

DynaPro DynaPro USB Troubleshooting Manual

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Table 0-1 - Revisions

Rev Number	Date	Notes
10	2016-12-12	Initial Release

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1 Connection and Power-up

Connect the DynaPro USB device by connecting the USB cable to a USB port on a powered-on device.

When the DynaPro is connected to USB, after a few seconds the device should go through a brief boot sequence and then display the idle message "Welcome". If this is seen, the device is successfully powering up and is stable.

If the display never powers on after connection to USB, try a different USB port or PC. ((3) referenced in figure 1.1) If the device supports Contactless/NFC and/or Ethernet (Part numbers 30056013, 30056028, 30056005, 30056007, or 30056031) ensure the power supply is connected to the cable and to a known good power source.

If after testing a different port/PC, the display does not show the boot sequence or idle message, the DynaPro will need to be returned to MagTek for service.

If the display shows the boot screen followed by the word "Offline" followed by a code (S43 for example), disconnect from the USB port for a few moments and then reconnect.

If after reconnection the same Offline message and code return, the DynaPro will need to be returned to MagTek for service.

If after connection to USB the display shows the boot screen and idle message, but then goes to a black display, the USB power saving feature of the PC is dropping power to the port. ((1) referenced in figure 1.1) This may occur with Windows 8.1 and 10 Operating Systems. Ensure the latest Windows updates are performed/loaded to the PC and then retry.



Figure 1.1 Connection Troubleshooting Decision Tree

2 Basic Communication

2.1 Connection

In thin-client systems such as Citrix, ensure that USB automatic redirection is setup for the DynaPro. The DynaPro may be independently tested using one of the sample applications found in the IPAD, DynaPro, DynaPro Mini Windows API available for download at:

https://www.magtek.com/Content/SoftwarePackages/99510127.exe

This may require Administrator rights to install. Once the API package has been installed, navigate to the folder containing the desired app. The example used is for a 64-bit system. Under 32-bit systems the files will be under "Program Files" and not "Program Files (x86)."

Navigate to C:\Program Files (x86)\MagTek\PCI PED Windows SDK\Sample Code\DotNET Host Simulator Demo\Object\ and run the PCIPED_HASim.exe demo application. The device should be recognized and the app should show the serial number, firmware, and capabilities:

冒 MagTek PCI PED Host App Sir	nulator - Version 10.1.0.1	3		
Device Connection method USB TCP/IP BLE	Open Device Close [Device Name of USB://98DE9	or IP:Port for connection	End Session
Device info Mfg: MagTek, Inc. Prod: DynaPro Serial: 98DE992208090D0E capab: V=4,SC=0,SR=1,TR=1,	Firmware: 30050851- Built: Aug 17 20 MS2=1,PFK=1,UDE=1,0	E3-PCI 16 12:07:52 CE=2,CLE=0,DR=1	re State : Idle on: Authenticated quiller Sepaton	
EMV IPAD/IPAD+	Config CA PKeys	Config EMV Tags	Config Device	Misc
Local /Acquirer Simulation Local Acquirer Approve Decline ARQC Batch Data Merch Grid View Acquirer Request	Wait(Sec) Present Card 25 Enter PIN 25 Card Type or MSR Smart card Contactless Mant Data Reversal	Ditions Send Forced Online Bypass Pin Beep On Data MSR Data Pin Tex	hsType - Goods Amount \$9.99 Cash Data Decrypt Data t View Acquirer Reque	Back: \$0.00 Cancel Send

Figure 2.1

2.2 Magnetic Stripe Card Read - Debit

Select the IPAD/IPAD+ tab, the Retail radio button, and then click Start:

EMV IPAD/IP	AD+ Config CA PKeys	Config EMV Tags	Config Device	Misc
- Transaction Simulato	r			
Simulation Type Bank Retail	 Transaction Simulation Normal One retry Invalid PIN Declined 	Misc Commands- Manual PAN I Verify PIN Dis	ength MIN/MAX : O Second	9/19 o 14/21 nd Msg to IPAD Get Response

Figure 2.2.1

You will be prompted on the DynaPro to swipe a card.

After the card is successfully swiped the masked and encrypted swipe data will be displayed at the bottom of the form and the display of the DynaPro will prompt you to select Credit or Debit: Choose Debit.

Select o	ine
Credit	Debit
V	▼

Figure 2.2.2

Accept the amount subsequently presented on the display. Choose Yes.



Figure 2.2.3

The display will then present an "Approved" message for a short time period:



Figure 2.2.4

The application will present the data from the swipe:



Figure 2.2.5

2.3 Magnetic Stripe Card Read - Credit

Select the IPAD/IPAD+ tab, the Retail radio button, and then click Start:

EMV IPAD/IPA	AD+ Config CA PKeys	Config EMV Tags	Config Device	Misc	
- Transaction Simulator					
Bank Retail	Transaction Simulation Normal Start One retry Cancel Invalid PIN Clear Reso Declined Clear Reso	Misc Commands - Manual PAN I Verify PIN Dis	length MIN/MAX : 0 play Message	9/19 o 14/21 nd Msg to IPAI Get Response	2

Figure 2.3.1

You will be prompted on the DynaPro to swipe a card.

After the card is successfully swiped the masked and encrypted swipe data will be displayed at the bottom of the form and the display of the DynaPro will prompt you to select Credit or Debit: Choose Debit.



