iview360 ®

RECORDER

Safety and Installation Manual

CE

Electromagnetic Compatibility (EMC)

Warning

This is a Class A product. In a domestic environment this product may cause radio interference, in which case the user may be required to take adequate measures.

Manufacturer's Declaration Of Conformance

A Declaration of Conformity in accordance with the following EU standards has been made and is kept on file at the address shown on the last page.

> The manufacturer declares that the product supplied with this document is compliant with the provisions of the EMC Directive 89/336, the Low Voltage Directive LVD 73/23, the CE Marking Directive 93/68 EEC and all associated amendments.

Specifications subject to change without notice.

BEFORE YOU BEGIN

Read these instructions carefully before installing or operating this product.

Note: This equipment should be installed by a qualified service person and should conform to local and national regulations.

This manual provides installation and operation information. To use this document you must have the following minimum qualifications:

- a basic knowledge of CCTV systems and components

- a basic knowledge of electrical wiring and low-voltage electrical connections.

INTENDED USE

Use this product only for the purpose for which it was designed, as described in this manual and in the IVIEW360 user manual.

ENVIRONMENTAL CONDITIONS

Storage: –10° to +60°C, 14 to 140°F. The recorder should be allowed to acclimatize to its operational temperature range before power is supplied. Additionally, if the recorder is moved from a colder area to a warmer area, precautions should be taken to ensure that condensation is prevented.

Operational: 5° to 35°C, 41 to 95°F. If a constant source of air flow is supplied to the product (e.g. fan blowing cool air over the unit) then the operational temperature range is increased to 5°C to 40°C, 41°F to 104°F.

CONTENTS

1 PREFACE

1.1 ABOUT THIS MANUAL

This manual includes safety and installation instructions for installers, and should be used in conjunction with the separate user manual supplied with the camera.

This document is intended to provide accurate information. However, the information it contains is subject to change without notice. IVIEW Digital Video Solutions, in keeping pace with technological advances, is a company of product innovation. This makes it difficult to ensure that all the information provided here is entirely accurate and up-to-date. IVIEW Digital Video Solutions accepts no responsibility for any inaccuracies or omissions, and specifically disclaims any liabilities, loss, or risk, personal or otherwise, which is incurred as a consequence, directly or indirectly, of the use and/or application of any of the contents of this document.

1.2 CONVENTIONS USED IN THIS MANUAL

WARNING statements identify potential hazards and problems that can occur if the equipment is handled improperly.

WARNING:

* Improper use of this equipment can cause severe bodily injury or equipment damage.

*this symbol indicates electrical warnings and cautions

CAUTION statements identify issues that can cause problems with the normal operation of the equipment.

CAUTION:

** Ensure recorder has sufficient clearance when installed.

**this symbol indicates non-electrical warnings and cautions.

TIP statements offer useful advice about operating the equipment.

TIP:

*** This setting can be individually controlled on each of your two video outputs.

***this symbol indicates important information.

Notes: contain important information about a product or procedure.

1.3 TRADEMARKS

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2 INSTALLATION

This chapter gives you a step-by-step guide to installing the recorder.

2.1 REQUIREMENTS

Operation requirements

The recorder is designed to work in tandem with a "recorder-ready" camera.

Cable requirements

The recorder requires a power cable and a dedicated interconnection cable (which is supplied with the unit).

- The 24V AC/DC cable powers the recorder

- The 3m/9ft 10" interconnection cable is for connecting the recorder to the camera

Note: The recorder will also require an Ethernet cable if you intend to connect it to your local network to use such features as an NTP time server.

WARNING

Do not replace the interconnection cable, or use any other cable in its place: doing so could damage the recorder and/or the camera **and will invalidate the warranty**.

Power requirements

For optimal performance the recorder should be powered from an isolated 24V AC/DC source (using a cable less than 10m/33ft long), capable of providing 2 amps at 24V.

WARNING

Do not connect the recorder directly to the mains: this will damage the recorder and could result in severe injury.

