



HIKVISION EUROPE B.V.

Intelligent Traffic System

TCM403-A(AFR) Debugging Manual

Product:	TCM403
Publisher:	Jeff.Cao
Version:	V1.0
Date:	20191115



Hikvision Europe B.V.

www.hikvision.com/europe

product.eu@hikvision.com

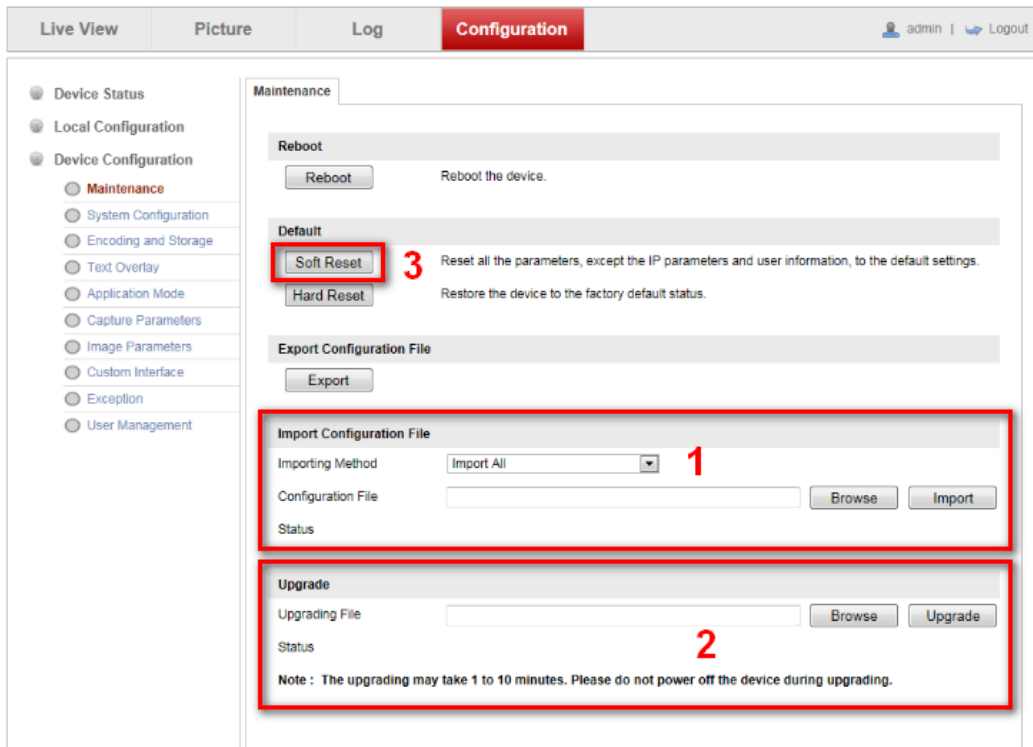
TCM403-A has two different kinds of types, including 0832 and 3813. Here we will introduce TCM403-A(AFR)/0832 debugging steps. Device activation not included below.

1. Upgrade firmware

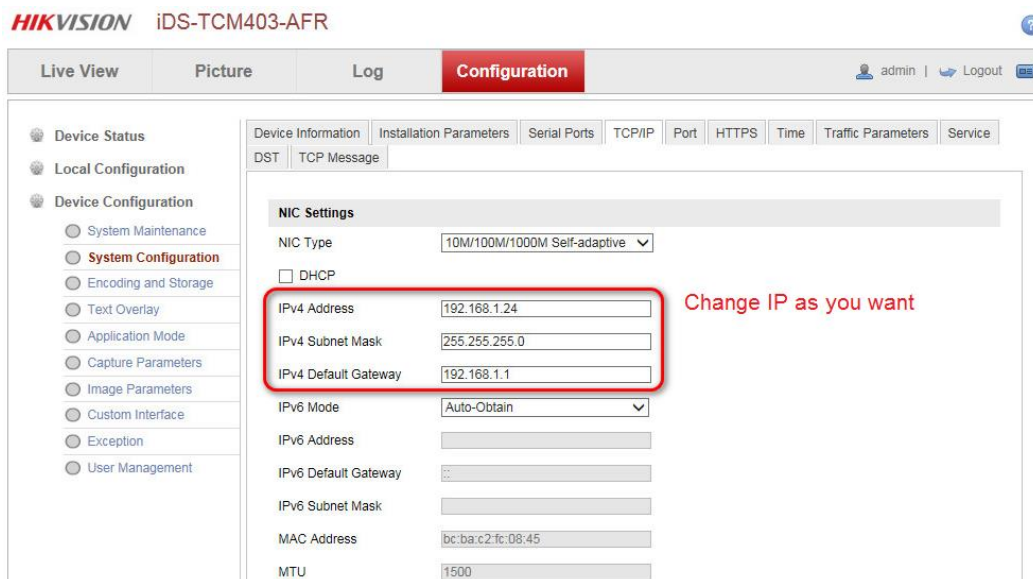
1) First, import alg file.

