

RE-BCC8FD camera license plate

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RE-BCC8FD

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 the built-in infrared illuminators. Thanks to a High-Light Suppression system is not influenced 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 at the output cables. The fixing base 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

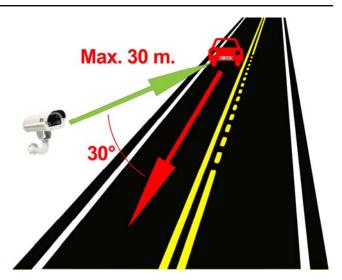
The positioning of the camera it is very important for a good yield of the license plate reading.

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 2 above, 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 CDS sensor which allows to detect the ambient light and is placed posteriorly to avoid false detections due to the headlights of cars. 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 illumination lights around the camera that would prevent the LEDs.

CONNECTIONS

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



BNC video output - At the BNC bayonet socket connecting the video cable which then leads to a AHD DVR.

The RE-BCC8FD cameras are cameras able to work only with DVR AHD last generation able to will



handle the full HD 1080P 1920x1080 (2 MP). The old analog CVBS video is no longer supported.

pin DC12V - 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. Attention to extension cables power too long or small section, which could introduce an excessive fall of species voltage at power IR illuminator.

RS485 port- This connection allows you to connect an RS485 BUS which serves to remotely control the IR

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illumination power and the OSD configuration menu. 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 is equipped with a manual lens adjustable from 5 to 50 mm.

Once the camera is positioned it is necessary to adjust the zoom and the focus of the lens by acting on the two adjustment rings

Acting initially on ZOOM (most advanced ring) 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.

Generally, it is good to fit a narrower width as possible around the location where it will lie in the plate, so that the same appears as large as possible in the frame.

Once defined the field of view act on FOCUS adjustment (rearmost ring) 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.

The objective also has a central ring for the aperture (OPEN / CLOSE) which should be left in the full open position.

IR LIGHT

The camera incorporates an internal infrared illuminator that emits illumination invisible to the human eye, but visible tothe camera. L'Illuminator turns itself on when it gets dark and the camera switches alone in night vision mode. The illuminator ignition allows the vision of absolute darkness plate 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 required it must be the coaching of another conventional 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, agree to reduce the brightness to avoid that is too bleached.

To properly adjust the lighting going into a real and illuminators dark conditions lit 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 it is also possible remotely via RS485 serial port (see below).



Adjusting the IR LED power- Using the up and down button increases and decreases the brightness of the LEDs. The camera does not have indicators that show the power of the LEDs selected, as this is physically visible on the degree of power illuminator.

Once you reached the desired level must press the button in a central location to store the power selected so that it will be maintained in the event of mains failure.

BUTTON ON BOARD ROOM AND OSD MENU

On the electronic card there is a button that allows access to the OSD less of the camera.



In this there are many settings menu. Care should be taken that four of these are essential to enable the reading of the day and night plaques.

LENS - This setting should be kept to MANUAL, having these cameras a manual lens.

EXPOSURE / SHUTTER - This setting is factory value 1/400 and it is possible to maintain this value unchanged until the speed of the means

less than 100 Km / h. If the means traveling at speeds top is good to set a faster shutter as 1/1000 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. However most it will shorten the shutter time as it reduces the overall brightness of the night video.

For this reason, if you anticipate lens means, as in the case of driveways, it is also possible to lengthen the shutter time of 1/200 to obtain a brighter image night. The maximum speed of the means to resume can not exceed 180 km / h.

EXPOSURE / AGC- This setting is factory preset to an average value (6). You can increase the AGC to increase nocturnal brightness, even in the face of most video noise.

DAY & NIGHT - This setting should be kept to EXT so that the happend / night passage is decided by the external sensor of brightness.



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REMOTE CONTROL VIA THE MENU UTC

If you have a UTC DVR you can control the camera menu remotely via UTC protocol. The UTC control does not require additional cables as controls passing along the video cable.

For how to activate the UTC Command check DVR manual.

REMOTE CONTROL VIA THE MENU RS485

The camera is equipped with an RS485 port that can be used to remotely control the brightness of the illuminators and the OSD menu. This way you can adjust all the parameters remotely.

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:

Pelco D Protocol SPEED '9600 bps ADDRESS 1

The commands are sent to the camera by calling the following presets

CALL PRESET + 95 - Opens the OSD menu of the camera

PROBLEMS AND SOLUTIONS

IR LED does not light up at night - 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 $^{\circ}$).

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.

 $\mathbf{No}\ \mathbf{video}\$ - Make sure your DVR supports the AHD 1080P format.

