



# Extreme CCTV®

## SURVEILLANCE SYSTEMS

Precision Engineered Opto-Electronics™

### INSTALLATION INSTRUCTIONS

## EX26 Series



[www.ExtremeCCTV.com](http://www.ExtremeCCTV.com)

Toll free: 1-888-409-2288  
MAN-26-03



## IMPORTANT

For best results, please read this Instruction Booklet prior to installing the **EX26** Series Camera.

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## WARNING !

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

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**Extreme CCTV®**  
SURVEILLANCE SYSTEMS

Made in Canada

**12 Vdc, 9W(max)**

**24 Vac, 60 Hz, 9 W(max)**



C US  
189936

Certified to:

UL 50 / UL 2044

CSA C22.2 No. 1-M94

CSA Type 4X / NEMA 4X

NEC Class 2 Limited Power Circuit See Installation

Instructions For Proper Connections

CSA C22.2 No. 0-M1991

CSA C22.2 No. 94.M91

CSA C22.2 No. 94-M91



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 ***EX26 Series*** of “plug and play” Cameras are extremely rugged and have been engineered specifically for day and night surveillance in all-weather conditions. Monochrome and color models are available in medium and high resolution versions.

A voltage regulator circuit allows for *12V dc* or *24V ac* operation, and a range in between, also providing protection from voltage surge, transient spikes, and reverse voltage.

The ***EX26 Series*** cameras are available in several models to meet individual requirements or specific needs.

Contact Extreme CCTV® for information.

- [sales@ExtremeCCTV.com](mailto: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](mailto:quality@ExtremeCCTV.com)
- Tel: 1-604-420-7711 or

see the rear of the booklet for contact numbers.

## **PARTS LIST** (items supplied with unit)

- *EX26* Camera assembly
- Installation Instructions
- “U” shaped Mounting Bracket

