



Dahua ANPR Camera Quick Setup Guide

For Paxton Access Control Controller



Revision

Revision History	Release note	Revisor	Date	
Version 1.0	First Edition	Bibu Chen	11/03/2019	



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1. Overview

This guide aims to help users to setup Dahua ANPR Camera to be integrated with Paxton Access Control Controller to trigger the relay out according to the different rights of different vehicle owners.

• Dahua Contact Information

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Tel: +86 571 8768 8883

Website: http://www.dahuasecurity.com/

2. Product

- a) Dahua ANPR Camera:
- Model Name: DHI-ITC237-PU1B-IR-PAX



- Firmware Version: 2.401.003.0.R, build: 2018-3-19
- Specification:

-Super Starlight -H.265

- -5-50mm vari-focal lens,
- -Monitor distance 4-40m
- -IP66
- -White list database,
- -IR light
- Wiegand Output for Paxton
- b) Paxton Access Control Controller:

Model Name: Net 2 Plus



3. Setup on ANPR Camera

a) Put IP address in your web browser and login

(The default IP address should be 192.168.1.108)

b) Click the button "Config" on the webpage and adjust the lens so

that the width of the number plate is close to 150 pixels



c) Set up the recognition and capture rules



The Recognition area shall be less than 2/3 of the whole view



d) Set up the image parameters to make the effect of number plate



in night and daytime as below



e) Set up Image Quality Parameter - WDR





f) Setup - Set up Image Quality Parameter - Light Brightness

≂ пс	Light(485) Config					
 Guide Setup Snapshot 	COM1	Z				
Intelligent OSD Config Secon Cutent	CheckStatus Work Mode	Yes No	~			
Extra Device	Light Brightness	10	(0~20)			
BW List Intelligence Default	LightArrMask	N N N				
Camera Network Event		Default	Refresh	ОК		
Storage System						
Information						





g) ANPR Camera captured the plate numbers

h) Also you can use the Quick Guide to do the quick setup



4. Connection with Net2 Plus

a) To connect the ANPR Camera with Net2 Plus Reader port, using a

Belden reader cable (as per Paxton specification).



Red wire: D1 at ANPR –Clock/D1 on Net2 Plus Reader Port

Black wire: D0 at ANPR –Clock/D0 on Net2 Plus Reader Port

Brown wire: GND at ANPR –0V on Net2 Plus Reader Port





5. Operation

a) Login to Net 2 Access Control

Vet2 Logon	X
	G ST
Log onto Win419560	1411
<u>U</u> sername:	System engineer 🔹
<u>P</u> assword:	
Reset Password	OK Cancel

b) Linking a Door to the ANPR Camera



Click the 'Door'> 'Detect', to detect the Door Reader of Net2 Plus which be connected before; If 'Detect' doesn't work, please try the'Net2 Configuration Utility' tool to detect the Net2 Plus.



ile <u>View Go Tools Options H</u> elp	
🍋 Back 🔹 🛋 Forward 📲 💆 Refresh	🚽 🎻 Print 🤱 Find user 🛛 🖡 Open door 🛛 🎴 New door 👻 ᢤ Times
Net2 Access Control	Doors
Events	Name ACU serial no. Type
🗉 🚰 Access levels	
• • Timezones	
■ Doors ■ Z Reports ■ Z Reports	
💤 Net2 operators	
Net2 actions	
Add new access control unit	
Add new door group	
Log off	
Net2 details	
Doors	
Net2 documentation *	<
	Reinstate Replace Delate ACL Detect

🦪 Print	🚷 Find user	🔋 Open door	📔 New door	• 🚯 Timesheet •			
Doors							
	Name	ACU serial no.	Туре	Firmware	Status	Port Alarm	
1	ACU:6332919	06332919	Net2 plus	Up to date	OK	00-0	
	Doors	Print € Find user Doors Name ✓ ACU:6332319	Print & Find user Copen door Doors Name ACU serial no. ACU 6332919 06332919	Print End user Open door New door Doors Name ACU serial no. Type ACU:6332919 06332919 Net2 plus	Finit & Find user Gpen door Naw door Mare ACU serial no. Type Firmware ACU:6332919 06332919 Net2 plus Up to dote	Print & Find user Open door Mare ACU serial no. Type Firmware Status ACU 6532919 06332919 Net2 plus Up to date OK	Print & Find user Open door Status Port ACU seriel no. Type Firmware Status Port Alarm ACU/6332919 Net2 plus Up to dete OK OPD.

