

M4400 Series





# Megapixel Over Coax DVR

FLIR's M4400 Series DVR uses the latest HD-CVI technology, giving you the flexibility to upgrade your security systems to 1080P HD resolution using existing coax cabling. With support for both HD resolution MPX cameras plus standard analog cameras, the DVR is ideal for retrofit applications. MPX also facilitates advanced features previously unavailable over a coax cable including duplex transmission for PTZ control, audio transmission, and extended distance cable runs up to 2300 ft.

## **HIGH DEFINITION QUALITY**

Experience outstanding Megapixel resolution

- 1080p (1920x1080), 720p (1280x720), 960H (960x480) resolution @ real time (30/25fps)
- MPX format is compatible with HD-CVI and SD-analog
- M4400 series also supports FLIR 1080p IP cameras

## **EASY INSTALLATION**

Ideal for retrofit – upgrade to HD video over existing coax cable

- Standard BNC connection no networking complexities
- Supports both HD and SD analog simultaneously

## **SUPERIOR PERFORMANCE**

Zero latency and extended cable runs

- Smooth real-time viewing with zero video latency
- Extended cable runs of up to 2300ft (700m)
- Two-way communication over coax allows for easy connection and control
  of PTZ cameras (PTZ cameras sold separately)

# FLIR CLOUD - QUICK & SECURE REMOTE VIEWING

Remote access via iOS, Android, PC / Mac with FLIR Cloud

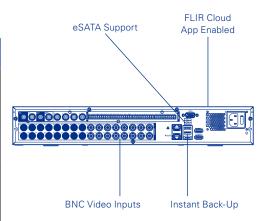
- Set up remote viewing in three easy steps: install FLIR Cloud app, scan QR code on DVR, view live video
- $\bullet$  Multisite viewing on FLIR Cloud CMS for PC / Mac
- Cloud platform will offer premium services to receive Video Surveillance as a Service (VSaaS)



