

RE-BCCxxx (cylindrical models) RE-DCCxxx (spherical models)

Product description

This range of analog cameras is designed to meet all video surveillance needs both indoors and outdoors. The cameras are contained in a watertight aluminum casing that can be installed outdoors without protection and is not afraid of rain. The cameras include an infrared illuminator for viewing in the dark for 24-hour surveillance.

Connections and commands

○ **Fixing cylindrical cameras**-The cylindrical cameras are equipped with an integrated bracket for wall mounting, specially made to allow the passage of cables inside it and protect them from tampering attempts. The camera is usually mounted at the cable exit so that no cables are left bare. However, the fixing base also has a lateral cable outlet slot if the cables come from the side in an external conduit.

The bracket must be fixed to the wall or ceiling with the supplied plugs.

If you do not have a box to contain the connections, the boxes for optional connections are available.

○ **Spherical camera fixing**-Spherical cameras consist of the camera unit and the fixing base which are screwed together. Before proceeding with the assembly it is necessary to unscrew the fixing base separating it from the camera body. In general, no tools are needed to unscrew the fixing base from the camera body, however if this is tightened too deeply, it is possible to help by placing a rigid rod, such as a screwdriver, between the two lateral cable outlet slots placed in the base.

The fixing base, separated from the camera is fixed to the wall or to the wall with plugs in correspondence of the cable exit hole and subsequently screwed onto it the camera body.



Before tightening fully, orient the viewing angle correctly.

○ BNC video output

To the female bayonet BNC connector yes connect the video cable that is then taken to the monitor or DVR generally via cable coaxial type RG59 and connector BNC. Yup can also use twisted cables with balun converters.



○ **DC12V plug**A stabilized 12VDC power supply of at least 1000 mA must be connected (not included). The pin required is the standard 5.5 mm. Be careful to use STABILIZED power supplies that supply 12V in any load condition. Using a power supply voltage other than 12VDC can generate video noise and in the worst cases damage the camera. Beware of power extension cables that are too long or have a small section, which could introduce an excessive voltage drop, especially when the IR illuminator is turned on.

○ **Connection housing**-The video and power connections must be protected from bad weather and housed in special electrical containers. For this reason, the cameras are equipped with an integrated cable of about 50 cm in length to reach the box that must be arranged nearby. Mounting boxes are available as an optional accessory to hold the connections inside.

○ **Zoom / focus adjustment**-Fixed lens cameras do not require focusing as they are factory set for most applications. Manually adjustable lens cameras have 2 external screws that allow you to adjust the lens focal length and focus without having to open the camera housing. Initially operate the ZOOM screw and adjust the width of the frame (wide angle / zoom) according to the area to be framed. Remember that a greater wide angle inevitably corresponds to less image detail. Once the field of view has been defined, use the FOCUS screw to perfectly focus the framed area. Remember that each lens has its own depth of field so that only a portion of the space in front of the camera can be perfectly focused. **ATTENTION:** The focus screws have a limit switch block that prevents the drive rings from coming out of their seat. It is necessary not to force beyond the limit switch to avoid damaging the adjustment mechanism.

○ **Camera adjustment with autofocus zoom**-Cameras with an autofocus zoom lens do not have a local screw adjustment as the lens is equipped with a motor that is controlled by the button on the camera cable. You can also remotely control the zoom with one of our DVRs that support the UTC protocol. No other cables are needed, in addition to the video cable, just enter the PTZ control and act on the zoom control. If the command does not respond, check that you have selected the UTC protocol in the PTZ settings of the channel.

IR illuminator

The cameras integrate an infrared illuminator that emanates an illumination that is invisible to the human eye, but visible to the camera. The illuminator turns on by itself as darkness falls and the camera switches by itself into night vision mode. The lighting of the illuminator allows the vision in B / W in absolute darkness up to its illumination range.

Models with normal IR (850 nm) have LEDs that are visible in the dark for a slight reddish glow.

OSD screen programming menu

Many models in this range allow you to configure various display options via an on-screen menu (OSD)

To control the on-screen menu, use the mini-joystick located along the camera cable. In addition, all cameras with OSD have of a UTC chip that allows you to control the programming menu also by operating the DVR from the opposite end of the video cable. Our DVRs include the UTC protocol in the PTZ menu to directly control the camera menu directly from the DVR.



OSD options

For explanations of the various OSD menu options, refer to the separate instructions.

AHD CVI TVI CVBS technology

All cameras in this range support AHD, high-resolution analog technology and allow you to



achieve resolution HD720P 1280x720, FULL HD 1080P 1920x1080 and above up to 5MP or 8MP (4K). They work with AHD DVRs that support AHD camera resolution. It is not possible to see the AHD signal by directly connecting an older generation monitor or DVR. Many models can be switched to traditional CVBS signal to connect to old analog DVRs, or to CVI and TVI formats, similar to AHD but from other manufacturers.

