

Etrovision EV3150 Video Server Installation Guide



EV3150 Video Server

Installation Guide – Version 6.2





About This Guide

Model

• EV3150A

Before Using EtroStation Pro

- Check the PC requirements
- Review the OS platform requirements
- Read an special and import precautionary information
- Having basic knowledge of network setup and configuration will be helpful

Important Announcements



NOTE: This icon represents a tip for operation.



CAUTION: This icon stands for an action that could affect an operation or mildly impair the system.



WARNING: This icon indicates an action that will likely impair the system.

Disclaimer

© 2007 Etrovision Technology. All rights reserved.

EtroLink[™] & AnyUSB[™] are trademarks of Etrovision Technology; other product or service names mentioned herein are the trademarks of their respective owners. Information contained in this document may be superseded by updates. No representation or warranty is given and no liability is assumed by Etrovision Technology with respect to the accuracy or use of the information, or infringement of patents or other intellectual property rights. No licenses are conveyed, implicitly or otherwise, under any intellectual property rights.

About This Guide

1	PRODUCT OVERVIEW1
1.1	Product Specifications1
1.2	Dual Streaming Capabilities2
1.3	Package Checklist2
1.4	Product CD2
1.5	Language Support
1.6	Product View
1.7	Side View4
1.8	Power Output Specifications
In-Box	x Power Output5
PoE (F	Power over Ethernet)5
2	USING THE EV3150A FOR THE FIRST TIME
2.1	Initial Requirements
Softw	are Requirements
Instal	EtroScan™6
2.2	Physical Video Server Connections7
Conn	ect to the Network7
Conn	ect Digital I/O7
Conn	ect Audio I/O8
Conn	ect Video In8
Conn	ect PTZ8
Powe	r on IP Camera9
Powe	r Out9
2.3	Initial Network Configuration10
Facto	ry IP Address10
Alter	the Network Domain10
Using	EtroScan™11
Chang	ge Network Setting via EtroScan [™] 13
2.4	Access the Video Server Web Interface14
3	RESET DEFAULT FACTORY SETTINGS
4	CAMERA LED INDICATORS
5	ADDITIONAL INFORMATION19

1.1 Product Specifications

Model	EV3150A				
Video Compression	Motion JPEG, MPEG-4, H.264 Baseline				
MJPEG	NTSC: 30fps @ 720x480 (D1 Resolution)/PAL: 25fps @ 720x576 (D1 Resolution)				
MPEG4	NTSC: 30fps @ 720x480 (D1 Resolution) / PAL: 25fps @ 720x576 (D1 Resolution)				
H.264	NTSC: 30fps @ 720x480 (D1 Resolution) / PAL: 25fps @ 720x576 (D1 Resolution)				
Video Streaming	Simultaneous Dual Streams, controllable Frame Rate and Bandwidth CBR/VBR				
Bit-rate	M-JPEG: 5 Video Quality Level Selectable; MPEG-4/H.264 : 64K~4Mbps				
Video Input	BNC, 1.0Vp-p with 75 Ω loading				
Video Output	N/A				
Image Setting Compression, Brightness, Contrast, Saturation					
Audio Compression	ADPCM AMR				
Audio Input	Line Inx1				
Audio Output	Line Outx1				
Security	Password Protection, IP Address Filtering, User Access Privilege				
Network Protocol	TCP/IP, UDP, DHCP, PPPoE, HTTP, DNS, DynDNS, NTP, FTP, SMTP, UDP, RTP, RTSP, 3GPP, UPnP, IPv4, SAMBA client (NAS)				
App. Integration					
Interface	EtroSDK™ 3.0				
Intelligent Video	/ideo Video Motion Detection				
Alarm Trigger	Intelligent video and external input				
Alarm Event	Intelligent Video, File Upload via FTP and E-mail, Notification via E- mail, External Output Activation, File Recording to SD or Remote NAS				
Video Buffer	Pre-and Post Alarm Buffer Up to 10 secs				
Configuration	EtroScan™ Utility. Built-in Web U/I				
Web Browser	IE 6.0 or above				
Local Storage	SD/SDHC Card support				
Casing	Metal (Aluminum)				
Dimension	78(W) X 33.7(H)X 94(D) mm				
Weight	210g				
Processor and Memory	ARM9 Base SoC. 128MB RAM. 16MB Flash				
Power	12V DC / 1A, PoE				
I/O Connector	1)RJ45 Female 2)DC Jack 3)Reset 4)Alarm Inx2 5)Alarm Outx1 6)RS-485x1 7)SD Card Slot 8)BNC Video In 9)Audio In 10)Audio Out				
Failover	Reset				

TROVISION ETROVISION

Operation Conditions	0 °C ~ 50 °C (32 °F ~ 104 °F) Humidity: 20% ~ 80% RH
Power over Ethernet	802.3af standard A/B compliant
Wireless Support	N/A
Included Accessories	CD-ROM (User Manual, Free Bundle NVR)
Approvals	FCC Part15 SubpartB CN EN55022 ClassB, EN55024 LVD C-Tick IC RoHS

1.2 Dual Streaming Capabilities

The EV3150A Series supports dual streams simultaneously.

