



Extreme CCTV®
SURVEILLANCE SYSTEMS

Precision Engineered Opto-Electronics™

INSTALLATION INSTRUCTIONS

ZX20/22
Ballistic Camera



www.ExtremeCCTV.com

Toll free: 1-888-409-2288
MAN-ZX20-22-00



IMPORTANT

For best results, please read this Instruction Booklet prior to installing the **ZX20/22** camera.



WARNING !

CSA Certified / UL Listed CLASS 2 power adaptors must be used in order to comply with electrical safety standards.



EU Directives covered by this declaration:

72/9/EC Low Voltage Directives

89/336/EEC Electromagnetic Compatibility Directive

This installation should be made by a qualified service person and conform to all local codes. **EXTREME CCTV™** will not be responsible for injuries or damages resulting from the improper installation or use of any camera sold by **EXTREME CCTV™**, their agents, distributors or dealers.

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DESCRIPTION

The **ZX20/22** Bullet-proof CCTV surveillance is essential as part of comprehensive measures for high-security applications. Ballistic design enables CCTV equipment to survive hostile gunfire attacks while upholding video vigilance. The design of such equipment must neutralize the extreme impact, momentum and shock generated by bullets while protecting the camera's functional integrity.

Integral to the ZX20/22 design is a double-walled chamber body made of cold drawn, high strength steel. The first layer absorbs the initial impact of any incoming projectile, while the second layer flexes to neutralize the remaining forces. For effective frontal protection, a four-layered, 1.25" ballistic insert ensures bullet-proof resiliency while maintaining high optical clarity and IR capability. The high-resolution LXR sensor delivers exceptional performance in the near infrared spectrum for effective Night Vision.

With a housing designed to UL752 Level 6 (Ballistic), the ZX20/22 is the ideal surveillance solution for extreme environments at risk of hostile gunfire.

Contact Extreme CCTV® for information.

- sales@ExtremeCCTV.com
- Tel: 1-888-409-2288 (Toll free NA)

See the Light. Get the Picture.™

UNPACKING

Care should be taken when unpacking. Check the parts list and confirm all items have been located. Inspect the equipment thoroughly to ensure nothing was damaged in transit.

Contact Extreme CCTV® if a problem is noted.

- quality@ExtremeCCTV.com
- Tel: 1-604-420-7711 or

see the rear of the booklet for contact numbers.

PARTS LIST (items supplied with unit)