2) Choose to upgrade in "Browse", upgrade file browse find box. the upgrade process takes about 1 minutes, after the completion of the camera upgrade selection to restart.

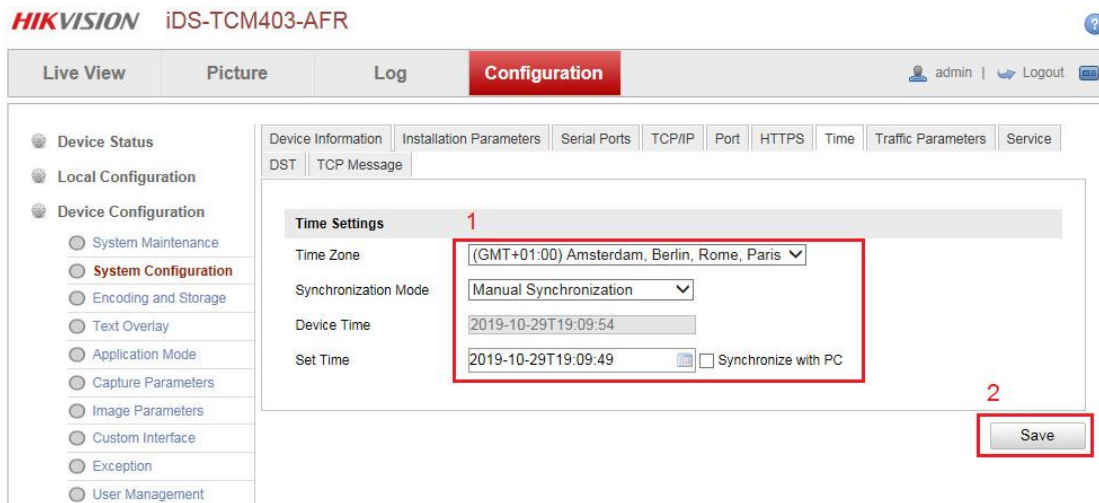
3) After the restart, select "Soft Reset", restart the camera.



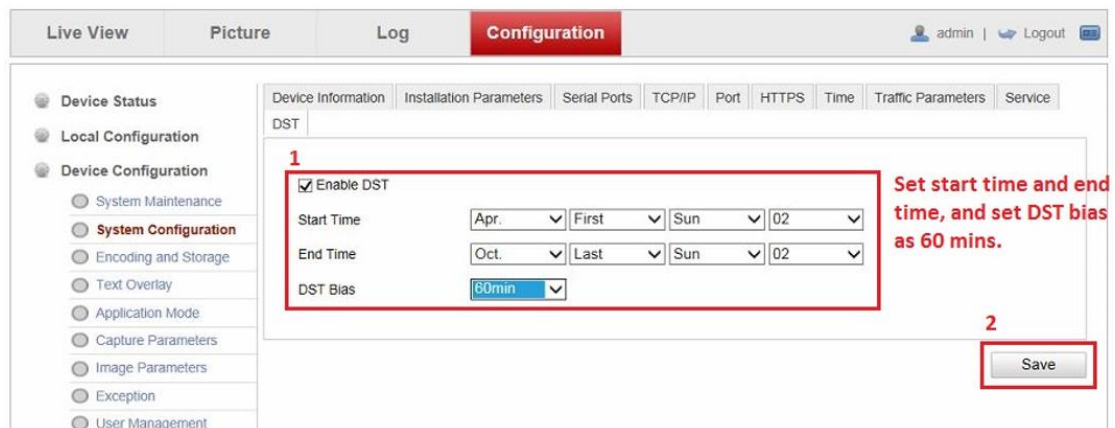
2. System Configuration>TCP/IP: change device IP as you want.



