

MEMRECAM ci Capture Setup Guide

MEMRECAM ci Capture

The *MEMRECAM* ci Capture Remote Control & Download system consists of:

- Ethernet to RS-232 Converter
- Serial Control Cable
- CAT5 Ethernet Cable
- Coax Video Cable
- Frame Grabber PCI Card (Not Shown)



Note: Please follow the installation steps in the order outlined in this guide.

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Frame Grabber Installation

CAUTION: Power down your system before opening the computer case. Handle electronic devices with care!

1) Remove the Control Computer case cover. Install the PCI Frame Grabber card in any empty PCI slot on your system board. Replace the Control Computer case cover and Boot Up the system.



 From the Start Menu, run the Frame Grabber driver installation wizard at X:\Drivers\Frame Grabber\drvInstaller.exe where X represents the CD-ROM drive letter for your particular computer. Click the [OK] button.



Note: If the Frame Grabber PCI card is not installed or seated properly, the following error message will appear. If so, Power Down your system and re-install the PCI card before continuing.



3) Click the **[Next]** button in the "Driver Installation Wizard" window.



4) In the "Digital Signature Not Found" window click the **[Yes]** button.



5) Please wait until the drivers are installed.

river Installa	ltion Wizard
Updating [Please (Device Drivers wait while the wizard installs the drivers for your device(s)
	< <u>B</u> ack <u>N</u> ext > Cancel

6) Click the **[Finish]** button in the "Installation completed" window appears. Re-start the Control Computer if necessary.

Driver Installation Wizard					
Installation completed					
A Language A	Click on "Finish" to close this window				
	< Back. Finish Cancel				

Peripheral Connections

 Connect the Serial Cable RS-232 DB9 connector to the Ethernet-RS232 Converter. Connect the Serial Cable Mini DIN connector to the Control connector on the *MEMRECAM* ci camera.



2) Connect the Ethernet-RS232 Converter Power Cable to the EVF Connector on the MEMRECAM ci camera.



 Connect one end of the Cat5 Ethernet cable to the Ethernet-RS232 Converter. Connect the other end of the Cat5 Ethernet cable to the control computer



4) Connect the BNC connector on the Coax Video cable to the NTSC Video output of the MEMRECAM ci camera. Using a BNC-RCA adapter, connect the other end of the Coax Video cable to the Frame Grabber PCI card in the Control Computer.



Ethernet Connectivity Test

The Ethernet to RS-232 Converter is set as a DHCP client by default. For Static IP Address applications, please refer to the converter's manufacturers user manual. The Finder.exe utility will search the network for the MAC address of the converter and display its assigned IP Address.

- 1) From the Start Menu, run the Finder.exe utility at X:\Drivers\Ethernet serial\Finder.exe where X represents the CD-ROM drive letter for your particular computer. Click the **[OK]** button.
- 2) In the Finder utility window, click the [Open Web Interface] button.

💑 Finder Sample					
Tasks:	Devices:				
Open Web Interface	IP Address Searching	MAC Address	Name	Product	
Configure IP Settings					
<u>D</u> evice Info					
Reboot Device					
<u>R</u> efresh List					
Close					
	1				

 Successful communication will result in the automatic detection of the Ethernet to RS-232 converter and the display of its MAC address and assigned IP Address.

💑 Finder Sample					<u>- 🗆 ×</u>
Tasks:	Devices:				
Open Web Interface	IP Address	MAC Address	Name	Product	
<u>C</u> onfigure IP Settings	192.168.1.104	00:40:9d:27:d1:75		ES1A	
Device Info					
Re <u>b</u> oot Device					
<u>R</u> efresh List					
Close					

Ethernet to RS-232 Converter Drivers Installation

- From the Start Menu, run the Ethernet to RS-232 Converter driver installation wizard at X:\Drivers\Ethernet serial\Realport\Setup.exe where X represents the CD-ROM drive letter for your particular computer. Click the [OK] button.
- 2) In Digi RealPort Setup Wizard window, click the [Next] button.

🧐 Digi RealPort Setup Wiza	rd	×				
	Welcome to the Digi RealPort Setup Wizard					
Ligh	This wizard will help you to install Digi RealPort on your system.					
	Digi's patented RealPort® software enables your application to access your serial device over the network as if it is connected to a local COM port.					
	Before you continue, make sure					
	 The device you want to install is powered up and connected to the network. 					
	You have the MAC address or IP address of the device.					
	To continue, click Next.					
	< <u>B</u> ack [<u>Next ></u>] Cancel					

3) Select the Ethernet to RS-232 Converter device, click the **[Next]** button.