- ZX20/22 camera assembly
- Sunshield
- Installation Instructions
- Strap wrench

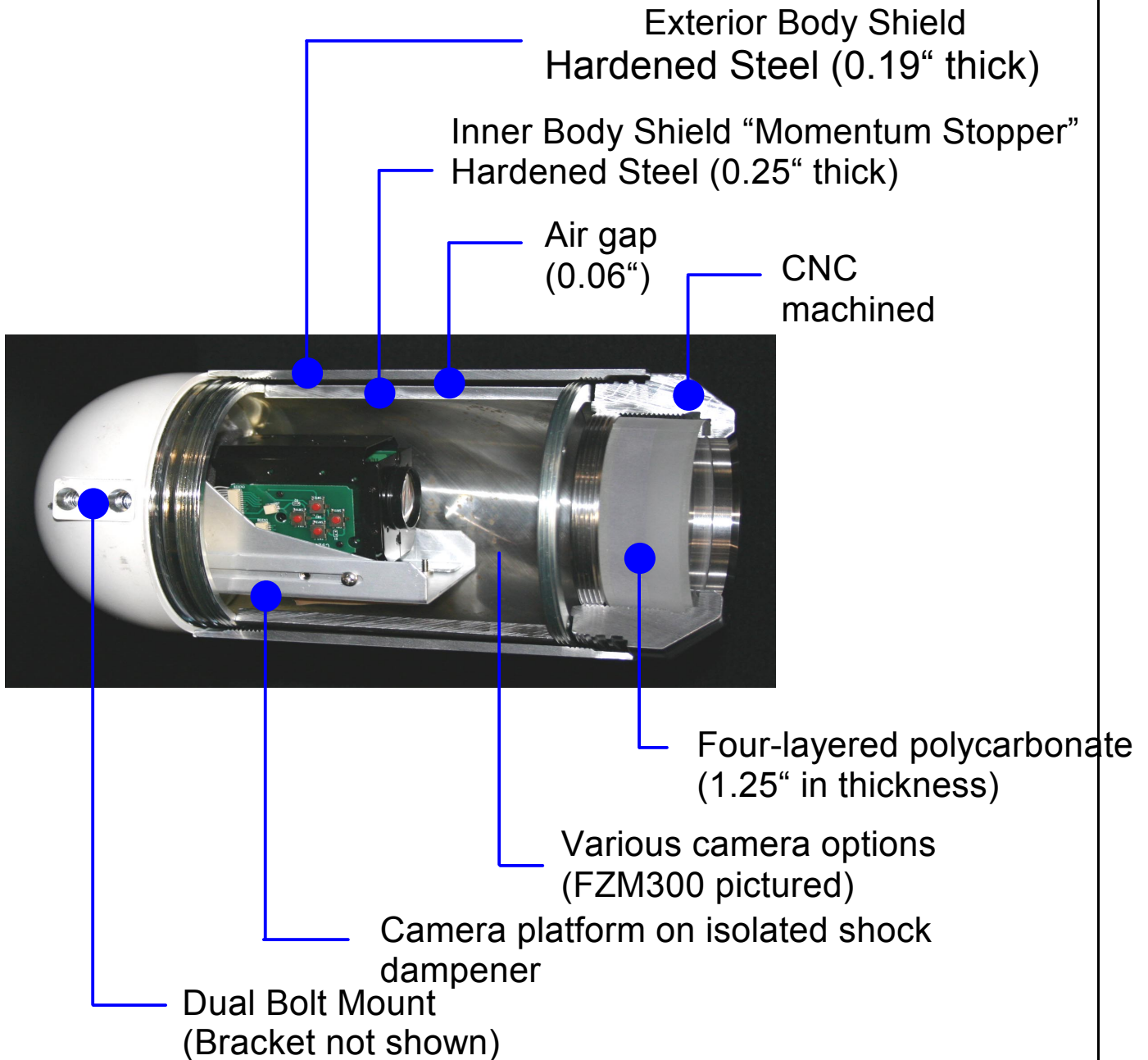
ITEMS REQUIRED FOR INSTALLATION

(not supplied with unit)

- Phillips screwdriver
- Hardware for camera mounting (bolts, etc.)

MECHANICAL SPECIFICATIONS

(See Section 5 - General Specifications, for additional information)