3. System Configuration>Time: Select the right time zone and synchronize device time with PC.

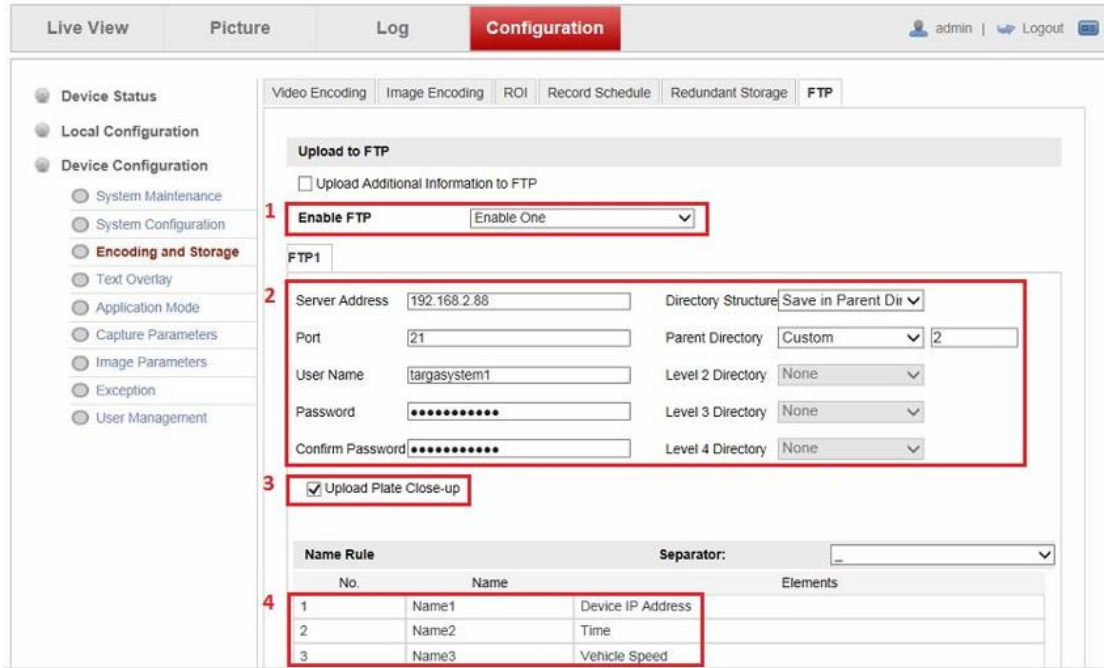


4. System Configuration>DST: If this country has daylight summer time, then need to enable DST function, set start time and end time, and set DST bias which is usually 60 mins.

