Digital Emergency Phone Tower User's Manual

V1.0.0
For VTA8111A series

Table of Contents

Important Safeguards and Warnings

Please read the following safeguards and warnings carefully before using the product in order to avoid damages and losses.

Note:

- Do not expose the device to lampblack, steam or dust. Otherwise it may cause fire or electric shock.
- Do not install the device at position exposed to sunlight or in high temperature. Temperature rise in device may cause fire.
- Do not expose the device to humid environment. Otherwise it may cause fire.
- The device must be installed on solid and flat surface in order to guarantee safety under load and earthquake. Otherwise, it may cause device to fall off or turnover.
- Do not place the device on carpet or quilt.
- Do not block air vent of the device or ventilation around the device. Otherwise, temperature in device will rise and may cause fire.
- Do not place any object on the device.
- Do not disassemble the device without professional instruction.

Warning:

- Please use battery properly to avoid fire, explosion and other dangers.
- Please replace used battery with battery of the same type.
- Do not use power line other than the one specified. Please use it properly. Otherwise, it may cause fire or electric shock.

Special Announcement

- This manual is for reference only.
- All the designs and software here are subject to change without prior written notice.
- All trademarks and registered trademarks are the properties of their respective owners.
- If there is any uncertainty or controversy, please refer to the final explanation of us.
- Please visit our website for more information.

1 Overview

Digital emergency phone tower support match with DSS platform, and you can configure on WEB to achieve:

- 1 mechanical key with indicator, support one-click alarm.
- Support platform emergency phone tower record snapshot and monitor/listen.
- Support simultaneously broadcast to multiple emergency phone towers.
- Face recognition.
- Swipe card for patrol.
- Support expansion of IPC, speed dome, snapshot camera.
- Matrix screen input, display info.
- Built-in radar speed meter (for some models only).
- Remote unlock (customized) and local key unlock.

2 Device Structure

2.1 Front Panel

Device front panel is in Figure 2-1. See Chart 2-1.

