

RE-BCC8HD

PRODUCT DESCRIPTION

This camera is made to allow the resumption of license plates of vehicles in slow or fast motion. It can operate in any light condition thanks to

infrared illuminators incorporated. Thanks to a System of High-Light Suppression is not affected by the headlights of the vehicle is that dipped beam.



ASSEMBLY

The cameras are equipped with a mounting bracket for wall built to allow the passage of cables within it.

The bracket is mounted generally in matching output cables. The basis of fixing It has 4 holes for fixing to the wall with dowels. The housing is waterproof and can be installed outdoors without any protection.

The housing is air-conditioned and is equipped with a fan which is activated at above 45 ° and a heater that is activated at below -5 ° C.

POSITIONING

The positioning of the camera it is very important for a good yield of the license plate reading.

The optimal recovery of the plate is carried out at a maximum distance of 30 m. depending on the adjustment of the lens. The first thing to check is therefore that the distance as the crow flies (not walkable on the ground) between the camera and the point where you will find the means, does not exceed this distance otherwise the infrared lighting will not be effective.

The second thing to consider is to position the camera so that the light of the headlights is not directly oriented towards the camera, while maintaining at least an angle of 30 ° vertically with respect to lighting of the headlights. The camera will then be placed in detected position with respect to the road surface so as to avoid that the

dot headlights directly against camera.

Satisfied 2 previous points in orienting the camera needs to be done so that the plate remains as long as possible in the field of vision of the camera.

CONNECTIONS

The connections on the output cable from the camera are the following:



BNC video output - At the BNC female bayonet connecting the video cable that leads then to monitor or management devices typically using RG59 coaxial cable and BNC connector. The RE-BCC8HD cameras are cameras that can work with both conventional analog DVR or DVR



AHD last generation with which allow you to reach the HD720P 1280x720 resolution (1.3 MP). The switching between the two systems TRADITIONAL CVBS and AHD is carried out by commands from the RS485 as we shall see later.

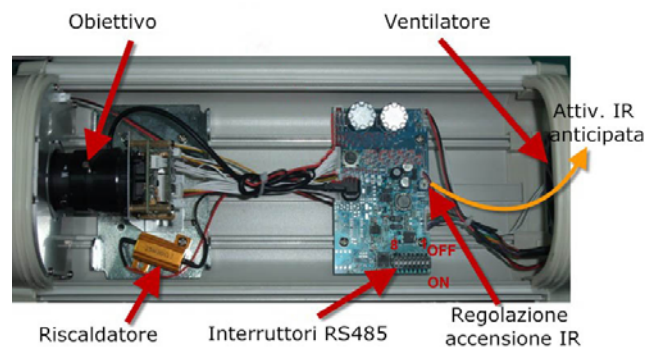
A AHD DVR can receive the camera is in the normal analog CVBS mode that AHD, but will agree to use the equipment that provides greater resolution. A previous generation analog DVR D1 or 960H will instead see only in CVBS mode camera.

Jack DC12V - We must connect a 12VDC power supply stabilized by at least 2,000 mA, such as RE-AL5 model (not included).

The requested plug is the standard 5.5 mm. Attention to use STABILIZED feeders that provide 12V in any load condition. The use of a different supply voltage from 12VDC can generate video disorders and in the worst cases damage the camera. Beware extension power cables are too long or

small section, that could to introduce excessive fall species voltage at the time IR illuminator ignition.

RS485 input - This connection allows you to connect an RS485 BUS to be able to remotely adjust the IR illumination power and configure the OSD menu



TARGET

Adjust zoom / focus - The camera mounts an adjustable objective lens from 5 to 50 mm .. Once positioned the camera is necessary to orient bracket

and appropriately adjust the lens. initially act on the ZOOM ring (TW) and adjust the amplitude of the frame (wide angle / zoom) based on the area to be framed. Remember that in most wide angle corresponds

inevitably a lower image detail. In general, it is good to frame a narrowest possible width around the location where it will be located in the plate so that the same appears as large as possible in the frame.

Once you defined the field of view act on the FOCUS ring to focus the perfectly framed area. Recall that each lens has its own depth of field to which it is possible to put in focus in a perfect way only a portion of the space in front of the camera. Concentrate on the most important area where you will find the plate of the vehicle to adjust the focus optimally.

