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Manufacturer: MaxID
Model: iDLMax

Manual

MaxID

Product User Guide

Jan 2009

iDLMax

Important Information

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Preface
About this guide

How to Use this Manual

This Product User Guide contains user instructions for the iDLMax Mobile computing device, software, docking via USB cable, data transfer and battery charging. This Preface section of the manual provides an overview of the manual's contents and organisation covering:

- Document Content and Overview
- Document Conventions
- iDLMax Key notation
- Stylus Actions
- Precautions

Document Content and Overview

This document contains the following material:

- This Preface, "About this Guide" provides an overview of the manual contents, describes document style and conventions, and describes precautions a user are to take using the iDLMax Mobile device.
- Chapter 1 – "Getting to know your iDLMax" provides details on iDLMax components, using the battery charger module and charging the battery, using the iDLMax, connecting power, LED indicators, using the iDLMax keyboard, and switching the iDLMax on and off. Battery storage, disposal and battery cautions and warnings are also covered.
- Chapter 2 – "iDLMax Configurations" covers modules and peripherals, customisation of settings, aligning the touch screen, date and time, power configuration, regional settings and storage properties. Use of control panels for adjustment of calibration settings is also covered.
- Chapter 3 – "Networks, Communications and Connections" describes installing, setting up and using of wireless communication modules. Connecting and interfacing the iDLMax with a host PC is also covered (including Microsoft ActiveSync)
- Appendix A – "Technical Specifications" provides FCC Information, illustrations, technical environmental, memory, touch screen and detailed specifications for the iDLMax.
- Appendix B – "Accessories and Peripherals" provides details and offers guidance in using the USB host cable, the SD memory card and the SIM card.
- Appendix C – "Maintenance, Troubleshooting and Technical Support" describes iDLMax maintenance, provides a troubleshooting table and makes suggestions on how to contact technical support.
- Appendix D – "Glossary" is a glossary of terms used in this guide that are specific to the iDLMax and Microsoft Windows®CE.NET.

Document Conventions

Formatting conventions are utilised throughout this manual to provide a consistent method for representing screenshots, command entries and keyboard characters. This manual also provides special conventions for notes and cautions, information of high interest to the user.

Notes contain information necessary for properly diagnosing, repairing and operating the iDLMax

The CAUTION sign indicates actions that could damage equipment or property.

A WARNING sign indicates actions that could result in personal injury or the injury of other persons.

Document Font styles

`Monospaced typeface:` shows filenames, paths, field selections from a pull-down list and data or keystrokes entered by the user.

Windows Controls including command bar sequences, prompts, dialog boxes, fields, pull-down lists, checkboxes and radio-buttons are printed in this **bold** typeface.

iDLMax Keys

Keys on the iDLMax are bracketed in this document by < and > characters to distinguish them from keys on the PC. Per example to differentiate the ENTER key on the iDLMax from the ENTER key on the PC keyboard, the iDLMax's keys are bracketed as shown: <ENTER>.

Stylus Actions

The Stylus actions apply to the iDLMax only.
SINGLE TAP OR SELECT: Tap the display screen once with the stylus to activate a specific button or select an item.
DOUBLE TAP: Tap the stylus twice rapidly in the same location to open an application.
TAP AND HOLD: Tap and hold the stylus to view the context menu (similar results to the 'right-click' action with a PC-mouse).

Precautions

As with any portable computer device, precaution should be taken to avoid any damage. The following precautions are recommended when using and handling the iDLMax device.

Handling the Lithium-ion Battery

The iDLMax makes use of a sealed removable Battery-Pack that contains Lithium-ion batteries. A safety hazard and risk of explosion may possibly occur from incorrect installation, usage or misapplication.

Do Not Disassemble, alter, modify, or insert sharp objects into the battery pack.
Do Not Expose the battery pack to strong impact, bumps or shock: Electrolyte leakage, ignition or rupture may result. If exposed to such conditions, stop using the battery pack immediately
Do Not Use with any other products: The iDLMax removable Battery-Pack was designed for use with the iDLMax product. If used with any other product, it may cause electrolyte leakage, generation of heat, ignition or rupture.
Do Not Use the iDLMax with any other Battery pack than the one supplied or specified: If other battery packs are used, it may result in heat generation, ignition or rupture.
Do Not Charge the battery pack in any other way than described in this manual: if not charged as specified, electrolyte leakage, generation of heat, ignition or rupture may result.
Do Not Throw the battery pack into a fire or Expose it to extreme or excessive heat: (for example direct sunlight for extended periods) Generation of heat, ignition or rupture may result
Do Not Short any contacts on the battery pack: Generation of heat, ignition or rupture may result. When transporting a spare battery, it is recommended that it be placed in a plastic bag so that its contacts are protected and would not accidently short when brought in contact with any metal objects.
When the battery pack has become degraded, replace it with a new one: If the amount of time the iDLMax can run by using a particular battery pack becomes dramatically shorter and repeated recharging does not restore its performance, the battery pack should be replaced with a new one. Generation of heat, ignition or rupture may result from continued use of degraded batteries
Storage: If the battery will not be used for extended periods of time (e.g. a month or more), charge or discharge (by means of using it) the battery pack until the remaining battery level becomes 40-50%. Store the battery pack in a cool, dry place.
Do not expose the battery pack to water or allow it to become wet
Charging: When using a battery pack for the first time, ensure that the removable external batteries are charged. The initial charging cycle for both batteries is approximately twelve (12) hours. Subsequent charging cycles will take up to a maximum of four and a half hours.
Use only the correct means as described in this manual to charge the battery pack: The battery pack is designed to prevent overcharging of the battery. Using incorrect means to charge the battery could result in electrolyte leakage, generation of heat, ignition or rupture.
Should the battery leak and fluid get into your eyes, do not rub your eyes: Immediately flush your eyes with clear water and see a doctor for medical treatment as soon as possible.
The battery pack may become warm during recharging or normal use: this is completely normal.
Recharging of the battery pack will not commence if internal temperature of the battery pack is outside of the allowable range: (0-50 degrees Celsius or 32-133 degrees Fahrenheit).
In high-temperature environments, the battery pack takes longer to fully recharge and the operating time is shorter: only use the iDLMax within the allowable temperature range.
Recycling: Please contact your product supplier or appropriate local authority for information on correct means on how to recycle this battery.

Handling the iDLMax

The iDLMax is a ruggedized mobile device and are tested against various MIL-STD and IP specifications (for details, refer to Appendix A of this manual). These precautions will assist in optimal benefit gained from using the iDLMax. MaxID Corp. cannot be held responsible in any way for any damages or loss resulting from the use of this unit.

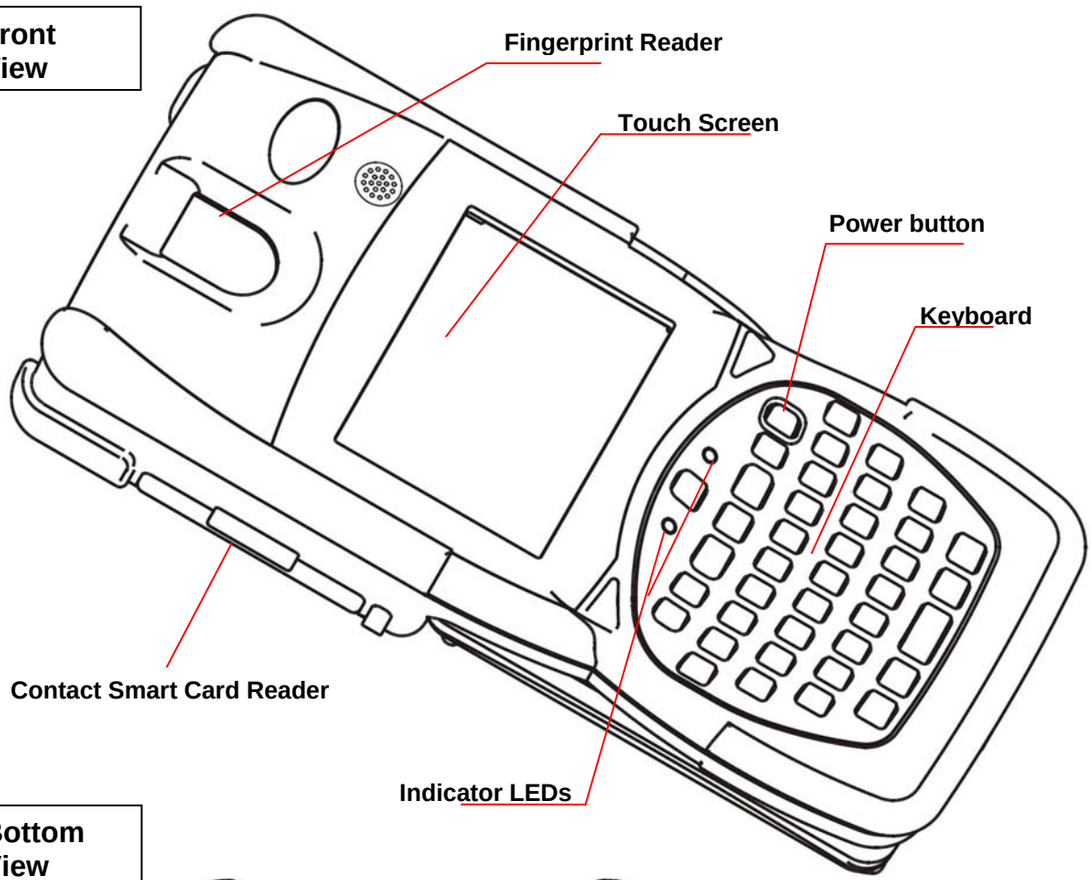
Before storing the device away, be sure to wipe off any moisture.
Do not disassemble this product and Do not allow foreign matter to ender inside the product: electric shock may occur when pins or areas of the circuit boards are touched, or damage to various extends may result.
Unplug the AC plug and remove the battery pack if Malfunction occurs: When serious product damage, foreign objects inside the product, smoke emitted, unusual smell emitted or product becomes unusually hot, immediately turn the power off, unplug the AC plug and remove the battery. Continuing to use the product in such conditions may result in fire or electric shock.
Use only the correctly supplied AC cord and plug and AC adaptor.
When using the AC cord, insert the AC plug completely into the AC outlet: fire due to overheating or electric shock may result if not done
Do not use a damaged plug or loose AC outlet.
Do not use the AC plug if your hands are wet: Electric shock may result
Do not connect the AC adaptor to a Power Source other than the specified or standard defined AC outlet: Doing so could damage the device or cause fire due to overheating.
Do not damage the AC adaptor, AC cord or AC plug in any way: Damaged cord may result in fire, short circuit, or electrical shock. Do not place the cord near hot tools, twist or pull it forcefully, place heavy objects on it, bundle it tight together, or modify the cord.
Clean dust and other debris of the AC plug regularly: accumulated dust or debris along with humidity may cause a defect to insulation, which may result in fire or electric shock.
Unplug the AC plug holding onto the plug itself: Pulling on the cord may damage the cord, resulting in fire or electric shock.

