

M3 Single-Slot Cradle

User Guide



Cradle Model:

A-1CR-U002-040-R00,
A-1CR-U00D-040-R00,
A-1CR-US02-110-R00,
A-1CR-U0ED-110-R00

Compatible Device:

M3 RED, GREEN and SKY

Version 2.3

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Notice – General Notices

The contents of this user manual were made based on the “current state” of the product, and this manual may contain technical and editing errors or omissions.

When separate application programs are developed and provided by the product providers using the product, refer to the program user’s manual provided by the product providers.

The companies that produce separate application programs besides the basic installation programs must include the contact telephone number for inquiring about these programs on the product, program, or product box separately when distributing the equipment.

M3 Mobile does not guarantee the quality of the programs produced by third party software companies installed after the release from the factory of M3 mobile.

M3 Mobile may request programs from the program manufacturers in order to guarantee the quality of the product to meet the requests of mobile network service providers.

Notice – Revision History

Version 2.3 – March, 2013

- Change address and M3 Mobile technical support webpage

Version 2.2 – Jan 17, 2011

- Ethernet Cradle (A-1CR-U0ED-110-R00) manual is merged.

Version 2.1 – Jan 14, 2011

- Models added: A-1CR-U00D-040-R00, A-1CR-US02-110-R00
- Changed figures on Description section.
- Specification for added models are added.
- FAQ and Troubleshoot for Serial Communications are added.

Version 2.0 – Jan 06, 2011

- First release of separate user manual for standard cradle.

Version 1.0 – May, 2010

- First release of printed version.

Warnings and Cautions for Safety

Before You Begin

Please read the warnings and cautions for safety carefully before you begin to avoid any damages or accidents. If you are not certain on any information given in this manual, please contact your supplier.

Customer Cautions

If the device is lost or stolen, then immediately report the incident to the service provider.

Refrain from using the device while driving.

When service for the product is required, request services through the designated service center of M3 Mobile.

For inquires about the application programs and other work programs besides the hardware and the basic installation, directly contact the corresponding program manufacturers.

Do not use any battery adapter or accessories other than the designated ones provided with the product.

Free warranty service may not be allowed if failures occur due to unauthorized use or misuse of the product.



Warnings and Cautions for Safety – Cntd.

Cautions in Carrying and Storing

Do not use the product in high temperature or high humidity environments as this may quickly cause damage to the product.

The product was designed to be suitable for work environments, but avoid impacts or dropping the product. This may cause fatal damage to the product.

Fully charge the battery before using the product for the first time.

Do not modify the product

Do not try to modify the product by any means.

Modifications may cause fire, injury, electric shock, or serious damage to the equipment and users.

The warranty service is not provided for troubles due to unauthorized modification.

1. Checklist

Thank you for selecting M3 Single-Slot Cradle. This guide will help you on basic usage of the product. Please check if all the contents shown below are nearby for use. Power supply and/or USB cable is needed for charging and/or ActiveSync.



Caution

Please use the correct power supply provided by M3 Mobile. Compatibility with other power supply source is not guaranteed.

If you don't have everything, contact your supplier immediately.

Note that the power supply connector type may differ to the picture depending on the cradle model.

Serial cables and Ethernet cables are not provided from M3 Mobile.

2. Usage – Description

A-1CR-U002-040-R00 is the **basic cradle** that comes with the PDA in the box as a default.