Combination options include:

Stream 1	Stream 2
H.264	M-JPEG
H.264	MPEG-4
H.264	H.264
M-JPEG	MPEG-4
M-JPEG	H.264
M-JPEG	M-JPEG
MPEG-4	H.264
MPEG-4	M-JPEG
MPEG-4	MPEG-4

A If users assign the same stream format for both Stream1 and 2, the image may be unable to achieve real-time performance. This is a system limitation.

1.3 Package Checklist

The EV3150A packaging will include the following materials.

- EV3150A Video Server x 1
- Power Adapter x 1
- Product CD x 1

1.4 Product CD

The product CD contains

• EtroStation[™]3.0 NVR management software

www.cctvireland.ie 1890 866 900



- 16CH Live View/Recording/4CH Playback
- User's Manual
- 1.5 Language Support
- English
- 1.6 Product View





1.7 Side View



- 1.12V DC Power Input
- 2. RJ-45 Network Port
- 3. 12V DC Power Output
- 4. Micro SD Card Slot
- 5. Factory Default Reset Button





- 1. Audio In
- 2. Audio Out
- 3. BNC Video In
- 4. Digital Input
- 5. Digital Input
- 6. Digital Output
- 7. RS-485
- 8. Power LED

1.8 Power Output Specifications

The EV3150A can output 12V DC power to other devices. This can be done via PoE using the RJ-45 port or an in-box power output port.

Below are power specifications based on which power output method is used.

In-Box Power Output

• 12V DC Output – Max. 500mA for external CCTV

External CCTV may not operate properly if device consumes more than 500mA.

PoE (Power over Ethernet)

• 12V DC Output – Max. 300mA for external CCTV

An External CCTV consuming more than 300mA may result in abnormal startup.



2.1 Initial Requirements

Software Requirements

Installation and configuration require the following:

- Microsoft Windows 2000 or XP Operating System
- Microsoft Internet Explorer version 6 or higher



Other browsers (i.e. Mozilla Firefox) are not currently supported.

Install EtroScan™

EtroScan[™] is a utility is used to configure network settings for video servers and other devices (e.g. video servers). EtroScan[™] is available via two methods.

Install EtroStation[™] 3.0

EtroStation[™] 3.0 includes the EtroScan[™] utility. EtroStation[™] is on the product CD that accompanies the EV3150A. Please refer to the EtroStation[™] documentation for installation instructions.

Download from Etrovision's Website

EtroScan[™] can also be downloaded from Etrovision's website. It is available in the Software Tools section of the Download area, http://www.etrovision.com/ Download_list.aspx?no=5.

After downloading the archived file, extract the contents and run Setup.exe to

2.2 Physical Video Server Connections

Connect to the Network

Connect the EV3150A to network hub/switch via a standard CAT5 Ethernet cable with an RJ-45 connector. Please note that the PC must be on the same network domain as the video server.

Connect Digital I/O

The EV3150A has 2 digital inputs and 1 digital output. The digital I/O ports are labeled on the device.



Connect the devices with the video server by inserting the positive/negative wire into the appropriate hole. To remove the cable from the digital I/O socket, press down on the wire release and pull the cable.



📀 ETROVISION

e-sales@cctvireland.ie

Properly align the wiring and terminals when connecting; an improper connection can damage the camera.

Connect Audio I/O

For audio I/O functionality, connect the audio input and output cables. Video flicker may occur when enabling/disenabling audio in and audio out. This situation normally only lasts for a second.

Connect Video In

If using a video server, connect the video output of your camera with video in of the video server using a standard 75Ω coaxial cable with BNC type connector.

Connect PTZ

If using a PTZ device, then connect the devices with the video server by inserting the positive/negative wire into the appropriate hole.



Properly align the wiring and terminals when connecting; an improper connection can damage the camera.

To remove the cable from the digital I/O socket, press down on the wire release and pull the cable.



Power on IP Camera

Connect the power adapter to the power connector. The adapter should be connected to 110v~22OV AC socket. There is no power button on the camera, so connecting/disconnecting the power adapter will start/shutdown the video server.

Power Out

The EV3150A has the ability to provide power to other devices either via a power line out or PoE.

While the PoE uses the RJ-45 cable to distribute power, the in-box power line out is located on the side of the EV3150A.



When using the 12V DC in-box port, connect the device with the video server by inserting the positive/negative wire into the appropriate hole.

