

### RY-BCC8FDM



#### 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 dipped.

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

is a IP camera "naked". The DSE cameras in this series are not capable of recording independently of the SD card or NAS.



They are developed to work with a NVR or an external recording software which is delegated all the video system management.

If you choose a camera NAKED, prematuretevi to also purchase an NVR.

Excellent in combination with this camera are our NVR series DN that allow you to make 100% resolution and frame rate real-time camera. The camera 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 ° and a heater that is activated at below -5 ° C.

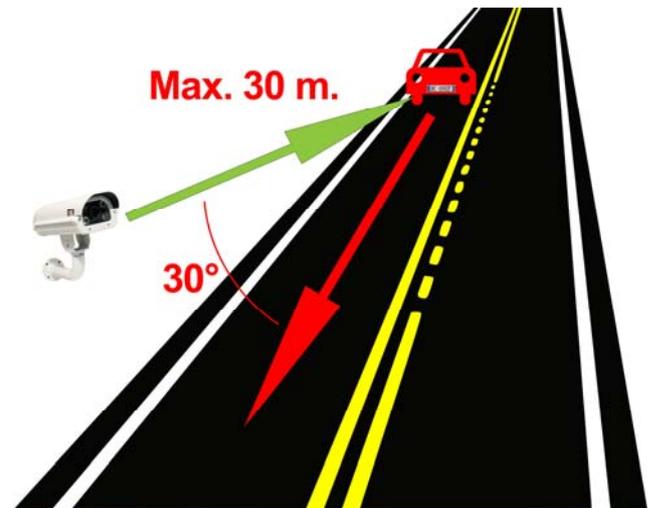
#### POSITIONING

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 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 an angle of approximately 30 ° with respect to the illumination of the headlights. It "s also wise to install the camera in position detected above street level: from 3 to 8 meters you can have the best results. Satisfied

the previous 3 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. 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 supply from POE network switch. If you are using the power POE, the 12VDC plug must not be connected.

**Network RJ45 socket** - Network port to connect to a switch



#### NETWORKING

Connect the network port of a port of the network switch camera with a right network cable. If you use a switch with ports POE the camera will draw power from the network cable. Otherwise you will need to connect a 12VDC power supply to the power input.

Check that the LED for the port of the network switch start blinking, which confirms that the network has established dialogue.

**IP ADDRESS ASSIGNMENT**

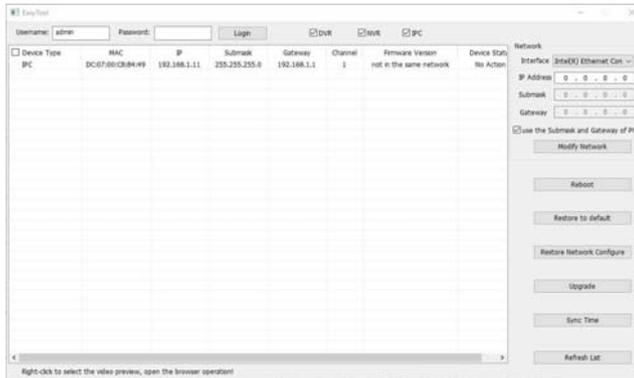
The camera IP address Factory **192.168.1.11**

The factory logon credentials:

**USER: admin**

**PASSWORD: (Blank)**

If you purchased more than one camera of this type connect them one at a time, to avoid creating conflicts in the network having the cameras the same factory address. To change the IP address and make it consistent with that of your network using the Windows program **EasyTool** the CD. It is a program that requires no installation and is made up of a few files. You can also copy the folder to a flash drive and use it on any PC on the network.



Run the program. When started, the program will search all the cameras .. RY-BCC8 network and list them in the table.

Select the camera is inserted into the IP ADDRESS box the address you want.

