Manitou Video and Audio Configuration Parameters Guide for Release 1.6.x

Summary

This document contains information about the optional and required parameters and settings for each video type supported by Manitou.

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Contents

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Manitou Video Configuration

Important Note

Due to the wide variety of devices available through different manufactures, Bold Technologies cannot test the integration against all of the products offered. Customers should consult with their device manufacturer, sales representative, or customer support to verify device support with the API used.

Video/Audio Requirements

- BObject and Video/Audio table data must be imported via the BObject Tool (btool.exe)
- ActiveX Controls – Some Video or Audio Types will require that an ActiveX browser plug-in be downloaded and installed on each client machine.
- Java – Some Video Types will require the Java Runtime Libraries be installed on each client machine.
- Internet Explorer browser security settings may need to be adjusted to allow ActiveX, Java, and JavaScript components to execute properly.

Video Licensing

Bold customers wishing to utilize Manitou's video functionality must be licensed to do so. Licensing limitations for both Video Accounts and individual Video Cameras are in place.

Audio Licensing

Bold customers wishing to utilize Manitou's audio functionality must be licensed to do so. Licensing limitations for both Audio Accounts and individual Audio Devices are in place.

Video Service

Manitou accounts requiring video functionality must have the Video Monitoring Service.

Audio Service

Manitou accounts requiring audio (audio only, not audio provided via a video format) functionality must have the Audio Monitoring Service.

Web Access Considerations

Web users that have the appropriate profile permissions can view stored and live video and audio via Manitou Online. It should be noted that DVR and Video/Audio Devices that are inside the Central Station's intranet network will not be accessible to web users unless those devices are accessible via external addresses or web users have established a restricted VPN connection to the Central Station's intranet network so that they can access those internal addresses.

Video Notes and Limitations

- Many video vendors require direct access to the video card/driver to create a video surface or overlay that the video is displayed on in Windows. Connecting to video using a client running on a virtual machine or connecting to a client on a remote machine via Remote Desktop, PC Anywhere, or other similar remote access software, can result in unpredictable behavior.
- Most video/audio types utilize a web-browser connection window that is tied to the Internet Explorer security settings on each client machine. (Security settings located in Internet Options, Security Tab, Custom Level) The following Internet Explorer Security settings may need to be adjusted on each client machine to ensure proper video/audio functionality:
    - Enabled – Allow status bar updates via script
    - Prompt or Enabled – Download signed ActiveX controls
    - Prompt or Enabled – Download unsigned ActiveX controls
    - Prompt or Enabled – Initialize and script ActiveX controls not marked as safe for scripting (several video controls are marked as safe for scripting or have registry updates available to make them so)
    - Enabled – Run ActiveX controls and Plug-ins
    - Enabled – Script ActiveX controls marked safe for scripting

Video Type/Audio Type Protocol Selection

Video Type / Audio Type (sometimes referred to as Video or Audio Protocol) selection is accomplished either at the Transmitter Type level or at the Device level.

- Transmitter Type - Video Type Selection
    - Create or Modify a Transmitter Type, selecting the desired Video or Audio Type.
    - Create a Transmitter of that Transmitter Type, ensuring that the customer has the appropriate Video or Audio Service and that the Transmitter is selected as Video or Audio Capable as needed.
    - Create a Device of type Camera (or Microphone/Audio device if appropriate) on that Transmitter which can be optionally placed on Plans, etc…
- Device - Video Type/Audio Type Selection (Only available in 1.4.9-1 and up)
    - Create a Device of type Camera (or Microphone/Audio device if appropriate) that is not associated with a Transmitter.
    - Select the desired Video or Audio Type on the Device.

Attention: Video/Audio Types are of two access varieties, those that are accessed via a transmitter (A/V type configured at the TX Type level) and those that are accessed directly via a device (A/V type configured at the Device level for devices not associated with a transmitter). Previously, both of these types were listed together in Audio and Video type dropdowns, but now they are filtered down appropriately. ie: On the Transmitter Type form, only video and audio types that must be accessed via a transmitter are listed in the video and audio dropdowns. On the Device form, for devices that are not associated with a transmitter, only video and audio types that must be accessed directly are listed in the video and audio dropdowns.

Supported Video/Audio Feature Matrix

The following attachment contains a feature summary for each video/audio device supported by Manitou.

Note: Due to the wide variety of devices available through different manufactures, Bold Technologies cannot test the integration against all of the products offered. Customers should consult with their device manufacturer, sales representative, or customer support to verify device support with the API used.

Manitou Video and Audio Support Quick Reference:

Manitou Video Device Configuration and Parameters

ADPRO Fast Scan w/Bosch (VCS) VideoJet 10

The ADPRO Fast Scan is a hardware video receiver capable of communicating with ADPRO Fast Scan transmitters; however, the receiver may only communicate with one transmitter at a time. A Manitou FEP driver is used to communicate with the receiver, and reverse commands are present to control the receiver and/or remote transmitters.

Video Type:

- VCSVJAXA (ActiveX/MPEG4 Format with Audio)
- VCSVJA (MJPEG Format without Audio)

Notable Features, Limitations and Recommend Usage: *(*May vary*)*

Typical Configuration: Transmitter(s) at the site and Receiver(s) at Central Station attached to VideoJet units at Central Station. Receiver(s) at Central Station should be connected to FEP serial inputs using AdPro Fast Scan Receiver Driver for bidirectional communication. For best performance, Vidoejet units should be configured to use/allow UDP video traffic (specifically for VCSVJAXA) and our implementation is designed accordingly.

Video: ADPRO Fast Scan Transmitters have up to 10 video Inputs.

Audio: Two channels - configurable.

I/O: Alarm Inputs and Outputs.

Software: For Bosch/VCS ActiveX/MPEG4, ActiveX player/plug-in must be installed on workstations. Browsing to a VideoJet device in Internet Explorer should prompt the ActiveX download. The Java Runtime Environment must be installed.

Connection Type: FEP/Receiver Driver w/In-house IP

Access Type: Via Transmitter (through FEP)

Device Address Syntax: (* See Notes *)

http://<server address or domain name>

Device Option Syntax: (* See Notes *)

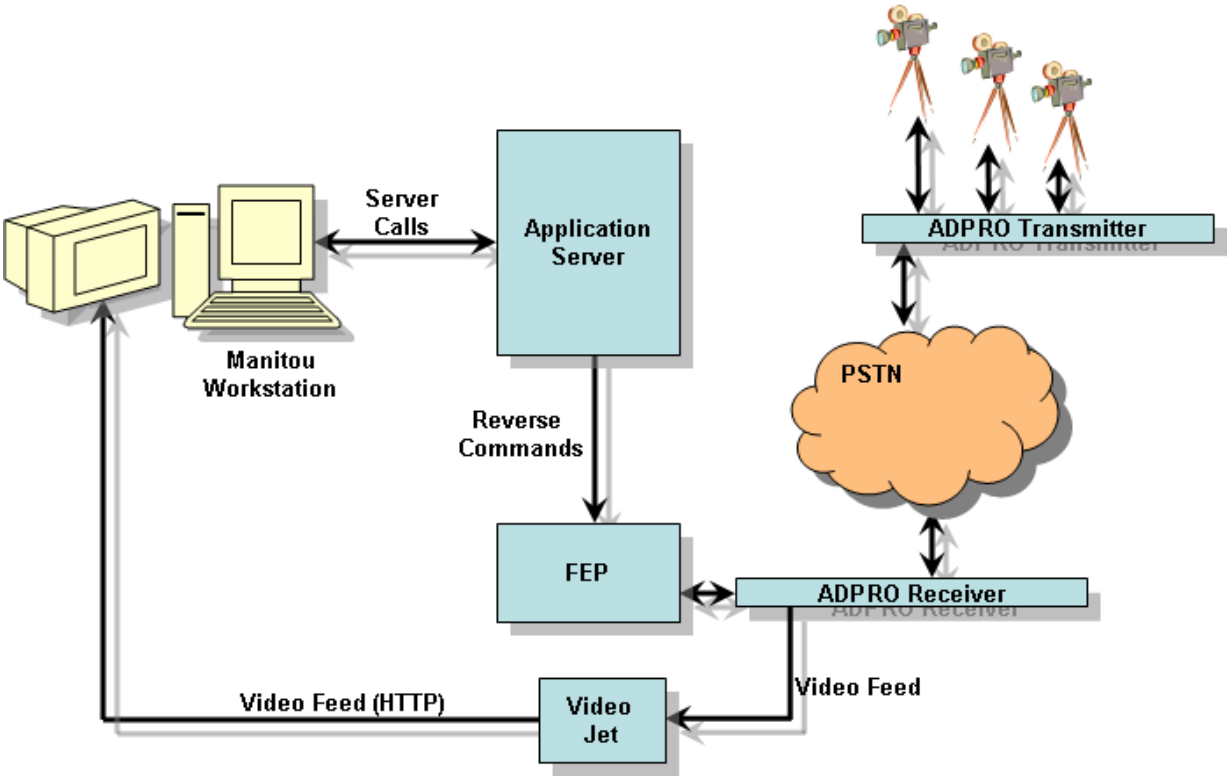
<parameter>=<value>	Acceptable Values	Description
cmddur=<int>	1-…	Command Duration – The amount of time in milliseconds that a PTZ or Iris type command should be executed. Optional. Default = 200.
protocol=<string>	UDP or TCP	The protocol required for connection to the Bosch VideoJet video server. Optional. Default is UDP.
size=<int>x<int>	<1-…>x<1-…> Example: 704x576	Size – The size in pixels (width by height) of the video feed when shown with the Virtual VMD Keyboard and controls. Optional. When not specified, the image will resize automatically.

Available User Options:

N/A

Notes: Supported in 1.4.9-1 and up only. A Device is not required (but usable) for this Video Type as connections are initiated and terminated via Reverse Commands.

Basic Architecture

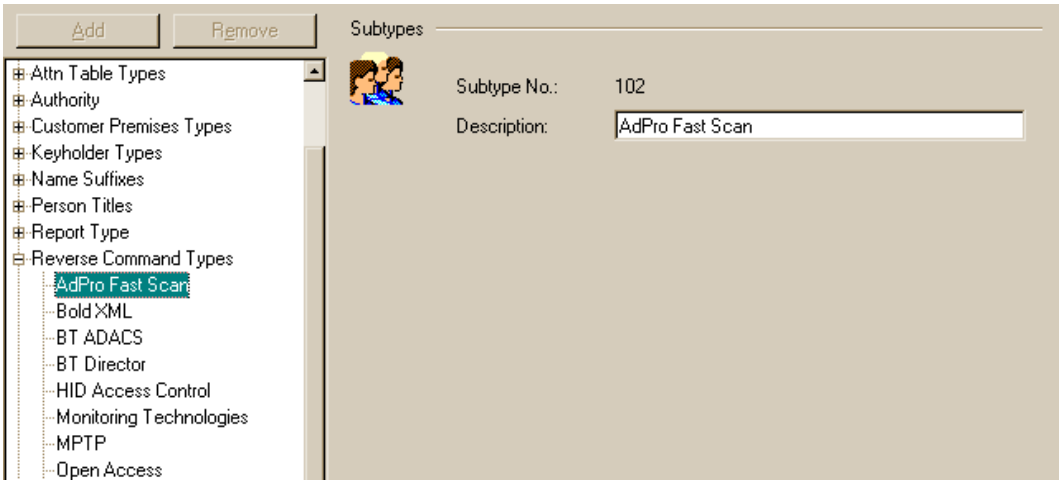


- Ideally, Manitou workstations will have dual monitors so that the operators may park video streams on their second monitor.
- Operators issue reverse commands to an ADPRO receiver to connect to a remote site, select cameras at the remote site, pan/tilt/zoom cameras, etc.
- A Video Jet unit is connected to each ADPRO receiver for streaming the video
- Operators can connect to the Video Jet unit to view the video in HTTP format

Reverse Command Configuration

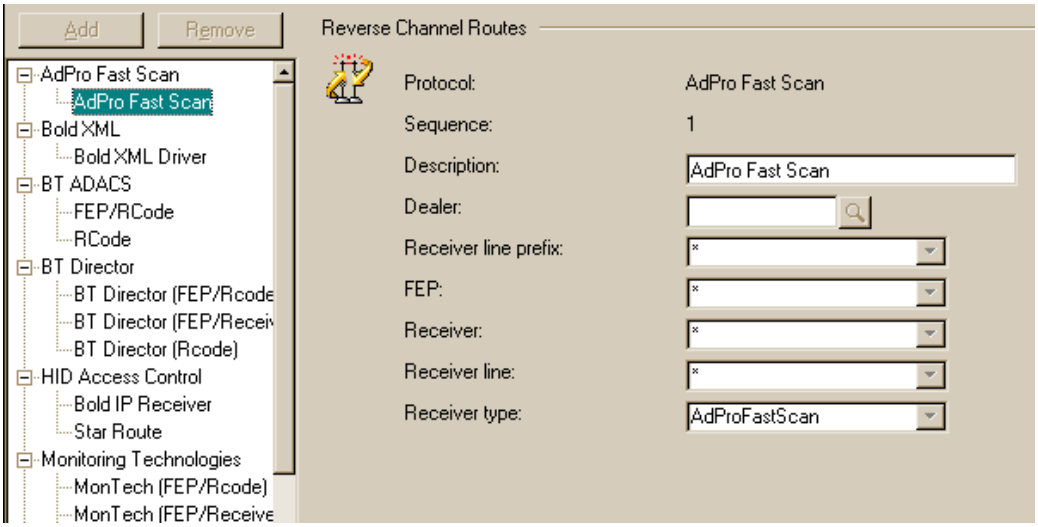
Subtype – an ADPRO Fast Scan reverse command subtype must be configured.

- SW → Maintenance → Setup → Subtypes



Reverse Channel Route – Due to the unique nature of ADPRO (each receiver can only communicate with one transmitter at a time), the only Reverse Channel Route that will work is a "default" route. By "default", I mean that the route uses wildcards for FEP Number, Receiver Number and Line Number; and has the appropriate Receiver Code set.

