

### RE-BCC8FDM

#### 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.

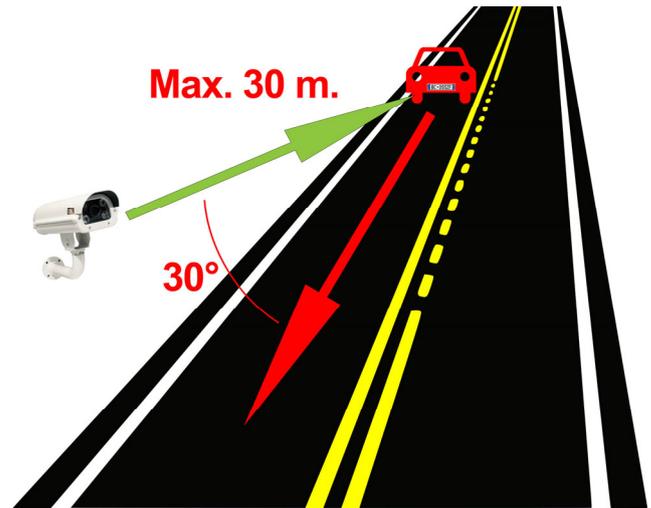
#### POSITIONING

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 an angle of approximately 30 ° with respect to the illumination 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 the camera. Satisfied

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



#### SENSOR BRIGHTNESS 'BACK

The camera is equipped with a sensor that allows CDS detect ambient light and is positioned in the rear to prevent false readings due to car headlights. The sensor is placed in the rear of the housing grommet.

Absolutely necessary to avoid that light sources should be to distort the detection of this sensor, because in this case the camera will not operate properly at night. Above all we must avoid the presence of

headlights lighting in the vicinity of the camera that would prevent the ignition of the LEDs.

#### 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-BCC8 .. cameras cameras are able to operate either with regular analog DVR or DVR



AHD last generation with which allow to reach the resolution of Full HD 1080P 1920x1080 (2 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 1080P can receive the camera is in the normal analog CVBS mode that AHD, but will agree to use the equipment that provides greater resolution. An older generation analogue DVR, or an AHD 720P DVR, you can see only in CVBS mode camera.



OWNER'S MANUAL

RE-BCC8FDM camera license plate

The camera is equipped with AHD 1080P in series mode unless otherwise requested in the order.

**pin 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 which serves to remotely control the target, the IR illumination power and other settings. To send the commands you can use a PTZ console or our DVR that has RS485 port.**

The two terminals of the RS485 port are connected with a twisted pair to the control mechanism, respecting the order A + / B- without swap them.

To send commands using the following settings:

PROTOCOL PELCO P / D ADDRESS: 1  
SPEED '9600

you can not change

**TARGET**

**Adjust zoom / focus - The camera mounts an adjustable objective lens from 5 to 50 mm .. motorized that is controlled through the RS485 serial line.**

Once the camera position is it is necessary to adjust the zoom and the focus of the lens by acting on the organ of remote control via RS485

Acting initially on ZOOM (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 less 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 FOCUS adjustment to focus 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.

**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

absolute darkness until its flow rate of 30 meters illumination.

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 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.**

The trimmer is placed in position factory 0. By screwing in a clockwise direction, towards the position 1, the illuminator will turn on later. Unscrew anti-clockwise, to the position 4, it 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 power of the LEDs is adjusted with the button on the camera cable or remotely through the RS485 serial port. The camera does not have indicators showing the power of the LEDs selected because this is physically visible on the degree of power illuminator.

**RULES 'OF OPERATION 1..6**

These cameras for license plate reading does not allow the user to freely change the internal settings of the video made to prevent inopportune modification may render ineffective the camera. Factory 6 are arranged in the camera mode of operation (1..6) to be chosen according to the speed of the vehicles.

Adjustments 1 to 4 are used for moderate speed. The 5 and 6 different settings are used for high speeds and provide globally darker images as the shutter speed is higher.

The maximum speed of the means to take can not exceed 180 km / h. The mode setting of operation makes with the button on the camera cable or remotely via RS485

The camera shows overlay the number of the selected mode.

**BUTTON ON BOARD ROOM**

On the cable that protrudes from the camera is placed a mini-joystick that allows to modify the power

IR illuminator and choose how  
 1..6 operation  
 The button is available for occasional adjustments in  
 As these same settings can be adjusted via the RS485 connection as we will see later.



**Setting Mode** - By moving the button to the right and left will select the operating mode from 1 (lenti- image lighter vehicles) to 6 (fastest vehicles, darker image).

**Adjusting the IR LED power** - Using the up and down button increases and decreases the brightness of the LEDs. Once the level desired you have to press the central button to store.

**RS485 FOR REMOTE CONTROL**

The camera is equipped with an RS485 port that should be used to remotely control the target, there brightness of the illuminators and the OSD menu. Compared to the first versions of the product, where these adjustments is only then carried out on the camera, the remote control makes it easy to intervene also installed camera.

To send RS485 commands it takes a PTZ console or DVR with RS485 port.

The settings to be set to communicate with the camera are fixed:

PROTOCOL PELCO D SPEED '9600

bps ADDRESS: 1 The commands

send to the camera calling the following presets depending on the function you want to play.

**CALL PRESET + 101..106** - This command sets the operating modes 1 to 6.

**CALL PRESET + 200** - This command displays the current operating mode (1..6 number appears superimposed)

**MOVING UP / DOWN** - With the navigation commands up and down you change the brightness of the IR LEDs. When you enter the preset 200 on the act joystick 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 + 97** - 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.

**CALL PRESET + 98** - Switch the video output 1080P AHD (DVR requires that support AHD1080P technology). The recall of PRESET 95 does not open the OSD menu of the camera as not accessible on these models.

**PROBLEMS AND SOLUTIONS**

**Image B / W day** - If the illuminators are turned on, adjust IR activation threshold. If the picture is B / N IR off IR filter is in the wrong position due to mechanical shock, Power up and power down

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 settings to save it after adjustment

**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](http://www.dseitalia.it/dati_telcavo.htm)



