

# Using the FLIR PTZ-35x140

# with NetDVMS

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## Introduction

The FLIR PTZ-35x140MS is a high-resolution multi-sensor camera system designed specifically for the security market for medium to long range security applications. It includes a sophisticated thermal imaging system that provides excellent night visibility and situational awareness. This model also contains a dual field-of-view thermal imaging system called Foveus, patented by FLIR, which provides a high resolution thermal image with a 5° view nested inside a wider 20° view. In addition to this thermal imaging system, is a high resolution daylight camera which provides optimal surveillance regardless of the time of day or lighting conditions.

Ocularis, when used with the NetDVMS network video recorder, allows you to switch modes of this sophisticated camera on the fly from within the Ocularis Client using the "Pelco D" protocol.

This document discusses the software configuration and use for the FLIR PTZ 35x140MS camera with NetDMVS and Ocularis. It assumes that all hardware is already configured (see the documentation included with the FLIR camera or <u>www.flir.com</u>) and the use of an Optelecom V30E analog encoder.

## **NetDVMS Configuration**

Use the following procedures to configure the FLIR PTZ-35x140MS camera in NetDVMS.

- Add the Camera to NetDVMS
- Configure the Camera Driver
- Adjust FLIR Mode Settings

#### Add a Camera to NetDVMS

Add the FLIR camera to NetDVMS as you would any other camera.

- 1. Open the NetDVMS Administrator application.
- 2. Click Add Device.

Device	n Manager	
Service Manager		Add Device
Scheduler		Edit Device
General Settings		Remove Device
Archive Setup		Settings
Import DLKs		I/O Setup
Net Matrix		Event Buttons
NetTransact		Generic Events
Ext		1/O Control

Figure 1 Adding a Device from NetDVMS Administrator

3. Enter the IP address for the camera. Click **Next**.

Device Setup Wizard	
Please specify information about the video device.	
The video device has this IP-address on the network:	192 . 168 . 11 . 22
Use DNS host names	Г
Click the 'Pot Setup' button if other than HTTP port 80 a	and FTP port 21 is used

Figure 2 Add an IP Address for the Device

4. Enter the password for administrative access to the camera as well as the driver for the corresponding encoder used. Click **Next**.

Please enter the password fo 'admin' on some devices).	r the video device's administrator	account (called	'root' or
The password for the video of	Sevice administrator account is:		

Figure 3 Enter password and select driver

5. When the camera is found, click **Next** on the following screen:

The software has found the	e following video dev	vice on the spe	offed IP-addre	099.
Video Device Type		MAC Addre	68 (S/N)	
Optelecom V	30 E	00	0047EXXX	XXX
Please enter the Device Li 'Product Registration and P	icense Key (DLK) for Retrieval of DLKs'sh	the MAC addre eet of the retail	tas. Please ref bax for more in	fer to the nformation.
Please enter the Device U Product Registration and F DLK :	cense Key (DLK) for Retrieval of DLKa' sh	the MAC addm eet of the retail	ns. Please ref box for more in	fer to the information.
Please enter the Device Li Product Registration and F DLK:	cense Key (DLK) for Retrieval of DLKs'sh	the MAC addn eet of the retail	nss. Please ref box for more in	fer to the formation.

Figure 4 Device Found

6. Enter a display name for the camera.

Device Setup Wizard		
Please enter a name that should appear for the	he new video device in the software.	
Show this name for the video device :	FUR PTZ-35x140MS	
Click the Camera Setup button to set up cam	era names and P/T/Z devices for this device	,
Camera Setup		
	Back Finish Cance	•

Figure 5 Assign a name to the device

This is the label that will appear to the user.

7. Click Finish.

Further configuration is required for this camera.