It may be helpful for an optimal adjustment to position a car stops at the exact point where it carries out the reading of the license plate.

The lens adjustment ring nuts can be rotated only after having unscrewed the pawl. Retighten after adjustment in order to avoid unwanted changes.

IR LIGHT

The cameras integrates in its interior an infrared illuminator that emanates illumination invisible to the human eye, but visible to the camera. The illuminator turns itself on when it gets dark and the camera switches alone in night vision mode. The illuminator allows ignition

the vision of the license plate total darkness until its scope lighting.

Note that in this camera, the illuminator is used for the vision of the automobile license plate and does not allow, if not marginally, the night vision of the medium or environment.

If this is request must be the tiling of another conventional camera.

IR threshold adjustment - On the electronic circuit board inside the housing is placed a potentiometer (see figure) to adjust the illuminator ignition threshold.

In most cases the adjustment is not necessary. Intervening only if one realizes that the camera never switches to night mode or switches in untimely manner due to abnormal conditions of ambient brightness.

Turn clockwise, the illuminator will light up later, unscrewing it anticlockwise will be activated soon. In the adjustment keep in mind that the camera reaction occurs with 5 seconds delay to avoid that sudden flashes can make the camera move from night to day. It is therefore necessary to turn a little potentiometer and wait for the reaction of the camera.

IR brightness adjustment - E 'can adjust the brightness of the illuminator to adapt to the distance of the shot. If the plaque comes too close, within 10 m. for example, arrangement may reduce the brightness to avoid that is too bleached.

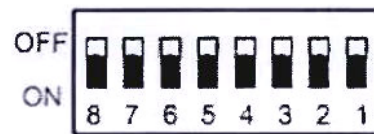
To properly adjust the lighting ask in real dark conditions and illuminators turned on by placing a retainer means in the license plate reading point. If the license plate is bleached with unreadable characters must reduce the power of the LEDs. Acting on the adjustment so as to optimize the illumination on the plate. The adjustment of the power of the LEDs is carried out remotely by means of the RS485 serial port.

RS485 FOR REMOTE CONTROL

The camera is equipped with an RS485 port that should be used to remotely control the brightness of the illuminators and the OSD menu.

Compared to the first versions of the product, where these adjustments were carried out on the camera, the command Remote it makes it easy to intervene also installed camera.

And 'possible to send commands with the common protocol Pelco P / D using a control console for our speed dome cameras or a DVR equipped with a RS485 port. On the inner sheet is placed a block with 8 microswitches for regular communication.



The switch 6 serves for controlling the speed of transmission and switch from 1 to 5 are used to assign the address to the camera according to the following tables:

Speed	switch 6
2400 bps	OFF
9600 bps	ON

Address	Int.1	Int.2	Int.3	Int.4	Int.5		
1	OFF	OFF	OFF	OFF	OFF		
2	ON	OFF	OFF	OFF	OFF		
3	OFF	ON	OFF	OFF	OFF		
4	ON	ON	OFF	OFF	OFF		
5	OFF	OFF	ON	OFF	OFF		
6	ON	OFF	ON	OFF	OFF		
7	OFF	ON	ON	OFF	OFF		
8	ON	ON	ON	OFF	OFF		
9	OFF	OFF	OFF		ON	OFF	
10	ON	OFF	OFF		ON	OFF	
11	OFF	ON	OFF		ON	OFF	
12	ON	ON	OFF		ON	OFF	
13	OFF	OFF	ON	ON	OFF		
14	ON	OFF	ON	ON	OFF		
15	OFF	ON	ON	ON	OFF		
16	ON	ON	ON	ON	OFF		
17	OFF	OFF	OFF	OFF			ON
18	ON	OFF	OFF	OFF			ON
19	OFF	ON	OFF	OFF			ON
20	ON	ON	OFF	OFF			ON
21	OFF	OFF	ON	OFF			ON
22	ON	OFF	ON	OFF			ON
23	OFF	ON	ON	OFF			ON
24	ON	ON	ON	OFF			ON
25	OFF	OFF	OFF			OR NOT	
26	ON	OFF	OFF			OR NOT	
27	OFF	ON	OFF			OR NOT	