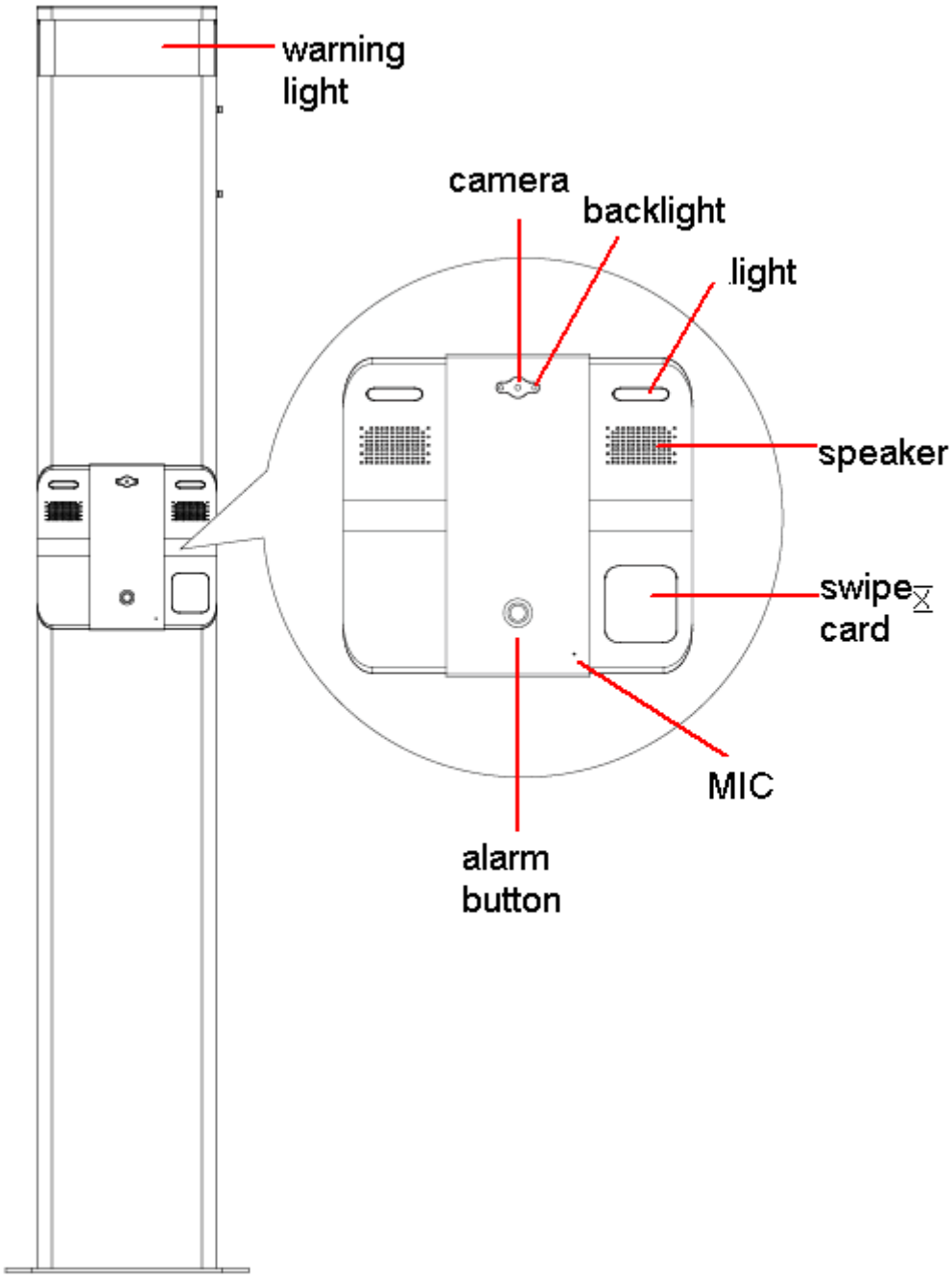

Figure 2-1

Component Name	Note
Warning Light	Warning light.
Camera	Get image in front of the tower.
Backlight	When environment is too dark, auto enable backlight.
Light	Light up from panel.
Speaker	Audio output.
Card	IC card recognition, used for patrol or patrol user card swiping.
MIC	Audio input.
Alarm Button	One-click call to MGT center.

Chart 2-1

2.2 Rear Panel

Device rear panel is in Figure 2-2. See Figure 2-2.

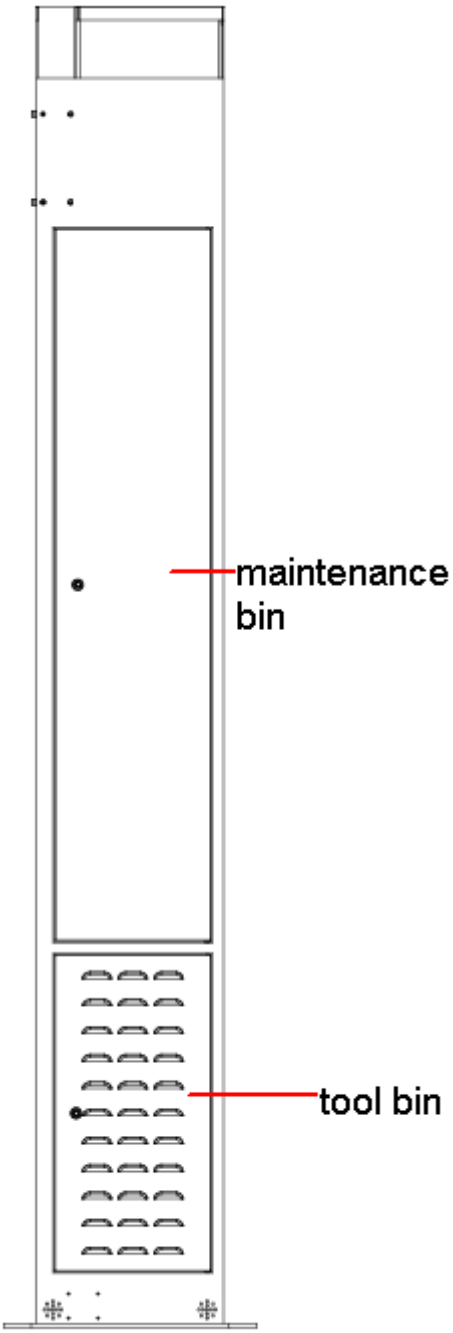

Figure 2-2

Component Name	Note
Maintenance Bin	Open maintenance bin, you can check and maintain inner of device.
Tool Bin	Used to store tools.