2.2 BEFORE INSTALLING THE RECORDER

- Check the components supplied with your recorder against the list below. Be sure **nothing** is missing.

- Make sure you have all the tools needed for the installation (not supplied, but listed below).

2.3 RECORDER INSTALLATION CHECKLIST

Inside the box you will find:

Quantity	Item
1	Recorder
1	Plastic support bracket
3	M5 x 6mm/0.24" Pan Head Crosshead screws (for support bracket)
3	M5 shakeproof washers
1	Plastic connector cover
2	M3 x 6mm/0.24" Pan Head Crosshead screws (for the connector cover)
1	3m/9ft 10" interconnection cable
2	Ferrites
1	Installation manual

You will also need:

1 Power supply unit

1 Crosshead screwdriver

1 Cable tie

1 Ground cable and set of fixings

2.4 INSTALLING THE RECORDER

CAUTION: Recorder Orientation

The recorder must be installed vertically upright on a surface adequate to bear its full weight.

Failure to comply with these instructions will invalidate the warranty.

CAUTION: Ventilation Clearance

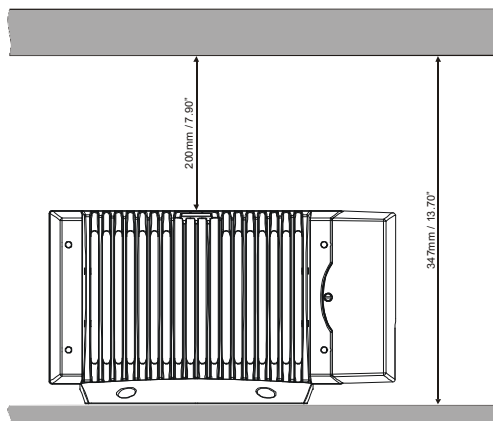Ensure recorder has sufficient clearance when installed. Refer to Fig. **2.1)**

Fig. 2.1) Ventilation clearances.
Keep 200mm / 8" clear above the recorder for ventilation purposes.

2.4.1 WIRING AND INSTALLING THE RECORDER

WARNING:

You must complete steps **1)** to **5)** of this installation before supplying power to the unit. The recorder requires a 24V AC or DC power supply – this is not the same as the camera, which requires a 12V DC supply. **Applying the wrong voltage to the recorder may damage it and will also invalidate the warranty.**

Refer to Fig. 2.2 for step **1)**

1) Attach the plastic support bracket to the body of the recorder using the three screws supplied. Use only these screws and be sure to fit all three screws**.**

CAUTION:

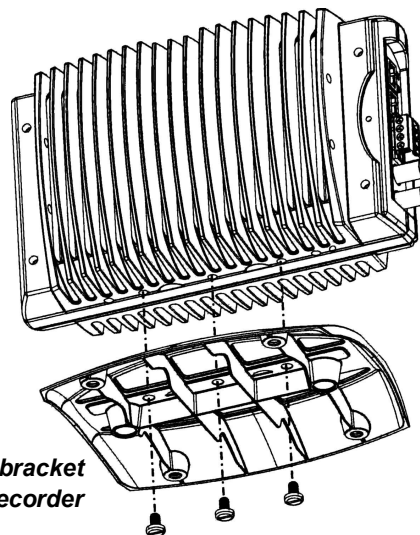Take care when handling the recorder: the device is heavy.

Fig. 2.2) Connecting the plastic support bracket to the base of the recorder

2)   Use screws or other suitable fastenings to fix the recorder in its final position through the four holes in the plastic support bracket. To prevent ground loops and resulting picture interference, we recommend that you ground the recorder to a suitable building earth point.

⚠️ **CAUTION:**

Ensure the recorder is stable in its final position, and that the unit itself stands vertically upright. **Mounting the device in any other way will invalidate the warranty.**

3)   You must fit a safety wire or cable tie (not supplied) or fix the device physically in some way. You can do this by looping the wire through an attachment point in the ceiling and through the hole provided on the body of the recorder, to the right of the connector panel.

