firmware, peripheral or communication device; and (xi) where authorized Licensor updates are provided to You, the Software incorporates all such updates within ninety (90) days of each update being provided or otherwise made available. In the event it is determined that any warranty claim reported by You falls within any of the foregoing exceptions, You shall pay for services at then current rates and charges.

(d) Nothing herein shall obligate Licensor or its authorized reseller to improve or otherwise

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If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

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a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

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