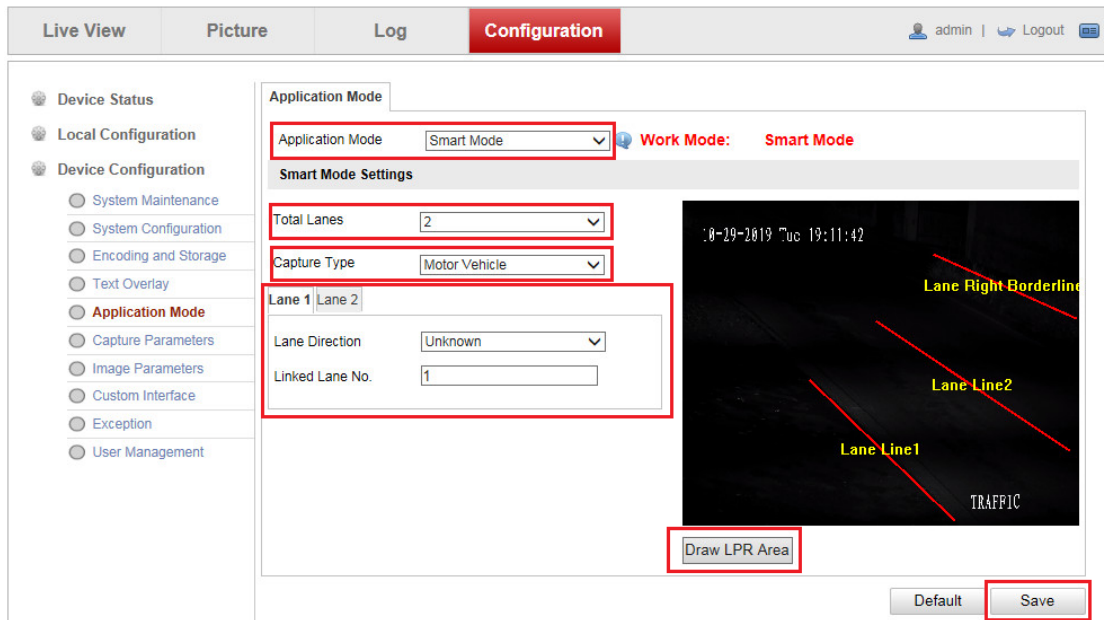


5. Encoding and Storage>FTP: enable FTP if you need; set third party platform IP address, select directory structure as save in parent directory, set port and parent directory as custom, set user name and password; Select upload plate close-up if you want; Set the name rule by choosing the information you want to show.





6. Application mode: only smart mode is available; select lane number; choose capture type as motor vehicle if you want to capture only motor vehicle, while choose all if you want to capture motorbikes at the same time; select lane direction; draw LPR area and finally click save.

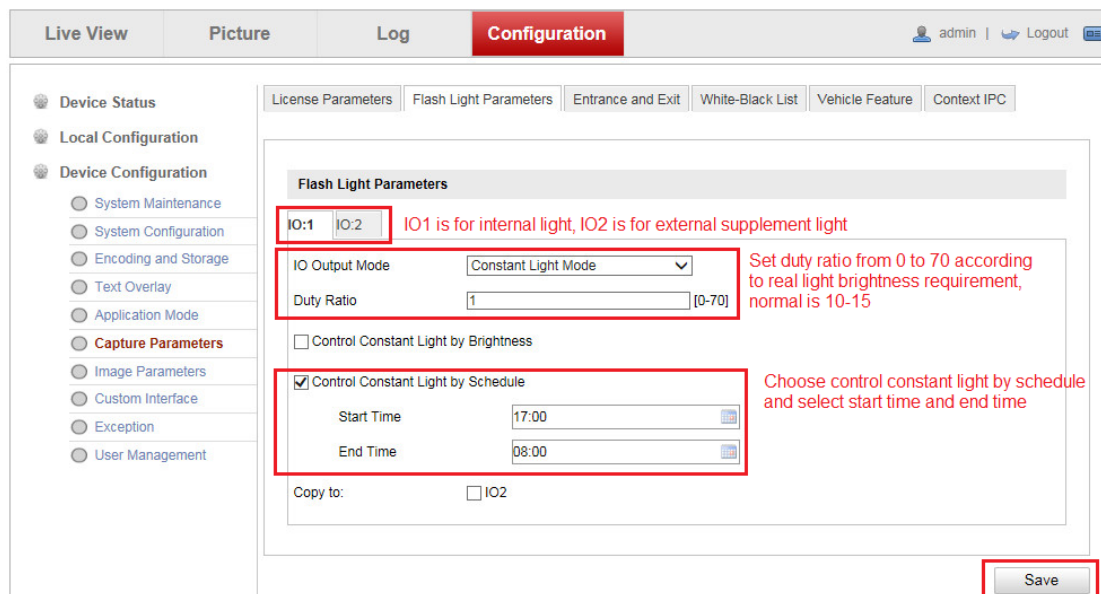


7. Draw lane line 1 2 and lane right borderline to make sure all the vehicle plate numbers are totally included in this area, because algorithm will not recognize the part exceeding the detection area.