# **Specifications**

DVR Specifications	M4400 Series
System	
Operating System	Linux (embedded)
Pentaplex	Simultaneous view, record, playback, backup & remote monitoring
Number of Channels	16 channel — MPX or analog cameras + 16 channel — FLIR IP cameras
Inputs/Outputs	
Video IN	16 x 1Vp-p, CVBS, 75ohms, BNC
BNC Video OUT	Yes
VGA OUT	Yes
HDMI OUT	Yes, 2 x HDMI outputs
Audio IN	4 channel, BNC for audio record 1 x MIC IN, BNC / 1 x MIC OUT, BNC for 2-way audio
Audio OUT	1 channel, BNC
USB Port	3 x USB 2.0 (2 at the back, 1 at the front)
Alarm IN	16 ch
Alarm OUT	6 ch
Video Output Resolution	1920x1080 (HDMI), 1280x1024, 1024x768
PTZ Control	Via Coax and RS485, supports Pelco D and P
Display	
Live Display	16 ch: 1, 4, 8, 9, 16
Live Display Speed	16 ch: 480 NTSC, 400 PAL
OSD	Camera title, time, video loss, camera lock, motion detection, recording
System Navigation	USB mouse, IR remote controller, front panel
Motion Area Setting	Adjustable grid (22x18)
Sensitivity	100
Firmware Upgrade	Automatic over the Internet & via USB device and network
User Authority	By user group
Time Synchronization	Auto time sync by NTP server
Recording	
Video Compression	H.264
Audio Compression	G.711
Recording Resolution*	NTSC: 1920x1080 (1080p), 1280x720 (720p), 960x480 (960H), 704x480 (D1), CIF (352x240)  PAL: 1920x1080 (1080p), 1280x720 (720p), 960x576 (960H), 704x576 (D1), CIF (352x288)
Recording Resolution*  Recording Frame Rate (FPS)	(D1), CIF (352x240) PAL: 1920x1080 (1080p), 1280x720 (720p), 960x576 (960H), 704x576 (D1), CIF (352x288)  NTSC: 480 @ 1080p / 720p
Recording Frame Rate (FPS)	(D1), CIF (352x240) PAL: 1920x1080 (1080p), 1280x720 (720p), 960x576 (960H), 704x576 (D1), CIF (352x288)
Recording Frame Rate (FPS) Recording Resolution Setting	(D1), CIF (352x240) PAL: 1920x1080 (1080p), 1280x720 (720p), 960x576 (960H), 704x576 (D1), CIF (352x288)  NTSC: 480 @ 1080p / 720p PAL: 400 @ 1080p / 720p
Recording Frame Rate (FPS)  Recording Resolution Setting Recording Quality Control	(D1), CIF (352x240) PAL: 1920x1080 (1080p), 1280x720 (720p), 960x576 (960H), 704x576 (D1), CIF (352x288)  NTSC: 480 @ 1080p / 720p PAL: 400 @ 1080p / 720p  Per camera for different resolutions 6 levels
Recording Frame Rate (FPS)  Recording Resolution Setting Recording Quality Control Recording Schedule	(D1), CIF (352x240) PAL: 1920x1080 (1080p), 1280x720 (720p), 960x576 (960H), 704x576 (D1), CIF (352x288)  NTSC: 480 @ 1080p / 720p PAL: 400 @ 1080p / 720p Per camera for different resolutions
Recording Frame Rate (FPS)  Recording Resolution Setting Recording Quality Control Recording Schedule Pre Recording	(D1), CIF (352x240) PAL: 1920x1080 (1080p), 1280x720 (720p), 960x576 (960H), 704x576 (D1), CIF (352x288)  NTSC: 480 @ 1080p / 720p PAL: 400 @ 1080p / 720p  Per camera for different resolutions 6 levels  By hour, by day, by recording mode, by motion, by channel
Recording Frame Rate (FPS)  Recording Resolution Setting Recording Quality Control Recording Schedule	(D1), CIF (352x240) PAL: 1920x1080 (1080p), 1280x720 (720p), 960x576 (960H), 704x576 (D1), CIF (352x288)  NTSC: 480 @ 1080p / 720p PAL: 400 @ 1080p / 720p Per camera for different resolutions 6 levels  By hour, by day, by recording mode, by motion, by channel Max. 30 Seconds Max. 5 Minutes
Recording Frame Rate (FPS)  Recording Resolution Setting Recording Quality Control Recording Schedule Pre Recording Post Recording	(D1), CIF (352x240) PAL: 1920x1080 (1080p), 1280x720 (720p), 960x576 (960H), 704x576 (D1), CIF (352x288)  NTSC: 480 @ 1080p / 720p PAL: 400 @ 1080p / 720p  Per camera for different resolutions 6 levels  By hour, by day, by recording mode, by motion, by channel  Max. 30 Seconds
Recording Frame Rate (FPS)  Recording Resolution Setting Recording Quality Control Recording Schedule Pre Recording Post Recording Reliability	(D1), CIF (352x240) PAL: 1920x1080 (1080p), 1280x720 (720p), 960x576 (960H), 704x576 (D1), CIF (352x288)  NTSC: 480 @ 1080p / 720p PAL: 400 @ 1080p / 720p Per camera for different resolutions 6 levels  By hour, by day, by recording mode, by motion, by channel Max. 30 Seconds Max. 5 Minutes  Watch-Dog, auto-recovery after power failure
Recording Frame Rate (FPS)  Recording Resolution Setting Recording Quality Control Recording Schedule Pre Recording Post Recording Reliability Covert Video	(D1), CIF (352x240) PAL: 1920x1080 (1080p), 1280x720 (720p), 960x576 (960H), 704x576 (D1), CIF (352x288)  NTSC: 480 @ 1080p / 720p PAL: 400 @ 1080p / 720p Per camera for different resolutions 6 levels  By hour, by day, by recording mode, by motion, by channel Max. 30 Seconds Max. 5 Minutes  Watch-Dog, auto-recovery after power failure
Recording Frame Rate (FPS)  Recording Resolution Setting Recording Quality Control Recording Schedule Pre Recording Post Recording Reliability Covert Video Playback	(D1), CIF (352x240) PAL: 1920x1080 (1080p), 1280x720 (720p), 960x576 (960H), 704x576 (D1), CIF (352x288)  NTSC: 480 @ 1080p / 720p PAL: 400 @ 1080p / 720p Per camera for different resolutions 6 levels  By hour, by day, by recording mode, by motion, by channel Max. 30 Seconds Max. 5 Minutes  Watch-Dog, auto-recovery after power failure Yes