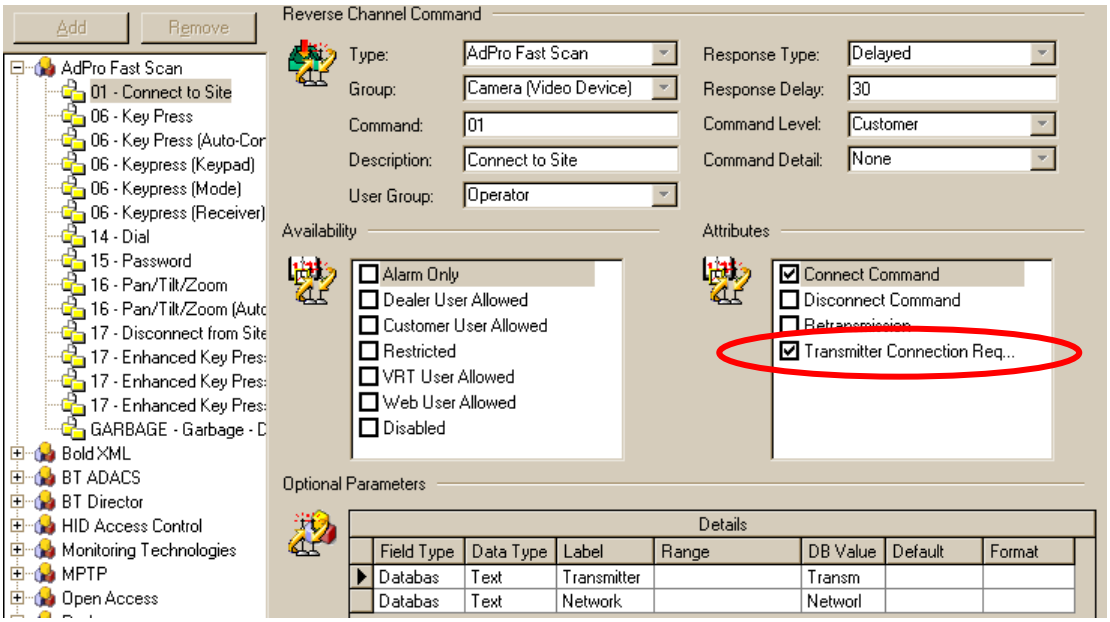
- SW → Maintenance → Setup → Reverse Channel Routes



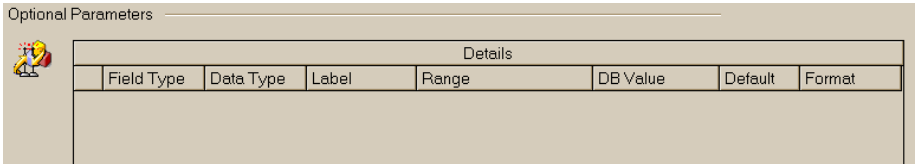
Reverse Commands – all ADPRO reverse commands must be configured in the Manitou Operator Client under the Monitoring Company's account.

- Manitou → Maintenance → Monitoring Company → Reverse Commands
- **Important!** All ADPRO reverse commands must include the Transmitter Connection Required attribute. This attribute forces default routing of requests such that all FEPs and ADPRO receivers are initially queried to

determine if one is already in communication with the transmitter. If one is not found already connected, then all FEPs and ADPRO receivers are queried to determine if any are available (idle) to perform the request.



- ADPRO supports several commands, each utilizing a two byte mnemonic to identify the request. Optional parameters are listed below each command (*Notation note:* single ASCII characters are sent as hex pairs to accommodate binary data. For example, the character 0x3C (<) is sent as the ASCII string “3C”. The valid range is “00” – “FF”.).
    - **00 – Connect to Receiver:** allows an operator to take control of a specific ADPRO receiver’s Video-Jet. This command has no parameters; however, specific Reverse Channel Routes must be created for each ADPRO receiver specifying the FEP number and receiver number.



- **01 – Connect to Site:** special compound command that will set the password and dial a remote site.

Optional Parameters

Details

Field Type	Data Type	Label	Range	DB Value	Default	Format
Database	Text	Transmitter ID		Transmitter ID		
Database	Text	Network		Network		

  - Transmitter ID: remote transmitter's site name
  - Network Address: contains the site number to dial as well as the password for the remote transmitter
- **06 – Key Press:** allows a single ASCII character to be sent to the AdPro transmitter

Optional Parameters

Details

Field Type	Data Type	Label	Range	DB Value	Default	Format
User Input	Values	Key	0D;<cr>|20;<space>|41;A			
Database	Hex	Transmitter ID		Transmitter ID		
Database	Text	Network		Network		

  - Key Pressed: ASCII to send
  - Transmitter ID (Optional, if auto-connect is desired): remote transmitter's site name
  - Network Address (Optional, if auto-connect is desired): contains the site number to dial as well as the password for the remote transmitter
- **14 – Dial:** send the dial command to the receiver

Optional Parameters

Details

Field Type	Data Type	Label	Range	DB Value	Default	Format
User Input	Text	Telephone				

  - Telephone Number: number to dial
- **15 – Password**

Optional Parameters

Details

Field Type	Data Type	Label	Range	DB Value	Default	Format
User Input	Text	Password				

  - Password: password to access remote transmitter
- **16 – Pan/Tilt/Zoom**

Optional Parameters

Details

Field Type	Data Type	Label	Range	DB Value	Default	Format
User Input	Values	PTZ	00;00|01;01|02;02|03;03|0			
User Input	Hex	Prepostion or	00-FF		00	
User Input	Values	Ernitec	00;<n/a>|1E;Sequence		00	
User Input	Integer	Channel No			0	
User Input	Integer	Duration (MS)	0-9999		0	
Database	Hex	Transmitter ID		Transmitter ID		
Database	Text	Phone		Network		

  - PTZ Command
  - Preposition and Auxiliary Number (if applicable): range dependant on the telemetry station chosen. For all other PTZ commands, use 0x00.
  - Ernitec BDR5xx Series Camera Station (if applicable):
    - 0x1E – Sequence Preposition
    - 0x1F – R/D Text
    - 0x20 – Insert Preposition
    - 0x21 – Clear Sequence
    - 0x22 – Display Sequence
    - 0x23 – Dwell Sequence
  - Channel Number (applies to the VM41 panel only). Defaults to 0 for non-VM41 transmitters.

- Duration: number of milliseconds to perform the PTZ function. Valid range is 0-9999.
- Transmitter ID (Optional, if auto-connect is desired): remote transmitter's site name
- Network Address (Optional, if auto-connect is desired): contains the site number to dial as well as the password for the remote transmitter

- **17 – Enhanced Key Press**

Optional Parameters

Details

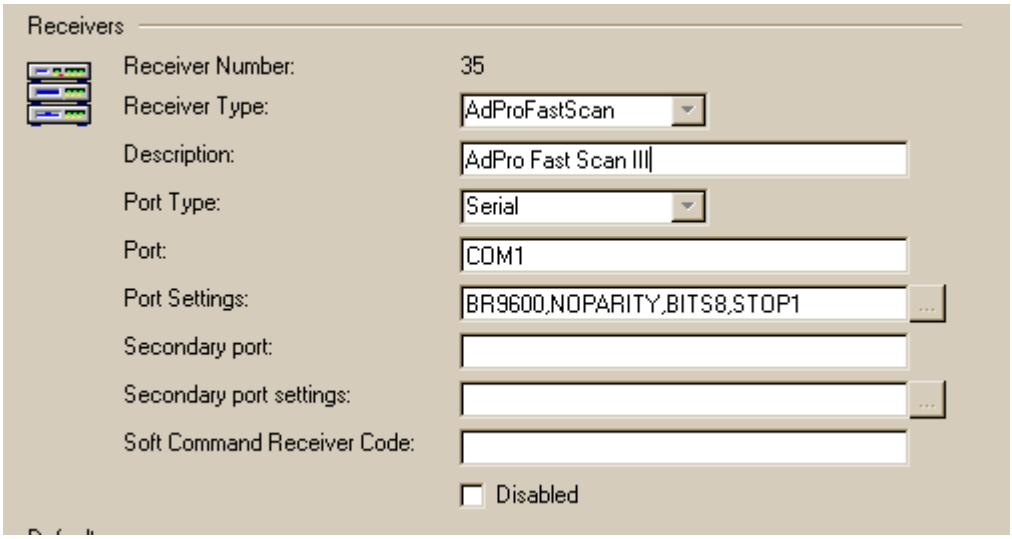
Field Type	Data Type	Label	Range	DB Value	Default	Format
User Input	Values	Direction	3C;Requesting			
User Input	Values	Key	0D;<cr>|41;A|42;B|43;C|4			
User Input	Text	Parameter(s)				
User Input	Values	Operation	0;<N/A>|1;Read|2;Write		0	
Database	Hex	Transmitter ID		Transmitter ID		
Database	Text	Network		Network		

- Data Direction
  - 0x3E: sending data to the receiver
  - 0x3C: requesting data from the receiver
- ASCII Command: ASCII command characters
- Parameters: numeric digits that would have appeared before the command, range 0x30 – 0x39 (max of three allowed)
- Operation (if applicable): some commands require a modifier to precede the ASCII characters. This indicates if the command is requesting a read or write operation
  - 0 – N/A
  - 1 – Read Operation
  - 2 – Write Operation
- Transmitter ID (Optional, if auto-connect is desired): remote transmitter's site name
- Network Address (Optional, if auto-connect is desired): contains the site number to dial as well as the password for the remote transmitter

Receiver Configuration

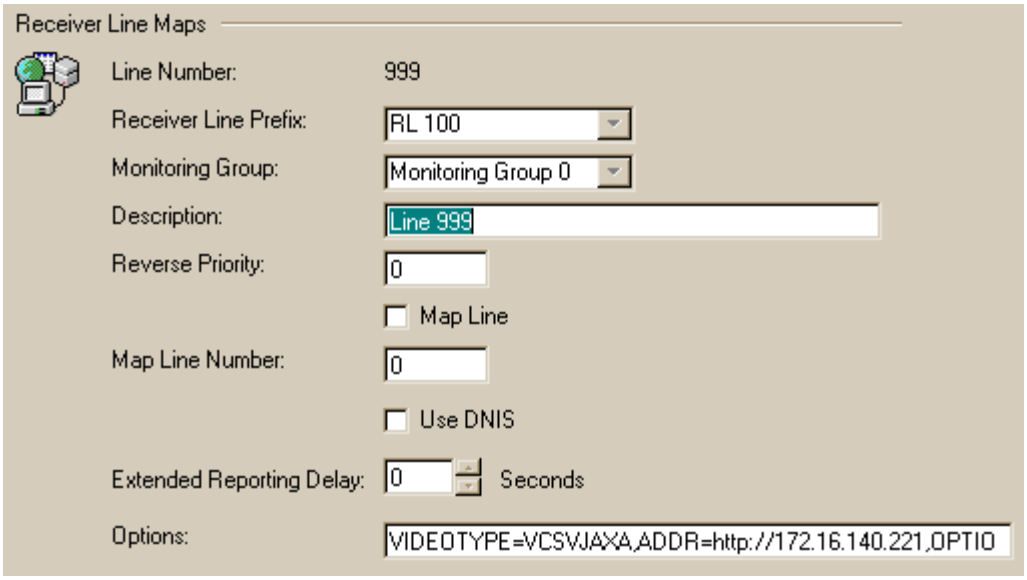
Receiver – A Receiver entry must be configured in order for the Manitou system to communicate with each ADPRO Fast Scan Receiver.

- SW → Maintenance → Setup → Receivers
- Port Type is Serial
- Port Settings are “BR9600,NOPARITY,BITS8,STOP1”



Receiver Line Map – A single Receiver Line must be configured for each ADPRO Fast Scan Receiver entry.