⚠️ **CAUTION:**

The recorder must be securely fixed: failure to do so will invalidate the warranty.
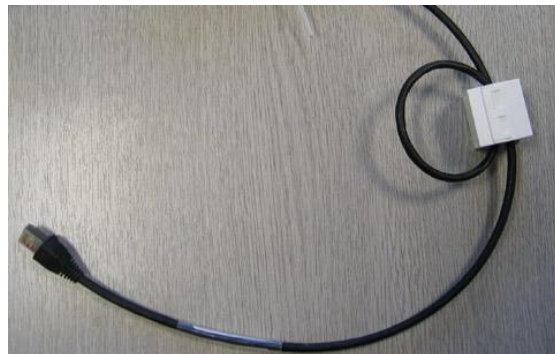
Fig. 2.3)
Connection panel
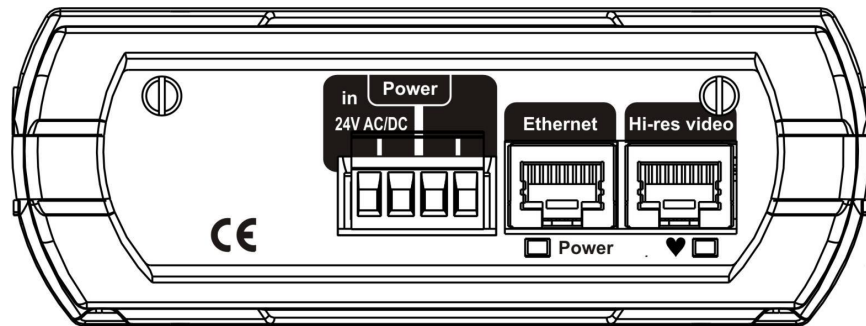
4)   Connect the recorder to the camera using the cable supplied. Be sure to connect the cable to the port marked **Hi-res video** (see Fig. **2.3)**). Clip one of the ferrites around the cable as shown below, leaving enough room between the ferrite and the end of the cable to allow the end of the cable to fit inside the connector cover (fitted below). 30-50cm (12"-20") from the end of the cable should be sufficient. The looped part should have a diameter of at least 4cm / 2".

⚠️ **CAUTION:**

Do not use any other cable than the one supplied; doing so will damage the recorder **and will also invalidate the warranty**.

5)   If you wish, connect the recorder to your network using an Ethernet cable connected to the Ethernet port (Fig. **2.3)**). Clip the remaining ferrite around the Ethernet cable as shown in the step above.

6)   Connect the power cable to the recorder – **remember that it requires 24V AC/DC, 2 Amps.**

7) Turn on the power supply to the recorder, and check the LED display. The Power LED should light up immediately.

8) After an interval of approximately one minute, when the recorder has successfully started up and completed its self-test, the second LED (marked with a heart symbol) will begin to flash. This shows that the recorder is working properly. If this LED does not light up, or remains permanently on or off, there is a problem with the recorder.

9) Once the Power LED is lit, and the 'heartbeat' LED is pulsing, fit the connector cover using the two screws supplied (see Fig. **2.4**)). Installation is complete.
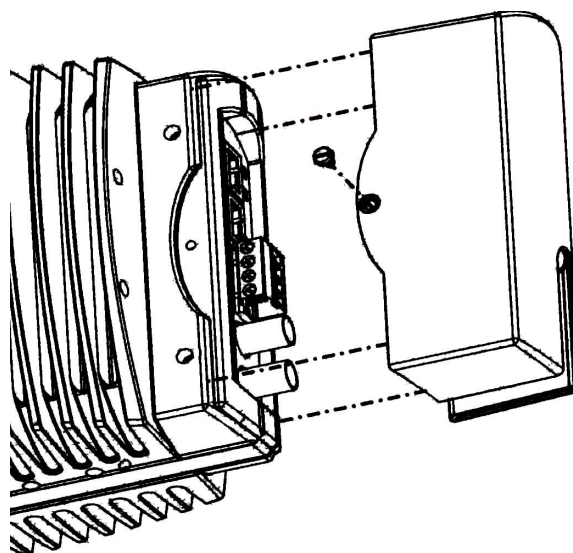