Use only the specified AC adaptor with this product: using an AC adaptor other than the supplied one may damage the product or result in fire.
Do not use the AC adaptor if it was exposed to strong impact: Strong impact may damage the AC adaptor which might result in short circuit, electric shock, or fire if used.
Do not expose the product to excessive high temperatures or leave it in high temperature environments for a long period of time: excessively exposing the product near fire or direct sunlight for extended periods may damage the product and cause trouble with internal parts. Using a damaged device may result in fire or electric shock.
Close the connector and card reader covers tightly when using this product in wet, moisture, steam, dust, oily vapour, etc. conditions: If such matter enters the device, it may cause fire or electric shock. If it occurred, turn the device power off, unplug the AC, remove the battery and contact your technical support office.
Keep SD memory cards away from infants and small children: accidental swallowing may result in bodily injury.
Use the supplied stylus to touch the screen: do not press down on the on display with sharp-pointed or hard objects that may leave marks or damage the display (e.g. pencils, ball point pen, nails, etc.)
If not using the device: turn the device of to optimize power consumption and battery life.
Use the stylus only for touching the screen: using it for other purposes may damage the stylus and result in scratches on the screen.
When carrying the iDLMax: Remove all external devices and cables and close all rubber covers.
Switch off by shutting down the iDLMax: before boarding an aircraft. Ensure it cannot be switched on inadvertently.
Switch off by shutting down the iDLMax: when and where the use of mobile devices are prohibited in public places and sensitive areas (e.g. in hospitals or other health care facilities)
Avoid stacking the product: if it fall over or drop, injury could result.

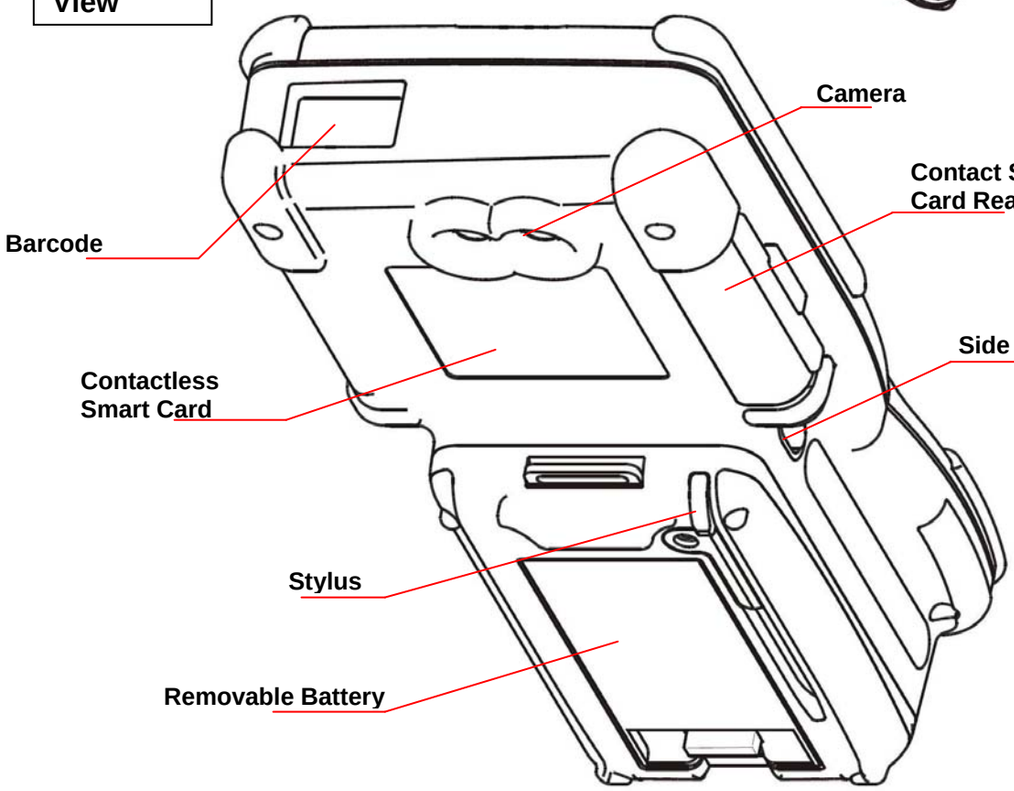
Chapter 1
Getting to Know your iDLMax

Parts of the iDLMax

Front View



Bottom View



Using the iDLMax

The Battery Charger

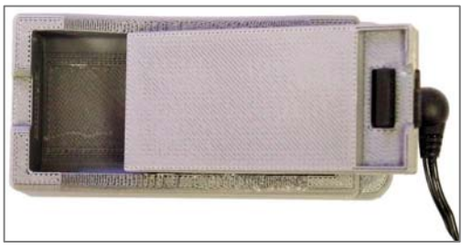
The Battery charger shown above is used to charge an iDLMax battery outside of the iDLMax. The battery charger requires a 12V 3A DC power supply in order to operate. This is supplied by the PSU.

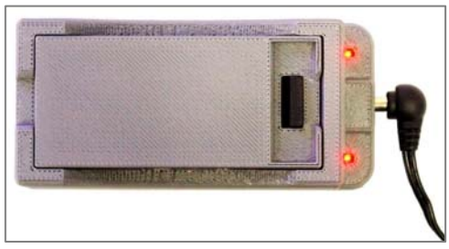
Connecting power to the battery charger

First, the power lead must be connected into the three-prong connector on the PSU. The power lead plug must then be connected to a power source and the power source switched on.

Connect the functional PSU into the battery charger by plugging the DC Jack into the connecter marked *"12V D.C."*
The red LED marked *"Power"* on the battery charger will light up to indicate power is present and that battery charger is functional.

Inserting a battery



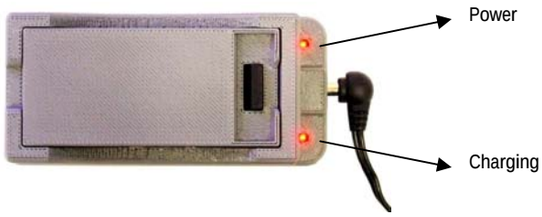


The iDLMax is supplied with 3.6V, 4000mAh batteries.
In order to charge a battery it must first be inserted into the slot in the battery charger as shown above.

Use only the correct batteries, PSU and battery charger supplied by a MaxID dealer. The use of other equipment can cause permanent damage to the iDLMax and render the warranty void. For correct supplies contact a MaxID Dealer or visit www.maxidgroup.com

Battery Charging & LED Indicators

The battery charger has two LED's. One LED is to indicate *"Power"* status and one is to indicate *"Charging"* status.