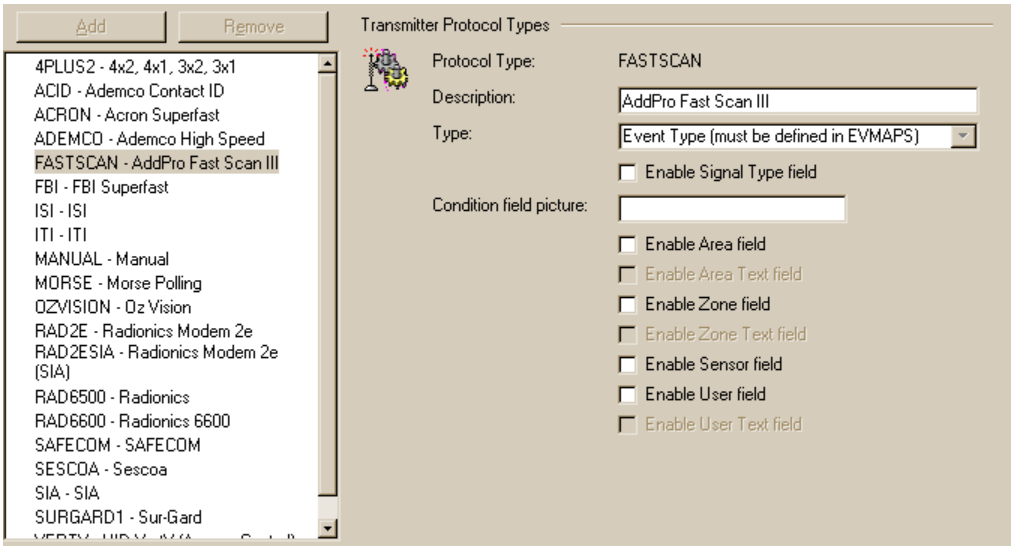
- SW → Maintenance → Setup → Receivers
- Line number *MUST* be set to 999 to correctly configure the Video Type, Device Address and Device Options.
- The Options string is a comma delimited list of key value pairs where the text to the left of an equals sign is the key, and the text to the right is the value.
    - VIDEOTYPE – the video type (protocol)
        - E.g.: VIDEOTYPE=VCSVJAXA
    - ADDR – the address (URL) for the receiver’s Video Jet device
        - E.g.: ADDR=http://172.16.140.221
    - OPTIONS – any options necessary for the Video Jet device.
        - E.g.: OPTIONS=XYZ



Signal Event Configuration

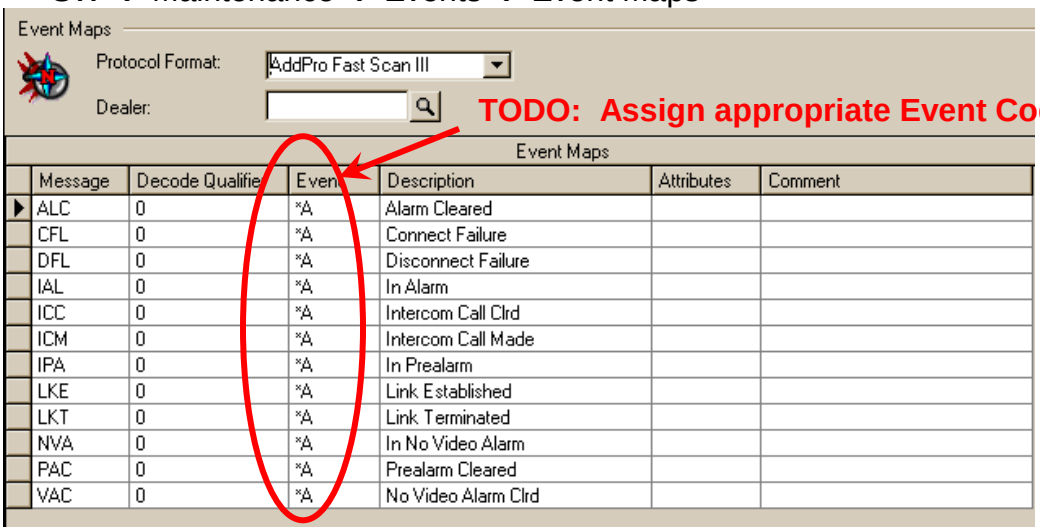
Transmitter Protocol Type – all signals from the FEP ADPRO driver utilize the FASTSCAN protocol type.

- SW → Maintenance → Setup → Transmitter Protocol Types
- The protocol type must equal “FASTSCAN”
- The type must equal “Event Type (must be defined in EVMAPS)”



Event Maps – several event map entries must be present for the FASTSCAN protocol Type. Note: the integrator must set a proper event code for each FASTSCAN message. *A (Activation) is used here for illustration purposes only.

- SW → Maintenance → Events → Event Maps



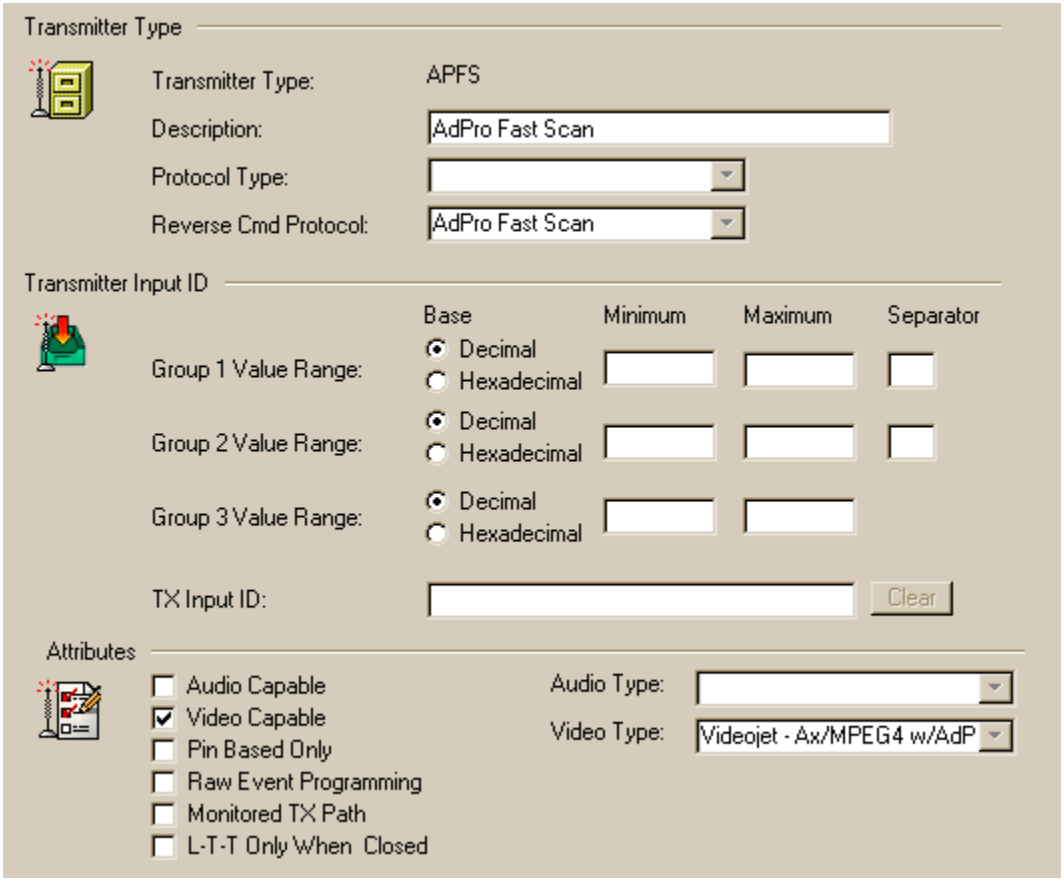
Message	Decode Qualifie	Event	Description	Attributes	Comment
ALC	0	*A	Alarm Cleared		
CFL	0	*A	Connect Failure		
DFL	0	*A	Disconnect Failure		
IAL	0	*A	In Alarm		
ICC	0	*A	Intercom Call Clrd		
ICM	0	*A	Intercom Call Made		
IPA	0	*A	In Prealarm		
LKE	0	*A	Link Established		
LKT	0	*A	Link Terminated		
NVA	0	*A	In No Video Alarm		
PAC	0	*A	Prealarm Cleared		
VAC	0	*A	No Video Alarm Clrd		

- All FASTSCAN raw event codes consist of three upper case alpha characters
  - ALC – Alarm Cleared.
  - CFL – Connect Failure. This is an internal event created by the FEP driver if five consecutive connect reverse commands have failed due to timeout (i.e., ISDN line failure).
  - DFL – Disconnect Failure. This is an internal event created by the FEP driver if requests to disconnect an idle transmitter from the receiver have failed.
  - IAL – In Alarm
  - ICC – Intercom Call Cleared
  - ICM – Intercom Call Made
  - IPA – In Pre-alarm
  - LKE – Link Established. An ADPRO transmitter is connected to the receiver.
  - LKT – Link Terminated. The connection to the ADPRO transmitter was disconnected.
  - NVA – In No Video Alarm
  - PAC – Pre-alarm Cleared
  - VAC – No Video Alarm Cleared

Transmitter Configuration

Transmitter Type – ADPRO requires its own transmitter type.

- Manitou → Maintenance → Transmitter Types
- The Reverse Command Protocol must be set to the ADPRO Fast Scan protocol (set up as a Subtype).
- Video Capable must be selected
- The correct Video Type must be selected (Video Jet dependent). This associates the correct BOBJECT file for displaying the HTTP video and applies to the VIDEOTYPE Option key value pair in the receiver line map entry.

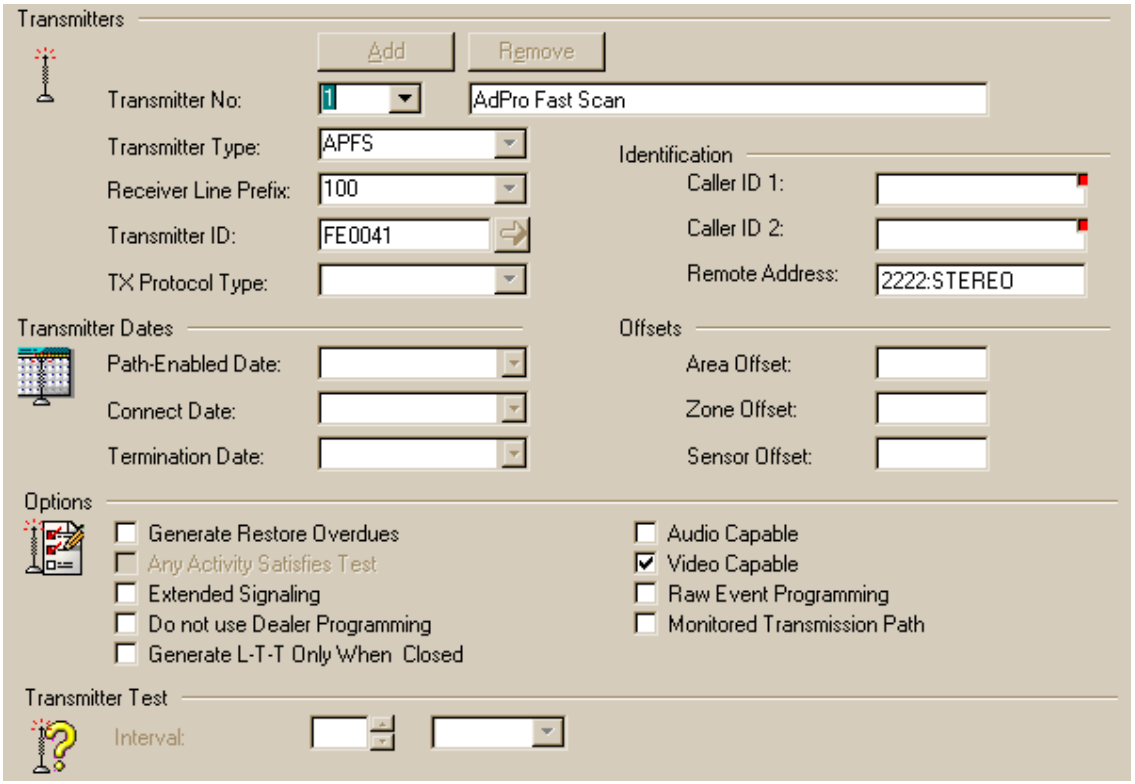


Customer Transmitter – ADPRO requires its own transmitter type.

- Manitou → Maintenance → Customer → Transmitters
- Each customer with an ADPRO transmitter will have a transmitter configured.
- The customer requires the Video Service in order to select Video Capable on the transmitter
- The transmitter type is the ADPRO transmitter type already created (see above)
- Transmitter ID refers to the ADPRO Fast Scan's Site Name
- Remote address provides the phone number for the receiver to dial to connect to the transmitter, as well as, the transmitter's password. This is a key/value pair separated by a colon.

- Left of the colon is the transmitter's phone number.
- Right of the colon is the transmitter's password.
- E.g: 2222:STEREO

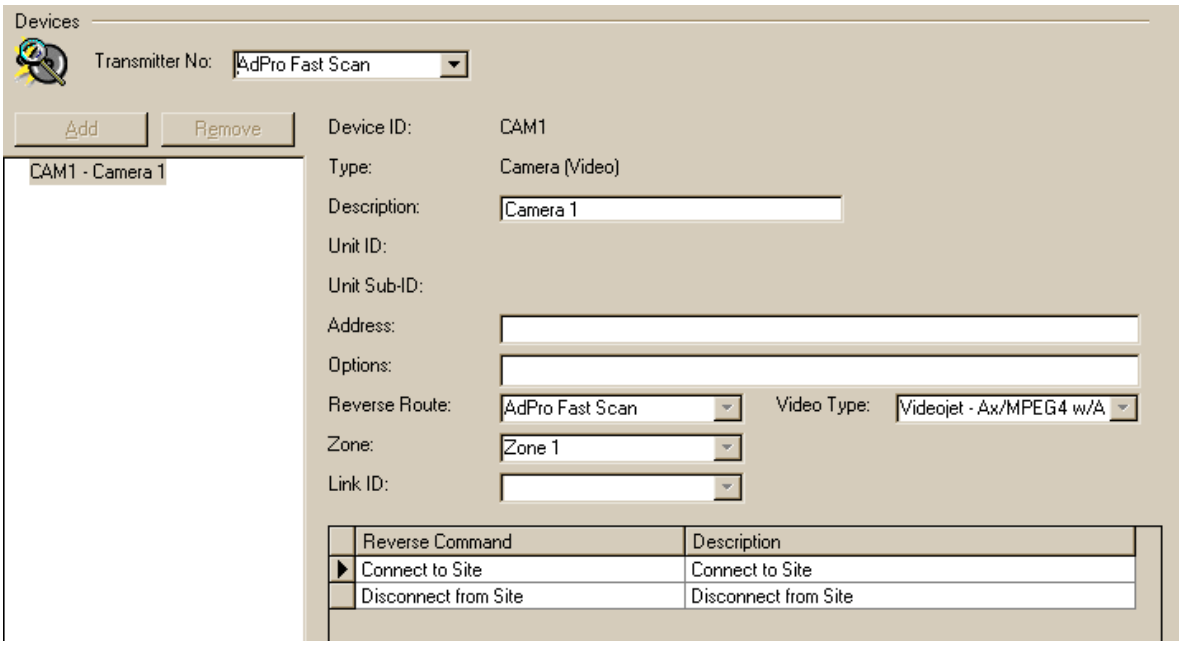
- The Video Capable option must be selected.



Device Configuration

Camera Devices – one or more cameras devices may be added to a customer.

