RE-BCC8FD4S

PRODUCT DESCRIPTION

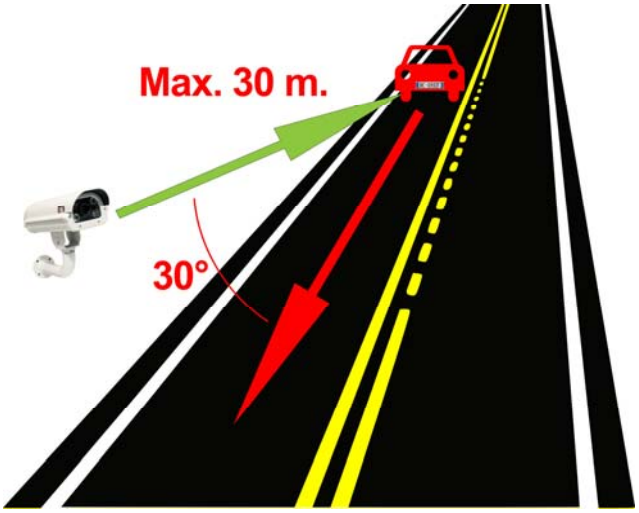
This camera is designed to allow the recording of license plates of vehicles in slow or fast motion. It can operate in any light condition thanks to the built-in infrared illuminators. Thanks to a High-Light Suppression system, it is not affected by the headlights of the vehicle, both high and low beams.
With this camera you are guaranteed to record license plates that are always legible in all conditions.
This camera does not perform character recognition (OCR)

ASSEMBLY

The cameras are equipped with a bracket for wall mounting made to allow the passage of cables inside it. The bracket is usually mounted at the cable exit. The fixing base has 4 holes for wall fixing with plugs. The housing is watertight and can be installed outdoors without protection.

POSITIONING

The positioning of the camera is very important for a good performance of the license plate reading.
The optimal recording of the license plate is carried out at a maximum distance of 30 m. depending on the lens setting.
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 the vehicle will be, 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 from the headlights is not directed directly at the camera. We recommend a horizontal angle with respect to the direction of the vehicles not exceeding 15% and a vertical angle not exceeding 45%.
You can obtain optimal positioning by positioning yourself on the roadside with a shot at about 30 ° with respect to the vehicles and installing the camera at least 5-6 m in height.



You can frame from 1 to 3 lanes, depending on the lens setting. See in this example an optimal 3-lane shot

When orienting the camera, be careful not to exceed the recommended vertical and horizontal angle above and the detection distance of 30m. Keeping within these limits, try to make sure that the license plate remains in the field of view of the camera as long as possible.

REAR LIGHT SENSOR

The camera is equipped with a CDS sensor that allows to detect the ambient brightness and is placed at the rear to avoid incorrect readings due to car headlights. The sensor is located in the rear cable gland of the housing.
It is absolutely necessary to avoid that light sources go to distort the detection of this sensor, because in this case the camera will not work correctly at night. Above all, it is necessary to avoid the presence of lighting headlights near the camera that would prevent the LEDs from turning on.
For proper operation make sure that the front LEDs of the camera light up at night.

CONNECTIONS

The connections placed on the cable coming out of the camera are the following:

BNC video output - The video cable is connected to the bayonet female BNC connector and then leads to an AHD DVR.

The RE-BCC8FD cameras are cameras designed to work with the latest generation AHD DVRs capable of handling Full HD 1080P 1920x1080 (2 MP) resolution. If necessary you can switch the video signal from AHD to CVI or TVI within the OSD menu. CVI and TVI are other high-resolution analog video formats used by other manufacturers.

The camera also supports the old analog CVBS video, but its use is not recommended due to insufficient resolution.