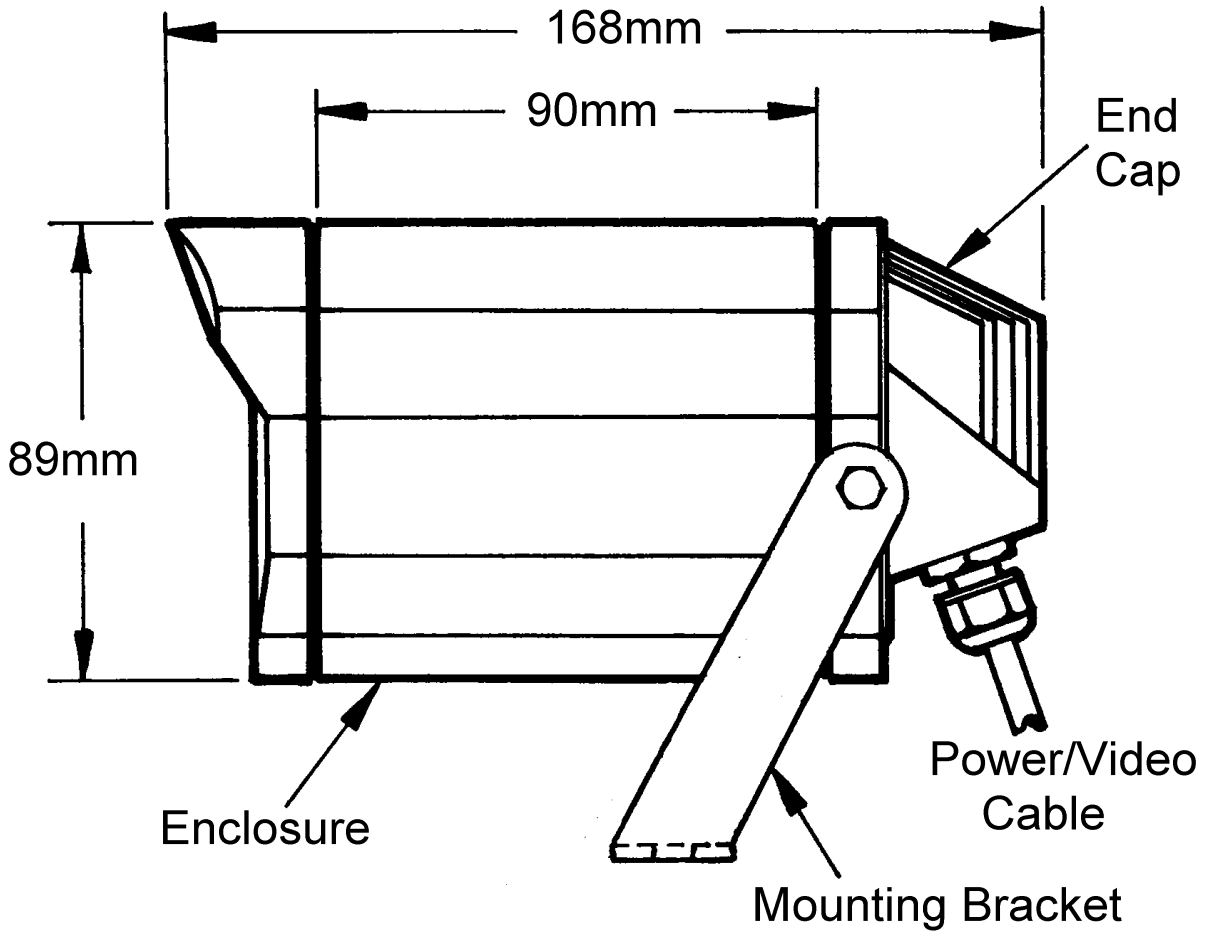
## **ITEMS REQUIRED FOR INSTALLATION**

(not supplied with unit)

- Phillips screwdriver
- 3mm Allan key
- Optional heavy duty “L” mounting bracket or die-cast aluminum mounting bracket (contact Extreme CCTV for details and prices)
- Hardware for camera mounting (bolts, etc.)

# EX26 MECHANICAL SPECIFICATIONS

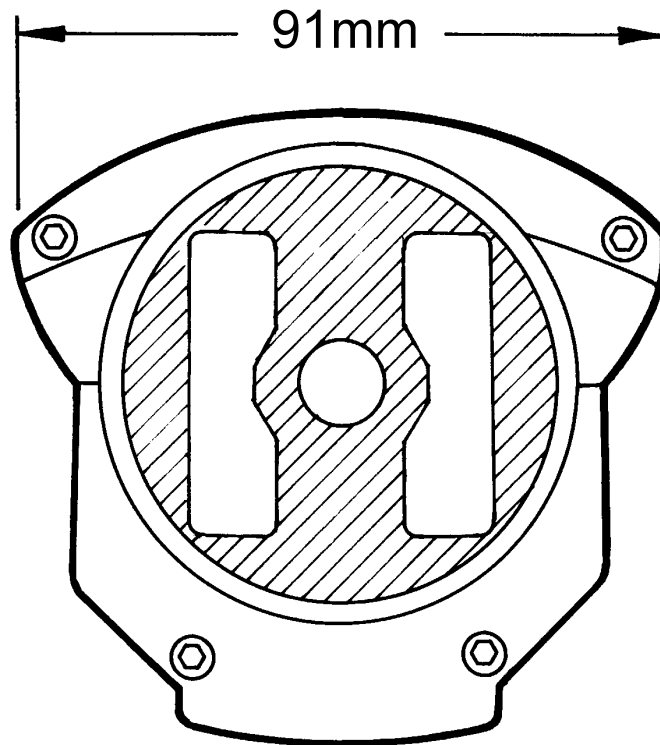
( See Section 5 - General Specifications, for additional information )



**Side View**

## **EX26 MECHANICAL SPECIFICATIONS**

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



**Front View**  
**(N versions Shown in above)**

## INITIAL PREPARATIONS

- Determine the operating voltage at the installation site. The camera has been pre-wired at the factory for 12V dc or 24V ac operation.
- All cameras have been tested prior to shipment. After the wiring has been reconnected, 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.
- Installations on drywall must use a 1/4" bolt and drywall butterfly type anchor or superior connection.