SWITCHING AHD CVI TVI CVBS

XxxHDU xxxFDU (1MP) models

These models support AHD and CVBS modes. The cameras are always supplied in AHD mode, but can be switched to traditional analog CVBS mode if you need to connect them to old DVRs or directly to a TV.

Switching between the two systems is done using the OSD Mini Joystick as follows:

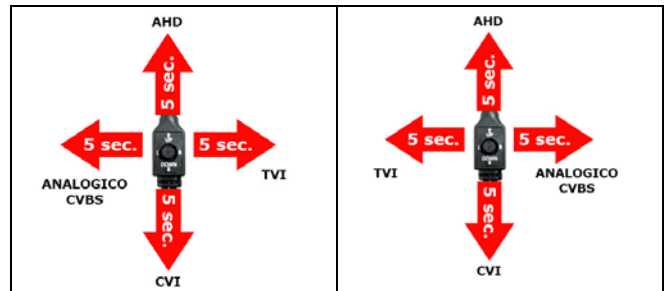
- **METHODAHD:** Hold the mini-joystick in the RIGHT position for 5 seconds
- **METHODANALOG / CVBS VIDEO:** Hold the mini-joystick in the LEFT position for 5 seconds



XxxFD4 (2MP) models

In addition to CVBS and AHD technologies, these cameras also support CVI and TVI technologies. These are high resolution analog technologies, similar to AHD but used by other manufacturers. In this case, the switchover is carried out as follows:

| | |
|--------|------------------------|
| xxxFD4 | xxxFD4R and RE-DCC1FD4 |
|--------|------------------------|



As you can see in the table, the switching takes place in a slightly different way for the models with invisible IR (xxxFDR) and for the mini dome models (RE-DCC1FD4). In this model it is also necessary to interrupt and restore power to the camera before switching.

XxxM4 (3MP) models

These cameras do not support CVBS. It is possible to switch between AHD and TVI formats



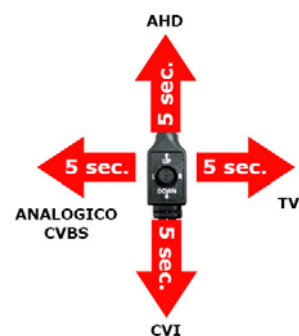
XxxN models (4MP)

These cameras support AHD and CVBS formats. Switching is carried out as follows. The Real Time / No Real time selection affects the resolution of the camera (No Real time = 4MP 12 f / s, Real Time = Half4MP 25 f / s). To adjust the remote control of the UTC menu from the DVR, you need to set Real Time.



Models xxx5 xxx5Z (5MP) xxx8 xxx8Z (8MP)

These cameras support all formats: AHD, CVI, TVI, CVBS. Switching is carried out as follows:



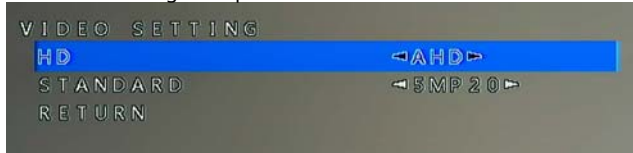
Models without button



Some cameras may be supplied without a push button on the cable. In this case the signal switching is only possible in the minus of the camera by accessing from the DVR with UTC protocol.

Resolution adjustment

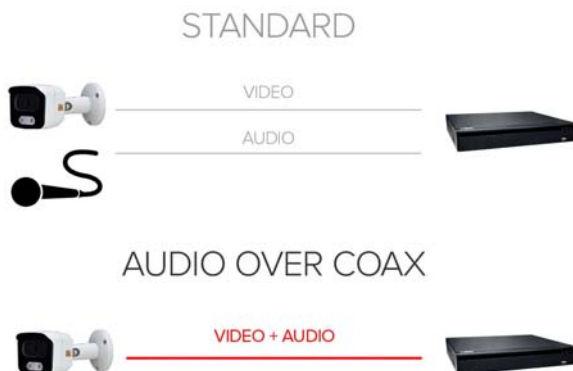
Some camera models, in addition to different video formats, can handle different resolutions. Adjustment is made in the OSD menu, as in the following example



The cameras are supplied at the highest resolution from the factory. If the DVR does not display the maximum resolution of the camera, you can switch the camera to CVBS to display the menu and select the maximum resolution supported by the DVR.

AOC audio connection

Some cameras AHD have a built-in microphone for audio. These cameras do not have an RCA audio output to be connected with a separate pair to the DVR as in traditional analog wiring, but they are able to pass audio over the same video cable.



To use this technology you need to have our DVR that supports AOC technology and you will need to enable AOC as channel audio input in the DVR settings.