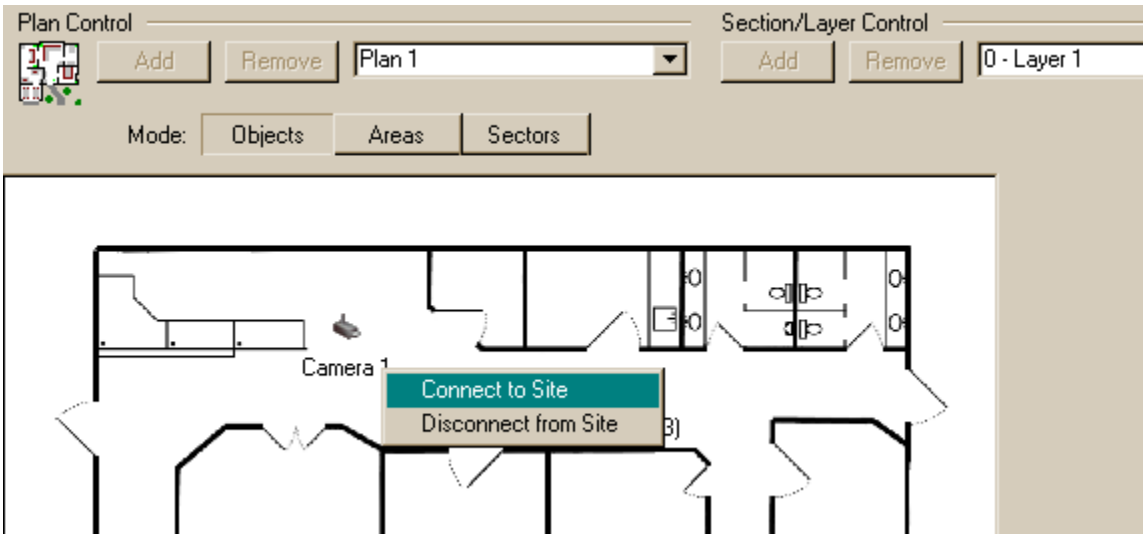
- Manitou → Maintenance → Customers → Devices
- Select the ADPRO transmitter
- The Device ID uniquely identifies the device for the customer
- Select the Camera (Video) type
- Select the Reverse Route (always a default route)
- Select the Video Type for Video Jet
- Add any reverse command in the grid for display in a context menu upon right clicking the device on a plan



Plan Configuration

Camera Devices – one or more cameras devices may be added to a customer's plans.

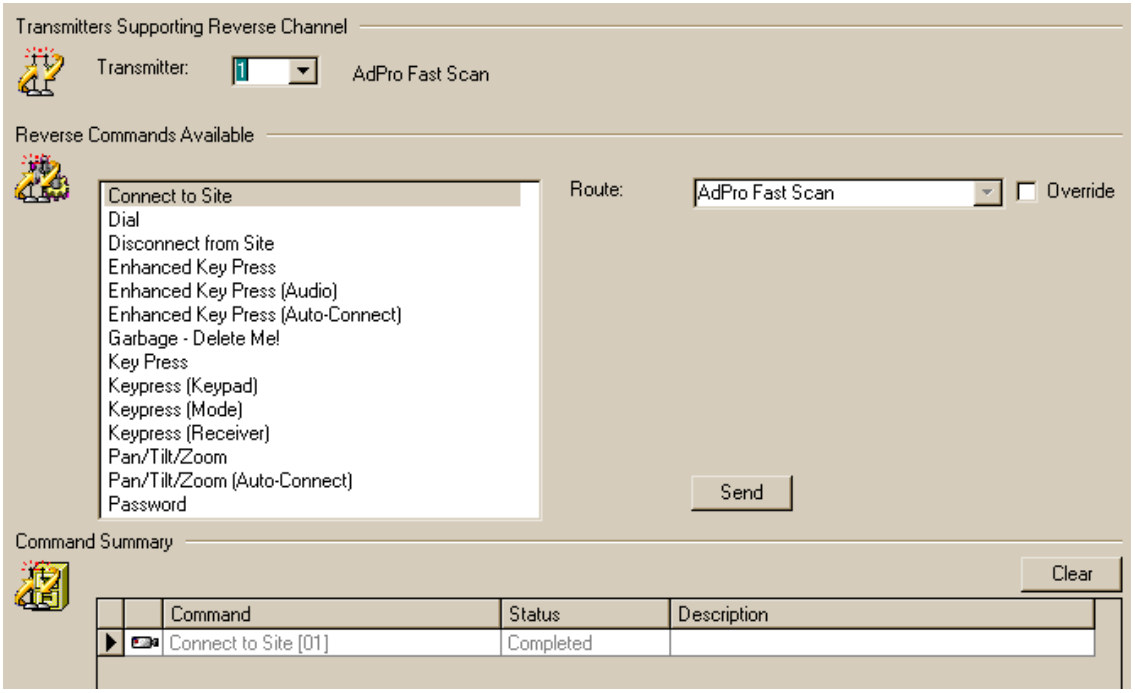
- Manitou → Maintenance → Customers → Plans
- Add devices as you normally would (instructions for this are out of the scope of this document)
- When viewing the plan on the Customer form or the Alarm form, right clicking the camera device displays a context menu with configured reverse commands.
- Selecting reverse commands from the plans form behave in the same manner as selecting them from the Reverse Command Send form or Alarm Action Patterns.



Sending Ad-hoc Reverse Commands

Reverse Send – users may send reverse commands to a customer's ADPRO transmitter directly from the customer account.

- Manitou → Maintenance → Customers → Reverse Send
- Select the Transmitter
- Select the reverse command in the Reverse Commands Available list box
- A route most likely defaulted. If not, you may check the Override box to select one manually; however, you should only use routes with wildcards for the FEP, receiver and line numbers, and the correct ADPRO receiver code.
- The Send command button will issue the reverse command to the FEP. If the user needs to enter optional parameter information, a dialog will prompt the user prior to sending the request to the FEP
- The command status and summary information displays in the Command Summary grid.



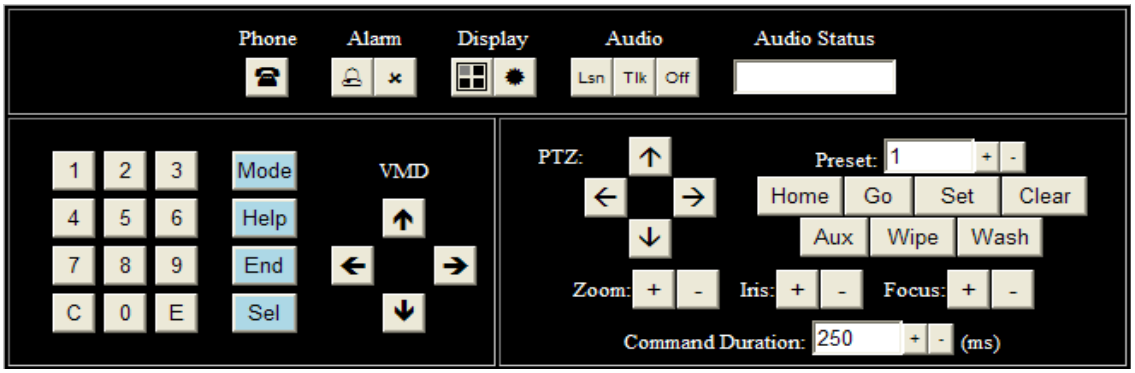
Viewing Video

Media Matrix – the media matrix can only be opened by connecting to a site; there is no menu shortcut.

- Manitou → [Media Matrix]
- The upper portion of the screen displays the video (or an audio player)
- The lower portion of the screen includes a keypad for controlling the transmitter.

ADPRO Keypad – users can use the keypad to send reverse commands directly to the receiver and or transmitter. This document is not intended to explain the full functionality of ADPRO or how to perform certain operations, but it does explain some basic commands. Please refer to ADPRO documentation if more information is needed.

- Manitou → [Media Matrix]
- Phone – used for connecting to a site
    - If the dialing table in the receiver is not displayed, it will display it.
    - If the dialing table is displayed and a site is selected, it will initiate a dial request. Also, the Up/Down arrow buttons will select different sites in the dialing table
- Alarm Bell – Equivalent to the AdPro receiver alarm bell button press
- Alarm X – Clears an alarm at the transmitter
- Display Grid – Toggles the video display from one image to four images
- Display Star – Equivalent to the AdPro receiver star button press
- Audio Lsn – Toggle listen on/off
- Audio Tlk – Toggle talk on/off
- Audio Off – Turn listen and talk off
- PTZ and Preset Buttons – Perform implied PTZ and Preset functions
- Command Duration – Time in milliseconds in which PTZ commands are allowed to execute from a single button press. If desired, holding a PTZ button down will cause the command to repeat.
- <#> + Sel – selects a camera. E.g., “1” + Sel selects camera 1, “2” + Sel selects camera 2, etc.



Alarm Handling

Video Alarm – When an alarm has associated ADPRO video, the operator is prompted if they want to view the video when the alarm is loaded. If the user requests to view the video, a connect reverse command is issued to view the site. Upon completion, the Media Matrix is loaded (or brought to front) with the video loaded.

- Manitou → Operations → Alarm Handling
- The media matrix behaves the same whether it is associated with an alarm or if it was opened via an ad-hoc reverse command.

American Dynamics Intellex

Video Type: NTLX

Connection Type: IP

Access Type: Direct connect to device (URL)

Notable Features, Limitations and Recommended Usage:

! Licensing Restriction: This video type is currently used under a restricted license from Tyco. It may only be used with the originally licensed customer.

Video: Up to 16 video inputs.

Typical Configuration: Unit at site accessible via IP by the Central Station.

Alarm Processing: Outbound device based connections can be made in response to an alarm. If a video connection is made from an alarm screen it is launched in streaming mode so no camera control is available.

Live Connection: Live connections can be made from a Device on a Floor Plan. Live connections include camera control if it is available.

Software: ActiveX player/plug-in must be installed on workstations. The software can be installed using the Intellex API Components installer.

Device Address Syntax:

<server address or domain name>

Device Option Syntax:

<parameter>=<value>&<parameter>=<value> …

Available User Options:

<parameter>=<value>	Acceptable Values	Description
camera=<int> or device_id=<int>	1-…	A list of camera numbers separated by a semicolon. At least one camera is required. Up to 16 cameras may be specified.
resolution=<string>	LOW,MEDIUM, or HIGH	Default is MEDIUM

Avigilon 4

Video Type: AVIGILON

Connection Type: IP

Access Type: Direct connect to device (IP)

Notable Features, Limitations, and Recommended Usage: *(*May vary*)*

Typical Configuration: Avigilion server accessible via IP by the Central Station.

Video: Requires Avigilion NVR

Storage: DVR/NVR

Software: .Net ActiveX Interop assembly player/plug-in must be installed and registered (with RegAsm) on workstations. AvigilonControlCenterSDK-4.12.0.28.exe must be installed. Bold_Avigilon5_Setup must be installed

Device Address Syntax: *(Note: Only accepts IP addresses, not names)*

IP Address: ###.###.###.###

Device Option Syntax:

<parameter>=<value>&<parameter>=<value> …

Available User Options:

<parameter>=<value>	Acceptable Values	Description
camera=<string>	Any string	Name of the camera to connect. Required.
Port=<int>	Integer	Port of the Avigilon NVR. Required.
user=<string>	Any string	The username that has permission to view live video on the NVR. Required.
password=<string>	Any string	NVR password. Required
livemode=<string>	“on”,”off”	Livemode=on causes incoming alarms to load the live stream of the camera, livemode=off will load video playback from the DVR. Default is on.
bwlimit=<string>	“on”,”off”	bwlimit=on, enables bandwidth throttling. It requires that the user set the maxbwdatarate parameter. bwlimit=off, does not restrict the data rate at which video is received. Defaults to “off”
Maxbwdatarate=<long>	Long(ie, 75000 = 750kb pipe)	If the client is operating in a bandwidth-constrained environment (over the internet), this value can be set lower so the connection is not overwhelmed. Defaults to 75000(750kbs) transfer rate. Some typical values include: • **Gigabit ethernet (1000Mbps)** = 125000000 (bytes per second) • **Megabit ethernet (100Mbps)** = 12500000 (bytes per second) • **Kilobit ethernet**

		(10Mbps) = 1250000 (bytes per second)

Avigilon 5

Video Type: AVIG5

Connection Type: IP

Access Type: Direct connect to device (IP)

Notable Features, Limitations, and Recommended Usage: *(*May vary*)*

Typical Configuration: Avigilion server accessible via IP by the Central Station.

Video: Requires Avigilion NVR

Storage: DVR/NVR

Software: .Net ActiveX Interop assembly player/plug-in must be installed and registered (with RegAsm) on workstations. Bold_Avigilon5_Setup must be installed

Device Address Syntax:

IP Address: ###.###.###.###
or
Resolvable DNS Name: server.somewhere.com

Device Option Syntax:

<parameter>=<value>&<parameter>=<value> …

Available User Options:

<parameter>=<value>	Acceptable Values	Description
camera=<string>	Any string	Name of the camera to connect. Required.
Port=<int>	Integer	Port of the Avigilon NVR. Required.
user=<string>	Any string	The username that has permission to view live video on the NVR. Required.
password=<string>	Any string	NVR password. Required
livemode=<string>	“on”,”off”	Livemode=on causes incoming alarms to load the live stream of the camera, livemode=off will load video playback from the DVR. Default is on.
bwlimit=<string>	“on”,”off”	bwlimit=on, enables bandwidth throttling. It requires that the user set the maxbwdatarate parameter. bwlimit=off, does not restrict the data rate at which video is received. Defaults to “off”
Maxbwdatarate=<long>	Long(ie, 75000 = 750kb pipe)	If the client is operating in a bandwidth-constrained environment (over the internet), this value can be set lower so the connection is not overwhelmed. Defaults to 75000(750kbs) transfer rate. Some typical values include: • **Gigabit ethernet (1000Mbps)** = 125000000 (bytes per second) • **Megabit ethernet (100Mbps)** = 12500000 (bytes per second) • **Kilobit ethernet**

		(10Mbps) = 1250000 (bytes per second)

AXIS AMC

Video Type: AXISAMC

Connection Type: IP

Access Type: Direct connect to device (URL)

Notable Features, Limitations, and Recommended Usage: *(*May vary*)*

Typical Configuration: AXIS server (AVHS) accessible via IP by the Central Station.