## **GUIDELINES**

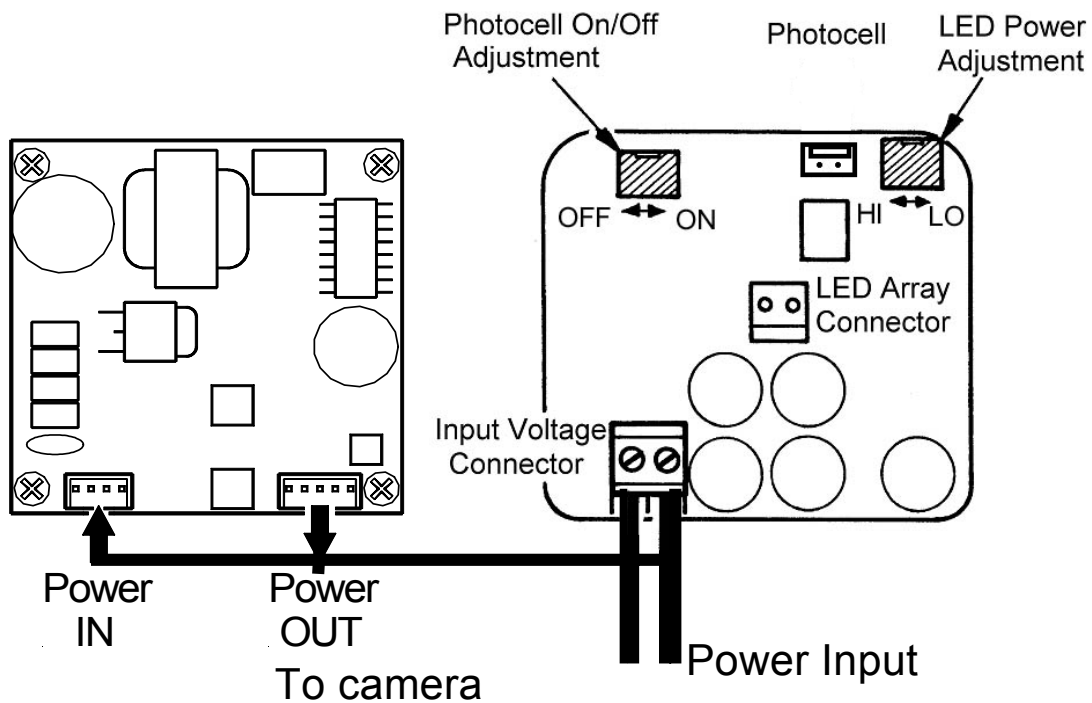
Basic requirements must be met before the *EX26* can be installed.

1. Voltage Setting
2. Camera / LED Array Adjustments

Following Section will guide the installer through these settings and adjustments.

# 1. VOLTAGE SETTING

The camera unit is pre-connected with electrically isolated power boards for 24V ac or 12V dc operation with no wiring change or wiring polarity. Only the LED and photocell setting can be adjusted if required. **See Figure 1-1** for wiring details.



**FIGURE 1 – 1**  
**Circuit Board Wiring**

## 2. ADJUSTMENTS - CAMERA / LED ARRAY,

For optimum picture quality the camera lens must be as close as possible to the inside face of the viewing window, without touching. However, the foam ring around the lens should be adjusted to seal against the inside face, minimizing any side light interference, but without obstructing the field of view.

The lens clearance adjustment can be achieved via the side screws on the camera bracket.