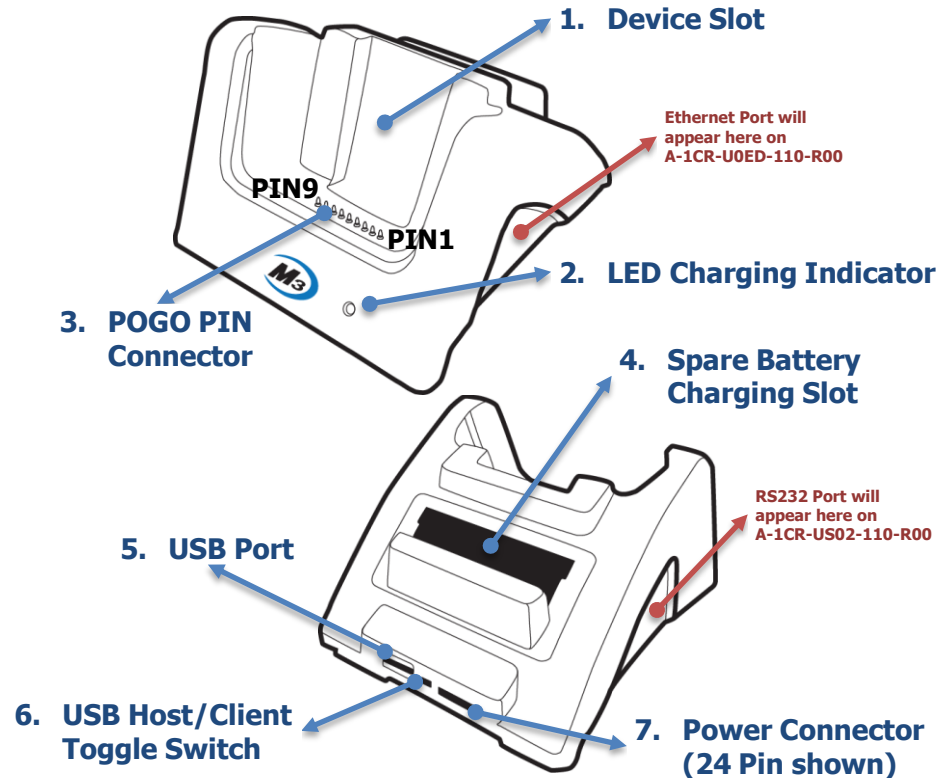
A-1CR-U00D-040-R00 is identical to A-1CR-U00D-040-R00 model except the power connector type. **DC Jack type power connector** is used instead of 24 pin connector.

A-1CR-US02-110-R00 has **RS232 serial port** (right side of the cradle) for serial communication.

A-1CR-U0ED-110-R00 has **Ethernet** (left side of the cradle) feature.

Description

Refer to next images ([A-1CR-U002-040-R00](#)) for Single-Slot Standard Cradle parts and descriptions.



2. Usage – Description continued.

- 1. Device Slot** – A PDA slides into the slot for charging, data transfer or ActiveSync connection.
- 2. LED Charging Indicator** – Charging status of an spare battery is displayed. Refer to No. 4. Note that the LED on the PDA will show the charging status of PDA.
- 3. POGO Pin Connector** – Used for data communication with PDA such as ActiveSync.

Charging LED description

LED Color	Meaning
RED	The spare battery is being charged.
GREEN	The spare battery is fully charged.

1	2	3	4	5	6	7	8	9
USB D-	USB D+	USB VBUS	COM6_DET (N/A)	RXD (N/A)	TXD (N/A)	USB ID	GND	5V

- 4. USB Port*** – USB host or client can be used. Make sure the switch is switched to proper side for use.
*USB host is not available in A-1CR-U0ED-110-R00 (Ethernet model).
- 5. Spare Battery Charging Slot** – Spare battery can be charged in this slot.
- 6. USB Host/Client Toggle Switch*** – When it is switched to **H** (left side) USB host function is available and when switched to **C** (right side) the PDA can be connected to a host PC as a client.
*On A-1CR-US02-110-R00(Serial) and A-1CR-U0ED-110-R00(Ethernet), the switch must be switched to **H** or **E** (left side) to use serial communication or Ethernet connection.
- 7. Power Connector*** – AC power supply connector. Make sure the authentic power supply is used. *On A-1CR-U00D-040-R00(DC Jack) and A-1CR-U0ED-110-R00(Ethernet), DC Jack type connector is used rather than 24 pin connector.



Caution When switching between USB host (Serial, Ethernet) and client, the PDA must be removed from the device slot.