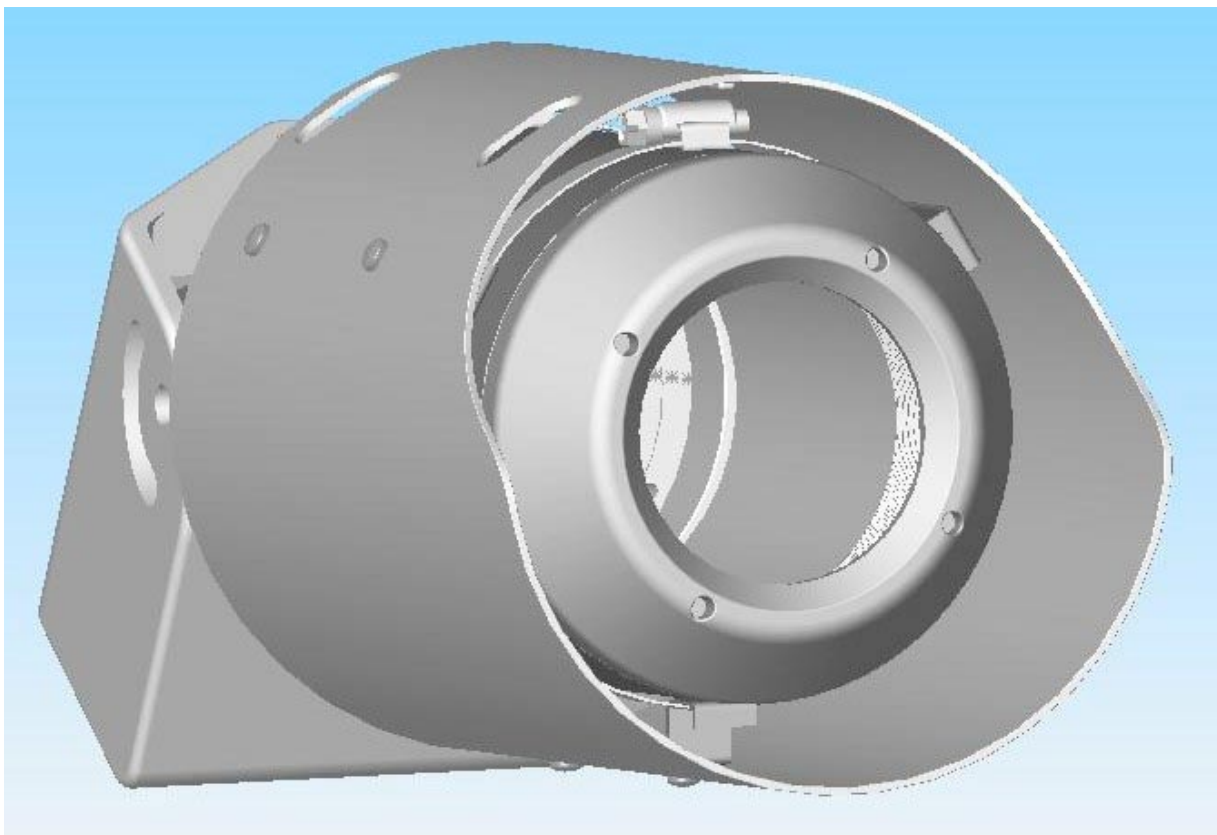


SUNSHIELD INSTALLATION

The following steps show the installer how to install the sunshield.

Step1 - Install the supplied C-Clamps to the inner brackets of the sunshield, without tightening them.

Step2 – Slide the sunshield over the housing and tighten the clamps.



INITIAL PREPARATIONS

- Determine the operating voltage at the installation site.
- All cameras have been tested prior to shipment. After re-wiring it is advisable to check the camera's operation before installation.

Select a suitable location that is protected from accidental damage, tampering, and environmental conditions exceeding the camera's specifications.

Caution: The selected mounting location should not place the camera in a situation where its environmental specifications could be exceeded. Ensure the selected location is protected from falling objects, accidental contact with moving objects, and unintentional interference from personnel. Follow all applicable building codes.



The following installation guidelines must be followed:

- Locate the camera such that it cannot be easily interfered with, either intentionally or accidentally.
- Select a mounting surface capable of supporting the combined weight of the camera and mounting hardware under all expected conditions of vibration and temperature.
- Secure all cabling.

GUIDELINES

Three basic requirements must be met before the ZX20/22 can be installed.

1. Voltage Setting
2. Camera Wiring & Settings

Sections 1 to 2 will guide the installer through these settings and adjustments.

1. VOLTAGE SETTING

The camera unit is pre-connected with an electrically isolated power board for 24V ac or 12V dc operation with no wiring change or wiring polarity. See diagram below for wiring details.

Note: Input voltage is 10.5VDC to 40VDC for DC input. The AC input range is 12VAC to 28VAC.