### **Configure the Camera Driver**

1. The camera now appears in the NetDVMS Device Manager. Expand and select the device and click **Edit Device**.

NetDVMS Administr	ator - Not for Resale		1	
	Device Manager			
Service Manager	- 2 FUR PTZ-35x140MS (192.168.11.22)	Add Device	Edit device settings	
Scheduler		Edt Device	Identify Video Device Device Type : Costelecom V30 E	
General Settings		Remove Device	Device Name : FLIR PTZ-35x140MS Camera Settings	
Archive Setup		Settings	Device Serial Number : Device License Key :	-
Import DLKs		I/O Setup	Fisheye License Key :	-
NetMatrix		Event Buttons	Network Settings for Video Device IP-address :	٦
NetTransact		Generic Events	192         168         11         22         Image: Use DNS host name           80         Image: Use DNS host name         Image: Use DNS host name	
Ext	x »	I/O Control	21 🔽 Default Ptp Port Root Password :	
			OK Cance	d

Figure 6 Configure Driver Settings

2. From the *Edit device settings* screen, click **Camera Settings**.

Camera Settings for FLIR PTZ-35x140M	1S				X
PTZ Camera Selection					
Some of the connected camera	s are	e Pan/Tilt/Zoo	m cameras		
PTZ type controlled through COM	41 :	None			~
PTZ type controlled through CON	12 :	None			~
Name		Number	Туре	Device Port	Port Addr.
Camera 1			Fixed	-	
Name	Nu	mber	Туре	Device Port	Port Addr.
			Fixed 💌		1
			_		
Apply				ОК	Cancel

Figure 7 Modify Driver Settings

- 3. Check the Some of the connected cameras are Pan/Till/Zoom cameras checkbox.
- 4. In the *PTZ type controlled through COM1* drop-down, select **Pelco-D**.
- 5. Click the row that says "Camera 1" to enable entry in the fields at the bottom of the pop-up.

6. fill out the fields according to the following:

Field Name	Description
Name	This is the camera label that will be displayed. You may change the name here.
Number	This is a number assigned as a shortcut to the camera. It is not currently used but a number must be entered.
Туре	Select Moveable from the drop-down menu.
Device Port	Select COM1
Port Addr	Default is '1' and this is the recommended setting.

#### 7. Click Apply.

Camera Settings for FLIR PTZ-35x140M	1S			×
PTZ Camera Selection				
Some of the connected camera	s are Pan/Tilt/	Zoom cameras		
PTZ type controlled through COM	M1 : Pelco-D			•
PTZ type controlled through COM	M2: None			•
Name	Numb	oer Type	Device Port	Port Addr.
Camera 1		11 Moveable	COM 1	1
Name Camera 1	Number 1	Type 1 Moveable 💌	Device Port	Port Addr.
Apply			ок	Cancel

Figure 8 Modify Driver Settings

- 8. Click **OK** to close this pop-up.
- 9. Click **OK** to close the *Edit Device* pop-up.
- 10. To be sure that all changes are saved, click the Exit button to avoid possible data loss.

The next step is to configure the various FLIR modes.

## **Adjust FLIR Mode Settings**

Operators using *Ocularis Client/Client Lite* may change the modes of the FLIR camera on the fly while viewing camera video. Follow these steps to configure FLIR presets to be able to allow these functions.

- 1. Reopen the NetDVMS Administrator.
- 2. The PTZ settings need to be accessed, so pause the Recording Server by clicking the **Service Manager** button and clicking **Pause**.
- 3. Once the recording server is paused, select the FLIR camera and click the Setting button.

NetDVMS Administra	ator - Not for Resale	6
Service Manager	Device Manager	Add Device
Scheduler	O como i	Edt Device
General Settings		Remove Device
Archive Setup		Settings
Import DLKs		I/O Setup
Net Matrix		Event Buttons
NetTransact		Generic Events
Ext	K	1/0 Control

Figure 9 Modify Camera Settings

- 4. The *Camera Settings for FLIR PTZ-35x140MS* screen appears. Click the **PTZ Preset Positions** button in the lower right corner.
- 5. The *PTZ Preset Positions* pop up appears. The *Preset Positions* list is prepopulated with the presets as defined by the manufacturer.