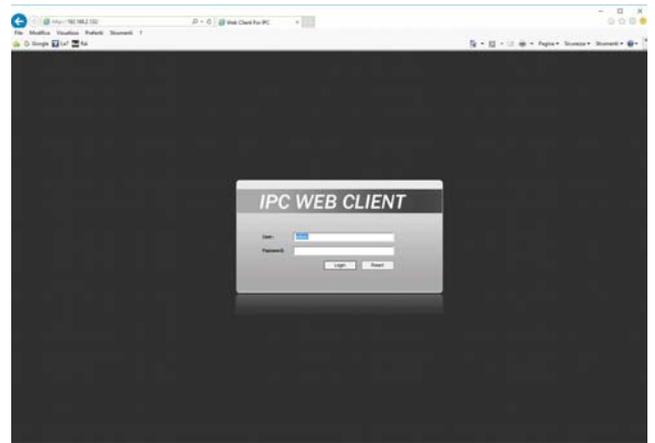
If you leave the option enabled USE THE GATEWAY OF PC AND SUBNET subnet mask and gateway we will be set equal to the PC on which you are working. Click NETWORK MODIFY to update the camera data and enter those settings.

Because the camera can communicate with other devices network it is necessary that the first 3 digits IP address and subnet mask are common to all network devices.

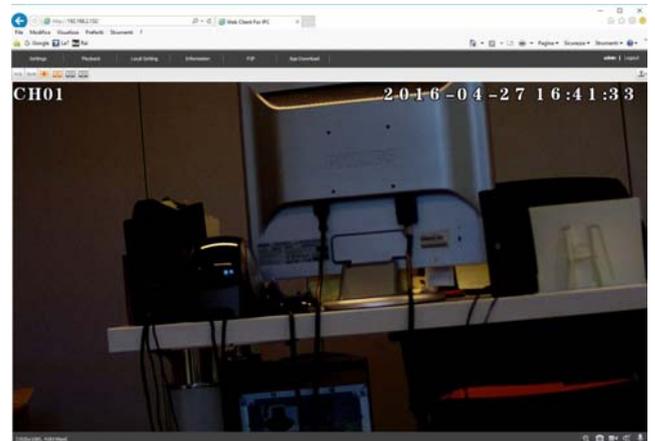
**VIEWING THE CAMERA**

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. You can not use other browsers. 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.



Type the credentials of USER: admin PASSWORD: leave blank the camera image will appear.

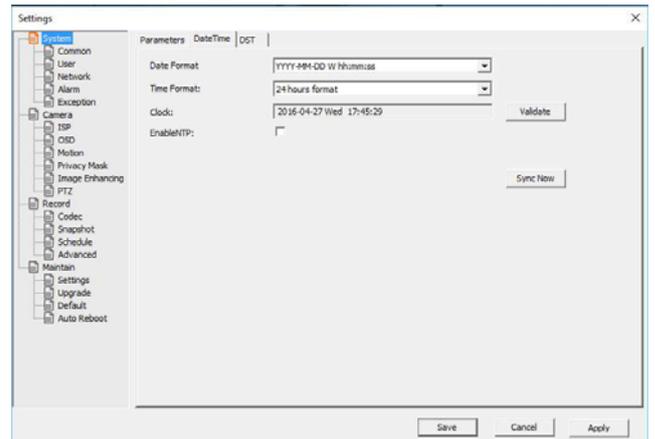


If you are testing the camera in an internal do not worry if the image will become dark. And normal considering that these cameras work with a fixed shutter.

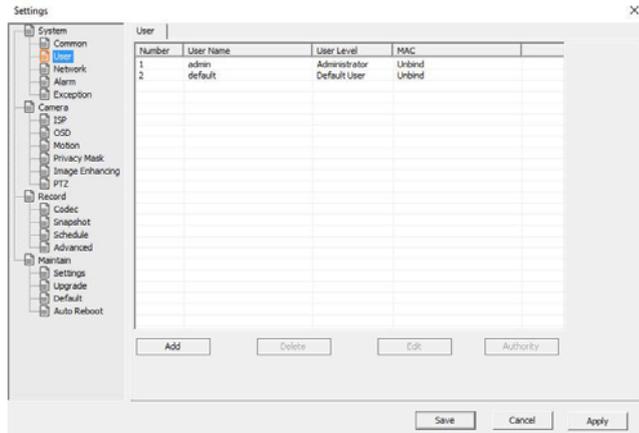
Through the IE browser you can also adjust certain parameters of the camera by pressing the SETTINGS button at the top.