🧐 Digi RealPort Setup Wizard			×
Select Device From the list below, select the list, select <device not<="" th=""><th>the device you would like to u listed> and click Next.</th><th>use. If your device is not in</th><th>S)</th></device>	the device you would like to u listed> and click Next.	use. If your device is not in	S)
Devices found on your networl	c		
IP Address 🗠	MAC Address	Model	
22192.168.1.104	00:40:9D:27:D1:75	ES1A	
		<u></u> B	efresh
	< <u>B</u> ack	. <u>N</u> ext>	Cancel

4) Select a COM port, in this example COM11 was selected, click the **[Next]** button. Make a note of the COM port selected for future reference.

🥯 Digi RealPort Setup Wizard		×
Select COM Names Select a starting COM port numbe list below. Click Next to begin the	er for your new ports. Verify the new names in the e installation.	I)
Start: COM11		
New names:	_	
Port 1 : COM11		
	< <u>B</u> ack <u>N</u> ext> (Cancel

5) Please wait until the software is installed.

🐲 Digi RealPort Setup Wizard			×
Installing Digi RealPort Please wait while your Digi RealPort device	is installed.		Ì
Installing Multiport Serial device			
	< <u>B</u> ack	<u>N</u> ext >	Cancel

6) When the installation is complete, click the **[Finish]** button.



MEMRECAM Capture Software Installation

- From the Start Menu, run the *MEMRECAM* Capture installation wizard at X:\setup.exe where X represents the CD-ROM drive letter for your particular computer. Click the [OK] button.
- 2) Please wait while the installation files are loaded.



3) In the Welcome window click the **[Ok]** button.

욽	Memrecan	Control & Capture Setup		×
	z	Welcome to the Memrecam C	iontrol _Capture installation program.	
	Setup cann Before pro be running	ot install system files or updat ceeding, we recommend that y	e shared files if they are in use. You close any applications you may	
-		OK	E <u>x</u> it Setup	

4) To install the software in a different directory, click the [Change Directory] button. To accept its default location, just click the large button on the left.



5) To accept the default Program Group in the Start Menu, click the **[Continue]** button.

🛃 Memrecam Control & Capture - Choose Program Group	×
Setup will add items to the group shown in the Program Group box. You can enter a new group name or select one from the Existing Groups list.	
Program Group: Memrecam Control & Capture	
Existing Groups:	
Accessories	
NAC Lens Calculator	
Startup	
	-
Cancel	

6) When the installation is complete, click the **[OK]** button.

Memrecam Control & Capture Setup	×	
Memrecam Control & Capture Setup was completed successfully		
()		

Edit the Memrecam.INI File

- To edit the Memrecam.INI file, run it from the Start Menu at X:\Program Files\Memrecam\Memrecam.INI where X represents the Hard Drive partition letter for where the Operating System is installed in your particular computer. Click the [OK] button.
- 2) The default COM Port defined in the Memrecam.INI file is COM1.



3) Referencing the COM port selection noted in the Ethernet to RS-232 Converter Drivers Installation section above. Specify the COM port used by the converter. In this example, our selection was COM11. Edit the number at the left of the statement to reflect the correct COM port.



Note: If the COM port specified in the Memrecam.INI file does not match the COM port of the Ethernet to RS-232 Converter, the following error message will appear when attempting to run the MEMRECAM Capture Software.



Select Video Source and Set Resolution

1) Open the MEMRECAM Capture Software from the Start Menu.



2) Open the Video Source window by clicking **Tools** on the top toolbar. Select **Set Source to Comp1**.

=M	emrec	am Control a	nd Caj	pture	
Eile	<u>T</u> ools	Help			
	Bra	:ket PlayBack	•		
	Deb	ug			
	Set Source to Comp1				
	Show Toolbar				

 The Frame Grabber PCI card has two Video Composite and one S-Video inputs. Select the correct video input form the Select a Video Source drop down menu. Click the [OK] button.

Video Source			? ×
Capture Source	Device Settings	Camera Controls	1
Select a Video	Device:		
DFG/SV1			-
Select a Video	Source:		
Video Compos	ite		
S-Video			
Video Composi Video Composi	te te		
	ОК	Cancel	

4) Open the Video Format window by clicking **Tools** on the top toolbar. Select **Set Resolution to 640x480**.

Memrecam Control and Capture	<u>_ 0 ×</u>
File Tools Help	
Bracket PlayBack	
Set Resolution to 640x480	
Set source to Comp1	
ShowToolbar	
	SEL
	N N
Scene Trigger (******) Frame	
	• •
	/
	PSTOP
1 READY 15.0 **** ***** ID Status Play Rec Shutter	
	DownLoad
	Start Frm End Frm goto start -5 25
	C:\Memrecam00000.avi

5) Using the **Resolution** drop down menu, select **640x480**. Click the **[OK]** button.

