



CCTV Bullet Camera

**ZEB HDTV MSB2**



## User Manual

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

## Dear Customer,

Hello Zebee, please refer to this user manual for optimum usage of **ZEB-HDTVI MSB2** CCTV Surveillance Bullet Camera.

## Features

- **ICR (Infrared Cut Removable Filter):** Automatic day/night mode switching for clear images.
- **AGC (Automatic Gain Control):** Adjusts sensitivity for varying light conditions.
- **BLC (Back Light Compensation):** Enhances visibility in front of bright backgrounds.
- **AWB (Auto White Balance):** Ensures natural colors in different lighting.
- **2 DNR (Digital Noise Reduction):** Reduces image noise for clearer pictures.
- **AHD / CVI / TVI / CVBS:** Supports four video formats for compatibility.
- **4 Warm Light LED:** Enables night vision for low light or darkness.
- **2 MP:** High-resolution image sensor.
- **15M Meters IR Range (Max.):** Maximum infrared illumination distance.

# Specifications

|                       |                                     |  |
|-----------------------|-------------------------------------|--|
| Camera                | Minimum Illumination                | 0.2 lux  |
|                       | Image Sensor                        | GC20C3   |
|                       | Shutter Speed                       | 1/26 to 1/10000 seconds  |
|                       | Angle of View                       | Horizontal: 72°; Vertical: 40°; Diagonal: 82°  |
| Lens                  | Scanning System                     | Progressive Scan   |
|                       | Focus Length                        | 3.6 mm (Fixed)   |
|                       | Mount Type / Lens                   | M12  |
|                       | Focus Control                       | Fixed  |
|                       | Lens Type                           | Fixed  |
|                       | Lens                                | 3.6mm  |
| Night Vision          | Max Aperture                        | F1.6   |
|                       | LED type                            | Warm Light LED   |
|                       | LED Color                           | Warm Light   |
|                       | No. Of LEDs                         | 4  |
|                       | IR Cut Filter                       | Yes  |
| Camera Features       | Light Range                         | 12 to 15 meter   |
|                       | LED Power On                        | Auto   |
|                       | OSD Support                         | Yes  |
|                       | Day/Night Switch                    | Auto   |
|                       | Noise Reduction                     | Yes  |
|                       | Picture Adjustment                  | Yes  |
|                       | White Balance                       | Yes  |
|                       | AGC (Gain Control)                  | Yes  |
|                       | ICR (Infrared Cut Removable Filter) | Auto(ICR)  |
|                       | Back Light Compensation             | Yes  |
|                       | Video output                        | TVI: 1920 x 1080 (25fps)<br>AHD: 1920 x 1080 (25fps)<br>CVI: 1920 x 1080 (25fps)<br>CVBS: PAL: 1200 x 576 / NTSC: 1200 x 480 |
| Weatherproof Standard | Ip66                                |  |
| S/N Ratio             | ≥52dB ( AGC OFF )                   |  |
| General               | Power Consumption                   | DC12V(± 10%)   |
|                       | Operating Temperature               | -20°C~50°C / Less than 90% RH  |
|                       | Weight                              | 164g   |
|                       | Body type                           | ABS Plastic  |
|                       | Dimension (W x D x H)               | 7.1 x 15.7 x 7.1 cm  |
|                       | Country of Origin                   | India  |

## Connectors



DC Power Input



BNC Connector

## Getting Started

Unpack your camera and ensure all components are present.

- **Camera Placement:** Decide on the installation location considering visibility, temperature, stability, and angle.
- **Cable Connection:** Connect the camera to your monitor or recording device using the appropriate cables.
- **Power Supply:** Power the camera with a DC12V power supply (matching the camera's requirements) by connecting it to the camera's power input.
- **Positioning:** Adjust the camera's angle and secure it in place using the mounting screws.
- **Testing:** Verify camera functionality by checking the live feed on your monitor or recording device.

## Installation

Follow the provided instructions to install the camera securely, connect cables, and position it as needed.

- **Mounting:** Securely mount the camera on a stable surface or bracket using the included mounting screws. Ensure it has a clear line of sight to the area you want to monitor.

- **Positioning:** Adjust the camera's angle to achieve the desired field of view. Tighten the mounting screws to lock it in place.
- **Cable Routing:** Carefully route the cables, keeping them tidy and out of the way. Use cable clips or ties to secure the cables to prevent damage or tripping hazards.
- **Weatherproofing (Outdoor Installation):** If installing the camera outdoors, ensure it is protected from the elements. Consider using weatherproof enclosures or covers to shield the camera and cable connections.
- **Connecting to Power:** Connect the DC12V power supply to the camera's power input. Ensure the power supply is properly connected to a stable power source.
- **Video Connection:** Connect the camera's video output to DVR using the BNC cables.

*Note: Controlling the CCTV camera OSD menu is subjective depending on the DVR / XVR used. For further assistance kindly contact our toll free no. 044 4000 0004*