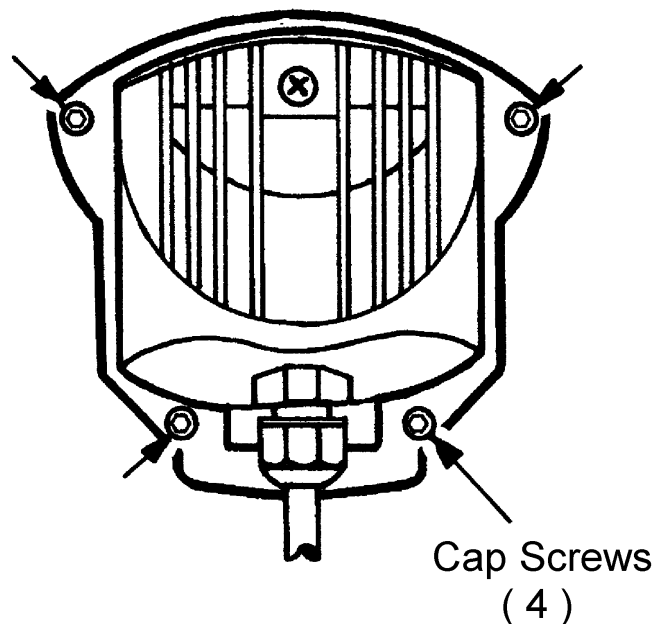
See **Figure 2-3** on page 11.

This section explains to the installer how to adjust the LEDs for brightness and beam spread.

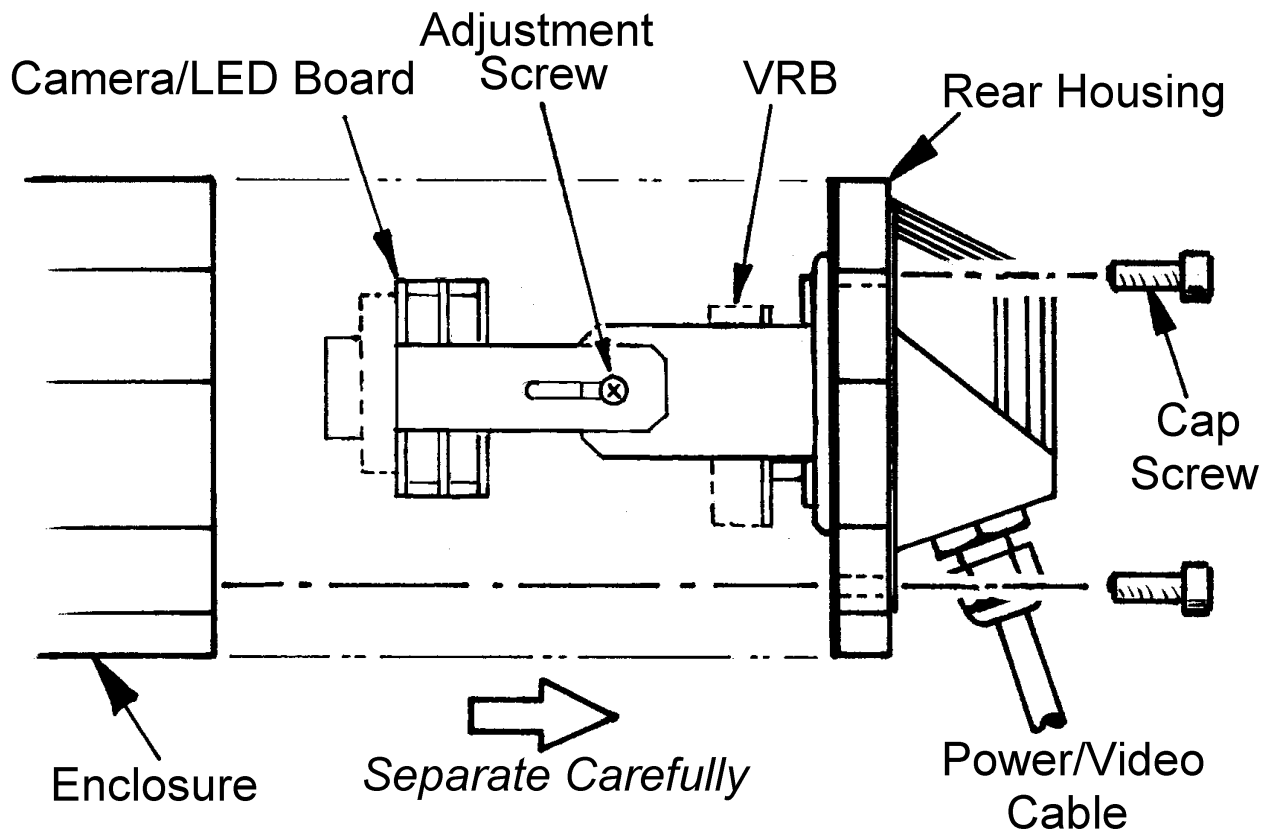
Step 2.1 - Disconnect the power source to the camera and the video signal at the BNC connector.