2. Usage – Specification

Model		A-1CR-U002-040-R00	A-1CR-U00D-040-R00	A-1CR-US02-110-R00	A-1CR-U0ED-110-R00
Compatible PDA(s)		M3 RED, GREEN and SKY			
Charging LED (Extra battery only)		<ul style="list-style-type: none"> ▪ Red - Charging ▪ Green - Fully charged 			
Spare Batt. Slot		Charging Slot (2200mAh Battery, 4.2V/1A)			
Adapter Input		AC 100 ~ 240V, 50 ~ 60Hz			
Adapter Output		DC 5.2V / 3A			
Power Connector		24 PIN Connector	DC Jack Type	24 PIN Connector	DC Jack Type
USB	Host	Supported (switch to H)			N/A
	Client	Supported (switch to C)			
Serial Port		N/A	N/A	RS232C Transceiver (switch to H)	N/A
Ethernet Port*		N/A	N/A	N/A	RJ-45 Ethernet Port (switch to E)
Switch		USB Host/Client toggle switch			Ethernet/USB Client switch
Cradle / PDA Connector		9 PIN POGO Connector. Refer to '2. Usage – Description No.3 POGO Pin Connector' for pin I/O information.			

2. Usage – Specification

Ethernet Specification

- RJ-45 Ethernet Port
- IEEE 802.3/802.3X 10Base-T / 100Base-Tx compliant
- IEEE 802.3x flow control
- Auto-Negotiation for 10Base-T and 100Base-Tx

Ethernet Port LED Description

LED Color	Meaning
Flashing GREEN	Accessing to the switch/hub.
Solid GREEN	Connection is established.
Flashing AMBER	Data transmission



Caution

Inserting and ejecting PDA in the Ethernet cradle reasonably quickly may cause the Ethernet LED unlighted. This happens due to the time taken to load and unload LAN driver in PDA. If this happens, please reset the PDA.

3. FAQ and Troubleshoot – Charging

This chapter provides frequently asked questions and its corresponding answers.

Charging

Q1. How to charge PDA using the cradle?

Step 1. Plug in the AC adapter plug to wall jack and 24 PIN connector to power connector of cradle.

Step 2. Insert the PDA to device slot to start charging the PDA.

Note that directly connecting 24 PIN connector to PDA can also charge the PDA.



Caution

1. Use the correct AC adapter with 5.2V, 3A output provided by M3 Mobile.
2. Incongruent change of battery can cause the explosion.
3. When attached battery is completely discharged, plug charger to main body, then reset the device to check if the screen is back on. Leave at least for 10 min in charging state before use.

Q2. Charging Status

Charging status of the PDA and the extra battery is indicated by LEDs.

LED charging indicator on the cradle (No. 2 in description) indicates the charging status of the extra battery.

LED on upper left corner (for RED and GREEN) or upper right corner (for SKY) indicates the charging status of the battery attached to the PDA.

3. FAQ and Troubleshoot – PC Connection

PC Connection

Q1. How to connect to PC

M3 cradle product range support charging and USB connection. You must have **Microsoft ActiveSync** or **Windows Mobile Device Manager** (for Windows Vista and 7) installed.

Step 1. Switch USB Host/Client toggle switch to **C**.

Step 2. Supply power to the cradle using the proper AC adapter.

Step 3. Connect PC and the cradle using the provided USB cable.

Step 4. Insert the PDA to the device slot. Your PC will automatically detect the new device.

Q2. PDA is not recognized in ActiveSync or Mobile Device Center.

A2-1. Check if the USB cable is properly connected on both sides.

A2-2. Check if E/U toggle switch is switched to **C** (right).

A2-3. If switch is changed to **C** while PDA is in the cradle, remove the PDA from the slot then slide in again.

A2-4. Check if the ActiveSync or Mobile Device Manager on your PC is compatible with the OS of the PDA. For more information, visit <http://www.microsoft.com/canada/windowsmobile/wm07/devicecenter/troubleshooting.mspx>

3. FAQ and Troubleshoot – Serial Comms.

Serial Communication

Q1. Cannot use serial communication through cradle. What should I check?