Memrecam Control and Capture	_ 🗆 ×
File Tools Help	
	SEL
	N N
Video Format	
Stream Settings	
Digital Image Format	
Resolution Pixel Depth (bits) and Compression Size (bytes)	4
320 x 240	PSTOP
302 × 208 640 × 480 704 × 57	
704 × 378 720 × 480 ▼	
OK Cancel Apply	
	DownLoad
	Start Frm End Frm
	goto start 5 25
	C:\Memrecam00000.avi

6) Congratulations!!! With all the proper settings, video from the MEMRECAM ci camera is displayed in the main screen. The camera responds to remote control commands using the buttons on the right.



Record and Playback

•	VIEW Mode
0	ARM Mode
4	TRIGGER
	PLAY
	STOP
K	STEP BACK
N	STEP FORWARD

	Camera Menu	
SEL	SELECT	
	UP ARROW	
\bullet	DOWN ARROW	

Troubleshooting - IP Address Update

 The Ethernet to RS-232 converter is set as a DHCP client as default. As IP address leases expire, the assigned IP address could change. If the IP Address changes, the following **COM xx Invalid!** will appear when attempting to run MEMRECAM ci Capture.

×
alid!

 To update the IP Address assignment, right click the My Computer icon on the desktop. Left click Properties. Select the Hardware tab and click the [Device Manager] button.

ystem Prope	rties			?
General Ne	twork Identification Hard	ware	User Profiles Advanced	1
- Hardware	Wizard			
	The Hardware wizard help unplug, eject, and configu	is you re yoi	ı install, uninstall, repair, ur hardware.	
			<u>H</u> ardware Wizard	
Device M	anager			
	The Device Manager lists on your computer. Use the properties of any device.	all the Dev	e hardware devices installe ice Manager to change the	d
	Driver <u>S</u> igning		Device Manager	
Hardware	Profiles			
$ \ge $	Hardware profiles provide different hardware configu	a way ration	y for you to set up and store is.	•
			Hardware Profiles	
	01	<	Cancel 🖉	pply

3) Expand the **Multi-port serial adapters** entry in Device Manager. Right Click the Ethernet to RS-232 converter's entry and select **Properties**.



4) In the Properties window, click the **Advanced** tab and click the **[Properties]** button.

ES1A (19	2.168.1.109)	Properties	<u>?</u> ×	
General	Advanced	Driver		
×	ES1A (192.	168.1.109)		
	Digi RealPo Copyright 1	ort for Windows 998-2004 Digi International Inc.		
	Protected b	y U.S. Patent No. 6,047,319. Patents Pending.		
Devi	ce Information		_	
Mo	del:	ES1A		
Nu	mber of Ports:	1		
De	Description:			
IP/	Address:	192.168.1.109		
TC	P Port:	771		
			_	
		Properties.		
		OK Ca	ncel	

5) In the Advanced Properties window, select the Network tab. The software has automatically detected that the IP Address of the converter and the IP Address in the Control Computer do not match. In this example the IP Address of the converter is 192.168.1.104. The Control Computer had detected in an earlier session an IP Address of 192.168.1.109. A Warning message appears in the bottom of the window. Click the [Update] button.

E51A (192.168.1.109) Advanced Pr	operties	? X
SU ESIA (1921881.109) └─☑_Ÿ Pot1 (CDM11)	Properties Network ES1A (192.168.1.109) Final Action Network Settings IP Address: 192.168.1.109 IDP Port: 771 Encrypt Network Traffic (TLS v1.0.128-bit AES) IDP Port: 1027 Warning The IP Address and TCP Port settings do not match those used by the device with MAC Address 00:40:90:27:D1.75. Update]
	OK Cancel App	ily

6) The Control Computer detects the new IP Address assignment and updates its database. Click the **[OK]** button.

E51A (192.168.1.104) Advanced Pro	operties	? X
Su ESIA (1921681.104)	Properties Network Properties Network ESTA (192.168.1.104) Network Settings IP Address: 192.168.1.104 ICP Port: 771 Encrypt Network Traffic (TLS v1.0 128-bit AES) ICP Port for Encrypted Traffic: 1027	
	OK Cancel App	ly -

7) Click the **[OK]** button to close the Properties window.

ES1A (192	.168.1.109)	Properties	? ×
General	Advanced	Driver	
×1	ES1A (192.	168.1.109)	
	Digi RealPo	ort for Windows	
	Copyright 1	998-2004 Digi International Inc.	
	Protected b	y U.S. Patent No. 6,047,319. Patents Pending.	
Devic	e Information		_
Mod	lel:	ES1A	
Num	ber of Ports:	1	
Des	cription:		
IPA	ddress:	192.168.1.109	
TCP	Port:	771	
			_
		Properties	
		OK Car	ncel

8) The Control Computer should automatically refresh the IP Address assignment shown in Device Manager. If for some reason it does not update, manually refresh Device Manger by clicking the Scan for hardware changes button.