The LED's indicate the following:

- When powered on with no battery inserted the "*Power"* LED illuminates and the *"Charging"* LED turns on briefly then off again. The *"Power"* LED remains on for as long as power is supplied to the battery charger.
- On inserting an uncharged battery into the battery charger the *"Charging"* LED turns on. This indicates that a charge cycle has begun and the inserted battery is being charged.
- When the battery charger detects that the charging battery has reached full charge. The *"Charging"* LED turns off indicating the charge cycle has ended and the battery is now fully charged.
- On inserting a battery that is already fully charged, the *"Charging"* LED will remain off to indicate that the battery does not need charging.

Inserting the battery into the iDLMax

Insert the battery into the iDLMax as shown below

At all times - Switch off the iDLMax before removing the battery.

Before using the iDLMax for the first time the removable external batteries MUST be charged. The initial charging cycle for both batteries is approximately twelve (12) hours. Subsequent charging cycles will take up to a maximum of four and a half hours.

Using the normal Power down option before removing a battery will ensure that application data are stored savely. If the battery is removed from the iDLMax or completely discharged during normal operation, there is a window between 40 second to 1 minute and 20 seconds (depending on the charge level of the backup battery) in which to insert a charged battery or plugging a power supply into the iDLMax, before losing non-persistent application data.

Charging a battery via the iDLMax

The iDLMax was designed to allow the user to charge a battery while it is inserted into the iDLMax. This can be done by simply connecting the supplied power lead with power supply to the iDLMax. First, the power lead must be connected into the three-prong connector on the PSU. The power lead plug must then be connected to a power source and the power source switched on. Now connect the supplied functional PSU into the iDLMax by plugging the DC Jack into the designated connecter at the back of the iDLMax as per the picture below.

A red LED to the right of the up-arrow direction key on the front of the iDLMax will light up to indicate power is present and that the battery is being charged.

The iDLMax can operate as normal while it is connected to the power supply and being charged. The charging status is indicated on the iDLMax by a “battery with lightning” icon displayed in the system tray (right bottom corner of the LCD) while the iDLMax is powered on.

Note: for convenience, the iDLMax will also be able to operate as normal when connected to the power supply without a battery being inserted into the iDLMax itself.

IDLMAX Front Panel

Switching on the iDLMax

To switch the iDLMax on, insert a charged battery into the iDLMax. Hold the <POWER> key ( ) down for two seconds and release. The backlight will turn on briefly and the iDLMax will then boot up, displaying the boot sequence on the display. Once the Microsoft ® Windows CE operating system is fully loaded into the iDLMax memory, a green LED to the left of the up-arrow direction key will turn on.

From a complete shutdown state, the iDLMax takes approximately twelve to twenty eight seconds to turn on and an audible beep will be heard. From a suspend or hibernation state, the iDLMax takes less than one second to turn on.

NOTES

When the unit is switched on for the first time or after a complete shut down,
the boot sequence may take approximately 12 – 28 seconds to complete.
The duration is also depending on the quantity of 3rd party applications loaded on the unit.

Switching off the iDLMax

To switch the iDLMax off, hold down the <POWER> key ( ) for two to three seconds. This will put the iDLMax into the default suspend mode. A green LED to the left of the up-arrow direction key will flicker intermittently indicating that the device is in suspend mode.

To power the iDLMax down completely, hold down the <POWER> key ( ) for four to five seconds as per the message displayed (as shown in figure 1-2). A menu will then be displayed providing options to Suspend, Power down or Cancel the power down (as shown in figure 1-3). The iDLMax will create a restore point to save all registry and related installed information when the “Power down” option is selected before shutting the unit down.

NOTES

Note that a complete power down is generally only performed when the
unit will be stored over extensive periods, or after applications has been installed,
or when a ‘fresh’ restart is desired. The default mode of switching off, is the suspend mode.

Resetting off the iDLMax

To reset the iDLMax, hold down the <POWER> key ( ) for approximately 4-5 seconds (as shown in figure 1-2). Select the "Power down" option from the menu as shown in figure 1-3. The iDLMax will create a restore point to save all registry and related installed information before shutting the unit down.

When the device is started from a complete shutdown state, the boot-up menu provides various options allowing for the device to be configured in different start up ways (for example restoring it to its default factory settings). Contact your product/service provider for more detail on the management of the boot-up sequence and options (for example when it is desired to clear the device and restore it to its default factory settings).

FIGURE 1-2

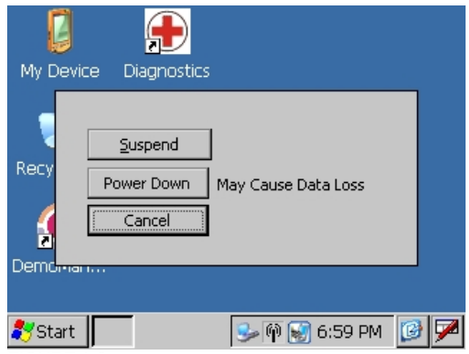


FIGURE 1-3

The device can also be reset by pressing the <POWER> key ( ) and holding it in for approximately 10 seconds.

In case of a serious error no response using the <POWER> key ( ), a "hard reset" can be done by removing the main removable battery from the iDLMax, and keep it out for 10-15 Minutes to allow the internal backup battery to drain completely. Upon replacing the removable battery now, the iDLMax will start up afresh. Use the boot-up menu to apply start-up changes if required.

Using the Keyboard

The iDLMax features a 40-key full QWERTY style keyboard. There are three types of keys viz. function keys, alphanumeric keys and navigation keys.

Function Keys

Function keys perform a specific function.

Key		Function
<BK SP> (Backspace)		The function is performed by pressing the <BK SP> key. This moves the cursor back one space and deletes each time the key is pressed. If text is being typed, a character is deleted each time the key is pressed.
<SPACE> (Spacebar)		Pressing the <SPACE> key will insert a blank space character at the position of the cursor in a text field.
<FN>		The <FN> key toggles the keyboard between the main keys in white printed on the top of each button (being the Alpha keys), and the secondary keys in blue printed on the bottom of each button (typically the numeric keys and some special character keys). (I.e., when <FN> is pressed once, all characters printed in blue on the bottom of each button on the keypad will be enabled. When the <FN> key is pressed again, all Alpha characters printed in white on the top of each button on the keypad will be enabled)
<↑> (Shift)		The <↑> (Shift) key toggles Alpha key's case status for the key pressed following the press of the <↑> key. Pressing the <↑> key and holding it in for 3 seconds toggles caps lock status. A blue "A" () will be displayed in the system tray on the iDLMax indicating that the caps log is on. While the caps lock status is on, the alphabet characters that are selected will be the upper case of the alphabet.
<POWER>		Pressing this key performs the suspend/resume function. This wakes the iDLMax from suspend mode or puts it in suspend mode. When pressed and hold, options for a complete shutdown will be provided.
<DEL> (Delete)		Pressing the <DEL> key deletes the next character forward each time the key is pressed.
<TAB>		Depending of the active window, the <TAB> key will either allow the user to change between 'active' items in the window (for example from one button to another, or one field to another), or it will allow the user to enter a application defined number of spaces (for example 5 spaces will be inserted in a "Word" application).
<SYM> (Symbols)		The <SYM> key is invoked by first pressing the <FN> key and then this key. It will bring up a Symbols table with specials characters on the LCD display, allowing the user to select and enter such symbols.
<Esc> (Escape)		Depending on the active window, pressing the key will close an active window, stop a process from running, or exit an application.
<ENTER>		The <ENTER> key confirms data entry.
<MENU>		Within any application, the <MENU> key will activate the applicable menu bar of the specific application.
<F1> <F2> <F3> <F4>		The <F1>, <F2>, <F3> and <F4> function keys is invoked by first pressing the <FN> key and then the applicable key. These keys are customisable in software and used to perform a specific task.

Navigation keys

The navigation keys enables one to navigate the cursor.

Key	Function
	Moves the cursor one character to the left.
	Moves the cursor one character to the right.
	Moves the cursor up one row or line.
	Moves the cursor down one row or line.

Alphanumeric keys

Alphanumeric keys are used to enter alphabets or numeric symbols. Toggle between alphabet and numeric symbols by means of the <FN> key. Toggle alphabet characters between upper case and lower case characters via the <↑> key. The table below is a guide for entering characters.

Key		Function
<A> <S> <D> <F> <L>		**Function keys with Alphabet characters:** **a s d f l**
<Q 1> <W 2> <E 3 > <R 4> <T 5> <Y 6> <U 7> <I 8> <O 9> <P 0>		**Keys with Alphabet and numeric characters:** **q 1** **w 2** **e 3** **r 4** **t 5** **y 6** **u 7** **i 8** **o 9** **p 0**
<G> <H> <J> <K > <Z> <X> <C> <V> <B> <N> <M>		**Keys with Alphabet and special characters:** **g $** **h ** **j .** **k -** **z ?** **x (** **c)** **v @** **b #** **n :** **m ;**

Uppercase Characters and Caps Lock function

The <↑> key toggles the Alpha key case status for the key pressed following the press of the <↑> key.