After that, the door setting for the ACU should be as follows and apply:

CU:6332919						
ACU serial number: 06332919						
Doorname	ACU:6332919					
Door group	(none)					
Door open time	2 - seconds					
Unlock the door during	At no time					
	. Only unlock the door once a user has been granted access					
	Silent operation					
Unlock relay 2 during	At no time					
Reader details Name	ACU:6332919 (in)					
Name	ACU:6332919 (In)					
Readertype	ANPR - 26 bit Wiegand reader					
Keypad type	None					
Keypad type Token data format	None ANPR-26 bit Wiegand					
Keypad type Token data format Operating mode	None ANPR - 26 bit Wiegand					
Keypad type Token data format Operating mode Reader operating mode	None ANPR - 26 bit Wiegand Token only					
Keypad type Token data format Operating mode Reader operating mode Timed operating modes - Thir	None ANPR-26 bit Wiegand Token only s allows for different reader operation during a selected timezone.					
Keypad type Token data format Operating mode Reader operating mode Timed operating modes - This During this timezone:	None ANPR-26 bit Wiegand Token only s allows for different reader operation during a selected timezone. All day, every day					
Keypad type Token data format Operating mode Reader operating mode Timed operating modes - This During this timezone: This reader will operate as:	None ANPR-26 bit Wiegand Token only sallows for different reader operation during a selected timezone. All day, every day Cinactive					
Keypad type Token data format Operating mode Reader operating mode Timed operating modes - This During this timezone: This reader will operate as: Reader action - This is what will he	None ANPR-26 bit Wiegand Token only allows for different reader operation during a selected timezone. All day, every day Concrive appen when a valid access is granted.					



c) Add a new user, and select the 'Tokens' > 'New Token' to open the 'Add new token' window. Then, select 'Vehicle number plate' and enter the license plate number which belongs to the user. (e.g. MA64XFN)



After clicking 'OK', the plate numbers display on the window; then click

'Apply' on the bottom right corner.

Chen, Bibu		
Firstname	Bibu	
Sumame	Chen	
Department	(enon)	New dept.
Telephone	Fax	
Personnel number		
0	Valid from	
0	2019/2/28 🗾 2019/3/29	-
Access rights Tokens Other det	alis Memo Events Current velicity	
PIN 3132 Auto PIN	Card template None	
		Newtoken
MJ56KFZ MA64XFN		Delete
		Lost token
		Found token
		Change token type

d) When the ANPR Camera read a license plate number from user's car, it will send the converted token number to Net2 Plus. If it's a correct token, the controller will open the door.



Plate number recognition (from ANPR Camera Web):

Obtain Plate Info				Artes	
MA64XFN					American
					E 🗉 🗉 🛛
Real Plate Info	Index		Capture Time	Plate	Country
the second se	17	ANPR	2019-03-01 16 26 04	MA64XEN	GBR

Events result (from Net2 Access Control):

ivents								
Date/time	User	Token number	Where	Event	Details			
- 3/8/2019	9:48:11 AM zheng, jie		ACU:6332919 (In)	Access permitted - ANPR	MA64×FN			
- 3/8/2019	9:47:35 AM zheng, jie		ACU:6332919 (In)	Access permitted - ANPR	MA64XFN			
- 3/8/2019	9:47:14 AM Bibu		ACU:6332919 (In)	Access permitted - ANPR	MJ56KFZ			
- 3/8/2019	9:47:07 AM Bibu		ACU:6332919 (In)	Access permitted - ANPR	MJ56KFZ			
•• 3/8/2019	9:46:59 AM Bibu		ACU:6332919 (In)	Access permitted - ANPR	MJ56KFZ			
- 3/8/2019	9:46:30 AM zheng, jie		ACU:6332919 (In)	Access permitted - ANPR	MA64XFN			
- 3/8/2019	9:46:00 AM Bibu		ACU:6332919 (In)	Access permitted - ANPR	CF55FWU			
** 3/8/2019	9:45:52 AM Bibu		ACU:6332919 (In)	Access permitted - ANPR	CF55FWU			
- 3/8/2019	9:45:42 AM Bibu		ACU:6332919 (In)	Access permitted - ANPR	MJ56KFZ			
- 3/8/2019	9:45:27 AM Bibu		ACU:6332919 (In)	Access permitted - ANPR	MJ56KFZ			



6. Appendix

a) ANPR Installation

DHI-ITC237-PU1B- IR-PAX			+	PFB604W2
Mount Position	Height	Best Capture Distance	Range of the Capture Distance	Width of the lane
Side of the lane	2 meters	7 meters	6-10 meters	3.5 meters
Right above the lane	2 meters	7 meters	6-10 meters	
	3 meters	12 meters	10-14 meters	
Side of the lane	4 meters	16 meters	14-18 meters	7 motors
Or Dight shows the lane	5 meters	16 meters	16-24 meters	/ meters
Right above the lane	6 meters	25 meters	24-40 meters	

•

• Vertical angle< 30 Degree



Horizontal angle< 30 Degree



• Number plate angle< 5 Degree



• Number plate width: more than 130pxel