Step 2.2 - Remove the four cap screws with a 3mm Allan key. See **Figure 2-1** on page 9.

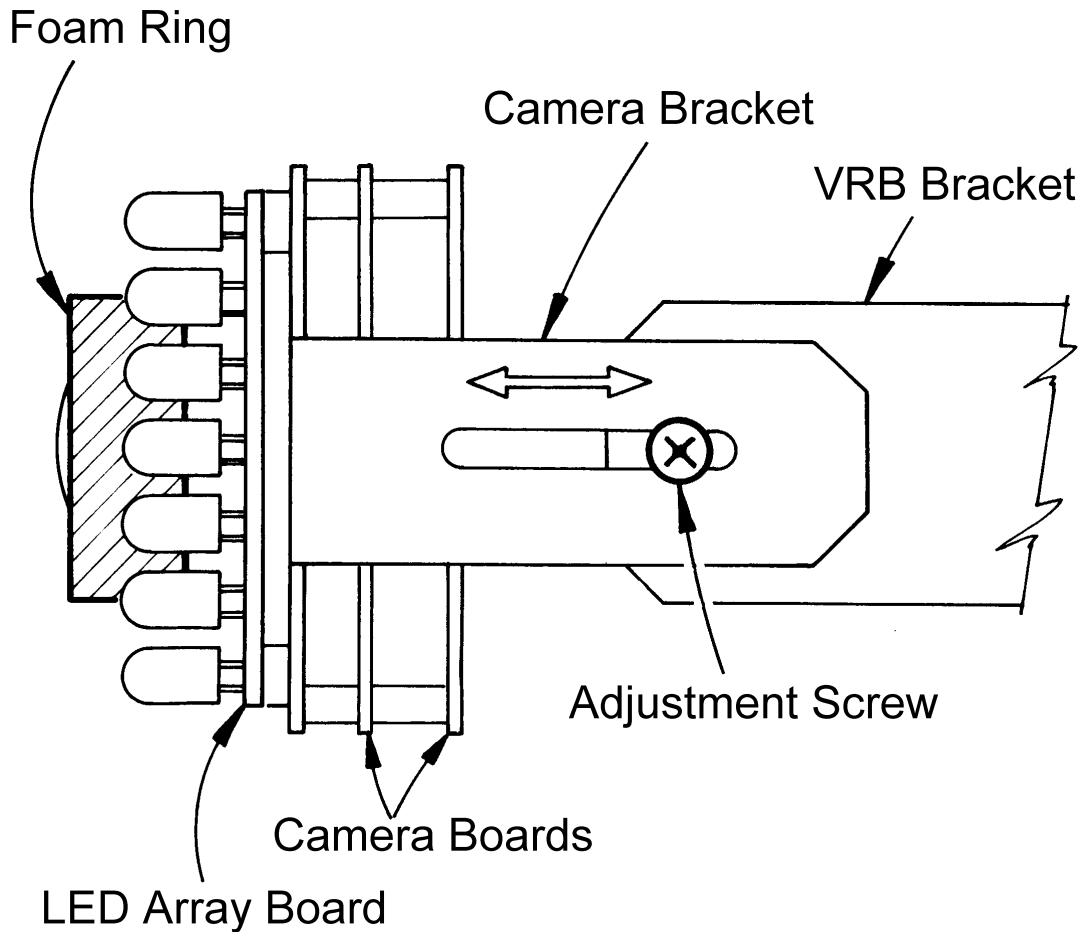
- Step 2.3 - Carefully slide out the rear housing from the main enclosure. Make sure the gasket remains with the rear section. See **Figure 2-2**, page 10.
- Step 2.4 - Make the necessary adjustments as per **Figures 2-3** to **2-5** on pages 11 to 13 respectively.
- Step 2.5 - Carefully slide rear section back into the main enclosure and re-install the cap screws.



