

#### RY-BCC8 IP camera license plate

**RY-BCC8** 



#### PRODUCT DESCRIPTION

This IP 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 illuminators embedded white light.

Thanks to a High-Light Suppression system is not influenced by headlights of means that is dazzling

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dipped.

Compatible with ONVIF protocol can be combined with any management system or NVR that supports this standard. RY-BCC8

IP camera "naked". The DSE cameras in this series are not capable of recording independently of the SD card or NAS, and are provided free software for your PC or mobile APP.

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They are developed to work with an NVR or an external recording software which is delegated all the video system management. If you choose a camera NAKED, premuratevi to also purchase an NIVP

Excellent in combination with this camera are our NVR series DN that allow you to make the FullHD resolution to 100% and

real-time frame rate of

camera

RY-BCC8 is still compatible with any NVR or software platform on the market as long as they conform to the ONVIF standard.

## **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  $^\circ$  and a heater that is activated at below -5  $^\circ$  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 illumination of the LEDs 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. The minimum angle of 30 ° must also be respected in order to avoid dazzling of the driver whereas the LEDs emit white light.

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. The optimal reading is obtained by framing a single lane, but you can take up to 3 lanes with a satisfactory reading.

The camera operates indifferently framing the rear or front plates.

## CONNECTIONS

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

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

These cameras, also support the power POE by network switches. If you are using the power POE, the 12VDC plug must not be connected.

Network RJ45 socket - Network port to connect to a switch

**BNC video output** - It 'provides a BNC female connector to which you can connect an analog monitor laptop useful for adjusting the lens. Do not use this video out for license plate reading because of lower resolution to digital streaming.

## TARGET

Adjust zoom / focus - The camera mounts an adjustable objective lens from 5 to 50 mm. autoiris DC drive. Once the camera is positioned it is necessary to orient the bracket and appropriately adjust the lens. To adjust the lens remove the rear plastic protection of the camera and open the top cover. 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.



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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. The commissioning focus adjustment is crucial for the success of the license plate reading. Make sure you have a large monitor as much as possible to be able to properly evaluate the quality of detail.

It may be useful for a correct adjustment, 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.

#### **NETWORKING**

Connect the network port of a port of the network switch camera with a right network cable. Check that the yellow LED on the connector starts to flash, which confirms that the network has established dialogue.

## IP ADDRESS ASSIGNMENT

The camera IP address Factory 192.168.0.199

The factory logon credentials:

USER: admin

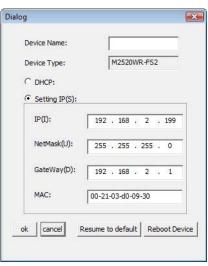
PASSWORD: admin

To change the IP address of the base and make it consistent with that of your network using the Windows program SEARCHIPCAMERA the CD. It is a program that does not require installation and consists of two files only. You can also copy the folder to a flash drive and use it on any PC on the network.



Run the program and click SEARCH. The program will search all RY-BCC8 cameras on the network and list them in the table.

Select the camera click EDIT

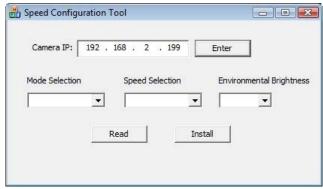


Set the address you want, and the subnet mask and gateway of your network and click OK to refresh. Remember that the first 3 IP Address numbers must be the same for all network elements (cameras, PCs, routers etc.)

### SETTING THE CAMERA

The RY-BCC8 camera is pre-programmed for the best performance in the detection of plaques. And yet you can make some adjustments to adapt perfectly to the environment and the means to shoot. To make these adjustments using the second application on the CD called

**SPEED CONFIGURATION TOOL.** It is, also in this case of a program that does not require installation and consists of only 2 files. You can also copy the folder to a flash drive and use it on any PC on the network.



Enter the IP address of the camera you want to configure and click ENTER

to execute t

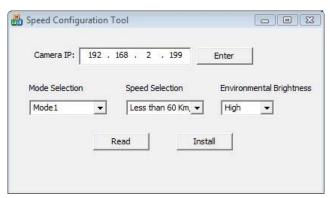
connection. The message: ENTER OK. Now press READ to read the current settings of the camera.



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E 'can modify parameters as desired and click INSTALL to transfer to the camera. The success of the operation is confirmed by the message OK INSTALL.

It should be noted that in order to proceed with these adjustments it is necessary that <u>there are no clients on the network</u>. The adjustable parameters are as follows:

MODE - There are two options Mode 1 and Mode 2. Mode 1 is used when the night light is expected as low or absent in the filming of road sections. MODE 2 is used when the night brightness is expected always good such as filming at tollbooths. Of the camera factory is set to MODE 1, which is normally recommended for most applications.

**SPEED** - This parameter should be adjusted according to the maximum speed of the means. The available options are: 30 Km / h, 60 km / h, 90 km / h, 120 km / h, 150 km / h.

## BRIGHTNESS - This parameter defines

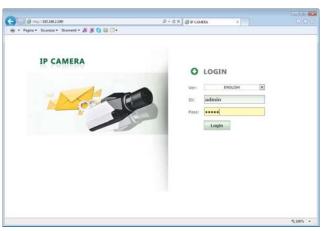
Night image brightness to be obtained. If you select an image with general low light also it has greater protection against the glare of the headlights. There are 4 levels Normal, Low, Medium,

#### **VIEWING THE CAMERA**

The camera is based on ONVIF protocol and for this reason can be connected to any NVR.

To evaluate the video quality can also connect with the Internet Explorer browser by typing the IP address of the camera.

However, this connection is not necessary because the web interface does not intervene in the license plate reading capabilities.



Type the credentials of USER: admin PASSWORD: admin Take care that the first camera access must install the ActiveX components in the browser. If not, head in the Explorer security settings and custom settings enabled all options regarding the download and execution of ActiveX is marked safe for you not marked as safe. It will see the image of the camera. Through the IE browser you can also adjust some of the camera's performance parameters but you should not change them to avoid compromising the ANPR functionality.

#### LIGHT LED

The camera incorporates an internal illuminator high power LED lighting that gives off visible to the human eye.

The 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 about 30 m lighting ..