Video: Requires AXIS Cameras, AVHS

Storage: Video storage capabilities.

Software: ActiveX player/plug-in must be installed on workstations. Installer must be used to install Axis AAC_Decoder, MJPEG Decoder, H264 Decoder, AXIS Media Control, MPEG4 Decoder

Device Address Syntax:

IP Address: 172.16.140.20

Device Option Syntax:

<parameter>=<value>&<parameter>=<value> …

Available User Options:

<parameter>=<value>	Acceptable Values	Description
user=<string>	Any string	The username that has permission to view live video on the camera. Required.
password=<string>	Any string	The password for the user. Required.
uimode=<string>	ptz-relative ptz-absolute none	Allows camera to display ptz cursor, or pointer. Default is PTZ buttons, but no in-video PTZ controls.
networktimeout=<string>	1000-… Examples: 1000(1 second) 5000(5 seconds)	Time in milliseconds. Default is 5000 milliseconds.
mediatype=<string>	mpeg4 mjpeg h264 mpeg2-unicast	Type of camera mode Default is mpeg4.
autorec=<int>	0, 1, 2	Specifies the type of auto-recording desired. Values: 0 = Auto-record when alarm is involved. (Default) 1 = Auto-record always, including maintenance connections. 2 = Never Auto-record.
reclimit=<int>	0, 1-… (seconds)	Specifies the maximum time in seconds of an auto-recorded video feed. Default is zero, meaning no limit.

Bold Compliant Video

Video Type: BOLDVID

Connection Type: IP

Access Type: Direct connect to device (URL)

Notable Limitations and Recommended Usage: *(*May vary*)*

Usage: This will be dependant on the video manufacturer and what portions of the Bold Compliant video specifications they have implemented. For details, please see the Manitou Video Interface Specification documentation.

Alarm Processing: Video manufactures have the option to communicate with our XML receiver driver.

Software: This will be dependant on the video manufacturer.

Device Address Syntax:

http://<server address or domain name>

Device Option Syntax:

<parameter>=<value>&<parameter>=<value> …

Available User Options:

<parameter>=<value>	Acceptable Values	Description
device_id=<int>	1-…	The device ID for the camera (as configured on the video server). A device_id or view_id is required.
view_id=<int>	1-…	The view ID for the camera/cameras (as configured on the video server). A device_id or view_id is required.
user=<string>	Any string	The username that has permission to view live video on the camera. Required.
password=<string>	Any string	The password for the user. Required.
format=<string>	Any string	Video format (QSIF, SIF, Other). Optional.

For more information and details regarding the Bold Compliant Video specification, please see the Manitou Video Interface Specification documentation.

Bosch (VCS) VideoJet 10

Video Type: VCSVJAX (ActiveX/MPEG4 Format – Audio Capable)
or
Video Type: VCSVJ (MJPEG Format – Not Audio Capable)

Connection Type: IP

Access Type: Direct connect to device (URL)

Notable Features, Limitations and Recommended Usage: *(*May vary*)*

Typical Configuration: VideoJet unit at site. For best performance, Vidoejet units should be configured to use/allow UDP video traffic (specifically for VCSVJAX) and our implementation is designed accordingly.

Video: Single input per unit.

Audio: Two channels (in/out).

I/O: Alarm Inputs and Outputs.

Alarm Processing: We currently do not have a mechanism to receive alarms directly from VideoJet units. As a result, we recommend that these units be configured so that alarms trigger alarm outputs on the unit that trigger inputs on a traditional alarm system that can communicate said alarms to the Central Station receivers.

Software: The Java Runtime Environment must be installed. For Bosch/VCS ActiveX/MPEG4, ActiveX player/plug-in must be installed on workstations. Browsing to a VideoJet device in Internet Explorer should prompt the ActiveX download.

Device Address Syntax:

http://<server address or domain name>

Device Option Syntax:

<parameter>=<value>&<parameter>=<value> …

Available User Options:

<parameter>=<value>	Acceptable Values	Description
protocol=<string>	UDP or TCP	The protocol required for connection to the video server. Optional. Default is UDP.

Dedicated Micros NetVu

Video Type: DMNVU

Connection Type: IP

Access Type: Direct connect to device (URL)

Notable Features, Limitations and Recommended Usage: *(*May vary*)*

Typical Configuration: Unit at the site and accessible via IP or Modem/RAS/IP by the Central Station.

Video: Up to 16 video inputs.

Audio: Up to 2 channels with Talkback.

I/O: Alarm Inputs and Outputs. (Optional)

Storage: Long-term DVR video storage capabilities.

Format Limitations: Stepback and StepForward frame-by-frame functionality is only functional when in JFIF format.

Software/Redistribution Notes: ActiveX player/plug-in must be installed on workstations.

These files are installed by the DM COM SDK, and should be distributed with any application that will use the DMCom2Java control.

The OCX
DMCom2Java.ocx

Visual Basic 6 Runtime Files
MSVBVM60.dll
OLEAUT32.dll
OLEPRO32.dll
ASYCFILT.dll
COMCAT.dll
STDOLE2.dll

The Java Executable and its Support DLLs
DMCom2Java.exe
avcodec.dll
FFMPEGCodec.dll

The target machine must have the Sun Java Runtime Environment (JRE) 1.5 or later. The JRE can be downloaded for free from http://java.com/en/download/index.jsp.

(Taken from Dedicated Micros SDK Documentation)

Device Address Syntax:

http://<server address or domain name>

Device Option Syntax:

<parameter>=<value>&<parameter>=<value> …

Available User Options:

<parameter>=<value>	Acceptable Values	Description
camera=<int> or device_id=<int>	1-…	The camera's identifier. Required. Note: Multiple cameras can be viewed at once via a single control/connection by specifying the cameras using a ; separator, thus allowing for synchronized playback and review. Example: camera=1;3;11 Warning: PTZ commands do not function when connected to more than one camera in this fashion.

user=<string>	Any string	The username that has permission to view live video on the camera. Optional. Default: <blank>
password=<string>	Any string	The password for the user. Optional. Default: <blank>
resolution=<string>	low, medium, high	Sets the quality of the video feed. Optional. Default: HIGH
format=<string>	JFIF, MPEG4	The video format. Optional. Default: JFIF
ptz=<int>	1=True 0=False	Show PTZ and Preset command buttons. Optional. Defaults to True=1.

Direct URL Video

Video Type: URLVID

Connection Type: IP

Access Type: Direct connect to device (URL)

Notable Features, Limitations and Recommended Usage: *(*May vary*)*

Usage: This depends entirely on the URL being connected to and the video manufacturer involved. For this video type, we are essentially opening a web browser and loading the URL with no other Manitou interaction whatsoever.

Software: This will be dependant on the video manufacturer.

Device Address Syntax:

http://<complete URL to video page content>

Device Option Syntax:

No parameters are used unless specifically referred to by video manufacturer.

Available User Options:

N/A

exacqVision

Video Type: EXACQV

Connection Type: IP

Access Type: Direct connect to device (URL)

Notable Features, Limitations, and Recommended Usage:

Typical Configuration: exacqVision server accessible via IP by the Central Station.

Video: Up to 16 cameras plus IP cameras

Storage: Video storage capabilities.

Software: ActiveX player/plug-in must be installed on workstations.

Device Address Syntax:

http://<server address or domain name>

Device Option Syntax:

<parameter>=<value>&<parameter>=<value> …

Available User Options:

<parameter>=<value>	Acceptable Values	Description
cameraname=<string>		Camera name must match a camera name as configured on the DVR. Required.
user=<string>	Any string	The username that has permission to view live video on the camera. Required.
password=<string>	Any string	The password for the user. Required.
port=<int>		TCP port number used to connect to the DVR. Optional. Default = 22609

EyeRover

Video Type: EYEROV

Connection Type: IP

Access Type: Direct connect to device (URL)

Notable Features, Limitations, and Recommended Usage: *(*May vary*)*

Typical Configuration: Eyerover server accessible via IP by the Central Station.

Video: Requires specific compatible cameras.

Storage: Video storage capabilities.

Software: ActiveX player/plug-in must be installed on workstations. Browsing to an Eyerover unit in Internet Explorer should prompt the ActiveX download.

Device Address Syntax:

http://<server address or domain name>

Device Option Syntax:

<parameter>=<value>&<parameter>=<value> …

Available User Options:

<parameter>=<value>	Acceptable Values	Description
device_id=<int>	1-…	The device ID for the camera (as configured on the Eyerover server). A device_id or view_id is required.
view_id=<int>	1-…	The view ID for the camera (as configured on the Eyerover server). A device_id or view_id is required.
user=<string>	Any string	The username that has permission to view live video on the camera. Required.
password=<string>	Any string	The password for the user. Required.
compression=<string>	lan, cable, dsl, dialup	Sets the quality of the video feed. Optional.
resolution=<string>	small, medium, large, huge	Sets the size of the video feed. small = 172x120 medium = 352x240 large = 704x480 huge = 1056x720 Optional.

Fast Trace 2

Video Type: FASTT2

Connection Type: IP

Access Type: Camera (Video)

Software/Redistribution Notes: ActiveX player/plug-in must be installed on workstations.

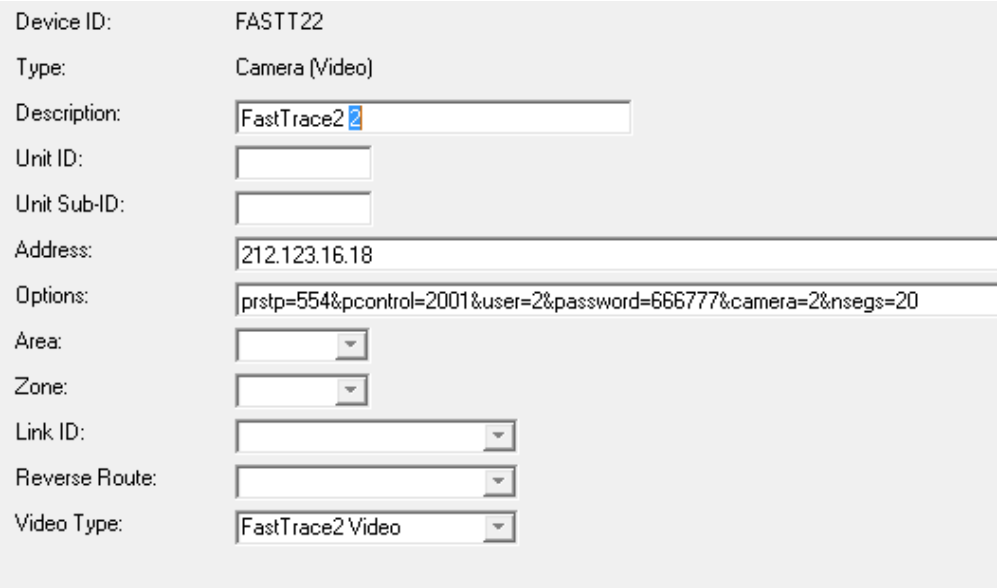
Device Address Syntax:
<server address or domain name>

Device Option Syntax:
<parameter>=<value>&<parameter>=<value> …

Available User Options:

<parameter>=<value>	**Acceptable Values**	**Description**
user=<string> **(Mandatory)**	Any string	The user name required to log into the FastTrace2 video server
password=<string> **(Mandatory)**	Any string	The password required to log into the FastTrace2 video server
camera=<int> **(Mandatory)**	1-…16	The camera number
prstp=<int> **(Mandatory)**	1-… 65535	The RTSP port of the FastTrace2 video server
pcontrol=<int> **(Mandatory)**	1-….65535	The control port of the FastTrace2 video server
nsegs=<int> **(Optional)**	Any int Default: 0	Number of rewind-seconds before the alarm date-time

MANITOU DEVICE SETTINGS



Example:

Address: 212.123.16.18

Options: prstp=554&pcontrol=2001&user=2&password=666777&camera=1&nsegs=20

BOBJECT ON MANITOU

AUDIO CONTROLS

Press to listen audio, only in live mode.

Press to talk, only in live mode.

SNAPSHOT

press to take snapshot.


show alert message with the folder where is saved the snapshots.

File saved as : Snapshot – camera – contid – datetime . jpeg

PTZ CONTROL

The control features in screen pan-tilt-zoom action. This means that when live streaming a camera with pan-tiltzoom capabilities, moving the cursor in the video window will cause to cursor to show a left, right, up, down or zoom button.
Clicking the left mouse will cause the pan-tilt-zoom action to occur. To zoom out you need to press and hold the SHIFT button while pressing the mouse button in the zoom area. The mousewheel can also be used for zooming in and out.

PLAYBACK CONTROLS

Select date and load.

- Rewind
- Stepback frame by frame, only when the system is paused
- Play
- Pause
- Stepforward frame by frame, only when the system is paused
- FastForward

Select to change the mode, between live and Playback

LOG INFORMATION

06/04/2013	16:38:48	REVERSE COMMAND - DISCONNECT 212.123.16.18 - Completed
06/04/2013	16:38:07	REVERSE COMMAND - CONNECT:LIVE 212.123.16.18 CAM:1 - Completed
06/04/2013	16:38:00	REVERSE COMMAND - AUDIO:TALK 212.123.16.18 CAM:1 - Completed
06/04/2013	16:37:58	REVERSE COMMAND - AUDIO:LISTEN 212.123.16.18 CAM:1 - Completed
06/04/2013	16:37:54	REVERSE COMMAND - CONNECT:PLAYBACK 212.123.16.18 CAM:1 - Completed
06/04/2013	16:37:46	REVERSE COMMAND - CONNECT:LIVE 212.123.16.18 CAM:1 - Completed

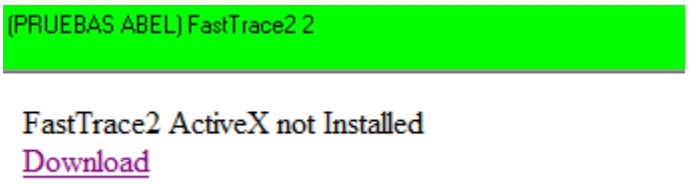
Registered in the log, the connections and disconnections, and the use of the audio controls.