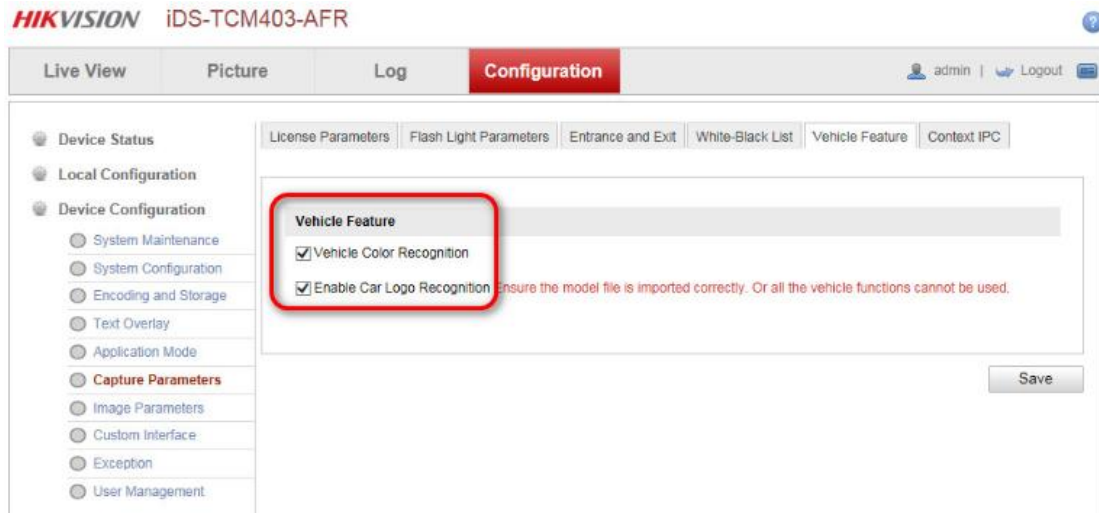
8. Capture Parameters>Flash Light Parameters: IO1 is for internal light(IR), while IO2 and IO3 are for external supplement light; only constant light mode is available; Set duty ratio from 0 to 70 according to real light brightness requirement; the larger the number, the greater the intensity of IR lamp, generally recommended 10-15, if the license plate is too overexposure, you can reduce this parameter. Choose control constant light by schedule and select start time and end time.



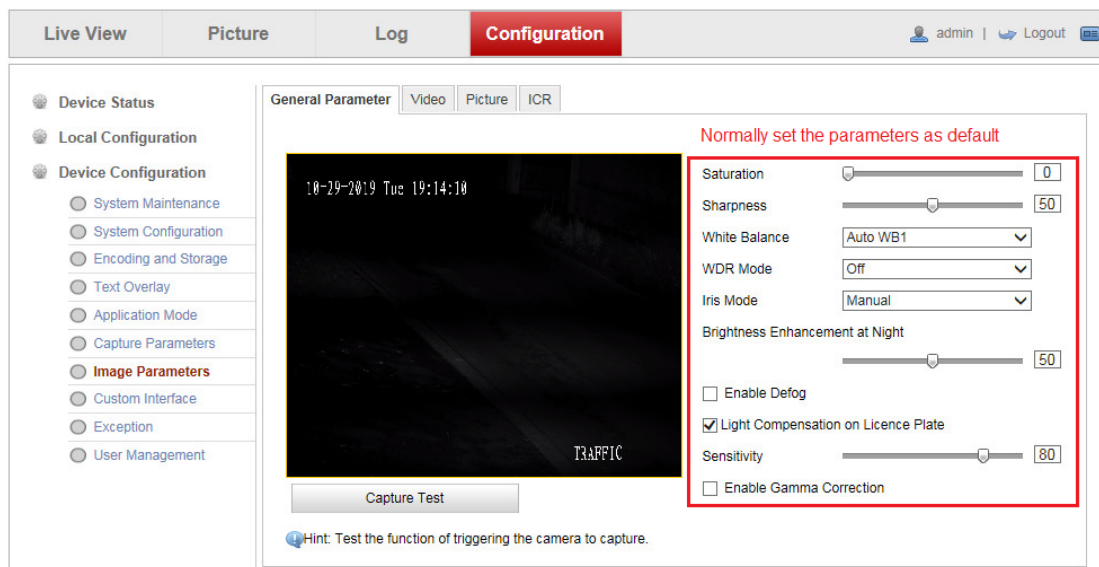
9. Enable color and brand recognition



If the brand(car logo) needs to be recognized, in order to ensure the recognition rate, it is recommended to install the camera in the middle of the lane; Car colors can only be identified during the day, and only black, white, gray in night.