Pressing the <↑> key and holding it in for 3 seconds toggles caps lock status. The status and displays the status on the screen as shown in figure 1-1. While the caps lock status is on, the alphabet characters that are selected will be the upper case of the alphabet.

FIGURE 1-1

Chapter 2
iDLMax Configurations

Customising the iDLMax

Settings

It may be required at times to change the default setting of the iDLMax according to personal preferences. The settings can be changed from the control panel. To access the control panel, from the task bar select Start>Setting>Control Panel.

Date & Time Settings

In Date & Time Setting, the year, month, date, time and time zone can be changed.
To change the Date & Time settings select Date/Time from the control panel.

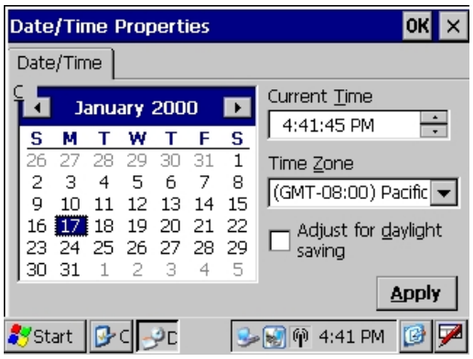


Figure 2-4: DATE/TIME SCREEN

- To change the month, tap on the month to open a list of months and select the desired month.
- To change the year, tap on the month to activate a numeric dial. Select the up arrow to increase the value or the down arrow to decrease the value. A new year value can be entered using the numeric keys on the iDLMax.
- The months (and years) can be scrolled by tapping the arrow buttons on either side of the displayed month and year.
- To change the time, select the hour, minute, second or AM/PM field and select the up arrow to increase the value or the down arrow to decrease the value. New values can be entered using the numeric keypad on the iDLMax.
- The correct time zone can be selected form the pull-down list.
- Select Apply to save the changes made and/or select OK to exit the Date/Time settings

Backlight

The backlight timeout can be adjusted to reduce power usage or for convenience. The backlight setting can be adjusted by selecting Display from the control panel and then by selecting the Backlight tab.

Figure 2-5: BACKLIGHT SETTING SCREEN

Modify the backlight pull-down list settings to suit personal preferences.

Select OK to exit the Display settings or press the <ENTER> key on the keyboard.

A Backlight typically consumes much power. It is therefore recommended to minimize the backlight turn-off time when using battery power.

Touch screen Settings

When attempting to select a particular item with the stylus and another item is selected in error, then touch screen could need re-aligning.
To align the touch screen select **Stylus** from the control panel. The Double-Tap settings can be adjusted from this window by following the instructions on screen on the **Double-Tap** tab.

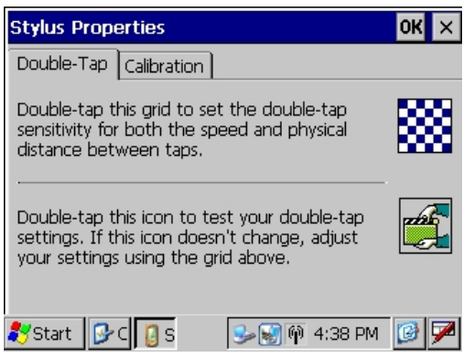


Figure 2-1: STYLUS SCREEN

To re-align the Touch screen, select the **Calibration** tab.

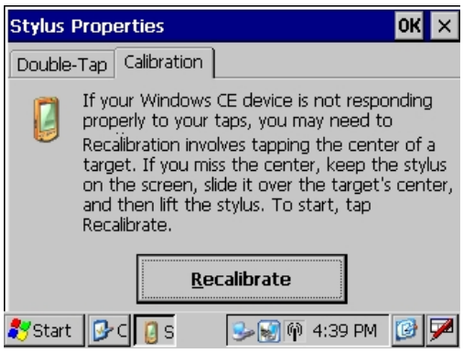


Figure 2-2: CALIBRATION TAB

Selecting **Recalibrate** starts the recalibration process.

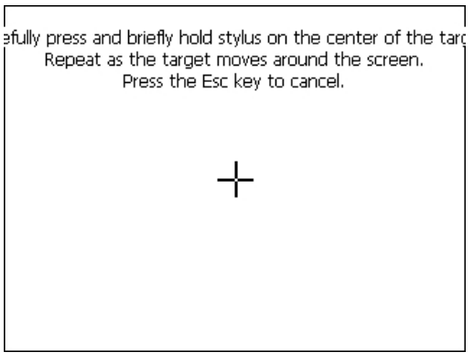


Figure 2-3: ALIGN PROCESS SCREEN

Carefully press and briefly hold the stylus on the centre of the target as it moves around the screen.

Select **OK** to exit the **Stylus** settings or press the <ENTER> key on the keyboard.

The calibration settings of the touch screen will influence the accessibility of the Windows CE task bar when the task bar is hidden. Therefore ensure that the calibration is done accurately.

Power

To modify the power management schemes select Power from the control panel.

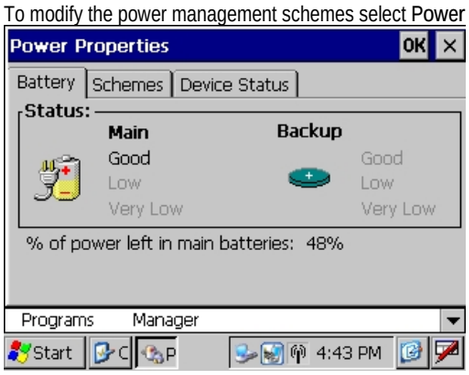


Figure 2-6: BATTERY TAB

The Battery tab displays the charge level for the main battery and the backup battery as well as the power source.

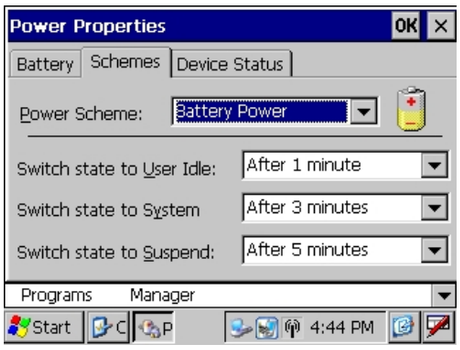


Figure 2-7: SCHEMES TAB

The Schemes tab allows one to modify the User Idle, System Idle and Suspend mode times when using either battery or AC power.

Select OK to exit or press the <ENTER> key on the keyboard.

Regional Settings

To change the regional settings, access Regional Settings from the control panel.

Figure 2-8: REGIONAL SETTINGS SCREEN

Select the desired language/location.
The appearance samples are shown in the bottom half of the screen. Review these samples and select the tab for any of the setting that needs changing.

Select OK to exit or press the <ENTER> key on the keyboard.

Chapter 3
Networks, Communications and Connections

Overview

The iDLMax has a physical USB host connection, a physical Mini-USB slave connection, and three wireless communications options viz. Wi-Fi 802.11b, Bluetooth and GSM/GPRS. The use of each depends largely on the application and location of the user.

This chapter contains info on setting up and using the communications channels.

Mini-USB

The Mini-USB connection allows the iDLMax to be connected to a Host PC via the USB cable provided so that files can be transferred and synchronised between the Host PC and the iDLMax. The iDLMax acts as the USB slave device when connected to a PC as described.

At all times – It is best to switch off the iDLMax before connecting the USB cable.

iDLMax USB Drivers

Before connecting to the iDLMax to a host PC, the USB drivers for the iDLMax must be installed on the Host PC first. From the CD ROM (or otherwise as obtained from your product/service provided), copy the files ***wceusbsh.inf*** and ***wceusbsh.sys*** to any convenient folder on the Host PC.

Host PC connectivity software

When the host PC uses the Microsoft ® Windows Vista operating system, the Windows Mobile Device Centre v6.1 needs to be installed on the PC (in most cases this software is to be installed manually, as the default Mobile Device Centre software distributed with Windows Vista is of an older version and does not function correctly).
In the case where the Host PC uses the Microsoft ® Windows 95, 98, 2000 or XP operating system, it will be required for the Microsoft ® ActiveSync program to be installed on the host PC to allow it to connect to the iDLMax.

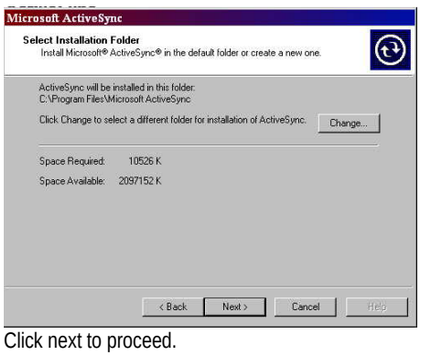
Microsoft® ActiveSync

Microsoft® ActiveSync is a tool that enables file transfer and synchronisation. The iDLMax is delivered with the latest version of ActiveSync loaded. If ActiveSync is already installed on the intended Host PC, please ensure that the version is V3.8 or higher.