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



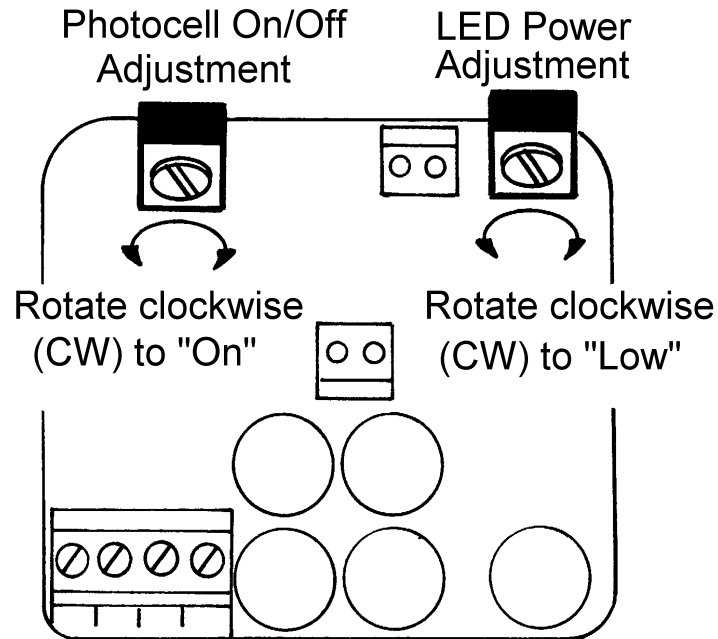
**FIGURE 2 – 2**  
**Access for Camera / LED Board and**  
**Voltage Regulator Board ( VRB )**  
**(N versions shown above with LEDs)**



For optimum picture quality, the two adjustment screws, located on either side of the camera bracket, allow the lens to be moved closer to the viewing window.

Adjust the foam ring at this time.