Recording Frame Rate (FPS)  Recording Resolution Setting Recording Quality Control Recording Schedule Pre Recording Post Recording Reliability Covert Video Playback Playback Channel	(D1), CIF (352x240) PAL: 1920x1080 (1080p), 1280x720 (720p), 960x576 (960H), 704x576 (D1), CIF (352x288)  NTSC: 480 @ 1080p / 720p PAL: 400 @ 1080p / 720p Per camera for different resolutions 6 levels  By hour, by day, by recording mode, by motion, by channel Max. 30 Seconds Max. 5 Minutes  Watch-Dog, auto-recovery after power failure Yes
Recording Frame Rate (FPS)  Recording Resolution Setting Recording Quality Control Recording Schedule Pre Recording Post Recording Reliability Covert Video Playback Playback Channel Playback Speed	(D1), CIF (352x240) PAL: 1920x1080 (1080p), 1280x720 (720p), 960x576 (960H), 704x576 (D1), CIF (352x288)  NTSC: 480 @ 1080p / 720p PAL: 400 @ 1080p / 720p Per camera for different resolutions 6 levels  By hour, by day, by recording mode, by motion, by channel Max. 30 Seconds Max. 5 Minutes  Watch-Dog, auto-recovery after power failure Yes  1/4/8/16 Variable Max 4x
Recording Frame Rate (FPS)  Recording Resolution Setting Recording Quality Control Recording Schedule Pre Recording Post Recording Reliability Covert Video Playback Playback Channel Playback Speed Playback Players	(D1), CIF (352x240) PAL: 1920x1080 (1080p), 1280x720 (720p), 960x576 (960H), 704x576 (D1), CIF (352x288)  NTSC: 480 @ 1080p / 720p PAL: 400 @ 1080p / 720p Per camera for different resolutions 6 levels  By hour, by day, by recording mode, by motion, by channel Max. 30 Seconds Max. 5 Minutes  Watch-Dog, auto-recovery after power failure Yes  1 / 4 / 8 / 16  Variable Max 4x  Backup Player
Recording Frame Rate (FPS)  Recording Resolution Setting Recording Quality Control Recording Schedule Pre Recording Post Recording Reliability Covert Video Playback Playback Channel Playback Speed Playback Players Search	(D1), CIF (352x240) PAL: 1920x1080 (1080p), 1280x720 (720p), 960x576 (960H), 704x576 (D1), CIF (352x288)  NTSC: 480@1080p / 720p PAL: 400@1080p / 720p Per camera for different resolutions 6 levels  By hour, by day, by recording mode, by motion, by channel Max. 30 Seconds Max. 5 Minutes  Watch-Dog, auto-recovery after power failure Yes  1/4/8/16  Variable Max 4x  Backup Player By time & event  Up to 1,000 lines for motion detected, configuration changes,
Recording Frame Rate (FPS)  Recording Resolution Setting Recording Quality Control Recording Schedule Pre Recording Post Recording Reliability Covert Video Playback Playback Channel Playback Speed Playback Players Search Log Search Audio Play	(D1), CIF (352x240) PAL: 1920x1080 (1080p), 1280x720 (720p), 960x576 (960H), 704x576 (D1), CIF (352x288)  NTSC: 480 @ 1080p / 720p PAL: 400 @ 1080p / 720p Per camera for different resolutions 6 levels  By hour, by day, by recording mode, by motion, by channel Max. 30 Seconds Max. 5 Minutes  Watch-Dog, auto-recovery after power failure Yes  1 / 4 / 8 / 16 Variable Max 4x Backup Player By time & event  Up to 1,000 lines for motion detected, configuration changes, connects/disconnects and video loss
Recording Frame Rate (FPS)  Recording Resolution Setting Recording Quality Control Recording Schedule Pre Recording Post Recording Reliability Covert Video Playback Playback Channel Playback Speed Playback Players Search Log Search	(D1), CIF (352x240) PAL: 1920x1080 (1080p), 1280x720 (720p), 960x576 (960H), 704x576 (D1), CIF (352x288)  NTSC: 480 @ 1080p / 720p PAL: 400 @ 1080p / 720p Per camera for different resolutions 6 levels  By hour, by day, by recording mode, by motion, by channel Max. 30 Seconds Max. 5 Minutes  Watch-Dog, auto-recovery after power failure Yes  1 / 4 / 8 / 16 Variable Max 4x Backup Player By time & event  Up to 1,000 lines for motion detected, configuration changes, connects/disconnects and video loss
Recording Frame Rate (FPS)  Recording Resolution Setting Recording Quality Control Recording Schedule Pre Recording Post Recording Reliability Covert Video Playback Playback Channel Playback Speed Playback Players Search Log Search Audio Play Storage & Archive	(D1), CIF (352x240) PAL: 1920x1080 (1080p), 1280x720 (720p), 960x576 (960H), 704x576 (D1), CIF (352x288)  NTSC: 480 @ 1080p / 720p PAL: 400 @ 1080p / 720p Per camera for different resolutions 6 levels  By hour, by day, by recording mode, by motion, by channel Max. 30 Seconds Max. 5 Minutes  Watch-Dog, auto-recovery after power failure Yes  1 / 4 / 8 / 16 Variable Max 4x Backup Player By time & event  Up to 1,000 lines for motion detected, configuration changes, connects/disconnects and video loss Yes  Up to 4 HDD's SATA (internal) Up to 4 HDD's eSATA (external)
Recording Frame Rate (FPS)  Recording Resolution Setting Recording Quality Control Recording Schedule Pre Recording Post Recording Reliability Covert Video Playback Playback Channel Playback Speed Playback Players Search Log Search Audio Play Storage & Archive Storage	(D1), CIF (352x240) PAL: 1920x1080 (1080p), 1280x720 (720p), 960x576 (960H), 704x576 (D1), CIF (352x288)  NTSC: 480 @ 1080p / 720p PAL: 400 @ 1080p / 720p Per camera for different resolutions 6 levels  By hour, by day, by recording mode, by motion, by channel Max. 30 Seconds  Max. 5 Minutes  Watch-Dog, auto-recovery after power failure Yes  1 / 4 / 8 / 16 Variable Max 4x  Backup Player By time & event  Up to 1,000 lines for motion detected, configuration changes, connects/disconnects and video loss Yes  Up to 4 HDD's SATA (internal)