To install Microsoft® ActiveSync, the installation files must be downloaded from the Microsoft® website, www.microsoft.com/downloads/.
Install ActiveSync by running the installation file downloaded. After the required files are extracted and copied to the PC the installation wizard will run and the following window will be presented.

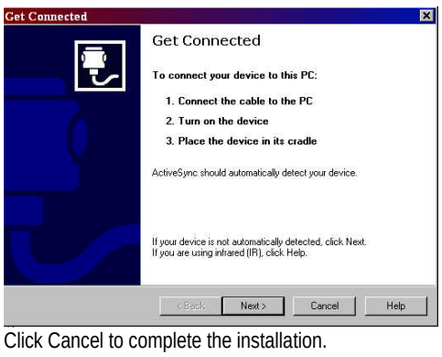
Click next to proceed with the installation.

The next window presented will give one the option of changing the installation folder and displays the hard drive space available and required for the installation.



Click next to proceed.

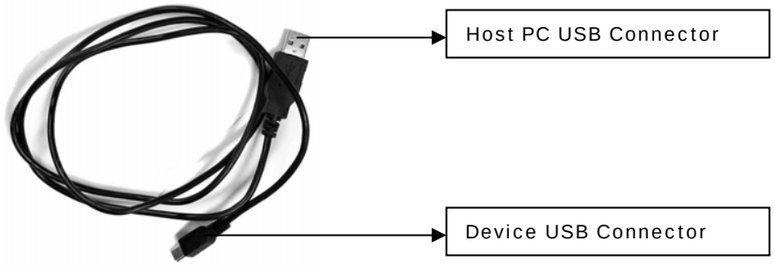
The installation wizard will install the necessary files and then the following window will be presented.



Click Cancel to complete the installation.

Connecting the iDLMax to the host PC

The USB cable provided is shown below.



Connect the cable to the Host PC (ensure that the PC is switch on and user logged in), connect the other end of the cable to the iDLMax.

Switch the iDLMax on, the Host PC will then detect the device on the USB port and attempt to install the drivers. If the Hardware Installation Wizard does not find the drivers, then the wizard would prompt to be pointed to the drivers. In this case, point to the files copied above.

After the drivers are installed, Active Sync will automatically detect the iDLMax

Transferring Files

To transfer files start Microsoft® ActiveSync on the Host PC by selecting Start>Programs>Microsoft ActiveSync. An icon will be put into the system tray.

Connect the iDLMax to the Host PC via the USB Cable and switch the iDLMax on. ActiveSync will detect the iDLMax and establish a connection. When a connection is successfully established, the ActiveSync icon in the system tray will turn green like so.

To browse the files and folders on the iDLMax: on the Host PC, right-click on the green ActiveSync icon and select Explore. A window will then be opened showing the files and folder on then iDLMax. One can now browse the folders, as one would normally do on in Windows Explorer. Files can now be copied between the iDLMax and the Host PC.

To terminate the connection simply disconnect the USB Cable between the two devices.

USB

The USB connection allows the various USB peripheral devices to be connected to the iDLMax via a USB cable. The iDLMax acts as the USB host device for the peripheral device connected to it.

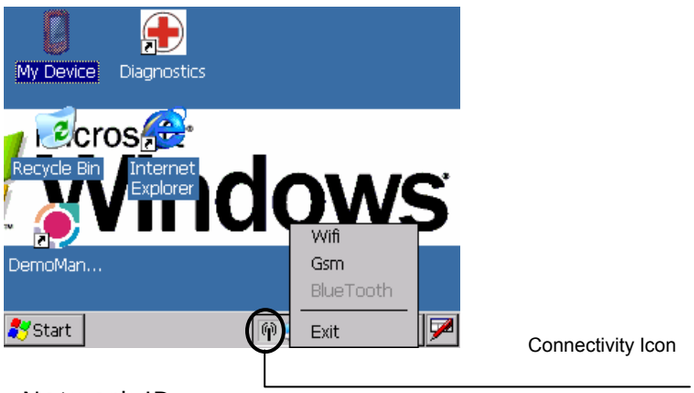
For any peripheral device to be connected, ensure that Microsoft ® Windows CE 5.0 drivers is available for the specific peripheral device and that it is correctly installed onto the iDLMax as required by the manufacturer/supplier of such peripheral device (in most cases it would be required for such drivers or installation file to be loaded or at least copied onto the iDLMax prior to connecting the peripheral device to the iDLMax).

Note that drivers for a standard external Keyboard or Mouse are included in the default operating system supplied with the iDLMax (no additional driver installation would be required)

Networking

Wireless Networking

The iDLMax is fitted with various wireless communication devices. To improve power management these devices is switched off by default when the iDLMax is turned on. The wireless devices can be switched on programmatically or can be switched on manually by clicking on the **Connectivity icon** in the system tray.

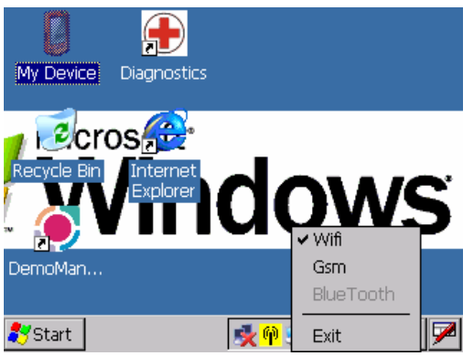


Network ID

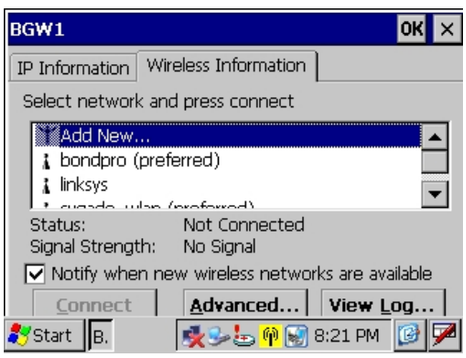
The Network ID can be set-up by going to **Owner** in control panel. Select the **Network ID** tab. Consult with the network administrator and enter the **User Name**, **Password** and **Domain**.
Select **OK** to save setting and exit.

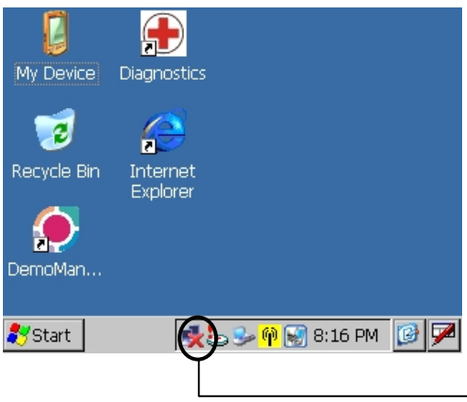
Connecting to an 802.11b Wifi wireless Network

The iDLMax is fitted with an 802.11b wireless network module. By default, the 802.11b card is disabled. To enable the card, tap the **Wifi** option on the **Connectivity icon**. The card will then be switched on and the **Connectivity icon** will turn to yellow.



The **Wireless Properties** window will open after the Wifi is turned on (if this window is not opened by default, open **Wireless Properties** by tapping the **Network icon** in the system tray). To connect to a network select **Wireless Information** tab and wait a few seconds for available networks to be scanned. A list of available wireless networks will be displayed. Select the desired network and then tap connect.
Select **OK** to exit the **Wireless Properties** window.





Dial Up

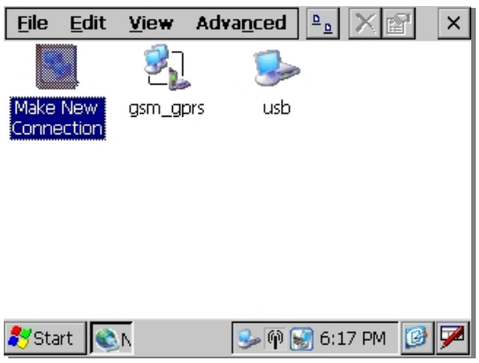
The iDLMax is fitted with a GSM/GPRS modem with an internal antenna. A dial-up connection can be set up.
Before setting up the dial-up connection a SIM card from a GSM provider must be inserted into the iDLMax. Follow guidelines as per Appendix B to fit a SIM card.

Enabling GSM/GPRS Modem

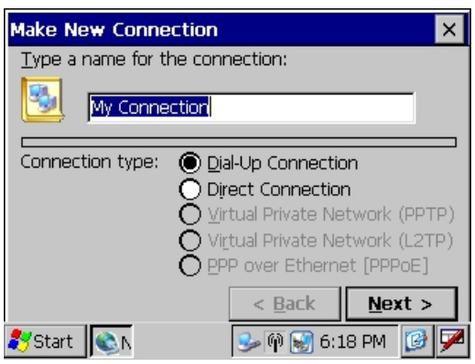
The GSM/GPRS modem can be enabled or disabled programmatically or manually by clicking on the **Connectivity icon** in the system tray. To enable the modem, tap the **Connectivity icon** and select GSM. The GSM Modem will then be switched on and the **Connectivity icon** will turn to green. Tapping the GSM option again will disable the modem.