A1-1. Check if the serial cable is properly connected on both sides.

A1-2. Make sure the USB Host/Client switch is switched to **H** (left side).

A1-3. Check if necessary driver(s) installed on the PC or equivalent hardware.

Q2. Can Serial communication and ActiveSync be used simultaneously?

A2-1. No. Since ActiveSync requires 'Client Mode' on the cradle and Serial communication requires 'Host Mode', it cannot be used at the same time.



Note RS232 Serial Communication is [only available in A-1CR-US02-110-R00](#) model.

3. FAQ and Troubleshoot – Ethernet

Ethernet

Q1. Cannot use Ethernet

A1-1. Check if the LAN cable is properly connected to the cradle and LAN output port AND AC power supply is connected.

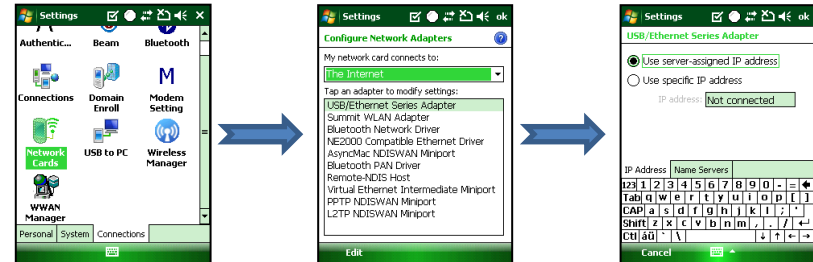
A1-2. Check if the E/U toggle switch is switched to **E** (left).

A1-3. If switch is changed to **E** while PDA is in the cradle, remove the PDA from the slot then slide in again.

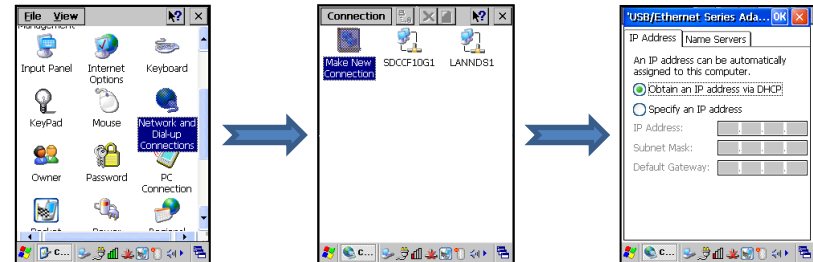
A1-4. Check if the Ethernet uses Static IP or DHCP. Then, check if the PDA's network adapter is configured accordingly. Refer to next images for static IP configurations.

A1-5. If all above methods does not solve your issue, contact your supplier.

Static IP Configuration Windows Mobile



Windows CE



3. FAQ and Troubleshoot – Ethernet

Ethernet Continued.

Q2. Can Wi-Fi be used after the PDA is taken from the cradle?

A2-1. Yes, Wi-Fi can be used if WLAN is turned on and correctly, configured. Using Ethernet cradle will not effect on Wi-Fi connection.

Q3. Ethernet LED is not turning on.

A3-1. Inserting and ejecting PDA in the Ethernet cradle reasonably quickly might cause the Ethernet LED unlighted. This happens due to the time taken to loading and unloading LAN driver in PDA. If this happens, please reset the PDA.
Using Static IP will decrease the chance of getting into this situation.



Note Ethernet connection is [only available in A-1CR-U0ED-110-R00](#) model.

Services and Support

Should you require any services or technical support on M3 Mobile's products, contact your supplier or visit M3 Mobile technical support webpage <http://itc.m3mobile.net>. Desired or relevant manuals can be downloaded from **Knowledge Center** or **FAQ** in technical support webpage.

For DOA or RMA, please send the defective product to suitable address **AFTER** consulting the supplier.

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Thank you for choosing M3 Mobile's product!