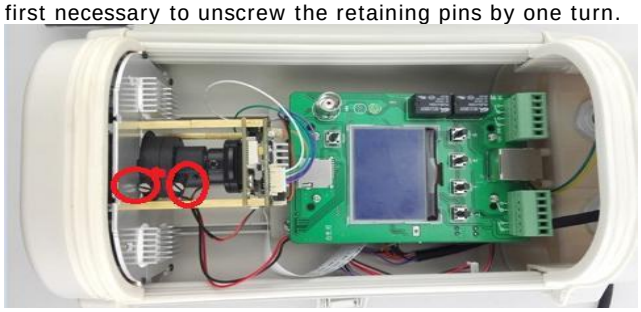
Pin DC12V - A stabilized 12VDC power supply with at least 2000 mA must be connected (not included).

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. Pay attention to 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.

TARGET

Zoom / focus adjustment - The camera mounts a manual lens adjustable from 6 to 22 mm.

Once the camera has been positioned, it is necessary to adjust the zoom and focus of the lens by acting on the two adjustment dials. In order to rotate the ring nuts it is first necessary to unscrew the retaining pins by one turn.



Operate initially on the ZOOM and adjust the width of the frame (wide angle / zoom) according to the area to be framed. Remember that the greater the wide angle, the less image detail inevitably corresponds.

Generally it is good to frame as narrow a width as possible around the position where the license plate will be, so that it appears as large as possible in the frame.

With this camera you can cover from one to 3 lanes.

Once the field of view has been defined, adjust the FOCUS adjustment (ring farthest back) 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. Focus on the most important area where the vehicle's license plate will be to adjust the focus in the best way.

For a perfect adjustment, it may be useful to position a stationary car in the exact point where the license plate is read, possibly making the adjustment at night, when the focus is most important.

IR ILLUMINATOR

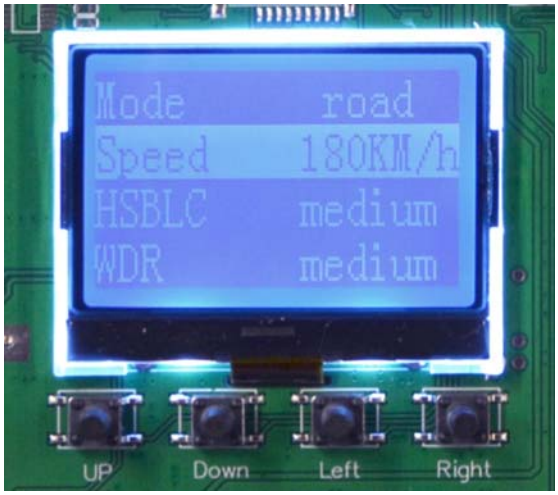
The camera integrates an infrared illuminator that emits an illumination invisible to the human eye, but visible forthe camera. LThe illuminator turns on by itself when darkness falls and the camera switches by itself into night vision mode. Switching on the illuminator allows you to view the license plate in absolute darkness up to its illumination range of 30 meters.

Note that in this camera the illuminator is used for viewing the vehicle license plate and does not allow, if not marginally, the night vision of the vehicle or the environment. If this is required, another traditional camera is required.

ADJUSTMENTS

The camera is equipped with an internal screen with a push-button panel for regulating the license plate reading settings

The keypad allows you to move between the menu items with the UP DOWN LEFT RIGHT buttons



MODE - The first menu item allows you to auto-configure all subsequent options quickly simply by selecting the type of camera use. Select PARKING if you are using the camera in an area where vehicles are moving slowly, such as in a parking lot or service area. Select ROAD if you want to monitor a road with fast moving vehicles.

SPEED- Select the maximum speed of the vehicles in transit. You have the following steps available: 30Km / h, 60 Km / h, 90 Km / h, 120 KM / h, 150 Km / h, 180 Km / h.
Consider that the higher the speed of the media set, the darker the night image will be as a faster shutter speed is required. Conversely, by setting a lower speed you will get an image that also allows a good view of the vehicle and not just the license plate.

SPEED 30 Km / h
The vehicle is also visible in color, but if the vehicle is fast the license plate is moved

180 Km / h
The vehicle is barely visible, but the license plate is legible even at high speed

Be careful not to be excessively attracted by setting low speeds to obtain the image of the vehicle in color, as in this situation a vehicle traveling at a higher speed will have a moving and difficult to read license plate.