Dial-up Connection

To set up a new dial-up connection, select **Start>Settings>Network and Dial-up Connections**.

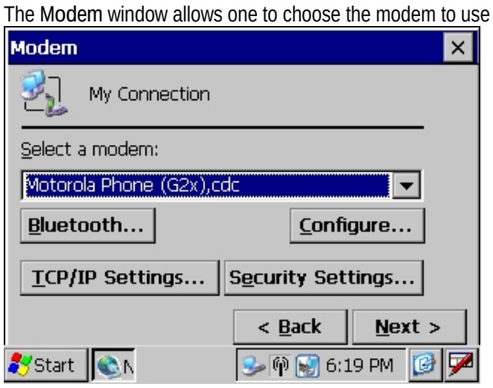


Double-tap **Make New Connection**. This will start a wizard that prompts for details regarding the dial-up settings. The first window prompts for a connection name (default is “My Connection”) and connection type.



Enter a desired name for the connection in the text box and select **Dial-Up Connection** from the connection type list. Tap **Next** to proceed.

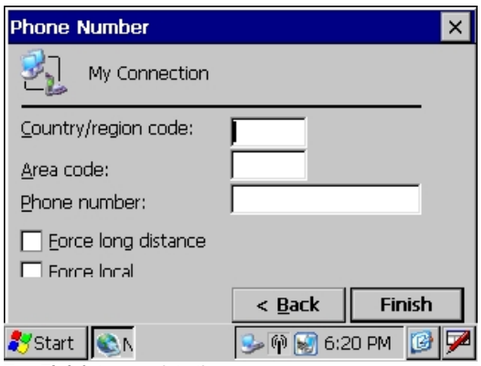
The Modem window allows one to choose the modem to use for the dial-up connection.



Select Motorola Phone (G2x),cdc Port from the drop down list.
Tap Configure to modify the modem communications and call options.
Tap TCP/IP Settings to modify the IP Address and name servers.
Tap Security Settings to modify the security settings.

Do not adjust any settings above without first consulting the network administrator, GSM provider or Internet Service Provider.

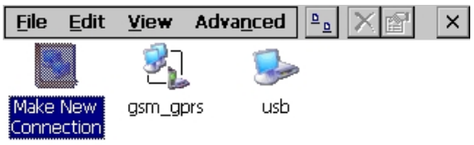
Tap Next to continue.
The final window prompts for the Phone Number. Contact the GSM Provider or Internet Service Provider for the phone number.



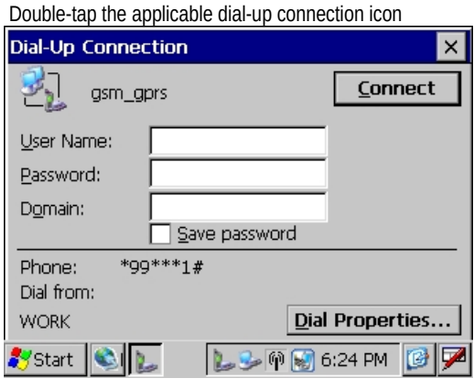
Tap Finish to complete the process.

Internet

To connect to the Internet, first a SIM card must be inserted into the iDLMax, the GSM/GPRS modem must be enabled and a Dial-up connection set up, as described above.
To activate the dial-up connection, select Start>Settings>Network and Dial-up Connections.

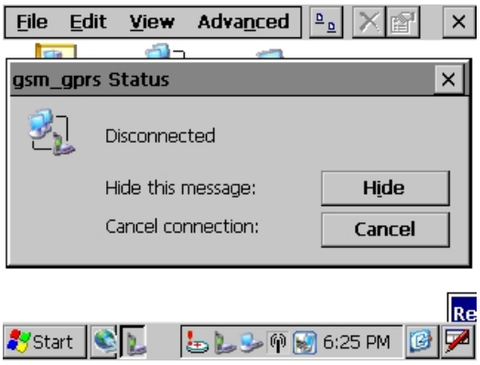


Double-tap the applicable dial-up connection icon



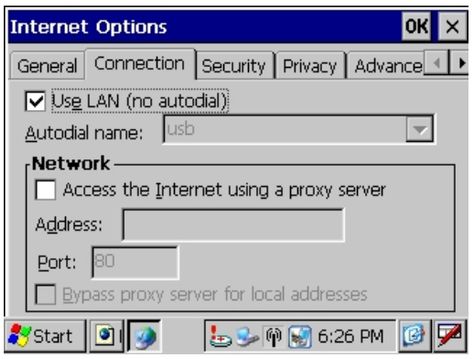
Enter the User Name, Password and Domain. This info can be obtained from the GSM Provider or the Internet Service provider.

Tap Connect to dial and connect.



Tap Hide to hide the window after a successful connection.

Open Internet Explorer, and select View>Internet Options from the menu bar,

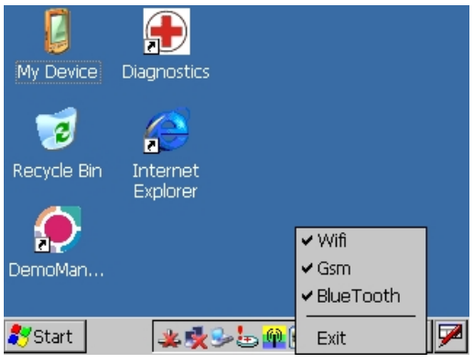


Select the Connection tab and then select the dial-up connection from the drop down list. Tap OK to save settings and exit. Enter the website address in the address bar to access websites of choice.

To terminate the connection, double-tap the Dial-up icon on the system tray, then tap Disconnect.

Using Bluetooth

The iDLMax is fitted with a Bluetooth module. By default, this Bluetooth module is disabled. The Bluetooth module can be enabled or disabled programmatically or manually by clicking on the **Connectivity icon** in the system tray. To enable the module, tap the **Connectivity icon** and select **Bluetooth**. The Bluetooth device will then be switched on and the **Connectivity icon** will turn to blue. Tapping the **Bluetooth** option again will disable the module.



Connecting to an external Bluetooth device

To set up a connection with a Bluetooth device, select **Start>Settings>Control Panel**, and select the **Bluetooth Device Properties**. The **Bluetooth Manager** window will be displayed.

Ensure the desired external Bluetooth device is turned on or enabled and Tap the **Scan Device** button. All available Bluetooth devices will be listed in the **Untrusted** column of the Bluetooth Manager window.

From the list, select the desired device to connect to and add it to the Trusted column by tapping the → button. Depending on the device, Authentication might be required. If this is the case, follow the prompts to set up the required Authentication.

After the external Bluetooth device has been added to the Trusted column, it must be activated. Double-tap on the device, and select the Activate option from the options list. Once again, depending on your device, further Authentication might be required and you could be required to set up pin codes. Follow the applicable prompts on your external Bluetooth devices as well as on your iDLMax device.

Appendix A
Technical Specifications

FCC Information

General Statement

Warning: Changes, modifications or disassembling of or to this device not expressly approved by MAXID could void the user's authority to operate the equipment.

FCC Specific Statement

Class B Devices:

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

RF Exposure

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be operated with minimum distance of 20cm between the radiator and your body. This device must not be co-located or operating in conjunction with any other antenna or transmitter.

Industry Canada Specific Statement

The term "IC:" before the radio certification number only signifies that Industry Canada technical specifications were met.

This Class B digital apparatus meets all requirements of the Canadian Interference Causing Equipment Regulations. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Cet appareillage numérique de la classe B répond à toutes les exigences de l'interférence canadienne causant des règlements d'équipement. L'opération est sujette aux deux conditions suivantes: (1) ce dispositif peut ne pas causer l'interférence nocive, et (2) ce dispositif doit accepter n'importe quelle interférence reçue, y compris l'interférence qui peut causer l'opération peu désirée.

Overview

All specifications are subject to change without prior notification.