**FIGURE 2 – 3**  
**Camera Lens Adjustment**  
**(N versions shown above with LEDs)**

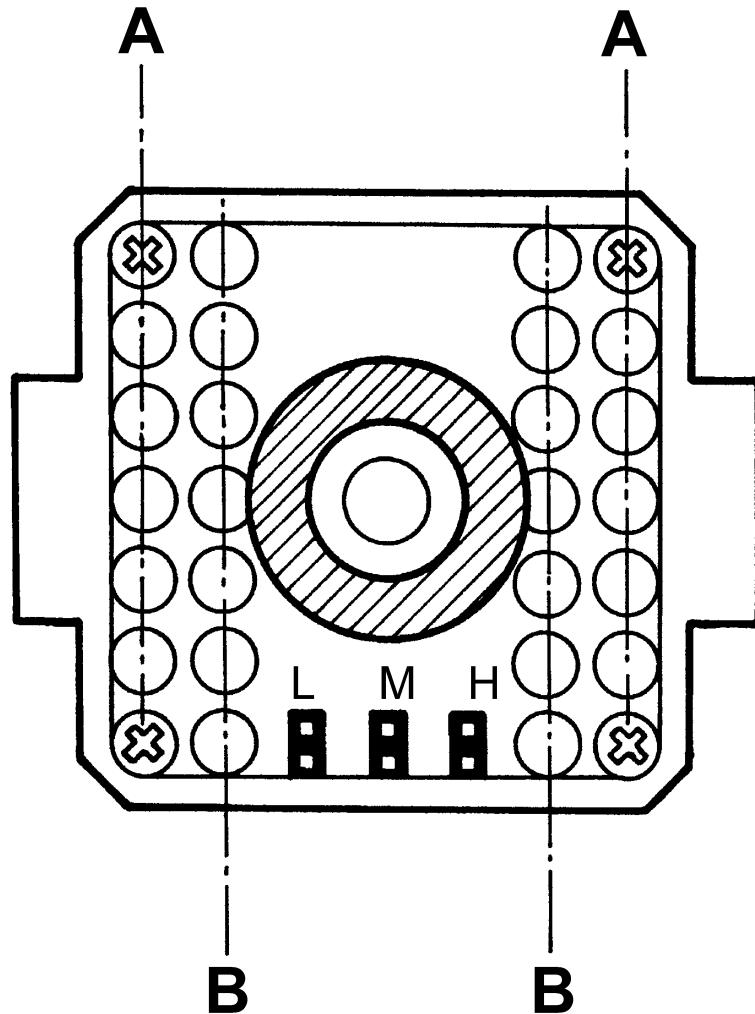


For LED power adjustment, rotate clockwise (CW) for “Low” and counter-clockwise (CCW) for “High”.

For photocell “On/Off” light-level adjustment, rotate clockwise (CW) for “On” and counter-clockwise (CCW) for “Off”.

***Note: The brightness of the LEDs is set to the maximum output from the factory.***

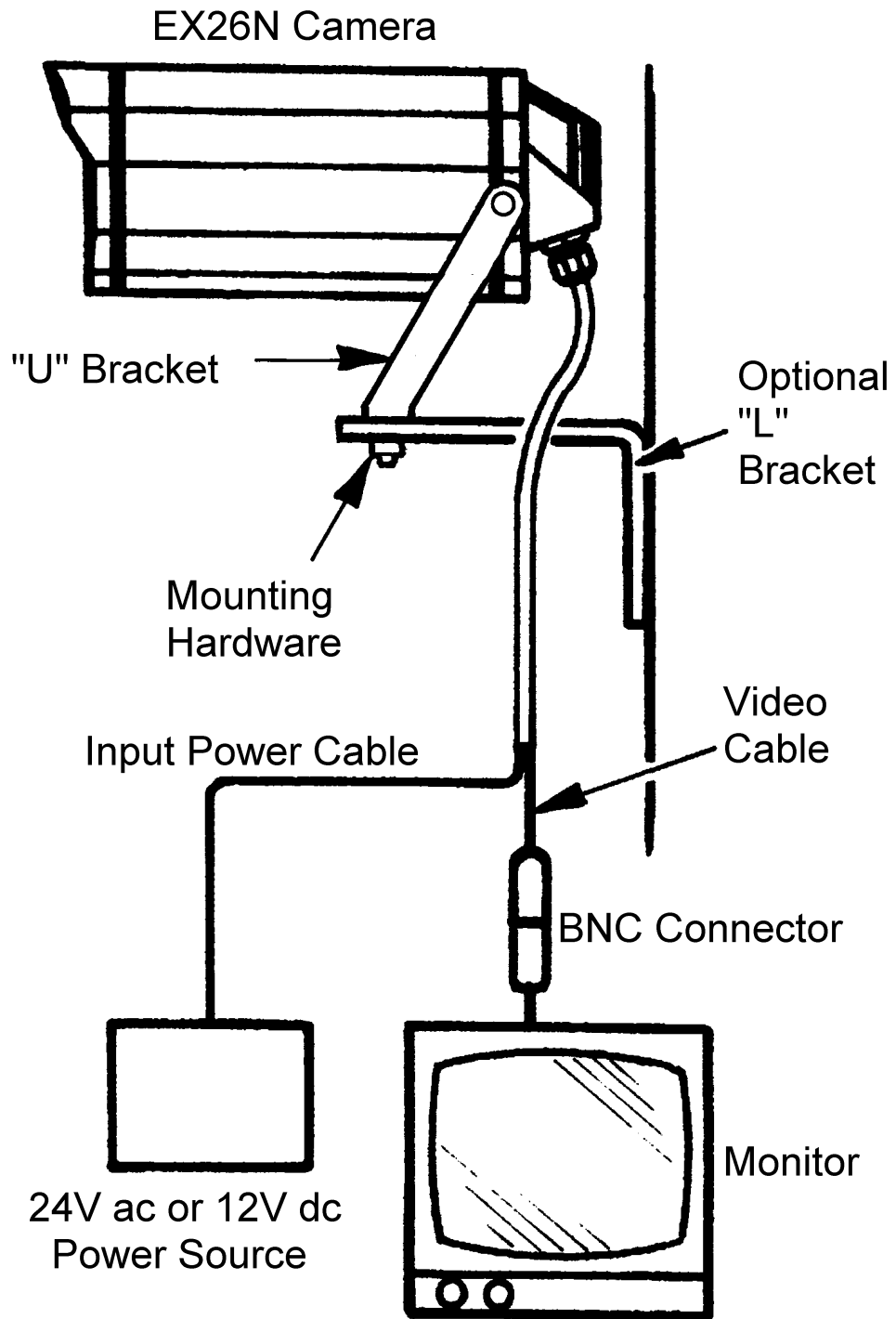
***FIGURE 2 – 4  
LED Array Power Adjustments  
( For N Versions)***