TZ View			
	Wide	Te	le
			► ▲ ▼ ↓ H → ↓ ▼ ↓ ∝ ∝ ∝
	· · · · ·		
reset Positions			
reset Positions Use preset positions from	n device		
reset Positions Use preset positions from A1. (1) Pos	n device	*	Set Position
reset Positions Use preset positions from A1. (1) Pos A2. (2) Pos A3. (3) Pos	n device	A II	Set Position
reset Positions Use preset positions from A1. (1) Pos A2. (2) Pos A3. (3) Pos A4. (4) Pos A4. (4) Pos	n device	ĨI.	Set Position Edit Name
reset Positions Use preset positions from A1. (1) Pos A2. (2) Pos A3. (3) Pos A4. (4) Pos A5. (5) Pos B1. (6) Pos	n device	- H	Set Position Edit Name Test
reset Positions Use preset positions from A1. (1) Pos A2. (2) Pos A3. (3) Pos A4. (4) Pos A5. (5) Pos B1. (6) Pos B2. (7) Pos B2. (7) Pos B3. (8) Pos	n device	* 11 -	Set Position Edit Name Test Delete
reset Positions Use preset positions from A1. (1) Pos A2. (2) Pos A3. (3) Pos A4. (4) Pos A5. (5) Pos B1. (6) Pos B2. (7) Pos B2. (7) Pos B3. (8) Pos B4. (9) Pos	n device	н Ш -	Set Position Edit Name Test Delete
reset Positions Use preset positions from A1. (1) Pos A2. (2) Pos A3. (3) Pos A4. (4) Pos A5. (5) Pos B1. (6) Pos B2. (7) Pos B3. (8) Pos B4. (9) Pos B4. (9) Pos B5. (10) Pos C1. (11) Pos	n device	A H T	Set Position Edit Name Test Delete
reset Positions Use preset positions from A1. (1) Pos A2. (2) Pos A3. (3) Pos A4. (4) Pos A5. (5) Pos B1. (6) Pos B1. (6) Pos B2. (7) Pos B3. (8) Pos B4. (9) Pos B4. (9) Pos B4. (9) Pos B5. (11) Pos C1. (11) Pos	n device	A H V	Set Position Edit Name Test Delete
reset Positions Use preset positions from A1. (1) Pos A2. (2) Pos A3. (3) Pos A4. (4) Pos A5. (5) Pos B1. (6) Pos B2. (7) Pos B3. (8) Pos B4. (9) Pos B5. (10) Pos C1. (11) Pos reset Position on Events	n device	A H V	Set Position Edit Name Test Delete
reset Positions Use preset positions from A1. (1) Pos A2. (2) Pos A3. (3) Pos A4. (4) Pos A5. (5) Pos B1. (6) Pos B2. (7) Pos B3. (8) Pos B4. (9) Pos B5. (10) Pos C1. (11) Pos reset Position on Events	n device	A H V	Set Position Edit Name Text Delete  Setup
reset Positions Use preset positions from A1. (1) Pos A2. (2) Pos A3. (3) Pos A4. (4) Pos A5. (5) Pos B1. (6) Pos B2. (7) Pos B3. (8) Pos B4. (9) Pos B5. (10) Pos C1. (11) Pos reset Position on Events atrolling	n device		Set Position Edit Name Test Delete
reset Positions Use preset positions from A1.(1) Pos A2. (2) Pos A3. (3) Pos A4. (4) Pos A5. (5) Pos B1. (6) Pos B2. (7) Pos B3. (8) Pos B2. (7) Pos B3. (8) Pos B5. (10) Pos B5. (10) Pos C1. (11) Pos reset Position on Events Tooling	n device		Set Postion Edit Name Test Delete Setup Setup

Figure 10 PTZ Preset Position Settings

In order for operators to control the various modes of this camera, presets must be configured using specific names.

6. Identify 8 presets to define. It can be any eight and for ease of configuration, we suggest using 8 contiguous presets.

FLIR_ACTIVE_DLTV
FLIR_DLTV_AUTOFOCUS
FLIR_ACTIVE_IR
FLIR_BLACK_HOT
FLIR_WHITE_HOT
FLIR_PLATEAU_VALUES
FLIR_AGC_TYPE
FLIR_IR_FFC

Table 1 FLIR Preset Names

- 7. Select the first preset to be configured, and click the Edit Name button.
- 8. In the *Preset Position* pop-up, enter a preset name from the list in Table 1.