Fig. 2.4) Fitting the connector cover

2.5 DISCONNECTING THE RECORDER

You **must** shut down the recorder if you need to disconnect it or move it to a new location. Doing this will ensure that the drive is not damaged during the move, and no data is lost. Take care not to shut down the recorder by accident – nothing will be recorded while the disk is shut down.

To **shut down** the recorder:

1) Enter the menu system using the MENU key.

2) In the main menu, use ▲▼ to go to `Recorder` and then press ▶ to go to the next screen.

3) In the `Recorder` menu, use ▲▼ to go to `Advanced` and then press ▶ to go to the next screen.

4) In the `Recorder Advanced` menu, use ▲▼ to go to `Disk Operations` and then press ▶ to go to the next screen.

5) Use ▲▼ to go to `Shut Down Recorder` and then press ▶ to go to the next screen.

6) A message appears saying `Recording will be disabled until the recorder is reset. Are you sure?`

7) The default response is `No`: use ▼ to choose `Yes`, then press ENTER to confirm. The message `Recorder disabled` appears on screen, followed by `Recorder Disconnected`. At the top right you will then see the message `Shutting off the recorder` followed by `You can now turn off your recorder`. At this point you can now remove power from the recorder and disconnect it from the camera.

2.6 CONFIGURING THE RECORDER

To configure the recorder for continuous, event, or scheduled recording please refer to the camera manual (section **6.4**).
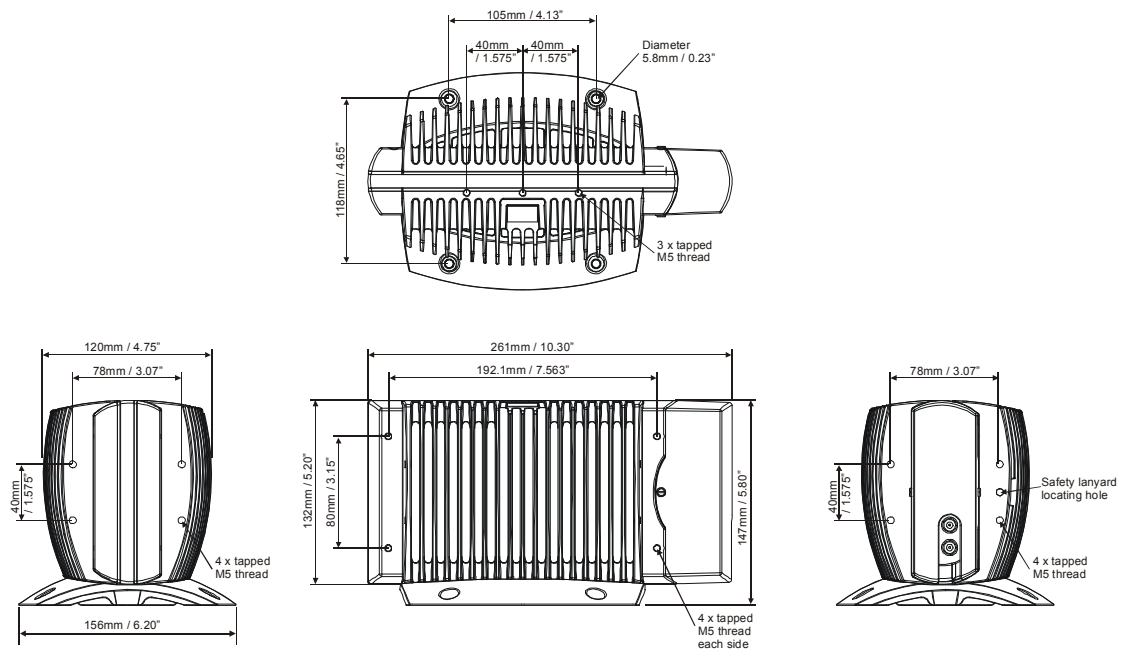
2.7 VERSIONS

To check version numbers for the recorder, please refer to the camera manual (section **6.5.4**).