The outside row of LEDs (**A**) can be bent inwards or outwards for beam width adjustment. To a lesser degree, the second row (**B**) can also be bent inwards or outwards for adjustment. Do not use your fingers for bending the LEDs.

**FIGURE 2 – 5**  
**LED Array, Beam Width Adjustment**  
**( For N Versions )**

### 3. CAMERA MOUNTING



## 4. TROUBLESHOOTING - CAMERA

<i>PROBLEM</i>	<i>POSSIBLE CAUSE</i>	<i>LIKELY SOLUTION</i>
<b>No Video</b>	<p>1. <u>Power Supply:</u> -Connections....</p> <p>-Voltage Range...</p>	<p>Check input power connections at the cable leads. Check for loose wires.</p> <p>If connected to DC, check input voltage range of 10.5 – 40V.</p> <p>If connected to AC, check input voltage range of 12 – 28V.</p> <p>Measure the voltage and current at the Input Power Cable. The current should be <math>&gt;.02A</math> and <math>&lt;1.0A</math>.</p>

<p><b>No Video</b> (cont'd.)</p>	<p>2. <u>Video Connections</u></p>	<p>Determine if wiring polarity at “Video Connector” terminal block is correct. Check the cable and 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/>
<hr/> <p><b>Poor Picture</b></p> <p>Snowy Image</p>	<hr/> <p>Poor Video Signal</p>	<p>Ensure the video cable is correctly matched and terminated with 75 ohms at each end. Make sure the video cables are similar types.</p>

<b>Poor Picture</b>		
Snowy Image (cont'd.)	Noisy Power Supply	Check connections. Relocate or replace the 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. Check video polarity.
Negative, scrambled, or faded image	Low voltage	Check voltage at the input power cable. Must be >10.5V dc or >12V ac.
Halo Effect	The Lens Foam Ring (Donut) is not touching the inside of the Dome	Make sure the Foam Ring touches the dome's inside surface.

## 5. TROUBLESHOOTING - LEDS

PROBLEM	POSSIBLE SOLUTION
<b>Fuse Blows</b>	<ul style="list-style-type: none"><li>- Check fuse rating.</li><li>- Check for shorting between the enclosure and the input power.</li></ul>
<b>Don't know if LEDS are "ON"</b>	850nm LEDS will have a faint red glow when "ON". 940nm LEDS are covert. Aim the LEDS directly at an IR sensitive camera to see the lights or wait for the LEDS to warm up (two minutes).

**NOTES:**

## 6. GENERAL SPECIFICATIONS

Power Consumption: 4.2W (max.) for color  
4.2W (max.) for mono  
9W (max.) for N

Input Voltage: 12V dc or 24V ac  
(60Hz)

Enclosure (housing): Aluminum casting and  
extrusion (sealed to  
IP66 / NEMA4)

Viewing Window: Toughened glass

Dimensions: 89mm **H** ( 3.50" )  
91mm **W** ( 3.58" )  
168mm **L** ( 6.61" )

Weight: 0.96kg ( 2.1lbs. )

*Subject To Change Without Notice.*



# Extreme CCTV®

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