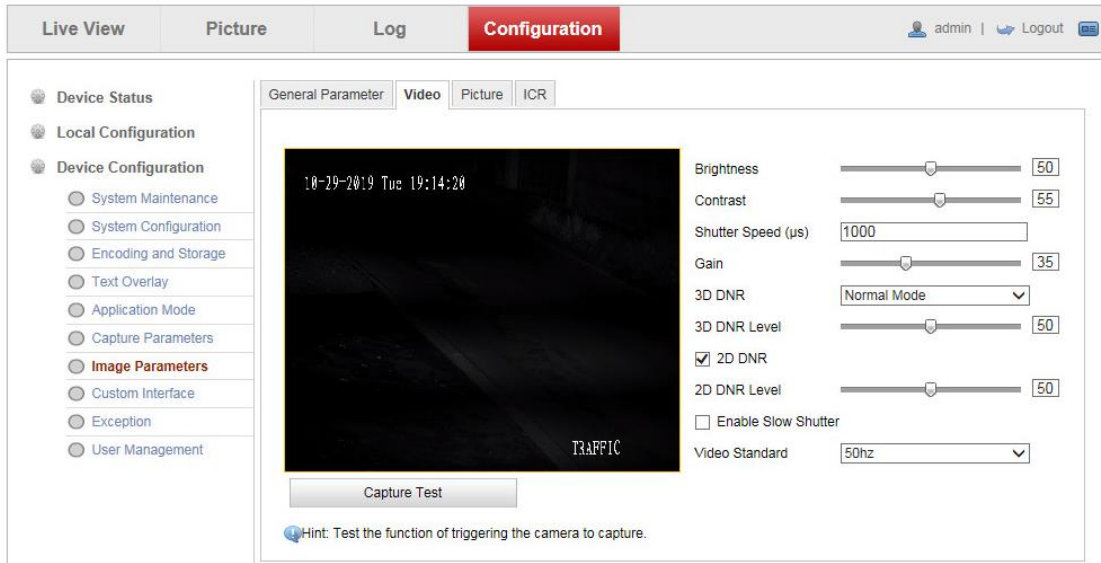


10. Image Parameters>General Parameter: normally set all the parameters as default. You can change the sensitivity value of light compensation on license plate if the license plate is not bright enough.

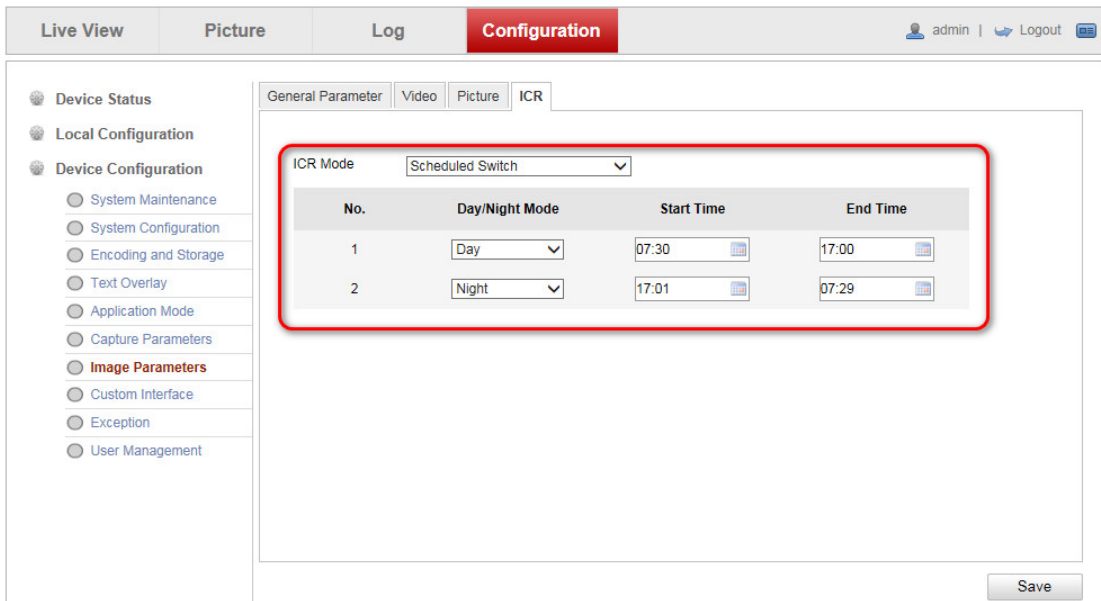


11. Image Parameters>Video: the default shutter speed value is 4000, and you can change it if there is image ghosting(normally can be configured to 1000-2000, is the best). The smaller the value is, the better result we get to solve image ghosting, which will reduce the image brightness. Set gain value according to vehicle license plate brightness during night time(0-50). Finally you need to set video standard as 50HZ or 60HZ according to the real situation in the project location country.