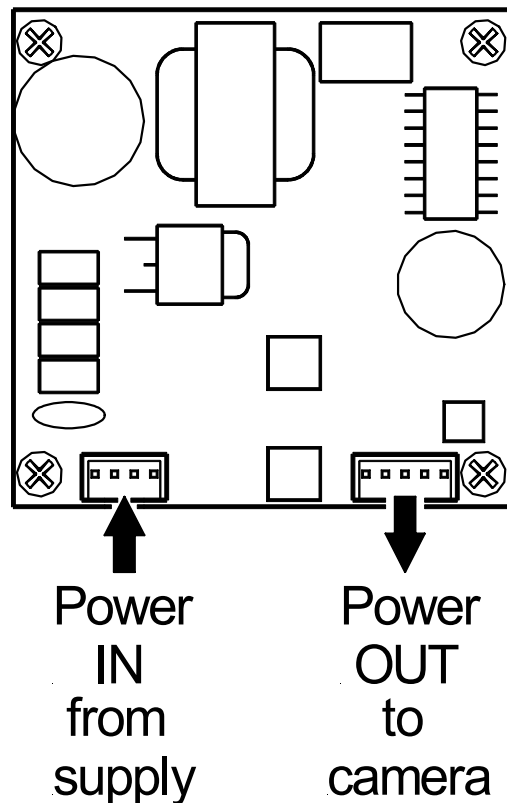


FIGURE 1 – 1
12VDC or 24VAC
Electrically Isolated Board

2. Lens SETTINGS

The following steps show the installer how to access the camera board and the camera lens.

- Step 2.1 - Remove the two set screws from the main enclosure, turn the rear housing with supplied strap wrench. See **Figure 2-1** on page 9.
- Step 2.2 - Carefully slide out the rear housing from the main enclosure. Make sure the gasket remains with the rear section.
See **Figure 2-2** on page 10.
- Step 2.3 - Make any necessary adjustments as per **Figure 2-3, Figure 2-4** on page 11, 12.
- Step 2.4 - Carefully slide the rear section into the main enclosure and tighten the set screws.



***FIGURE 2 – 1
Rear Housing Removal***



FIGURE 2 – 2
Rear Housing Removal
From Main Enclosure



FIGURE 2 – 3
Housing Separation for Camera, Lens and
Voltage Regulator Board Access

Proceed to Figure 2-4 for Lens Adjustments.

ALC Mode Select	ALC Adjustment
Metering to the “peak” light intensity of the image	Turn towards “P”
“Average” metering over the image	Turn towards “A”

Brightness	LEVEL Adjustment
For a brighter picture	Turn towards “H”
For a darker picture	Turn towards “L”

FIGURE 2 – 4
Lens Adjustment, ALC and Level

3. TROUBLESHOOTING GUIDE

<i>PROBLEM</i>	<i>POSSIBLE CAUSE</i>	<i>LIKELY SOLUTION</i>
No Video	1. <u>Power Supply:</u> -Connections.... -Voltage Range...	Check input power connections at the cable leads Check for loose wires. If connected to DC, check voltage input range of 10.5 - 40 V. If connected to AC, check input voltage range of 12 – 28 V. Measure the voltage at the Input terminal block.

<p>No Video (cont'd.)</p>	<p>2. <u>Video Connections</u></p>	<p>Determine if wiring polarity at "Video Connector" terminal block is correct. Check BNC connector.</p> <p>If still no video, connect the camera directly to the monitor. Check the video signal. If okay, the problem is with the interconnections. If still no video, contact Extreme CCTV® (see back cover for contact details).</p>
<hr/> <p>Poor Picture Quality</p> <p>Snowy Image</p>	<hr/> <p>Poor Video Signal</p>	<hr/> <p>Ensure video cable is correctly matched and terminated with 75 ohms at each end. Make sure video cables are similar types.</p>

Poor Picture Quality		
Dim Image	Iris closed	Increase iris level on lens
Snowy Image (cont'd.)	Noisy Power Supply	Check connections. Relocate or replace power supply.
Horizontal Scan Lines, Rolling Up or Down	Ground Looping on video cable	Check the coax cable shield is not touching ground, e.g. at couplings. An electrically isolated circuit board or isolation transformer may be required.
	24V ac operation	Line Lock adjustment required.
Negative, scrambled, or faded image	Low voltage	Check voltage at input power cable. Must be >10.5V dc or >12V ac.

4. GENERAL SPECIFICATIONS

Input Voltage: 10.5-40 VDC
12-28 VAC
(60Hz), 9W

Enclosure (housing):
1026 Cold Drawn High
Strength Steel

Ballistic Insert: Four-layered polycarbonate
1.25" in thickness

Viewing Window: Polycarbonate

Dimensions:
Inner Diameter 4" (102 mm)
Inner Length 5.9" (150 mm)
Outer Diameter 5" (127 mm)
Outer Length 10.9" (277 mm)

Weight: 24.6 lbs (11.2 kg)

Subject To Change Without Notice.



Extreme CCTV®

SURVEILLANCE SYSTEMS

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