Chart 2-2

3 Typical Network

Network of emergency phone tower and DSS platform is in Figure 3-1.

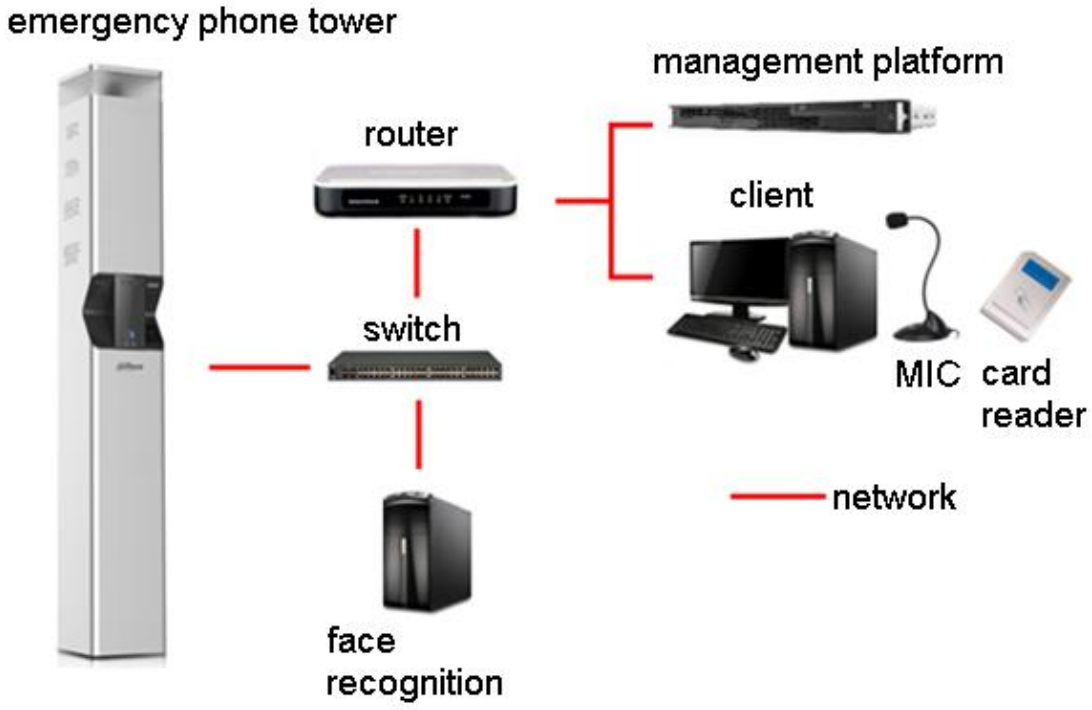

Figure 3-1

4 Device Installation

Warning:

- Avoid bad environment to install the tower, such as condensation and high-temperature, dust and etc.
- Installation and debugging must be carried by professional staff. Do not disassemble the device when it has malfunction.

4.1 Screw

Specifications of screw is in Chart 4-1.

Component Name	Quantity
M20 screw	4

Chart 4-1

4.2 Device Dimensions

Before installation, please confirm device pedestal dimensions and spacing between screws. See Figure 4-1.

Warning:

Screw hole diameter is 24mm, and rebar with diameter of 20mm is recommended.