Properly align the wiring and terminals when connecting; an improper connection can damage the camera.

Please review the Power Output Specifications in section 1.8 before using. To remove the cable from the digital I/O socket, press down on the wire release and pull the cable.



2.3 Initial Network Configuration

To configure the video server's network settings use the EtroScan[™] utility.

Factory IP Address

Below are the initial factory IP address settings for the video server:

IP Address	192.168.1.2
Subnet Mask	255.255.255.0
Gateway	192.168.1.1

Restoring the factory default settings will reset the network settings to the factory IP address settings (see the "Reset Factory Default Settings" section for more information).

Alter the Network Domain

Alter the IP address of the PC to the same network domain of video server's initial IP address, 192.168.1.2.

Here is an example of PC network settings used to configure the video server

neral ou can get IP settings assigned a is capability. Otherwise, you nee e appropriate IP settings.	automatically if your network supports d to ask your network administrator for
O Obtain an IP address automa	tically
Use the following IP address:	
<u>I</u> P address:	192.168.1.3
S <u>u</u> bnet mask:	255 . 255 . 255 . 0
Default gateway:	
O Obtain DNS server address a	utomaticallu
Use the following DNS serve	r addresses:
Preferred DNS server:	2 8 5
Alternate DNS server:	
	Ad <u>v</u> anced

Using EtroScan[™]

EtroScan[™] allows users to easily find a video server and configure the settings. After installing EtroStation[™], EtroScan[™] can be accessed via the MS Start button.



Select EtroScan[™] from the start menu to start.

C	TROUISION ww.etrovision.com		EtroScan	Utility	i _ ×
Туре	IP Address	MAC Address	Model	SN	FW Web AV
			C.,	14	
			Table	Died ID	
5	Chang	le beming	riable		

Press the Scan button to list the IP and MAC address list for video servers on the network. To refresh the list, press the Clear Table button and press Scan again. A new video server will display the factory IP address, 192.168.1.2. However, if multiple new devices are present on the network, then multiple instances of 192.168.1.2 will be listed.

V EI	w.etrovision.com		EtroScar	Utility		1	_ ×
Туре	IP Address	MAC Address	Model	SN	FW	Web	AV
 static 	10.10.120.182	00-19-6C-61-56-69	EV6156A	DQA-6156A	1.8.6	80	1852
static	192.168.1.2	00-19-6C-66-5C-C2	EV6552A	DQA-C8-08	1.8.6	80	1852
dhcp	10.1.21.1	00-19-6C-DE-13-01	EV6153A	ALLENLA	1.9.0	80	1852
dhcp	10.1.21.30	00-19-6C-EE-FF-01	EV3151A	Z999000000	1.9.1	80	1852
dhcp	10.1.21.4	00-24-01-11-22-33	DCS-6817	TEMP_SN	1.1.0	80	1852
dhcp	10.1.21.10	00-19-6C-57-11-DA	EV3151A	SP5711HDA	1.9.1	80	1852
dhcp	10.1.21.7	00-19-6C-00-02-23	EV6250A	A000000000	1.9.0	80	1852
dhcp	10.1.21.26	00-19-6C-51-03-0C	EV6150A-CI	L142000493	1.8.6	80	1852
dhcp	10.1.21.25	00-19-6C-51-02-95	EV6150A-BI	L142000470	1.8.6	80	1852
Sc	an Change	Setting Clear T	able	Bind IP	1	Exit	1



To identify a specific video server, use the MAC address which is located on the bottom of the camera. Below is an example of the label displaying the MAC address.



Please note that a completed RMA (Return Merchandise Authorization) form must contain the serial number of the product. For more information, please refer to our website.

Change Network Setting via EtroScan[™] Using EtroScan[™] there are two ways to modify the network settings.

Туре	IP Address	MAC Address	Model	SN	FW	Web	AV
d hcp	10.1.21.22	00-19-64-8E-00-77	EV8580U	886-2-2655	N/A	80	554
dhcp	10.1.21.20	00-19-67-80-00-00	EV8580U	886-2-2655	N/A	80	554
dhcp	10.1.21.59	00-19-6C-EE-00-08	EV8580U	886-2-2655	N/A	80	554
dhcp	10.1.21.17	00-01-02-01-0A-66	EV8580U	886-2-2655	N/A	80	554
d hcp	10.1.21.31	00-19-67-80-00-51	EV8580U	886-2-2655	N/A	80	554
dhcp	10.1.21.41	00-19-6C-EE-00-01	EV8580U	886-2-2655	N/A	80	554
dhcp	10.1.21.56	00-11-3B-00-00-01	EV8150A	K0511307	1.9.7	80	185
static	192.168.1.2	00-10-03-16-01-82	EV3151A	1003160182	1.9.7	80	185
dhcp	10.1.21.11	00-19-6C-31-51-AA	EV3150A	Chamber-3	1.9.7	80	185
d hcp	10.1.21.34	00-19-6C-61-56-69	EV6156A	DQA-6156A	1.9.7	80	185
static	10.1.20.181	00-19-6C-51-02-3E	EV3151A	L142000383	1.9.7	80	185:
static	10.1.21.42	00-19-67-80-00-68	EV8180F	N/A	1.0.0	80	554
<							