This section contains the following topics:

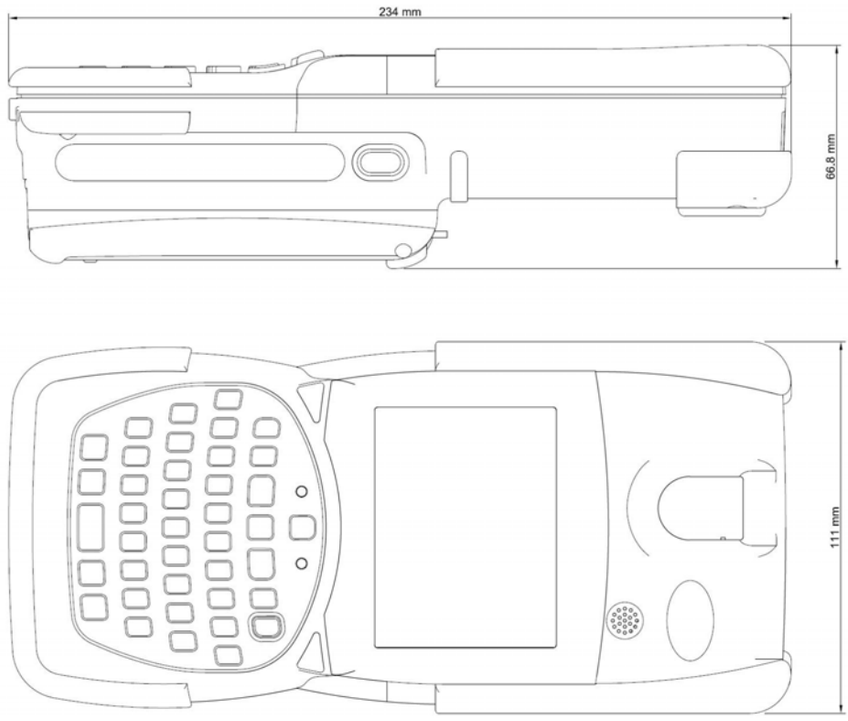
- Barcode Symbologies (Decoding Capabilities)
- Mechanical specifications
- The battery charger
- System specifications
- Environmental specifications

Barcode Symbologies (Decoding Capabilities)

All standard 1D and 2D symbologies (30+) including (but not limited too):

EAN	Code 128	Interleaved 2 of 5	Micro PDF
UPC	PDF417	MSI / Plessey	Aztec Code
JAN	Datamatrix	Codabar	Codablock A
Code 39	MaxiCode	Composite Code	Codablock F
Code 93	QR Code	RSS	Straight 2 of 5
OCR fonts (A, B and MICR) - optional			

Mechanical Specifications

Dimensions	234mm x 111mm x 66.8mm
Weight	820g with battery
Dimensional Illustration	

Battery charger

- One dedicated battery charging slot
- Charges the iDLMax 3.6V, 4000mAh Lithium Ion battery (up 4.5 hours charging time, depending on level of drain – 12 hours charge required on new battery before first time use)
- Power input: 12V DC 3A universal power supply AC adapter (same as per iDLMax power supply)

System Specifications

Display • Resolution • Backlight • Screen	3.5", ¼ VGA, TFT LCD display 240 (L) by 320 (W) pixels, 65K colour White LED Touch screen overlay 180dpi with signature capture capability
Keypad	40-key full QWERTY style keyboard with function and direction keys 2 side scan buttons
Construction	Industrial, high-strength poly-carbonate/ABS-blend plastic
Operating System	Windows® CE.NET version 5.0
Microprocessor	PXA270 ARM 9 core 520MHz
Memory	1 Giga bytes Flash, m-system. 128 Mbytes SDRAM.
Real time clock	Internal clock – dedicated battery operated Capable of powering the unit up on alarm
Communication Ports	External USB 1.1 host via standard USB connector (client interface) – 100mA max (Full speed USB compatible External USB 1.1 slave via mini USB connector
I/O Slots	Micro SD card slot – user accessible
Audio	Speaker mounted against case for system and multimedia audio sound GSM audio via Bluetooth headset
Power Options	4Ah Lithium-Ion removable/rechargeable battery pack 12V, 3A universal power supply AC adapter with 110-240 Vac, 50-60Hz (Make and model: Meanwell, GS25A12-P1J)
Hot Swap	Internal Supercap Allows approx 1 minute to swap battery, without losing any data/settings
Radio Support	Wi-Fi 802.11b/g compatible. GSM / GPRS Modem (Quad band module) – user accessible SIM Bluetooth V2.0 + EDR v2.0.E.2 7 Class 2
Development Environments	Standard Windows CE development tools Embedded Visual C++, Visual C# dotNET iDLMax SDK provided
Fingerprint scanner	Integral high-resolution optical fingerprint reader, 500dpi, ESD tolerant FIPS201 approved 16.2x24.3mm window 480x320 pixel image Capture, matching and registration software (1:1 and 1: many fingerprint matching)
GPS receiver	50 Channel Super sensitive GPS receiver.
1D and 2D Barcode Scanner	Fully integrated and operates in bright or low light conditions. 1D and 2D Barcode imager set to short focal length. Passport Character decoding Integrated Barcode decryption capability
Mug shot photo Imager	1.3 Mega pixel colour photo imager. Image preview mode available. Imager set to long focal length. Auto exposure. Integrated Lumiled LED illumination. (other modules may be supported in future)
Contact Smart Card Reader	ISO 7816 Smart card : FIPS approved
Contactless Cards Reader	ISO 14443 Proximity : FIPS approved ISO 15693 Vicinity : FIPS approved

Environmental Specifications

Operating Temperature	0° to 45°C / 32° to 104°F Note: Internal battery charge temperature limited to 45°C / 104°F – when temperature rises above this point while charging, charging will stop.
Storage Temperature	-20° to 80°C / -4° to 176°F
Humidity	5 to 95% (non-condensing)
Shock/Drop	Multiple 1.2m / 4.0ft drop to concrete
Sealing	IP64 rating, when all supplied rubbers fitted to all connectors and Smart card reader slot

Appendix B
Accessories and Peripherals

Overview

This appendix covers the following accessories and peripherals:

- SD Memory Card
- SIM Card
- Using USB

Customise your iDLMax with the many peripherals, data storage devices, battery packs, options and other accessories available.

Fitting SD Memory Card

Micro Secure Digital memory cards are available in several data storage sizes.

The Micro Secure Digital (SD) card is inserted into a holder that can be accessed from a cover located in the battery slot of the iDLMax.

Remove the Cover by loosening the screw and lifting the cover

The SIM holder and SD card holder will be visible

Lift up the SD card holder and slide the SD Card into the holder

Replace Cover and screw in to secure

Fitting a SIM Card

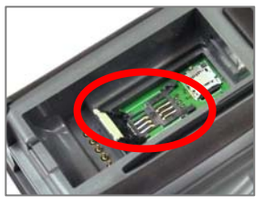
The iDLMax is fitted with a GSM/GPRS modem with an internal antenna.
Before setting up the dial-up connection a SIM card from a GSM provider must be inserted into the iDLMax.

The SIM Card can be inserted into a holder that can be accessed from a cover located in the battery slot of the iDLMax.

Remove the Cover by loosening the screw and lifting the cover

The SIM holder and SD card holder will be visible

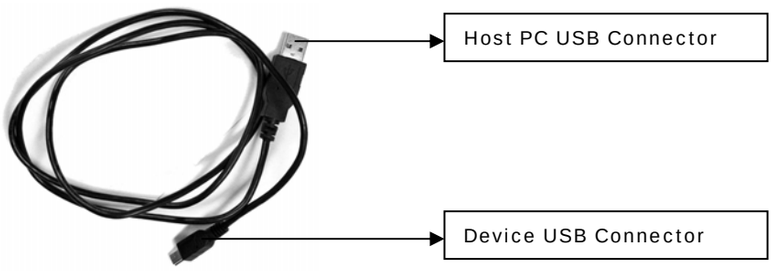
Lift up the SIM holder and slide the SIM into the holder



Replace Cover and screw in to secure

Using the USB

Using a USB cable to synchronise your data transmission with a host, you must install Mobile Device Centre v6.1 for host PC's using Windows Vista operating system, or Microsoft ActiveSync v3.8 or higher for other host PC's prior to synchronising data.



USB Cable

Appendix C
Maintenance, Troubleshooting and Technical Support

Overview

This section consists of the following topics:

- "Maintaining the iDLMax"
- "Troubleshooting"
- "Technical Support"

Maintaining the iDLMax

With normal use, the iDLMax, and the battery charger require no maintenance. For problem free usage of the product, observe the following suggestions when using the iDLMax:

- To prolong the life and avoid problems, keep the iDLMax and its battery charger clean. Use a clean, soft cloth dampened with a mild, dilute cleaning agent.
- If the display requires cleaning, do so with a lens cloth or an appropriately soft cloth dampened with a mild, dilute cleaning agent.

Never use a pen, pencil or other sharp object on the iDLMax's touch-screen. Use only the supplied stylus or plastic-tipped pens intended for use with a touch-sensitive screen.
Do not immerse/submerge the iDLMax, the battery charger or the batteries in liquid.
Do not use abrasive paper/cloth or abrasive/corrosive cleaning agents/solutions to clean the product or its accessories.

Do Not Dispose.
Do Not Recycle.
If you wish to discard your product, contact your local dealer or authorities for instructions on the correct method of disposal.

Technical Support

Partner and Reseller Technical Support

An excellent source for technical assistance and information is an authorised MaxID partner or reseller. A partner/reseller acquainted with specific types of businesses, application software and computer systems and can provide individual assistance.

Authorised MaxID partners furthermore also have access to latest software release, updates and downloads as well as additional technical information.