**CAUTION:** To avoid prejudicing the ANPR functionality and should not modify the configuration of the

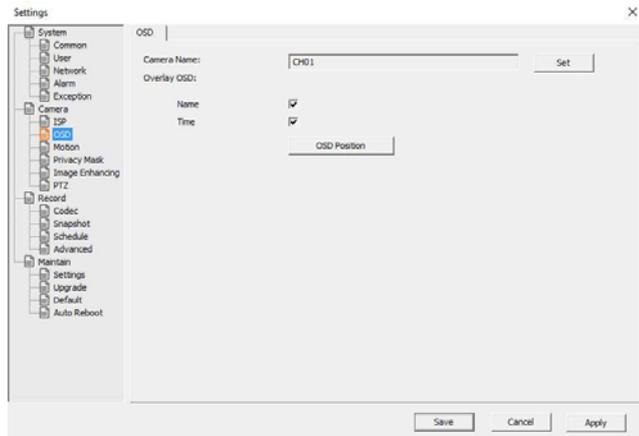
camera with the browser limited possibly only aesthetic details such as the following: Date and Time



Inserting new users

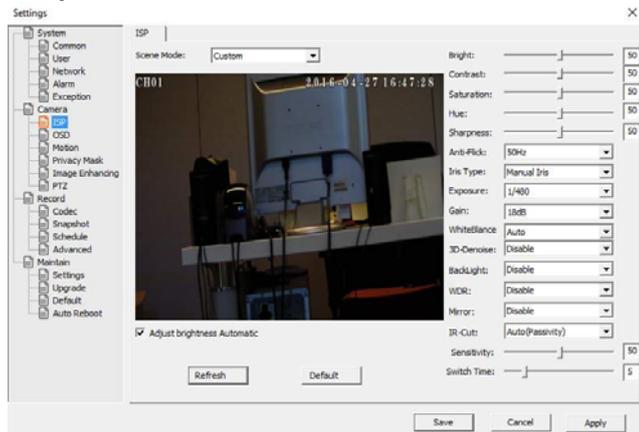


OSD overlays Settings



In particular it is recommended **DO NOT CHANGE** settings  
Video of the window Camera

following.



Key parameters for a good license plate reading capabilities are the parameters **Exposure and Gain** ( factory as in the figure). No changes made in this section as the restore option **DEFAULT** returns to the factory configuration of the DSP that is NOT that provided for the ANPR functionality.

Use the camera settings for the software tool provided in the CD we described further and allows you to change these settings safely.

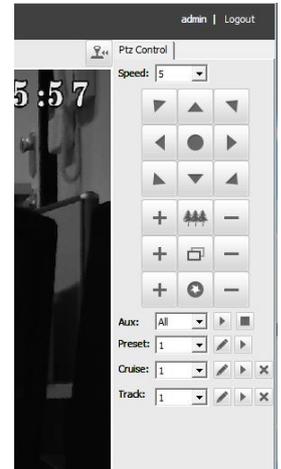
**GOAL SETTING MOTORIZED**

The camera mounts an adjustable objective lens from 5 to 50 mm. Once the camera is positioned it is necessary to orient the bracket and appropriately adjust the lens. Unlike normal CCTV cameras, these models for reading license plates require a certain time to obtain the best setting according to the distance of the medium. The accurate adjustment of the lens is essential for a good reading of the plates. Luckily

the our cameras to license plate They equipped with motorized lens that can be adjusted remotely using

the browser Internet Explorer. Acting initially on the button **ZOOM** and adjust the frame width (Wide / Zoom)

according 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 the field of view, push the button

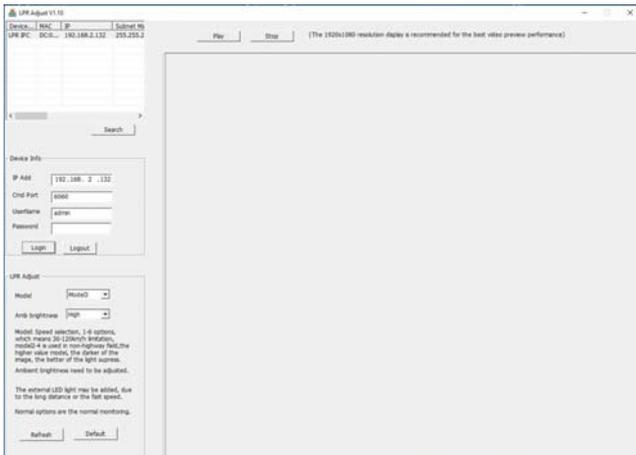
**FIRE** to focus perfectly framed area. Recall that each lens has its own depth of field to which it is possible to put in focus in a perfect way only a portion of the space in front of the camera. Concentrate on the most important area where you will find the plate of the vehicle to adjust the focus optimally. 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 of the lens position a car stops at the exact point where it carries out the reading of the license plate. This adjustment should be carried out in night vision, where conditions are worse.