3 RECORDER SPECIFICATION

Features	
Retrospective Pan and Tilt	Yes – see a full 360° after the fact
Retrospective Optical Equivalent Zoom	Yes – approx. 4x zoom after the fact
Retrospective VMD	Yes – carry out motion detection and tracking after the fact
Retrospective Scene Analysis	Yes – left luggage, object removal and scene change
Playback	Yes – play forwards, backwards, up to 32x
Single Frame Stepping	Yes – forwards and backwards
Graphical Timeline Display	Yes
Time and Date Searching	Yes
Event Searching	Yes
Event Locking	Yes – protect user definable sections and/or events from erasure
Motion Detection / Tracking	Yes (accessed via camera)
Scene Analysis	Yes – left luggage, object removal and scene change
Password Protection	Yes
Recording	
Resolution	3 Megapixel
Storage capacity	400GB continuous rated Hard Disc Drive ***Event-based:*** up to several months ***Continuous:*** up to several weeks Dependent on lighting conditions, frame rate and quality (user selectable) *Example:* ~5 days from continuous recording (24/7), 4 fps, highest quality, with 300 Lux lighting conditions
Continuous Recording	Yes
Event Based Recording	Yes
Scheduled Recording	Yes
Simultaneous Recording and Playback (Duplex)	Yes

Auto Record on Power Up	Yes
Recording Speeds	1, 2 or 4 frames per second
Recording Failure Detection	Yes – on screen and/or via alarm output
Recording Tamper Detection	Yes – 384 bit hash proprietary authentication signature
Record Pre- / Post-Alarm	Yes – up to 30 seconds
Video	
Video Compression	Proprietary, user selectable
Video Format	PAL or NTSC (via camera)
Mono / Colour	Colour and B&W Night Mode (via camera)
I/O	
Power Source Rating	24V AC/DC +/- 10%, 2 Amps
Power Consumption	30W
Control Protocol	**RS485**: Pelco-D, Vista PD; **RS232**: Bosch Autodome; all auto-sensing; via camera
Alarm Inputs	4 N/O or N/C (via camera)
Alarm Output	1 N/O or N/C (via camera)
Software Upgrade	Upgrade enabled via LAN (10/100BaseT)
Time/Date Generator	Yes – including NTP time support; synchronised with camera
Mechanical	
Weight	3.5 kg, 7lb 12oz
Size	L x H x W: 261 x 147 x 156mm; 10.28" x 5.79" x 6.14"
Operating Temperature Range	5 to 35°C, 41 to 95°F 5 to 40°C, 41 to 122°F with forced air flow (e.g. external fan)
Storage Temperature Range	-10 to 60°C, 14 to 140°F
Mounting	Upright; within 3 metres / 10ft of the camera
Camera Input	1 360° camera per recorder
Certifications	CE, EMC / FCC Class A

Dimensions

105mm / 4.13"
40mm / 1.575"
40mm / 1.575"
Diameter 5.8mm / 0.23"
118mm / 4.65"
3 x tapped M5 thread

120mm / 4.75"
78mm / 3.07"
40mm / 1.575"
4 x tapped M5 thread
156mm / 6.20"

261mm / 10.30"
192.1mm / 7.563"
132mm / 5.20"
80mm / 3.15"
147mm / 5.80"
4 x tapped M5 thread each side

78mm / 3.07"
40mm / 1.575"
Safety lanyard locating hole
4 x tapped M5 thread

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For more information on the IVIEW Complete Video Surveillance System, visit:

www.iviewsolutions.com