MaxID Support

The MaxID Group are a manufacturer of specialized mobile technology and have appointed regional distributors and integrators to provide our customers with a local service. In the first instance you should contact your original equipment supplier to obtain support for our products.
However, if you are unable to obtain the required level of support or need help locating a suitable local service provider please use our corporate support contact information below explaining your difficulties.

Tel: +44 (0)1932 895396
Email: marketing@maxidgroup.com

Notes

Appendix D
Glossary

Many definitions for this Glossary were taken directly from the Microsoft Developer's Network website at: http://msdn.microsoft.com/library/default.asp.

Active notification	The state of a user notification from the time the user is notified until the user handles the event.
Active window	The window in which a user is currently working or directing input. An active window is typically on top of the Z order and is distinguished by the colour of its title bar.
ActiveSync	Microsoft Windows Communication application that synchronises a Windows CE.NET device with a Microsoft Windows based host PC. ActiveSync can use RS-232, USB and Wireless networks.
Calibration	A user might require the recalibrating of the touch screen. One way to know that the touch screen needs to be recalibrated is to notice that when you attempt to select an item with the stylus, another item is erroneously selected.
Command bar	A control window that can contain buttons, combo boxes and menu bars. Windows CE-based applications can use a command bar rather than a separate menu bar and toolbar to efficiently use available screen space.
Compact Flash (CF) card	Compact Flash® is a very small removable mass storage device. CF™ cards are designed with flash technology, a non-volatile storage solution that does not require a battery to retain data indefinitely. CF™ cards consume only 5% of the power required by small disk drives. CF™ cards are available as modems, Ethernet, serial, digital phone cards, scanners, 802.11b WiFi LAN, etc.
Control	A standardised part of the window that can be manipulated by the user to perform action or display information. The most common controls are buttons that allow the user to select options and scroll bars that allow the user to move through a document or position text in a window.
Context sensitive help	Tap the "?" button to open a help dialog about the specific windows application you are using. Context sensitive help can tell you where you are in a program and can provide assistance with the specific problems you might be having.
Control panel	Control panels are several different applets that allow you to configure the iDLMax to meet your specific requirements. There are control panels for scanning, keyboard, display, etc. Access the control panels at the Start menu: Start>Settings>Control Panel.
Device manager	A tool to track all loaded device drivers and their interfaces. It issues notification of the appearance and disappearance of device interfaces, loads and tracks drivers by reading and writing registry values and unloads drivers when their devices are no longer required.
Device partnership	A registry key on a Windows CE.NET device that a desktop computer uses to identify the device when it is connected. The key defines values for synchronisation, file conversions, backup and restores information, which enable multiple Windows CE.NET devices to connect to the same desktop computer. A device partnership is created the first time you connect a Windows CE.NET device to a host PC.
Embedded	Broadly, software code or commands built into a device, as opposed to software that is added. In a narrower sense, code that is typically stored in ROM and described to either controlling a device or providing a specific functionality.
Firmware	Operating System of the iDLMax.
Positioning bar	A positioning bar is a tall, thin rectangle with a dark stripe running through it that appears on a rebar or a command band control. By touching and dragging a positioning bar with a stylus, a user can reposition a rebar or command bar. Positioning bars are especially useful for bringing off-screen rebar or command bar controls into view.
Host PC system	PC using the Microsoft Windows operating system and/or ActiveSync in a device partnership with the iDLMax.
Input method (IM)	A component that allows the user to input text using a touch screen.
Input panel	Refer to soft input panel (SIP)
Mounted file system	A file system located on a removable medium, such as a PC Card storage device. The operating system loads or mounts the file system when the medium is inserted into the device. It unloads or un-mounts the file system when the medium is removed or when the user issues a command to do so.

Navigation key	These a 4 separate buttons on the keypad with directional arrows pointing up, down, left and right that allows the user to move the cursor or highlighted text entry during menu selection. Press and release the key to move the display screen one line or character in the direction of the arrow.
Object store	The persistent storage that Windows CE makes available to applications. For example, Windows CE reserves part of its available RAM for the operating system and uses the rest for the object store. This data can be stored in files, registry entries or Windows CE databases.
PING	Protocol that sends a message to another computer and waits for acknowledgement, often used to check if another computer on a network is reachable.
Program memory	Memory that is used for stack and heap storage for both system and non-system applications. Non-system applications are taken from storage memory, uncompressed and loaded into program memory for execution.
WiFi	A device installed into the iDLMax that allows wireless connection and communication with a network.
RAM (random access memory)	You can add applications and data files to RAM or into Flash memory via the DiskOnChip. While flash memory is persistent (as long as the backup is charged), RAM is not and will be cleared when you remove or replace the battery. As you can only suspend the device, the only way to turn it fully off is to remove the battery or to perform a hard reset.
ROM (read only memory)	The operating system (Windows CE.NET) and applications are pre-installed on ROM and cannot be removed or modified. These applications are persistent.
RAS (remote access server)	A feature that connects a device to a host computer. Windows CE can connect to a remote access server using USB and dial-up connections. Windows CE supports the standard Microsoft Win32 RAS functions; however, it allows only one connection at a time. RAS functions can be implemented for direct USB connections or dial-up modem connections.
RTC	Real Time Clock on the iDLMax.
Secure Digital (SD) Memory Card	SD Memory Cards are small, non-volatile, solid-state devices that provide high storage capacity (32 MB, 64 MB, 128 MB and 256 MB), fast data transfer and security.
Shortcut menu	A menu that is displayed for a selected object. The menu contains commands that are contextually relevant to the selection.
SNMP (Simple Network Management Protocol)	SNMP is the standard protocol for managing devices on a network. SNMP is standardised protocol for network management services using a client/server model. The network management program (client) issues queries and commands to the remote device.
Soft input panel (SIP)	Click on the keyboard icon in the system tray to open the SIP. Use this virtual QWERTY keyboard like you would a computer's keypad to enter alpha numeric and symbols in the currant application.
SSID	The SSID (Service set identifier) is a network name; it is a name that identifies a wireless network. The SSID differentiates one WLAN from another; so all access points and all devices attempting to connect to a specific WLAN must use the same SSID. Devices must provide a unique SSID. Because an SSID can be sniffed in plain text from a packet it does not supply any security to the network.
Start button	The start button opens the Start menu. The Start menu contains a list of the resident applications, applets and utilities viable to the user.
Status bar	An area that displays state information for the content in the window, typically placed at the bottom of a window.
Status icons	A graphic representation of the status of a feature or function.
Stylus	The stylus is the equivalent of a mouse on the iDLMax. Use the stylus on a touch-sensitive display. Only a plastic tipped stylus should be used on a touch-sensitive display. Use the stylus to navigate by selecting characters in the soft input panel (SIP). Select applications from the desktop or system tray, select tabs, fields and text within applications and dialog boxes.
Suspend mode	The iDLMax will go into a 'suspend' or 'sleep' mode when it is idle for a configurable period of time. Suspend mode works and looks like you have turned the unit off. Press the <Power> key to suspend (put to sleep) the iDLMax. Press the <Power> key again for the iDLMax to resume its previous state.

Symbology	A symbology is a protocol for arranging the bars and spaces that make up a particular kind of barcode. A bar code is made up of numbers, letters and computer recognised characters that can be represented in a combination of bars and spaces. There is not one standard bar code; there are currently over 400 barcode symbologies that serve different uses, industries or geographic needs.
System tray	An area of the display screen located at the bottom, within the Task bar that displays status icons and symbols.
System tray keyboard Indicators	The System Tray Keyboard Indicators are located at the bottom of the display in the taskbar and contain status icons and symbols indicating open features and active applets.
Task bar	The Task bar at the bottom of the screen displays the start button icon, an icon for the active program, an icon for the current time and system icons for utilities loaded in memory, including the keyboard icon, which opens and closes the soft input panel (SIP).
Touchscreen display	A graphical computer interface display screen that allows the user to enter and select items with a stylus.
Uniform Resource Locator (URL)	The address of a resource on the Internet. URL syntax is in the form *protocol://host/localinfo*, where *protocol* specifies the means of returning the object, such as HTTP or FTP. *Host* specifies the remote location where the object resides and *localinfo* is a string, often a file name, passed to the protocol handler at the remote location. *Also called* a Uniform resource Identifier.
USB	Universal Serial Bus is a protocol for connecting PCs with peripheral devices, including PDTs, PDAs, cameras, printers, mice, scanners, etc.
WEP	Short for Wired Equivalent Privacy, a security protocol for wireless local area networks (WLANs) defined in the 802.11b standard. WEP is designed to provide the same level of security as that of a wired LAN. WEP aims to provide security by encrypting data over radio waves so that it is protected as it is transmitted from one end point to another.
Windows CE.NET	As per Microsoft, Windows CE.NET, the successor to Windows CE 3.0, combines an advanced real-time embedded operating system with the most powerful tools for rapidly creating the next generation of smart, connected and small-footprint devices.