HSBLC- It is the electronic function that avoids the glare caused by the vehicle headlights. You can adjust the intensity of this function to LOW / MEDIUM / HIGH.

HSBLC corrected

Insufficient HSBLC

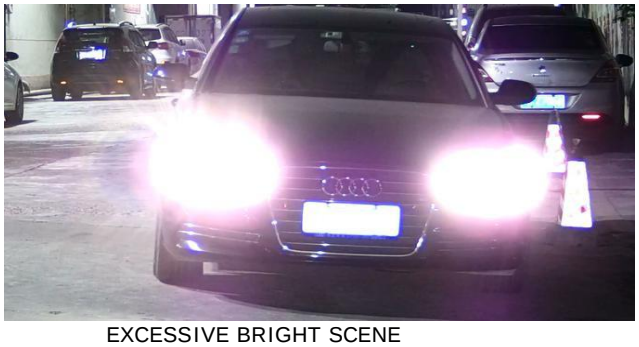
WDR- This parameter allows to increase the visibility of the environment around the vehicle. You can set this function to progressively increasing values: CLOSE (excluded), LOW, MEDIUM, HIGHER, HIGH

WDR CLOSED
The environment around the vehicle is hardly visible

WDR MEDIUM
The environment around the vehicle is more visible

SCENE BRIGHT- Here you can set the night brightness of the environment in which shooting takes place. You can choose the increasing values of CLOSE (excluded), LOW, MEDIUM, HIGHER, HIGH. However, it is recommended to keep the factory setting for this parameter except for particular shooting situations. For example, it may be convenient to set HIGH lighting when monitoring a motorway tollbooth.

CORRECT BRIGHT SCENE



EXCESSIVE BRIGHT SCENE

LED LIGHT- Here you can adjust the intensity of the IR illuminator to match the shooting distance. You have 13 levels of LED brightness (1..13). If the plate is shot closely, below 10 m. for example, it may be convenient to reduce the brightness of the LEDs to prevent it from being too bleached.
To adjust the lighting correctly, place yourself in real dark conditions and lights on by positioning a stationary vehicle at the license plate reading point. If the plate is bleached with illegible characters, the power of the LEDs must be reduced.

CORRECT LED POWER

EXCESSIVE LED POWER

CDS START- For a good reading of the license plates in the dark it is necessary that the front IR LEDs light up in night mode. Here you can set the activation threshold of the IR LEDs from 1 to 10 according to the night lighting of the environment. If you set a low value, the LEDs will turn on earlier, even in the presence of a certain ambient brightness. With a high value instead it will have to be darker for the LEDs to light up.
By reducing this setting to low values, you can compensate for the presence of any light sources near the camera which, by preventing the LEDs from switching on, prevent a good night reading of the wipers.

SNAPSHOT - Not used on these models

OSD BUTTON

Along the camera cable is a button that allows you to access the camera's OSD minus.

We advise against the user to intervene in these parameters because an inappropriate modification could preclude the ANPR capabilities of the camera.
However, the menu is accessible for auxiliary adjustments such as switching the video format (ADJUST / OUTPUT MODE) and managing overlays (SPECIAL / CAM TITLE)

REMOTE CONTROL OF THE MENU VIA UTC

If you have a UTC DVR, you can control the camera OSD menu remotely via the UTC protocol. UTC control does not require additional cables as the controls pass along the video cable.
For how to activate the UTC command, check the DVR manual.

RESET

If you are dissatisfied with the adjustments made, you can restore the factory settings by holding down the RESET button on the board.

PROBLEMS AND SOLUTIONS

IR LEDs do not light up at night- Check that there is no light source illuminating the sensor on the back of the camera. Adjust the CDS START ignition threshold in the menu.
Glare on the license plate - Avoid headlights directed directly towards the camera while maintaining the recommended positioning.
The plate is moved - Increase the speed of the vehicles in the settings
Plaque too bright or dark at night - Adjust LED power in settings
The plate is too small and cannot be read - Zoom in on the lens to focus the shot.
No video signal - Check if the DVR supports AHD 1080P format.

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