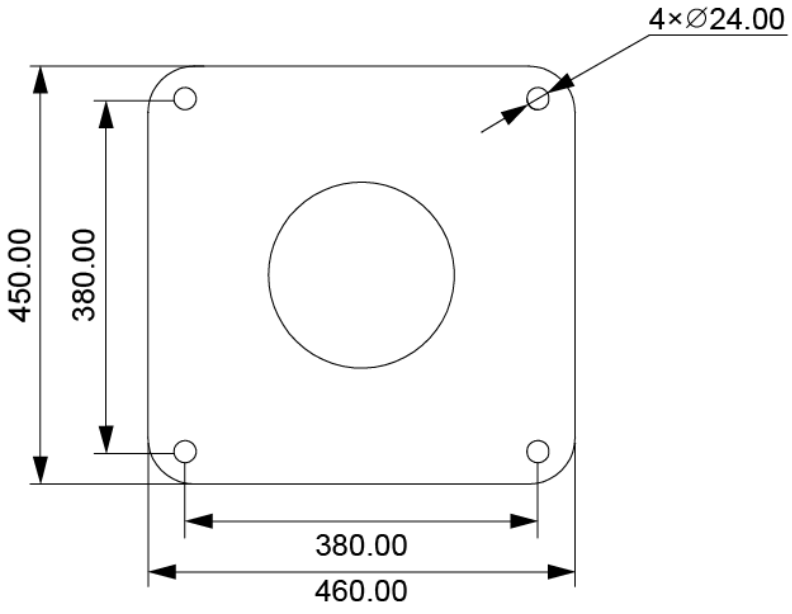

Figure 4-1

4.3 Steps of Installation

Step 1. Select digital emergency phone tower installation position. According to installation map, confirm position.

Tips:

Be careful with wiring, water draining, ventilation and other factors.

Step 2. Ditch.

Note:

Refer to general industrial standard.

Step 3. Pipe.

Note:

Refer to general industrial standard.

Step 4. Casting, see Figure 4-2.

a) Cast basic pedestal, pave with 100mm of gravel.
b) Fill in C25 concrete, all of length, height and width are no lower than 800mm.
c) On C25 concrete, insert four 20mm rebar according to space among screws.
d) Pull the rebar through 8mm steal place to fix (dig hole in advance according to screw hole spacing).

Note:

800mm is a reference only. Please adjust casting basic length, width and depth accordingly.

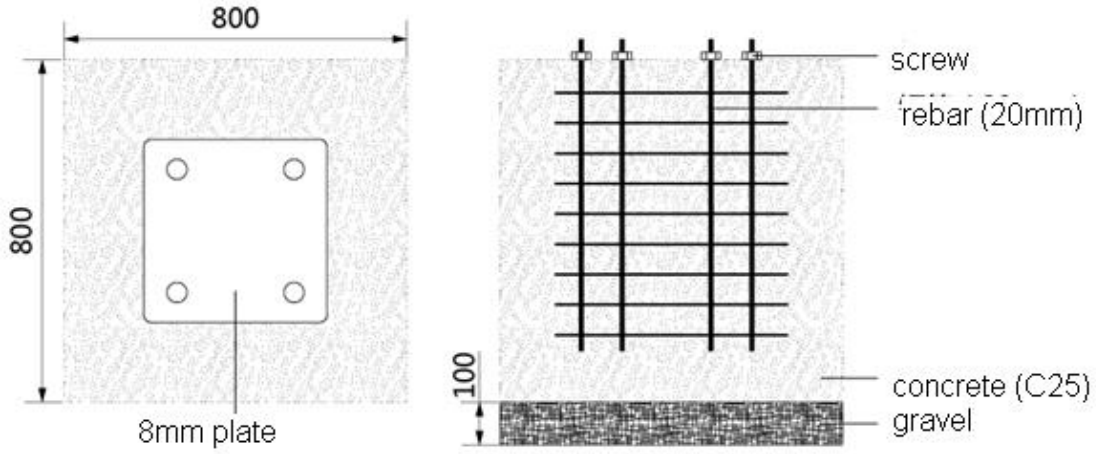

Figure 4-2

Step 5. Pave wire.

Note:

Refer to general industrial standard.

Step 6. Insulation test.

Note:

Refer to general industrial standard.

Step 7. Install emergency phone tower.

Pull 20mm rebar through the four holes on the tower, and fix via M20 screw.

5 Device Wiring

The digital emergency phone tower has wiring among internal modules all ready before being shipped out from manufacturing. If you want to add speed dome, radar, screen and other modules, you just need to select power supply inside the tower, and connect cable. For this basic model of tower, you shall connect external AC power and external network. Steps as follows:

Step 1. Connect external power.

Warning:

Before plugging device to power, you must make sure air switch is at OFF status; until well plugged, switch it to ON status. Now device is powered.

Connect power to no. 1 and 2, no. 3 is GND. Please well connected them, see Figure 5-1.

Note:

No. 5 and 6 already have SPD connection.