RESPONSE EVENTS:

0010 reached the start of the downloaded sequence
0020 reached the end of the downloaded sequence
0030 the jump button can be changed back into a rewind button
0040 no video available for the given timestamp
0050 failed to connect
0060 failed to authenticate
0070 error live play
0080 error recorded play
0090 error opening stream
0100 error taking snapshot
0110 error audio
0120 error PTZ

ACTIVEX

If the ActiveX is not installed the BJS will display and can be downloaded automatically:



Also make sure that the option within Explorer is set to “Allow to update Status Via Scripts”

Generic Snapshot Host

Video Type: GENSNAP

Connection Type: IP

Access Type: Direct connect to device (URL)

Notable Features, Limitations and Recommended Usage: *(*May vary*)*

Typical Configuration: Image file being automatically refreshed periodically and hosted on a web server accessible via IP by the Central Station.

Video: Live video/image feeds only.

Software: No player/plug-in should be required.

Device Address Syntax:

http://<server address or domain name>/<image file>

Device Option Syntax:

<parameter>=<value>&<parameter>=<value> …

Available User Options:

<parameter>=<value>	Acceptable Values	Description
cycle=<int>	1-…	Specifies approximate time between image refresh cycles in milliseconds. Optional. Default is 500.

Video Type: HEITEL

Connection Type: IP

Access Type: Camera (Video)

Software/Redistribution Notes: ActiveX player/plug-in must be installed on workstations.

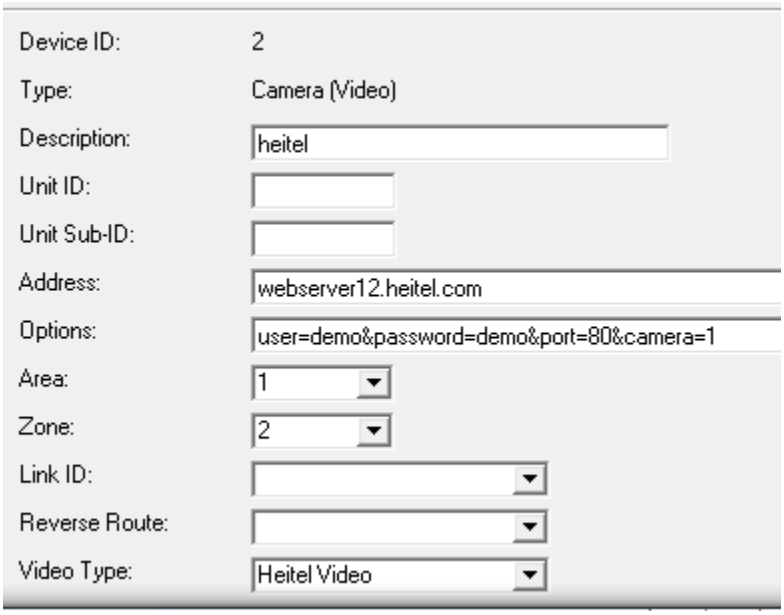
Device Address Syntax:
<server address or domain name>

Device Option Syntax:
<parameter>=<value>&<parameter>=<value> …

Available User Options:

<parameter>=<value>	**Acceptable Values**	**Description**
user=<string>	Any string	The username that has permission to view live video on the camera. Required.
password=<string>	Any string	The password for the user. Required.
camera=<int>	1-…8	Number of the active camera on DVR
port=<int>	1-… 65535	Number of the port to access to the DVR

CONFIGURATION IN MANITOU

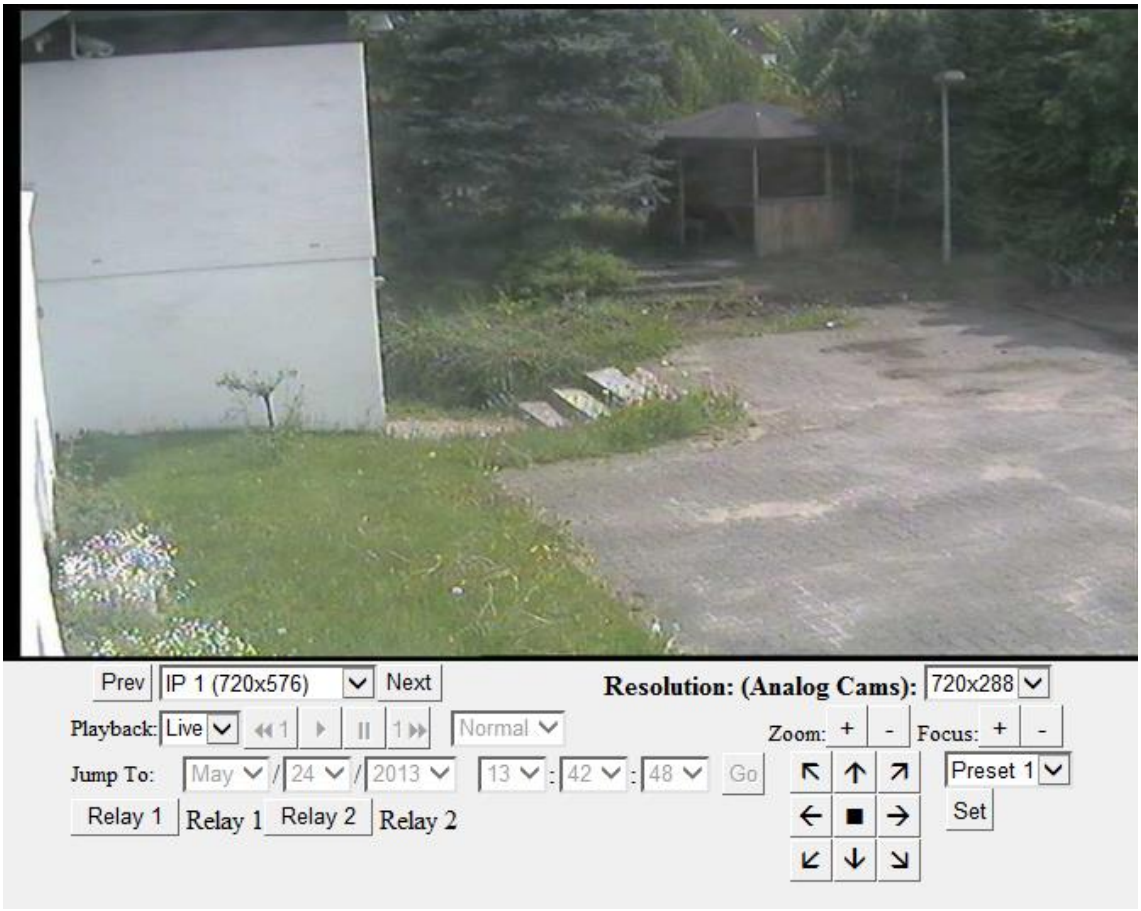


Example:

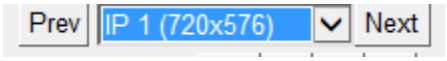
Address: webserver12.heitel.com

Options: user=demo&password=demo&port=80&camera=1

BOBJECT ON MANITOU

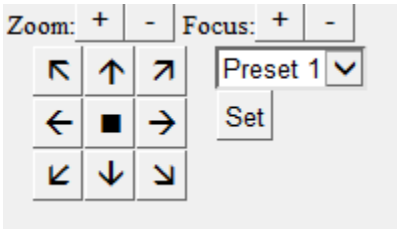


DVR Cameras



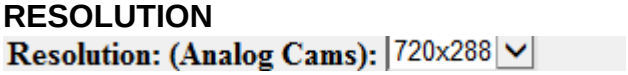
- Select with active cameras on DVR listed by name configured on DVR
- Buttons to change the next or previous camera.

PTZ CONTROL



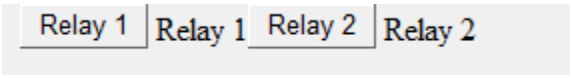
- **Zoom**
- **Focus**
- **Ptz movement**
- **Presets**

RESOLUTION



- Only change the resolution for Analog Cams

RELAYS



- Change the relays status.
- In the labels show the name configured on DVR

LOG INFORMATION

17:47:19	REVERSE COMMAND - DISCONNECT webserver12.heitel.com - Completed
17:46:04	REVERSE COMMAND - CONNECT webserver12.heitel.com CAM:7 - Completed
17:43:52	REVERSE COMMAND - CONNECT webserver12.heitel.com CAM:4 - Completed
17:43:25	REVERSE COMMAND - CONNECT webserver12.heitel.com CAM:3 - Completed
17:43:24	REVERSE COMMAND - CONNECT webserver12.heitel.com CAM:4 - Completed
17:43:18	REVERSE COMMAND - CONNECT webserver12.heitel.com CAM:5 - Completed
17:43:15	REVERSE COMMAND - CONNECT webserver12.heitel.com CAM:4 - Completed
17:43:09	REVERSE COMMAND - CONNECT webserver12.heitel.com CAM:3 - Completed
17:42:36	REVERSE COMMAND - CONNECT webserver12.heitel.com CAM:1 - Completed

The opened cameras are registered in the activity log.

Honeywell Fusion/HRDP

Video Type: HWFUS

Connection Type: IP

Access Type: Direct connect to device (URL)

Notable Features, Limitations and Recommended Usage: *(*May vary*)*

Video: Up to 16 video inputs.

Typical Configuration: Unit at site accessible via IP

I/O: Alarm Inputs and Outputs.

Alarm Processing: Honeywell Fusion/HRDP are capable of making outbound connections to a Central Station.

Storage: Long-term DVR video storage capabilities.

Software: ActiveX player/plug-in must be installed on workstations. We have created our own ActiveX player/plug-in for this implementation.

Device Address Syntax:

http://<server address or domain name>

Device Option Syntax:

<parameter>=<value>&<parameter>=<value> …

Available User Options:

<parameter>=<value>	Acceptable Values	Description
camera=<string>	Any string	The camera name identifier for the camera (as configured on the Honeywell server – case-sensitive).
user=<string>	Any string	The username that has permission to view live video on the camera. Required.
password=<string>	Any string	The password for the user. Required.
ptz=<int>	1=True 0=False	Show PTZ and Preset command buttons. Optional. Defaults to True=1.
type=<string>	FUSION = Fusion DVR HRDP = HRDP HRDPH264 = HRDP(h.264)	Sets the video type.
port=<string>	Port=2000, Port=4000, etc.	DVR Port(Required)

Honeywell Rapid Eye Multimedia

Video Type: HWREM

Connection Type: IP (Modem connectivity under development)

Access Type: Direct connect to device (URL)

Notable Features, Limitations and Recommended Usage: *(*May vary*)*

Video: Up to 16 video inputs.

Audio: Two channels (in/out).

Typical Configuration: Unit at site accessible via IP or Modem/RAS/IP by the Central Station.

I/O: Alarm Inputs and Outputs.

Alarm Processing: Honeywell Rapid Eye DVRs are capable of making outbound connections to a Central Station in response to alarm inputs or video motion, but their API doesn't provide support for this at this time. When a new API is available, we will likely implement a receiver/receiver driver that will accept inbound alarm signals from Honeywell Rapid Eye units directly and/or via a RAS server for modem connections. As a workaround, we recommend that these DVRs be configured so that alarms trigger alarm outputs on the DVR that trigger inputs on a traditional alarm system that can communicate said alarms to the Central Station receivers.

Storage: Long-term DVR video storage capabilities.

Software: ActiveX player/plug-in must be installed on workstations. We have created our own ActiveX player/plug-in for this implementation, HoneyIns.exe. Note: The HoneyIns.exe installs the Rapid Eye Multi-Media View software which requires that Adobe Reader v4.0 or better be on the system first.

Device Address Syntax:

http://<server address or domain name>

Device Option Syntax:

<parameter>=<value>&<parameter>=<value> …

Available User Options:

<parameter>=<value>	Acceptable Values	Description
camera=<int> or device_id=<int>	1-…	The device ID / Index for the camera (as configured on the Honeywell server). A device_id or device_name is required.
cameraname=<string> or device_name=<string>	Any string	The camera name identifier for the camera (as configured on the Honeywell server – case-sensitive). A device_id or device_name is required.
user=<string>	Any string	The username that has permission to view live video on the camera. Required.
password=<string>	Any string	The password for the user. Required.
ptz=<int>	1=True 0=False	Show PTZ and Preset command buttons. Optional. Defaults to True=1.
~~live=<int>~~	~~1=True (Live)~~ ~~0=False (Retrieval)~~	~~Sets the video feed to live or retrieval mode. Optional. Defaults to Live=1.~~

I-View Now

Video Type: Direct via URL

Connection Type: See “FEP – XML Receiver Driver.doc”

Access Type: Via Transmitter (through FEP)

Notable Features, Limitations and Recommended Usage: *(*May vary*)*

Typical Configuration: See “FEP – XML Receiver Driver.doc”

Storage: URLs to video are received via the XML FEP driver and stored in the Manitou database.

Software: No additional software is required.

Device Address Syntax:

No device setup is required – see “FEP – XML Receiver Driver.doc”

Device Option Syntax:

No device setup is required – see “FEP – XML Receiver Driver.doc”

Available User Options:

N/A

March Networks

Video Type: MARCHV (Legacy Series)

Connection Type: IP

Access Type: Direct connect to device (URL)

Notable Features, Limitations and Recommended Usage: *(*May vary*)*

Typical Configuration: Unit at the site and accessible via IP or Modem/RAS/IP by the Central Station.