28	ON	ON OFF		OR NOT	
29	OFF	OFF	ON ON ON		
30	ON	OFF	ON ON ON		
31	OFF	ON ON ON ON			
32	ON	ON ON ON ON			

The settings of the camera factory there RS485 communication are: PELCO PROTOCOL D SPEED '2400 bps ADDRESS: 1

Through the RS485 port is send commands to recalling camera presets the following system:

CALL PRESET + 200 - With this command gives you access to the remote modification of the IR LED brightness. When you enter the preset 200 act on the joystick by moving it up and down to change the power of the LEDs. Check the result on the monitor.

CALL + PRESET 201 - ends the adjustment With this command brightness of the LEDs and confirms the setting.

CALL PRESET + 101 - Changes the video output in CVBS, namely standard analog, for coupling with analog DVR that do not support the AHD The technology requires the switching time of 5 seconds. Close the OSD menu of the camera before performing the switching.

CALL + PRESET 102 - Switch the video output AHD 720P (requires DVR technology that support AHD)

CALL PRESET + 95 - Opens the OSD menu of the camera which is described below. Inside one moves with the navigation arrows (or joystick) and confirming with the IRIS button +

OSD MENU - SPEED 'THE SHUTTER

The camera has an on-screen menu that is called up Preset 95 as seen above.



In regular operating conditions it is not necessary to intervene in this menu, so it's highly advisable not to do so to avoid inadvertently change the factory settings.

It can, however, take action on the default options to optimize according to the application real vision. In acting in the OSD is important to remember that some adjustments

they are essential for the good operation of reading license plates and must not be changed randomly.

Below we listed the necessary adjustments.

LENS

This parameter must be maintained to MANUAL as the lens used is a manual varifocal.

EXPOSURE / SHUTTER

Click EXPOSURE SHUTTER and then to open this section of the menu



The factory setting of this parameter and 1/400 and it is possible to keep it unchanged until the speed of the means less than about 120 Km / h.

If the means traveling at a higher speed is good to increase this value to 1/1000, 1/2000 and beyond. More it provides for the high speed of the medium to resume more it will take a short amount of electronic shutter time. Note, however, most will shorten the time to shutter the more you reduce the overall brightness of the video. It usually takes no more than 1/2000 sec. If the means passing through lenses, as in rest areas, you can reduce the shutter at 1/200 and less and this

will increase there brightness picture allowing you to see the details of the medium. The maximum speed of the means to take can not exceed 180 km / h.

Be careful not to set this parameter to AUTO. The automatic shutter provides an excellent overall image but does not allow the license plate.

EXPOSURE / AGC

This setting is located in the section EXPOSURE already seen above, immediately below the shutter adjustment. The AGC is designed to increase the overall brightness of the night especially when it reaches values greater than 5, however, it introduces an inevitable video noise. If this is not acceptable, desirable that, AGC values lower around 3/4.

DAY & NIGHT

This parameter should strictly be left on EXT to allow a proper ignition control of the IR.

BACKLIGHT

Recommended OFF

The other OSD parameters are irrelevant in ANPR function.

PROBLEMS AND SOLUTIONS

Image B / W day - lit illuminators, adjust IR activation threshold. If the image is B / N IR off the IR filter is in the wrong position due to mechanical shock, deenergize and restore control camera, then secure it more solidly.

IR LED does not light up at night - Adjust the ignition threshold. Verify that there is a source of light that illuminates the sensor on the rear of the camera.

Glare on the plate - Avoid directly oriented towards the camera lights (min 30 °).

The plate is moved - Check goal setting. Reduce the shutter speed to 1/1000 or 1/1500

Targa too bright or dark at night - Adjust the power of the LEDs according to the shooting distance

The power of LEDs varies after a reset - Confirm the IR power setting by moving down the mini joystick

The plate is too small and you can not read - Increase the zoom lens to focus the shot.

No video - Check setting AHD / CVBS according to your DVR.

TECHNICAL FEATURES



http://www.dseitalia.it/dati_telcavo.htm