<sup>\* 1080</sup>p MPX cameras are required to take advantage of 1080p recording.





# **Specifications**

DVR Specifications Cont.	M4400 Series
Connectivity	
Cloud Connection	FLIR Cloud™
Supported Operating Systems	Windows™, Mac OSX
Remote Software	Client Software (PC/Mac)
Email Notification	Text with snapshot
Instant Smart Phone & Tablet Support	FLIR Cloud™ iPad®, iPhone®, Android™ apps
DDNS Free	FLIR DDNS
System Configuration	Full setup configuration over network
Ports	Programmable by User
Network Protocol	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP, IP Filter
Network Interface	10/100/1000-Base-TX, RJ-45
Network Speed Control	160MB total, 48Kb ~ 8192 Kb/sec. per camera
DVR General Information	
Power Consumption	Approx. 40 watts (No HDD Installed)
Supply Voltage	AC 100~240 V, 50/60 Hz
Unit Dimensions (W x D x H)	17.3" x 16.1" x 2.8" / 440mm x 410mm x 70mm
Unit Weight	13.2lbs / 6.0kg (without HDD)
Operating Temperature	32° ~ 104° F / 0° ~ 40° C
Humidity	10 ~ 90% RH

#### **Ordering Information**

## NTSC models

M44160:	8-41430-01021-0 (16ch, no HDD)
M44162:	8-41430-01022-7 (16ch, 2TB HDD)
M44163:	8-41430-01262-7 (16ch, 3TB HDD)
M44164:	8-41430-01028-9 (16ch, 4TB HDD)
M44166:	8-41430-01279-5 (16ch, 6TB HDD)
M44168 :	8-41430-01255-9 (16ch, 8TB HDD)
M441612:	8-41430-01284-9 (16ch, 12TB HDD)
M441616:	8-41430-01254-2 (16ch, 16TB HDD)

## **PAL** models

M44160P: 8-41430-01193-4 (16ch, no HDD) M44162P: 8-41430-01194-1 (16ch, 2TB HDD) M44163P: 8-41430-01195-8 (16ch, 3TB HDD) M44164P: 8-41430-01196-5 (16ch, 4TB HDD) M44166P: 8-41430-01197-2 (16ch, 6TB HDD) M44168P: 8-41430-01198-9 (16ch, 8TB HDD) M441612P: 8-41430-01199-6 (16ch, 12TB HDD) M44161P: 8-41430-01200-9 (16ch, 16TB HDD)

## **Package Dimensions**

20.1 x 7.1 x 18.9" / 510 x 180 x 480

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