Video: Up to 16 video inputs.

Audio: Up to 6 channels. (Optional) If video inputs are linked to audio inputs in the DVR's configuration, they will automatically be connected when the video input connection is requested without manually specifying an audio input.

I/O: Alarm Inputs and Outputs. (Optional)

Alarm Processing: March Networks DVRs are not able to make outbound connections to a Central Station when in alarm either by alarm input or video motion. As a result, we recommend that these DVRs be configured so that alarms trigger alarm outputs on the DVR that trigger inputs on a traditional alarm system that can communicate said alarms to the Central Station receivers.

Storage: Long-term DVR video storage capabilities.

Software: ActiveX player/plug-in must be installed on workstations. R5 and Legacy March Networks DVRs use different ActiveX controls and either or both can be installed on workstations. March Networks has provided SDK installers that install the appropriate ActiveX components.

DVR_SDK.exe	Installs the SDK.
DVR_SDK_Silent.exe	Installs the SDK silently, using all defaults.

Note: At this time, R5 DVRs and software have not yet been released.

Device Address Syntax:

http://<server address or domain name>

Device Option Syntax:

<parameter>=<value>&<parameter>=<value> …

Available User Options:

<parameter>=<value>	Acceptable Values	Description
camera=<int> or device_id=<int>	1-…	The camera's numeric identifier. A camera or cameraname is required.
cameraname=<string> or device_name=<string>	Any string	The camera's full name identifier. Case-sensitive, spaces are allowed. A camera or cameraname is required.
audio=<int>	1-…	The audio source's numeric identifier. Optional.
audioname=<string>	Any string	The audio source's full name identifier. Case-sensitive, spaces are allowed. Optional.
password=<string>	Any string	The DVR password. Optional, required if DVR requires it.

March Networks R5

Video Type: MARCHR5 (R5 Visual Intelligence Series)

Connection Type: IP

Access Type: Direct connect to device (URL)

Notable Features, Limitations and Recommended Usage: *(*May vary*)*

Typical Configuration: Unit at the site and accessible via IP or Modem/RAS/IP by the Central Station.

ESM Configuration: Unit (DVR) at the site and accessible via IP or Modem/RAS/IP by the Central Station in a configuration where an ESM (Enterprise Service Manager) server is used to manage the DVR. The ESM server may be located somewhere else, but must also be accessible via IP or Modem/RAS/IP by the Central Station. In this scenario, the ESM server information must be specified as an option in the device configuration as connections to both the ESM server (for authentication) and the DVR (for video/audio access) will be made.

Video: Up to 16 video inputs.

Audio: Up to 6 channels. (Optional) If video inputs are linked to audio inputs in the DVR's configuration, they will automatically be connected when the video input connection is requested without manually specifying an audio input.

I/O: Alarm Inputs and Outputs. (Optional)

Alarm Processing: March Networks DVRs are not able to make outbound connections to a Central Station when in alarm either by alarm input or video motion. As a result, we recommend that these DVRs be configured so that alarms trigger alarm outputs on the DVR that trigger inputs on a traditional alarm system that can communicate said alarms to the Central Station receivers.

Storage: Long-term DVR video storage capabilities.

Software: ActiveX player/plug-in must be installed on workstations. R5 and Legacy March Networks DVRs use different ActiveX controls and either or both can be installed on workstations. March Networks has provided SDK installers that install the appropriate ActiveX components.

DVR_SDK.exe	Installs the SDK.
DVR_SDK_Silent.exe	Installs the SDK silently, using all defaults.

Note: At this time, R5 DVRs and software have not yet been released.

Device Address Syntax:

http://<server address or domain name>

Device Option Syntax:

<parameter>=<value>&<parameter>=<value> …

Available User Options:

<parameter>=<value>	Acceptable Values	Description
camera=<int> *or* *device_id=<int>*	1-…	The camera's numeric position (port). (Used in conjunction with a cameratype.) A camera/cameratype, cameraname, or cameratag is required.
cameratype=<string>	**video.v** (Physical video input – Default value) **video.ip** (IP camera input)	The camera's type. (Used in conjunction with a camera position.) A cameratype is a combination of the March Networks: <kind>.<subkind> A camera/cameratype, cameraname, or cameratag is required. Default value is **video.v**.
cameratag=<string>	Any string Examples: video.v-13 video.ip-5	A unique camera id (tag). A cameratag is a combination of the March Networks: <kind>.<subkind>-<position> A camera/cameratype, cameraname, or cameratag is required.
cameraname=<string> *or* *device_name=<string>*	Any string	The camera's full name identifier (label). Case-sensitive, spaces are allowed. A camera/cameratype, cameraname, or cameratag is required.
audio=<int>	1-…	The audio source's numeric position (port). (Used in conjunction with an audiotype.) Optional.
audiotype=<string>	**audio.a** (Physical video	The audio source's type.

	input – Default value)	(Used in conjunction with an audio source position.) An audiotype is a combination of the March Networks: <kind>.<subkind> Optional. Default and only value is **audio.a**.
audiotag=<string>	Any string Examples: audio.a-1 audio.a-3	A unique audio source id (tag). An audiotag is a combination of the March Networks: <kind>.<subkind>-<position> Optional.
audioname=<string>	Any string	The audio source's full name identifier (label). Case-sensitive, spaces are allowed. Optional.
username=<string>	Any String	The DVR username to specify for the connection. Optional, required if DVR or ESM Server requires it.
password=<string>	Any string	The DVR password to specify for the connection. Optional, required if DVR or ESM Server requires it.
esm=<string>	Any string	The ESM (Enterprise Service Manager) server IP address or domain name. Optional, required if an ESM Server is used.
nostatusbar=<int> or <string true/false>	1=true=True 0=false=False Example: nostatusbar=true	Do not use status bar (prevents extra log data and store functionality from functioning). False, or 0, use status bar. True, or 1, do not use status bar. Defaults to 0/False.
autorec=<int>	0, 1, 2	Specifies the type of auto-recording desired. Values:

		0 = Auto-record when alarm is involved. (Default) 1 = Auto-record always, including maintenance connections. 2 = Never Auto-record.
forcelive=<int> or <string true/false>	1=true=True 0=false=False Example: forcelive=true	Force initial video playback to live mode. Values: False, or 0, initial video playback mode at event time (when available, ie: from an Alarm). True, or 1, force initial video playback mode to live, regardless of event time/alarm information. Defaults to 0/False.

Media Player Audio

Audio Type: MPAUDIO

Connection Type: See “FEP – XML Receiver Driver.doc”

Access Type: Via Transmitter (through FEP)

Notable Features, Limitations and Recommended Usage: *(*May vary*)*

Typical Configuration: See “FEP – XML Receiver Driver.doc”

Storage: Audio clips are received via the XML FEP driver and stored in the Manitou database.

Software: Windows Media Player (usually included with Windows) is required.

Valid Audio Formats: WAV, MP3, WMA

Additional Browser Security Adjustments: The Internet Options > Advanced > Security > Allow active content to run in files on My Computer may need to be allowed for this type. (Data files are temporarily stored on the client machine under a Manitou subfolder “BinFiles” to be accessed by the Media Matrix for display purposes)

Device Address Syntax:

No device setup is required – see “FEP – XML Receiver Driver.doc”

Device Option Syntax:

No device setup is required – see “FEP – XML Receiver Driver.doc”

Available User Options:

N/A

Media Player Video

Video Type: MPVIDEO

Connection Type: See “FEP – XML Receiver Driver.doc”

Access Type: Via Transmitter (through FEP)

Notable Features, Limitations and Recommended Usage: *(*May vary*)*

Typical Configuration: See “FEP – XML Receiver Driver.doc”

Storage: Video clips are received via the XML FEP driver and stored in the Manitou database.

Software: Windows Media Player (usually included with Windows) is required.

Valid Video Formats: MPG, AVI, WMV

Additional Browser Security Adjustments: The Internet Options > Advanced > Security > Allow active content to run in files on My Computer may need to be allowed for this type. (Data files are temporarily stored on the client machine under a Manitou subfolder “BinFiles” to be accessed by the Media Matrix for display purposes)

Device Address Syntax:

No device setup is required – see “FEP – XML Receiver Driver.doc”

Device Option Syntax:

No device setup is required – see “FEP – XML Receiver Driver.doc”

Available User Options:

N/A

OnSSI (Ocularis)

Video Type: ONSSI

Connection Type: IP

Access Type: Direct connect to device (URL)

Notable Features, Limitations and Recommended Usage: *(*May vary*)*

Video: Up to 16 video inputs.

Typical Configuration: Unit at site accessible via IP

I/O: Alarm Inputs and Outputs.

Alarm Processing: OnSSI is capable of making outbound connections to a Central Station.

Storage: Long-term DVR video storage capabilities.

Software: ActiveX player/plug-in must be installed on workstations. We created a wrapper against the OnSSI ActiveX control.

Device Address Syntax:

http://<server address or domain name>

Device Option Syntax:

<parameter>=<value>&<parameter>=<value> …

Available User Options:

<parameter>=<value>	Acceptable Values	Description
camera=<string>	Any string	The camera name identifier for the camera (as configured on the OnSSI server – case-sensitive).
user=<string>	Any string	The username that has permission to view live video on the camera. Required.
password=<string>	Any string	The password for the user. Required.

Pelco DX8100

Video Type: PELC8100

Connection Type: IP

Access Type: Direct connect to device (URL)

Notable Features, Limitations and Recommended Usage: *(*May vary*)*

Typical Configuration: Unit at the site and accessible via IP

Video: Up to 16 video inputs.

I/O: Alarm Inputs and Outputs. (Optional)

Storage: Long-term DVR video storage capabilities.

Software: ActiveX player/plug-in must be installed on workstations.

DX8100.exe Must use Pelco Installer

Device Address Syntax:

http://<server address or domain name>

Device Option Syntax:

<parameter>=<value>&<parameter>=<value> …

Available User Options:

<parameter>=<value>	Acceptable Values	Description
camera=<string>	Any string	The camera's full name identifier. Case-sensitive, spaces are allowed. A camera or cameraname is required.
user=<string>	Any string	The DVR username Optional, required if DVR requires it.
password=<string>	Any string	The DVR password. Optional, required if DVR requires it.
nostatusbar=<int> or <string true/false>	1=true=True 0=false=False Example: nostatusbar=true	Do not use status bar (prevents extra log data and store functionality from functioning). False, or 0, use status bar. True, or 1, do not use status bar. Defaults to 0/False.

QuickTime Video

Video Type: QTVIDEO

Connection Type: See “FEP – XML Receiver Driver.doc”

Access Type: Via Transmitter (through FEP)

Notable Features, Limitations and Recommended Usage: *(*May vary*)*

Typical Configuration: See “FEP – XML Receiver Driver.doc”

Storage: Video clips are received via the XML FEP driver and stored in the Manitou database.

Software: Apple QuickTime Player/Internet Explorer Plug-in is required.

Valid Video Formats: MOV, MP4

Additional Browser Security Adjustments: The Internet Options > Advanced > Security > Allow active content to run in files on My Computer may need to be allowed for this type. (Data files are temporarily stored on the client machine under a Manitou subfolder “BinFiles” to be accessed by the Media Matrix for display purposes)

Device Address Syntax:

No device setup is required – see “FEP – XML Receiver Driver.doc”

Device Option Syntax:

No device setup is required – see “FEP – XML Receiver Driver.doc”

Available User Options:

N/A

Redcare NGr (Next Generation)

Video Type: RCNGR

Connection Type: IP – See “FEP - Redcare Next Generation (NGr).doc”

Access Type: Via Transmitter (through FEP)

Notable Features, Limitations and Recommended Usage: *(*May vary*)*

Typical Configuration: See “FEP - Redcare Next Generation (NGr).doc”

Storage: Short-term storage of single images (sets of three, pre-event, event, and post-event images).

Software: No additional software is required.

Device Address Syntax:

No device setup is required – see “FEP - Redcare Next Generation (NGr).doc”

Device Option Syntax:

No device setup is required – see “FEP - Redcare Next Generation (NGr).doc”

Available User Options:

N/A

RSI Frontel GI

Video Type: RSIF (MPG Video Segments)
or
Video Type: RSIFI (JPG Images)

Connection Type: Dialup to an RSI Frontel GI Receiver machine, IP between this receiver and the Manitou FEP.

Access Type: Via Transmitter (through FEP)

Notable Features, Limitations and Recommended Usage: *(*May vary*)*

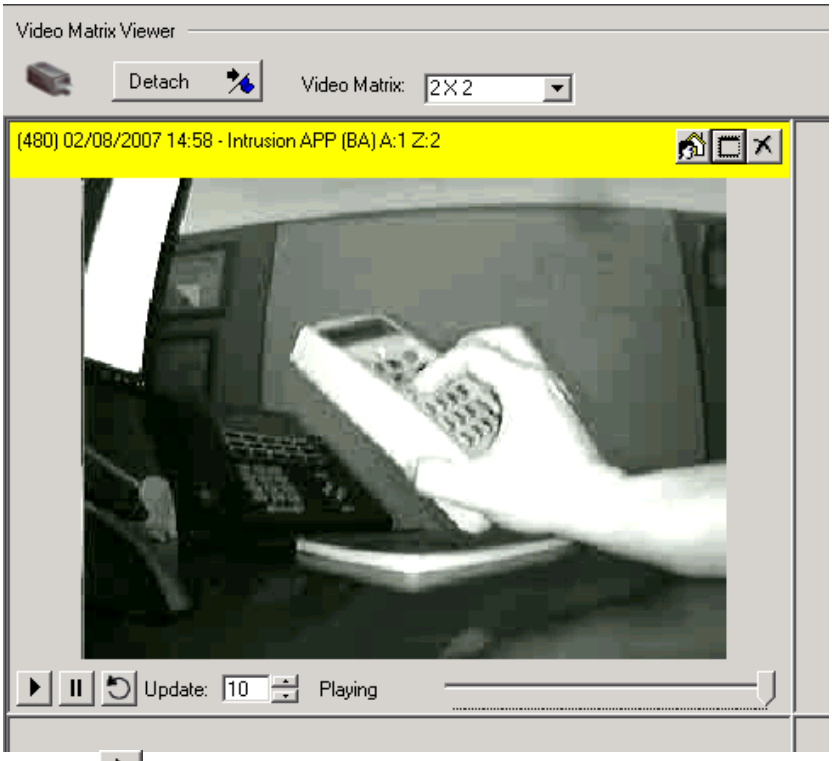
Video Capabilities:
- Event video
- Operator requested still images

Typical Configuration: See "FEP - RSI Frontel GI Receiver Driver.doc"

Storage: Signals, video and images are sent immediately. Video retrieval/viewing can begin before the complete video has been received. Both video and still images are stored within the Manitou database, accessible via Activity Log.