You will be prompted to enter a PIN on the DynaPro display prior to the amount acceptance message:

ENTER I	PIN
*****	****
X = CANCEL	₽ = 0K
Figure 2.	3.3

Accept the amount subsequently presented on the display. Choose Yes.



Figure 2.2.4

The display will then present an "Approved" message for a short time period:



When completed the application will present the KSN and EPB from the PIN in addition to the track data:

Device Connection method USB ● TCP/IP ● BLE Open Device Close Device Device Name or IP.Rot for connection ● USB ● TCP/IP ● BLE Open Device Close Device Device Name or IP.Rot for connection End Session Proce Info Mg: Mag Tek, Inc. Firmware: 30050851-E3-PCI Device Name or IP.Rot for connection End Session Prod: DynaPro Built: Aug 17 2016 12:07:52 Device Name or IP.Rot for connection Session: Amount, PAN Serial: 38DE592208090D0E capab: V=4,SC=0,SR=1,TR=1,MS2=1,PFK=1,UDE=1,CE=2,CLE=0,DR=1 Device Main Not Authenticated Capab: V=4,SC=0,SR=1,TR=1,MS2=1,PFK=1,UDE=1,CE=2,CLE=0,DR=1 Misc Commands Misc Misc Bank © Normal Start Manual PAN length MIN/MAX : © 9/19 © 14/21 Misc © Retail © Normal Start Manual PAN length Min/MAX : © 9/19 © 14/21 Misc Transaction Pin Block EPB: De	🗑 MagTek PCI PED Host App Simulator - Version 10.1.0.13		
Device Info Device Info Mfg: Mag Tek, Inc. Firmware: 30050851-E3-PCI Prod: DynaPro Buil: Aug 17 2016 12:07:52 Serial: 98DE99220809000E Session: Amount, PAN capab: V-4,SC=0,SR=1,TR=1,MS2=1,PFK=1,UDE=1,CE=2,CLE=0,DR=1 Not Authenticated EMV IPAD/IPAD+ Config CA PKeys Config EMV Tags Config Device Misc Transaction Simulator Firansaction Simulation Misc Commands Misc Misc Misc Bank One retry Cancel Wanual PAN length MIN/MAX : 0 9/19 • 14/21 Verify PIN Display Message Send Mag to IPAD Get Response Retail One retry Cancel Verify PIN Display Message Send Mag to IPAD Get Response Transaction Pin Block EPB: Decrypt Card Data Card Transaction Data CType: Firancial Track1: 1234560009005678^PUBLIC/JOHN Q^11106000000000000000000000000000000000	Device Connection method SB TCP/IP BLE Open Device Close Device USB://98DE992208090D0E Close Device Device Name or IP:Port for connection USB://98DE992208090D0E Close Device		
EMV IPAD/IPAD+ Config CA PKeys Config EMV Tags Config Device Misc Transaction Simulator Image: Start Image: Misc Commands Image: Start Ima	Device Info Device State Mfg: MagTek, Inc. Firmware: 30050851-E3-PCI Prod: DynaPro Built: Aug 17 2016 12:07:52 Serial: 98DE992208090D0E Not Authenticated Not Authenticated Not Authenticated		
Transaction Simulator Simulation Type Image: Simulation Type	EMV IPAD/IPAD+ Config CA PKeys Config EMV Tags Config Device Misc		
Simulation Type Transaction Simulation Misc Commands	Transaction Simulator		
Transaction Pin Block EPB: Decrypt Card Data Card Transaction Data CType: Financial Track1: %B1234560009005678^PUBLIC/JOHN Q^11060000000000000000000000000000000000	Simulation Type Transaction Simulation Bank Normal Start One retry Cancel Invalid PIN Clear Result		
Card Transaction Data CType: Financial Track1: %B1234560009005678^PUBLIC/JOHN Q^11060000000000000000000000000000000000	Transaction Pin Block KSN: EPB: Decrypt Card Data		
EncTrk1: 4232373743364145314530453030444639343330394446443132414634364545363542433045343631324142 EncTrk2: 34374331413936444244303142423732394241333337393842463143464235373130324631313645373530 EncTrk3: MSRKSN: 9500580000004E200063 MP: 874EEBB438CD9CF4B7E9B40FA5FF2B13209AAE486515CB0047A8F449C6976A2ECEF05B9557332093F5 EncPANandExpdt: 47C1A96DBD01BB729BA33798BF1CFB5791058EDA69733C22 SerialNo: 98DE992208090D0E	Card Transaction Data CType: Financial Track1: %B1234560009005678^PUBLIC/JOHN Q^11060000000000000000000000000000000000		
MSRKSN: 9500580000004E200063 MP: 874EEBB438CD9CF4B7E9B40FA5FF2B13209AAE486515CB0047A8F449C6976A2ECEF05B9557332093F5 EncPANandExpdt: 47C1A96DBD01BB729BA33798BF1CFB5791058EDA69733C22 SerialNo: 98DE992208090D0E	Enc Trk1: 4232373743364145314530453030444639343330394446443132414634364545363542433045343631324142 Enc Trk2: 34374331413936444244303142423732394241333337393842463143464235373130324631313645373530 Enc Trk3:		
CBCMac: E190047A	MSRKSN: 9500580000004E200063 MP: 874EEBB438CD9CF4B7E9B40FA5FF2B13209AAE486515CB0047A8F449C6976A2ECEF05B9557332093F5 EncPANandExpdt: 47C1A96DBD01BB729BA33798BF1CFB5791058EDA69733C22 SerialNo: 98DE992208090D0E CBCMac: E190047A		

Figure 2.3.6