**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

**IPC.EXE.** Yes It is, also in this case of a program that requires no installation and is made up of a few files. You can also copy the folder to a flash drive and use it on any PC on the network. IT 'S THE ADJUSTMENT IN SHOOTING NIGHT.

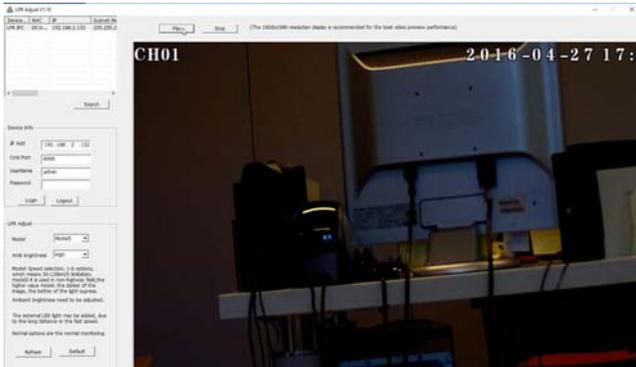


The program shows the upper left corner of the RY- BCC8-- cameras found on the net. You first need to select a camera,

USER NAME and enter

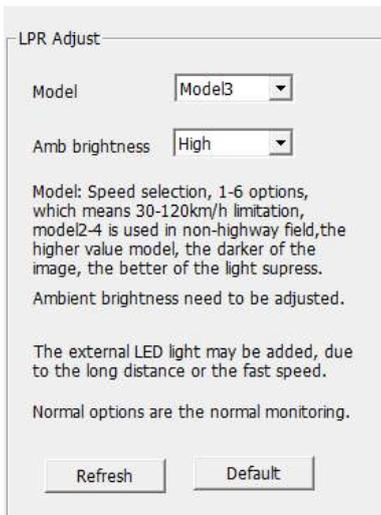
PASSWORD (admin / empty factory) and click LOGIN. The message: LOGIN SUCCESS.

Now press the PLAY button to preview the video of the camera.



This preview page can be used to view the camera's reactions and possibly for lens adjustment.

The adjustment of the camera parameters can be found in the lower left



**MODEL**

It represents the mode of operation of the camera and adjusts from 1 to 6 depending on the speed of the means. Adjustments 1 to 4 are used for moderate speed. Adjustments 5:06 are used for high speeds and provide images darker globally. In practice this adjustment affects the opening time of the shutter according to the following table:

| METHOD ' | SHUTTER (sec) |
|----------|---------------|
| 1        | 1/100         |
| 2        | 1/240         |
| 3        | 1/480         |
| 4        | 1/960         |
| 5        | 1/2000        |
| 6        | 1/4000        |

The NORMAL option should not be used because it is the natural vision camera with automatic shutter that is excellent for classical surveillance but does not allow the license plate reading.

**AMBIENT BRIGHTNESS**

This regulation defines the brightness of the surrounding environment. Setting the LOW value has a very dark shooting where almost only the license plate will be visible. In this condition we obtain the maximum protection against the glare due to headlights. The middle and HIGH settings allow you to see better the means but not optimal position situations can better endure the glare of the headlights. In practice this adjustment affects the camera gain in accordance with the following table:

| BRIGHTNESS | GAIN (dB) |
|------------|-----------|
| low        | 6         |
| Middle     | 12        |
| High       | 18        |

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**LIGHT LED**

The camera incorporates an internal infrared LED illuminator high power lighting that gives off invisible 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.

Check the night that the LEDs light up and be visible in their red light because the LED access is essential for night number plate reading. If the LEDs do not light up check that there are no nearby light sources to the camera.