Software: Requires the standard Windows quartz.dll library.

User Interface:
- Still Image:
  - Still image is displayed within the media matrix. No further interaction can take place.
- Video:



- Play – Play from the current slider position
- Pause – Go to Pause/Seek mode (slider interaction also initiates Pause/Seek mode)
- Update Repeat – Commence retrieval mode again
- Update: 10 Update Rate in Seconds – While video is still being received by the FEP, Manitou can poll and retrieve the latest portions of the video clip as it comes in.
- Playing Playback Status
  - Playing – Video is currently playing.
  - Pause/Seek – The user can move the slider to a point in the video via mouse or keyboard with focus. Updates are not being received.
  - Retrieval – Updates are being received on the specified time.
  - Complete – Entire video has been retrieved by the FEP and retrieval mode has completed.

Device Address Syntax:

No device setup is required – see “FEP - RSI Frontel GI Receiver Driver.doc”

Device Option Syntax:

No device setup is required – see “FEP - RSI Frontel GI Receiver Driver.doc”

Available User Options:

N/A

Still Image

Video Type: STILLIMG

Connection Type: See “FEP – XML Receiver Driver.doc”

Access Type: Via Transmitter (through FEP)

Notable Features, Limitations and Recommended Usage: *(*May vary*)*

Typical Configuration: See “FEP – XML Receiver Driver.doc”

Storage: Images are received via the XML FEP driver and stored in the Manitou database.

Software: No additional software is required.

Valid Image Formats: JPG

Additional Browser Security Adjustments: The Internet Options > Advanced > Security > Allow active content to run in files on My Computer may need to be allowed for this type. (Data files are temporarily stored on the client machine under a Manitou subfolder “BinFiles” to be accessed by the Media Matrix for display purposes)

Device Address Syntax:

No device setup is required – see “FEP – XML Receiver Driver.doc”

Device Option Syntax:

No device setup is required – see “FEP – XML Receiver Driver.doc”

Available User Options:

N/A

SureView

Video Type: SUREVIEW

Connection Type: Transmitter Based - SureView Gateway and BoldXML FEP Driver

Access Type: Via network to SureView Server

Notable Features, Limitations and Recommended Usage: *(*May vary*)*

Typical Configuration: Install and Configure SureView Gateway. Signals are passed from SureView Gateway to a SureView BoldXML configured FEP driver.

Storage: Images are stored in SureView server and accessed via SureView web interface.

Software: ImmixRemote.exe and ImmixRemote.exe.config on each workstation.

Valid Image Formats: N/A (not stored in Manitou)

Device Address Syntax:

No device setup is required – see “FEP – XML Receiver Driver.doc”

Device Option Syntax:

No device setup is required – see “FEP – XML Receiver Driver.doc”

Transmitter Setup:

Transmitter is configured on Manitou Customer record with Transmitter ID to match SureView remote ID.

Additional Setup Notes:

User accounts for operators in Manitou and SureView must match by name and password. Manitou passes the user credentials into the ImmixRemote.exe application in order to connect to SureView and login automatically. See Bold/SureView integration documentation for more details.

Available User Options:

N/A

Surgard System 5 Visual

Video Type: STILLIMG

Connection Type: Transmitter Based – see FEP documentation for SGVisual driver.

Access Type: Via Transmitter (through FEP)

Notable Features, Limitations and Recommended Usage: *(*May vary*)*

Typical Configuration: See FEP documentation for SGVisual driver.

Storage: Images are received via the SGVisual FEP driver and stored in the Manitou database.

Software: No additional software is required.

Valid Image Formats: JPG

Additional Browser Security Adjustments: The Internet Options > Advanced > Security > Allow active content to run in files on My Computer may need to be allowed for this type. (Data files are temporarily stored on the client machine under a Manitou subfolder “BinFiles” to be accessed by the Media Matrix for display purposes)

Device Address Syntax:

No device setup is required – FEP documentation for SGVisual driver.

Device Option Syntax:

No device setup is required – FEP documentation for SGVisual driver.

Available User Options:

N/A

VideoIQ iCVR 3

Video Type: VIQICVR3

Connection Type: IP

Access Type: Direct connect to device (IP)

Notable Features, Limitations, and Recommended Usage:

Typical Configuration: VideoIQ iCVR camera accessible via IP by the Central Station.

Video: Requires VideoIQ iCVR camera.

Storage: Video storage capabilities.

Software: ActiveX player/plug-in must be installed on workstations.

Device Address Syntax: http://<server address or domain name>

Device Option Syntax: <parameter>=<value>&<parameter>=<value> …

Available User Options:

<parameter>	Required/Optional	Description
username	Required	Camera username
Password (sets to username if not included)	Optional	Camera password
metadata	Optional 0, 1 – default 1	Display motion detection boxes on video
rtspport	Optional default 554	Port video will stream over
apiport	Optional default 80	Port API calls from the ActiveX control will stream over
talkbackport	Optional default 20022	Port talkback communication will stream over
prealarm	Optional default 10	Number of seconds before the event time that will be set for playback from
postalarm	Optional default 60	Number of seconds after the event time that will be set for playback through
quality	Optional low, high – default high	Video quality

listen	Optional 0, 1 – default 1	Enable audio over live stream
tcp	Optional 0, 1 – default 0	Use TCP to connect to the camera instead of UDP

VideoIQ Rialto 4

Video Type: VIQRIALT

Connection Type: IP

Access Type: Direct connect to device (IP)

Notable Features, Limitations, and Recommended Usage:

Typical Configuration: VideoIQ Rialto device accessible via IP by the Central Station.

Video: Requires VideoIQ Rialto device.

Storage: Video storage capabilities.

Software: ActiveX player/plug-in must be installed on workstations.

Device Address Syntax: http://<server address or domain name>

Device Option Syntax: <parameter>=<value>&<parameter>=<value> …

Available User Options:

<parameter>	Required/Optional	Description
username	Required	Rialto username
camera	Required 1, 2, 3, 4	Camera ID
Password (sets to username if not included)	Optional	Camera password
metadata	Optional 0, 1 – default 1	Display motion detection boxes on video
rtspport	Optional default 554	Port video will stream over
apiport	Optional default 80	Port API calls from the ActiveX control will stream over
talkbackport	Optional default 20022	Port talkback communication will stream over

prealarm	Optional default 10	Number of seconds before the event time that will be set for playback from
postalarm	Optional default 60	Number of seconds after the event time that will be set for playback through
quality	Optional low, high – default high	Video quality
listen	Optional 0, 1 – default 1	Enable audio over live stream
tcp	Optional 0, 1 – default 0	Use TCP to connect to the camera instead of UDP

VisioTech

Video Type: VISIOTCH

Connection Type: IP

Access Type: Direct connect to device (IP)

Products Supported: All compatible IP-based Dahua and HikVision NVRs

Notable Features, Limitations and Recommended Usage: *(*May vary*)*

Typical Configuration: Unit at the site and accessible via IP by the Central Station.

Storage: Long-term DVR video storage capabilities.

Software: ActiveX player/plug-in must be installed on workstations.

Alarm Processing: Outbound device based connections can be made in response to an alarm. We currently do not have a mechanism to receive alarms directly from this video device. As a result, we recommend that these units be configured so that alarms trigger alarm outputs on the unit that triggers inputs on a traditional alarm system that can communicate said alarms to the Central Station receivers.

Device Address Syntax:

<IP>

Device Option Syntax:

<parameter>=<value>&<parameter>=<value> …

Available User Options:

<parameter>	Required/Optional		Description
camera	Required	N/A	Camera number
port	Required	N/A	Video port
user	Required	N/A	User
password	Required	N/A	Password
zero	Optional	0	1 – Enable channel ZERO
dual	Optional	0	1 – Dual screen [Live]&[Playback]
clip	Optional	1	1 – Automatic download of the recorded video based on event and pre/post seconds
pre	Optional	30	Seconds before event for video playback/download
post	Optional	30	Seconds after event for video playback/download
stream	Optional	1	1 – Main stream (High Q)
vendor	Optional	“”	Vendor override “XSecurity”, “Safire”, and so on, depending on Dahua/HikVision and user preference
autorec	Optional	0	Record live video immediately on connection
ptz	Optional	0	1 – Show PTZ buttons

Note: There are possible playback issues (playback time [event time] incorrect). Visiotech recommends to make sure that you are using a DVR user with full access. If you are having issues, manually create a "superadmin" user and try again.

Example Addresses/Options

Address: 192.168.1.1
Options:
user=admin&pasword=admin&port=8888&camera=1&dual=1&zero=0&vendor=xsecurity&stream=1&clip=0&pre=30&post=30

Our in-house HikVision unit
Address: 172.16.140.201
Options:
camera=3&user=admin&password=12345&port=8000&vendor=HikVision

Visual Tools

Video Type: VTJPG (AXIS-like Protocol – Spain)

Connection Type: IP

Access Type: Direct connect to device (URL)

Notable Features, Limitations and Recommended Usage: *(*May vary*)*

Typical Configuration: Unit at the site and accessible via IP by the Central Station.

Video: Live video/image feeds only.

Software: No player/plug-in should be required.

Device Address Syntax:

http://<server address or domain name>

Device Option Syntax:

<parameter>=<value>&<parameter>=<value> …

Available User Options:

<parameter>=<value>	Acceptable Values	Description
camera=<int>	1, 2, 3, 4 up to 16	Selects the source camera ID / index. Applies only to video servers with more than one video input. Required only for servers with more than one video input.
resolution=<string>	640x480, 640x360, 704x288, 704x240, 480x360, 384x288, 352x288, 352x240, 320x240, 240x180, 192x144, 176x144, 172x120, 160x120	Specify the resolution of the returned image feed. Optional.
compression=<int>	0 – High Quality 50 – Medium Quality 100 – Low Quality	Adjusts the compression level of the image. Higher values correspond to higher compress, i.e. lower quality and smaller image size. Optional.

cycle=<int>	1-…	Specifies approximate time between image request cycles in milliseconds. Recommended value is no less than 2000 unless you reduce the resolution and/or increase the compression. Optional. Default is 2000.

Xanboo

Video Type: XANBOO
Connection Type: IP - IFrame

Access Type: Connect to Xanboo Servers

Notable Features, Limitations and Recommended Usage: *(*May vary*)*

Typical Configuration: DVR's stored at Xanboo, Central Stations have Xanboo Account.

Video: Live video/Recorded Clip Playback

Software: No player/plug-in should be required.

Device Address Syntax:

url="https://cs.xanboo.com/sxsdk/ui/archive.do?u=" + sUserName + "&p=" + sPassword + "&cmd=list&accountId=" + sAcctID + "&qdate=" + escape(m_sDatePic) + "&qtime=" + m_sTimePic + "&tz=EST";

Device Option Syntax:

<parameter>=<value>&<parameter>=<value> …

Available User Options:

<parameter>=<value>	Acceptable Values	Description
u=<string>	username	Username associated with the Xanboo Account
p=<string>	password	Account password
accountId=<string>	Xanboo assigned Account ID	Xanboo Account ID, value is stored on Xanboo server, connects account
qdate =<date>	Date value	Auto populated value to capture clips +/- 15

		minutes of opening
qtime=<date>	Time value	Auto populated value to capture clips +/- 15 minutes of opening

Revision History:

Date	Initials	Description
March 13, 2006	MT	Created initial document for 1.4.9.
March 22, 2006	SM	Added reverse command details for AdPro
March 24, 2006	KE	Change version to 1.4.9-1, company info and format changes
March 29, 2006	MT	Added notable features, limitations and recommended usage details to various video types.
August 23, 2006	MT	Added Dedicated Micros NetVu.
September 15, 2006	MT	Changed camera option information for Dedicated Micros NetVu.
September 27, 2006	MT	Changed camera option information and software details for March Networks.
October 3, 2006	MT	Updated March Networks audio information regarding linked audio inputs.
November 3, 2006	MT	Updated AdPro options and screenshots. Updated Dedicated Micros options.
November 10, 2006	MT	Added Redcare NGr and RSI Frontel GI information.
November 17, 2006	MT	Updated the Honeywell Rapid Eye options.
November 17, 2006	MT	Updated the Honeywell Rapid Eye options.
December 5, 2006	MT	Updated the AdPro and Bosch VideoJet software information to include the Java Runtime Environment requirements.
June 19, 2007	MT	Updated all video types with Access Type information and added new XML Receiver Driver related video types.
June 20, 2007	MT	Added Web Access Considerations section.
September 23, 2007	MT	Updated March Networks device options.
May 28, 2009	RH	Added American Dynamics Intellex
May 6, 2011	LB	Added Honeywell Fusion, Honeywell HRDP, AXIS AMC, Xanboo, PelcoDX8100
June 17, 2015	MT	Updated document with latest video types.
October 22, 2015	MT	Updated document with latest video types.
October 20, 2016	TD	Updated the “Supported Video/Audio Feature Matrix” section with an imbedded PDF file (double-click to open). The reason for this is because the source file is an XLS file and we don’t want to maintain multiple “sources” of the same information.
January 24, 2017	TD	Added VideoIQ iCVR 3 and VideoIQ Rialto 4 video types.