12. Image Parameters>ICR: start ICR mode if the internal light type is IR. It is recommended to select scheduled switch if you start ICR mode.



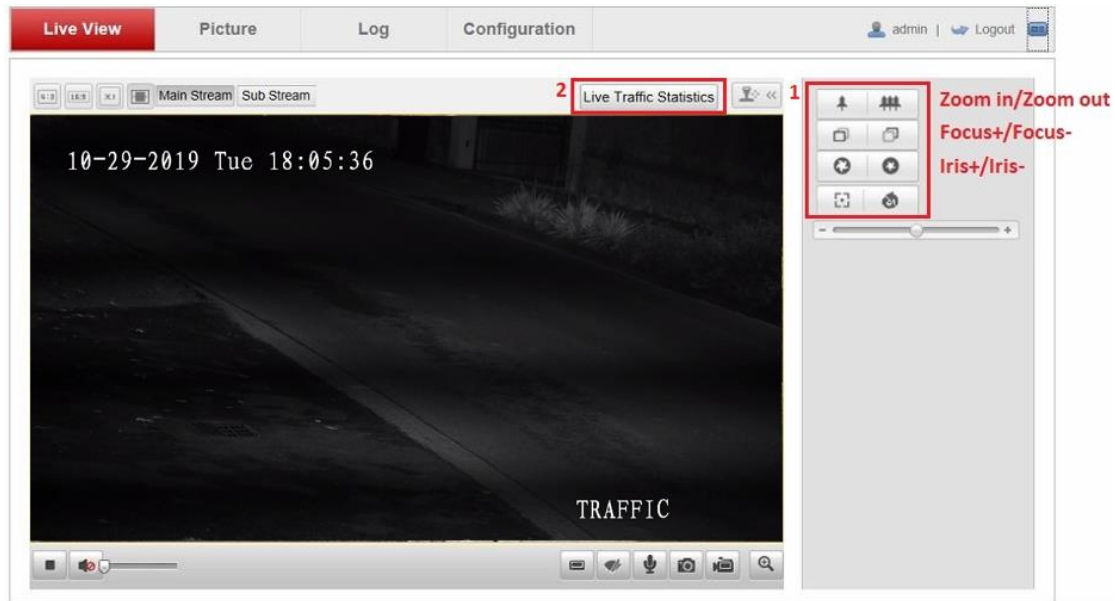
Note:

If ICR enables automatic switching, you must also enable "Capture Parameter"> "Flash light Parameter"> "Control constant Light by Brightness", the threshold of the fill light will be synchronized to the ICR threshold