Figure 11 Preset Position Name

- 9. Click OK.
- 10. Repeat this process for each of the modes listed in Table 1.

TZ Preset Positions for (FLIR PTZ-35x140MS) Camera 1	
PTZ View Wide	Tele
	r • • • • • • • • • • • • • • • • • • •
Class reset positions from device     Class Pos     Pos     Class Pos     Pos     Class Pos     Pos	Set Postion Edt Name Test Delete
(49) Pos *	A V
Preset Position on Events	
Goto preset on event	Setup
Patroling	Setup
	OK Cancel

Figure 12 Preset Position Settings

- 11. When done, click OK to save and close the PTZ Preset Positions pop up.
- 12. Click **OK** to close the *Camera Settings* pop up.
- 13. Click Exit to save changes, restart the Recording Server and close the NetDVMS Administrator.

The FLIR camera has now been configured in NetDVMS.

## **Assign Device Privileges**

The next step is to assign rights for this camera to each user. If using Ocularis, this is done via the Ocularis Administrator application. Refer to the Ocularis Administrator User Manual for further instructions.

If using NetDVMS directly with Ocularis Client Lite, this is done in the NetDVMS Image Server Administrator. Refer to the NetDVMS User Manual for further instructions.

In either case, be sure that the user has privileges to control the presets for this camera.

### Add the FLIR to a View

While not required, you likely want to include the newly added FLIR to one of the views available to the operator(s). If using Ocularis, views are created in the *Ocularis Administrator* application. Refer to the *Ocularis Administrator User Manual* for further instructions.

If using NetDVMS directly with Ocularis Client Lite, views are created in the Ocularis Client Lite setup mode. Refer to the Ocularis Client/Client Lite User Manual for further instructions.

## Using the FLIR

Once the FLIR has been added and configured in NetDVMS and appropriate privileges have been assigned and views created, the operator may now change the mode of the FLIR while viewing its video.

- 1. Log in to Ocularis Client/Client Lite.
- 2. Open a view that contains the FLIR camera. Or right-click to display the *Circular Control* Menu and select the FLIR from the *Select Camera* quadrant.
- 3. Position the mouse over the FLIR pane to display the Interactive Overlay Controls.



Figure 13 Interactive Overlay Controls

4. Click the *presets* control to display configured presets for this camera.



Figure 14 Select Mode from Preconfigured Presets

5. Select from the preconfigured presets to change the mode of the FLIR camera.

**Note:** The mode of the FLIR is set at the camera. Therefore, if one user changes the mode, it will be changed for all users. Also, the mode that is displayed, is the mode that the video is streamed and, therefore, the mode that the video will be recorded.

# **Pelco D Aux Command Reference**

Pelco Aux	Command	TVIS7 or SR100	NetDVMS Preset Names
Command			
Aux 1 on	FF 01 00 09 00 01 0B	Black Hot	FLIR_BLACK_HOT
Aux 1 off	FF 01 00 0B 00 01 0D	White Hot	FLIR_WHITE_HOT
Aux 2 on	FF 01 00 09 00 02 0C	Active = DLTV	FLIR_ACTIVE_DLTV
Aux 2 off	FF 01 00 0B 00 02 0E	Active = IR	FLIR_ACTIVE_IR
Aux 3 on	FF 01 00 09 00 03 0D	Toggle Plateau Values	FLIR_PLATEAU_VALUES
Aux 3 off	FF 01 00 0B 00 03 0F	Toggle AGC Type	FLIR_AGC_TYPE
Aux 4 on	FF 01 00 09 00 04 0E	DLTV Autofocus (toggle)	FLIR_DLTV_AUTOFOCUS
Aux 4 off	FF 01 00 0B 00 04 10	IR FFC	FLIR_IR_FFC

For more information, see the FLIR (<u>www.flir.com</u>) and Pelco (<u>www.pelco.com</u>) websites.

# **Contact Information**

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