1. Double click on a specific IP address; the setting page will be displayed.

2. Click Change Setting... button at the bottom of the screen.

Either method will display the network settings configuration

		CIP		0	PPP	OE
ion						
192	8 . %	168	73 :	1		2
192		168	3	1		1
255	s • 8	255	73 :	255		0
168	848	95	3	1	12	1
	192 192 255 168	192 . 192 . 255 . 168 .	192 . 168 192 . 168 255 . 255 168 . 95	192 . 168 . 192 . 168 . 255 . 255 . 168 . 95 .	192 . 168 . 1 192 . 168 . 1 255 . 255 . 255 168 . 95 . 1	192 . 168 . 1 . 192 . 168 . 1 . 255 . 255 . 255 . 168 . 95 . 1 .

After altering the video server network settings, click Apply to apply the changes. A prompt for the administrator authentication will be displayed:

Authentication	
ID :	root
Password :	****
ОК	Cancel

The default password for the administrator account (root) is pass. Enter the default password and click OK to confirm the changes.

After applying the new network settings, the video server will reboot; this process takes about 45 seconds. The video server's Power LED light will blink during the reboot process; the light will become stable once reboot is complete. Exit the "Setting Page" by clicking Close, and wait for the reboot to complete. After rebooting, press Scan to verify the new IP address. If using DHCP, then the MAC address may be necessary to accurately identify a specific camera.

DOUBLE Right Click Function": Double right click on a specific IP address on the list to quickly open the Live View browser page. Press Exit to quit EtroScan[™].

2.4 Access the Video Server Web Interface

MS Internet Explorer is used to access and configure the video server. When accessing a video server using the web interface for the first time, some configuration for ActiveX controls may be required.

- 1. Open the IE browser
- 2. Type in the IP address of the video server

3. Enter the administrator username and password: User name: root

Default password: pass

Press OK button to access to the Live View web page.



Usernames and passwords are case sensitive.



The administrator password should be changed after installation is complete. Please refer to the User Manual for more information.

Connect to 10.	1.21.11	?
The server 10.1.1 username and pa Warning: This ser password be sent without a secure	21.11 at EV3150A Video ssword. ver is requesting that y : in an insecure manner connection).	o Server requires a our username and (basic authentication
<u>U</u> ser name:	2	*
Password:		
	<u>R</u> emember my p	password
	ОК	Cancel

Upon login, the error "ActiveX control failed to load (OCX)" may be encountered.



The error indicates the browser requires adding certain ActiveX controls for the viewer to work.

Near the top of the browser page is a message regarding an add-on to run. The request is highlighted below in blue.



Clicking on the add-on message will bring up options; choose Run Add-on to add.



A confirmation message box will be displayed; choose Run.



Wait for the add-on to complete and the page to attempt reloading. Most likely other ActiveX controls will be required. Repeat the above procedure of adding ActiveX controls until the no other add-on requests are displayed and the Live View page loads without error.



3 RESET DEFAULT FACTORY SETTINGS

To reapply the factory settings without using the web interface, use the reset button.



Plug the power in and make sure the camera has fully booted. Press the reset button for 6 seconds.

If the camera has problems booting successfully (e.g. power light doesn't stabilize), then after connecting the power, hold the reset button for 6 seconds. The camera will shutdown and reboot (Power LED will flash during the reboot). Wait for the reboot to complete (Power LED light will become stable). Afterwards, the camera should be accessible via the default factory settings. A backup configuration can be restored if necessary.





4 CAMERA LED INDICATORS

The video server back (or combo cable if an outdoor or dome camera) has 3 LED indicators which display the camera state or activities.

- Red: the power LED
- Green: network connection LED
- Orange: network transmission LED

The table below highlights various camera states and corresponding Power LED indicators.

CAMERA STATE	Power LED
Booting	Blinking light
Camera operational	Stable light*
Connected to the network	Stable light*
Upgrading firmware	Blinking light
Firmware upgrade completed	Stable light*
Rebooting	Blinking light



5 ADDITIONAL INFORMATION

For more information on the EV3150A Video Server, please see the User's Manual (firmware version 1.9.5 as of this writing). This manual is available on the product CD, or it can be downloaded from the Etrovision website,

www.etrovision.com.

In addition, the latest firmware releases and other product documentation are available in the Download area.