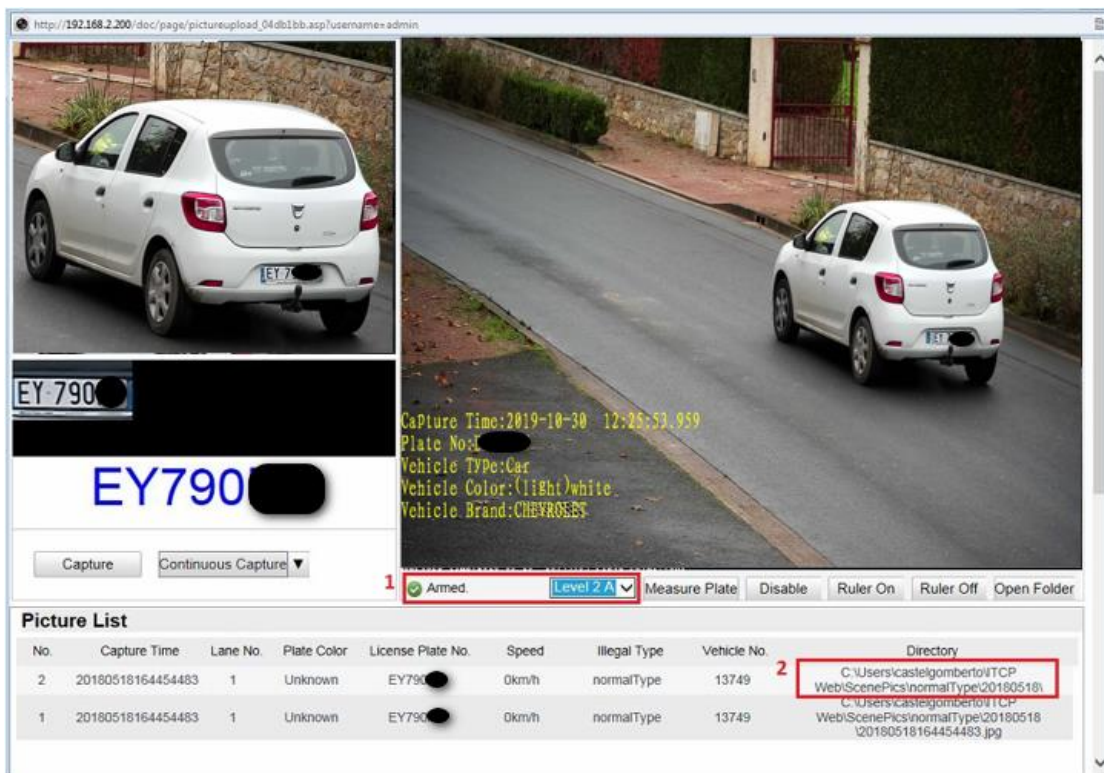
Control Constant Light by Brightness



13. Finally, go to live view to finish lens adjustment, including zoom in or zoom out, focus and iris adjustment. After that, click live traffic statistics to check captured pictures.



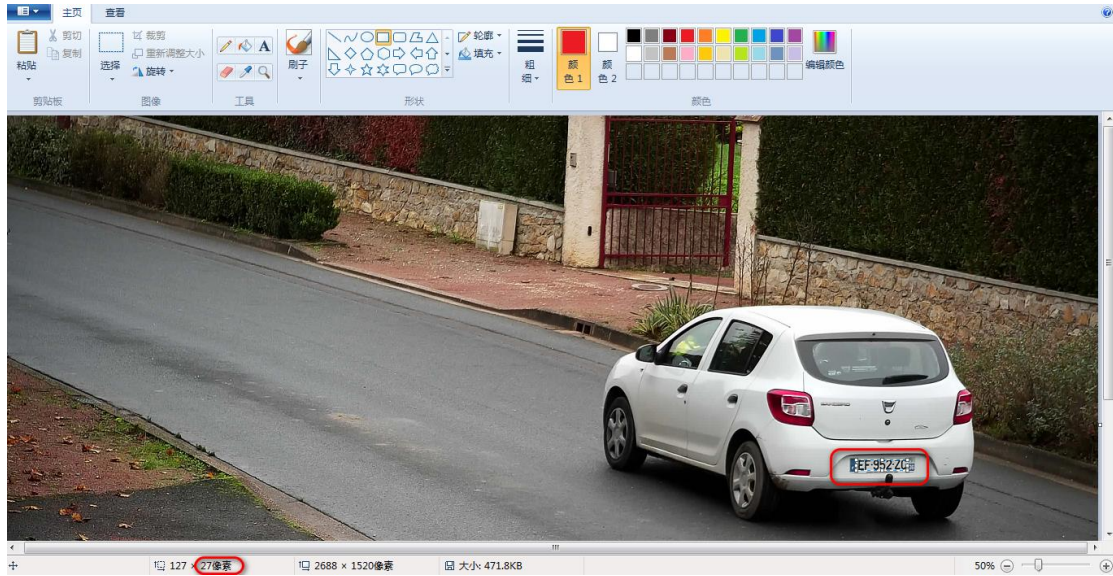
14. After you click live traffic statistics in step 12, it will pop up the interface as below. First, you need to choose level 2 armed to arm camera. Second, you can find all the results in capture list and there is the directory at the right side where the captured pictures are stored.



15. Go to the directory in step13 to find the captured pictures. Use windows paint tool to



open one picture and check the license plate number height as below. If the number height is not between 25 and 30, then you need to repeat step13 to step14.



If you have any question, you can contact **Europe Traffic Team**. We are looking forward to your reply.

