MIC Series 500 Camera

MIC Series 500

BOSCH

en   **Quick Install Guide**

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1 MIC 500 Series Camera Quick Start Guide

⚠️ **CAUTION!**

To reduce the risk of electrical shock, disconnect power supply before opening the power supply unit.

Power disconnect: power supply units have power supplied whenever the power cord is inserted into the power source.

⚠️ **WARNING!**

Installation should be carried out by qualified personnel only in accordance with the applicable local codes.

Bosch Security Systems Inc. accepts no liability for any damages or losses caused due to incorrect or improper installation.

1.1 MIC 500 Series Camera Mounting Instructions

The upright unit can be mounted with the camera ball up or down.

For inverted units, first remove the four M3 x 6 screws fixing the rain shield to the face of the camera, reverse the rain shield, reattach it to ensure that the rain shield is oriented correctly, and then configure the camera for inverted operation. For further details of configuring and reversing the controls for inverted units using the MIC Series Universal Camera Setup Software (cam-set) or via the MIC 500 Series camera on-screen menu, please refer to the Help and Instruction file in cam-set.

The MIC 500 Series camera, when canted, is designed only to be mounted ball up. The tilt limits for the canted unit prevent it from working properly if mounted ball down. Do not manually back drive the pan or tilt axis by hand. Back driving may strip teeth off the internal gears and in so doing will void the warranty.

M8 Stainless steel nuts, bolts, and washers should be used to secure the base to the mounting surface. Suitable sealant or the Nebar gasket may be used between the camera base and the mounting surface.

Ensure that the 12-pin connector is located inside the camera base plug and that the lock ring is tightened. Ensure that the base compartment containing the 12-way connector is moisture proof. On inverted units, it is very important that the connector area is watertight to prevent water pooling around the connector.
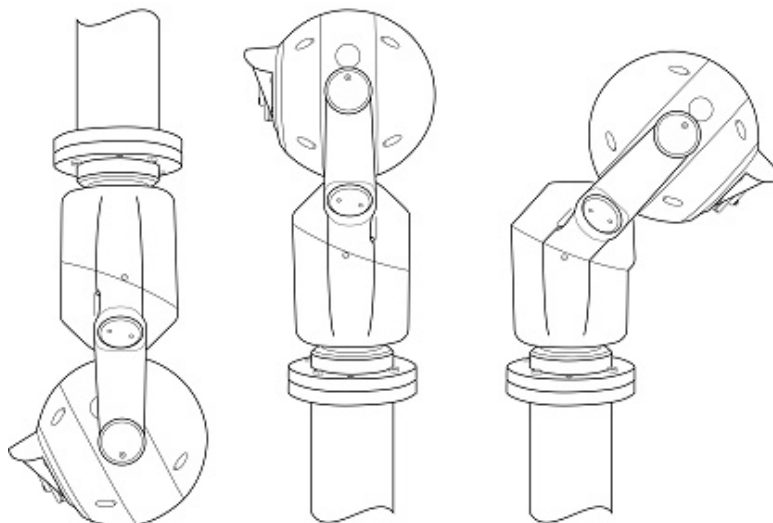

Figure 1.1 MIC 500 Series camera mounting positions: Inverted, Upright, and Canted

The MIC 500 Series camera has a security attachment point for attaching to a safety chain (not supplied), which in turn should be attached to a secure part of the structure during installation or removal.

WARNING!
Use caution when installing the MIC 500 Series camera. Follow common sense precautions such as fitting a safety chain.

1.2 Safety Earthing of the MIC 500 Series Camera

The electronics and housing of the MIC 500 Series camera are electrically isolated; however, the housing should be safety earthed regardless. This safety earth should be a bonding connection, such as one of the securing bolts, to the outside case of the camera. The camera should be earthed at one point only to prevent earth loops and thus hum bars appearing on the camera picture in the control room.

Shielded Composite Cable Connections
Note: all connections must be made.

Composite Cable Wire Color	Function	MIC PSU Terminal Block	PCB Marking
Red	AC supply	HD3-1	Power
Green	AC supply return	HD3-2	Power
White	RX +	Hd3-3	RxB
Yellow	Rx -	HD3-4	RxA
Drain Wire	Ground	HD3-5	GND
Blue	Tx -	HD3-6	TxA
Violet	Tx +	HD3-7	TxB
Coax Core	Video	HD3-8	Video
Coax Screen	Video return	HD3-9	Vid 0V
Black (optional)	Tamper switch	HD3-10	Tamp Sw
Orange (optional)	Wash drive	HD3-11	Wash
Brown	Heater+	HD6-1	
Gray	Heater-[1]	HD6-2	
1. Please refer to the MIC Series Power Supply Manual for details on connecting MIC 500 Series cameras with heaters and other auxiliary equipment.			

Mains Power and Video Connections

Mains	
Live	HD1-1
Neutral	HD1-2
Earth Connection	Already made

Video	
Video BNC CN1	**Connection**
Core	Video to Control Room
Screen	Video GND to Control Room

A standard female BNC connector provides the composite video output from the MIC 500 Series camera.

Telemetry Connections

The MIC 500 Series camera can be daisy-chained in a multi-drop configuration, the last or furthest camera in the chain should be typically terminated with a 120 Ω resistor placed across the cameras receiving pair.

Telemetry		
Signal Function	**Telemetry Signal Name**	**HD4 or HD5**
RS485+ to camera	RxB	Pin 1
RS485− to camera	RxA	Pin 2
0v from control room	GND	Pin 3
RS485− to control room	TxA	Pin 4
RS485+ to control room	TxB	Pin 5

1.3   Commissioning the MIC 500 Series Camera

The MIC 500 Series camera provides twin protocol support with a single software pack. Switching between the installed protocols is easily done using cam-set or the on screen menu function. Three protocol packs are available: Forward vision (FV)/ Bosch, FV/Pelco and FV/ VCL.

All MIC 500 Series cameras are supplied set to address 1 and initially loaded with the FV / Bosch protocol pack. The available protocol packs are provided on the CD and can be loaded onto the camera using cam-set.

To use the MIC Series Universal Camera Setup software (cam-set), connect the MIC 500 Series camera power supply (HD4 or HD5) to a PC using either the MIC-USB485CVTR, an RS485 to USB signal converter, or for older PCs with a serial port, a suitable RS232 to RS485 converter can be used. Please refer to the Help and Instruction file in cam-set for further details.