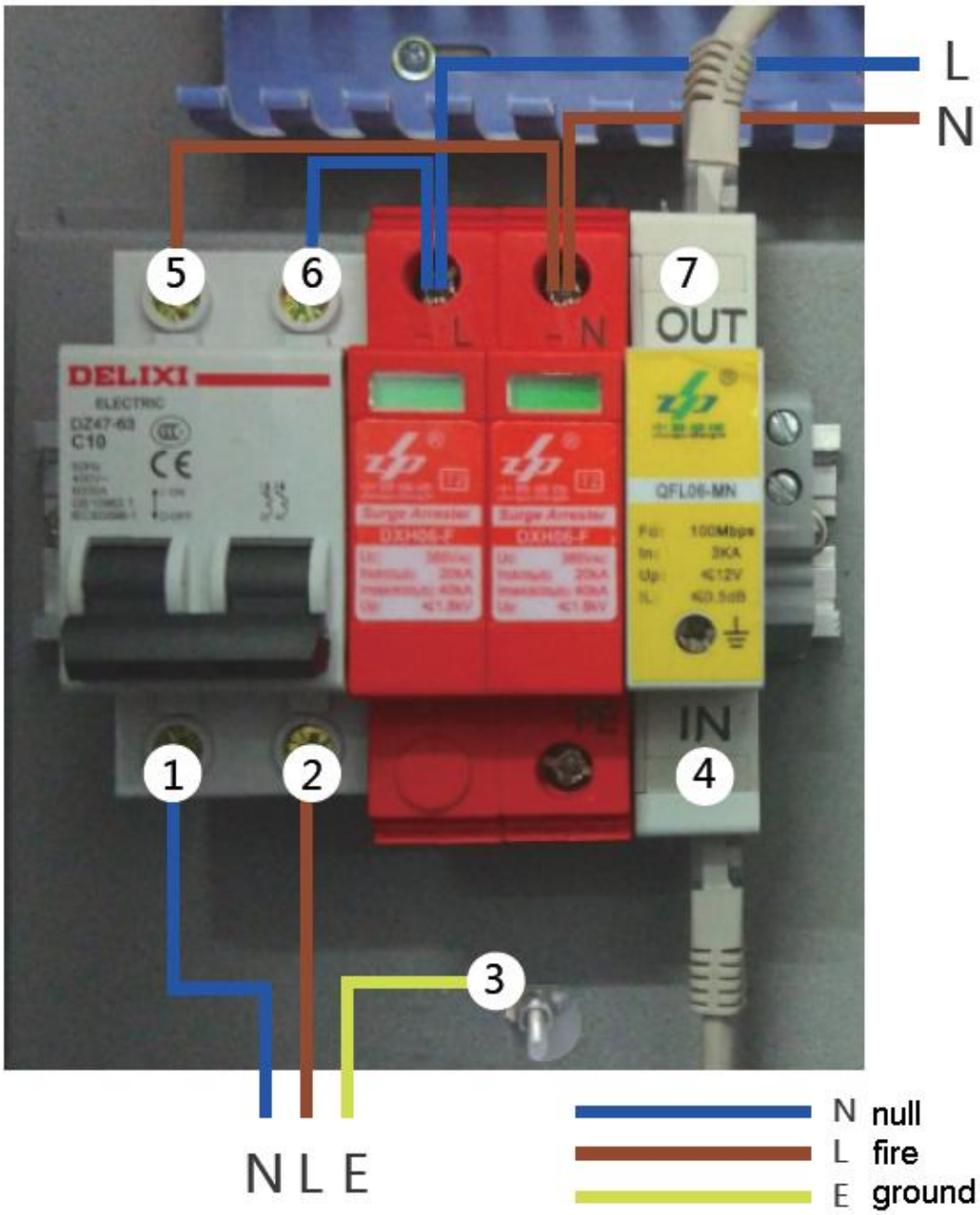

Figure 5-1

Step 2. External network connection.

Note:

The tower supports fifer input.

- Wired input: If paved is wired line, Connect external network to Figure 5-1 IN port (no. 4), and then pull one network cable from Figure 5-1 OUT port (no.7) to Figure 5-2 fiber port (no.3).

Warning:

Fiber module at two ends receives working band, band width which must be matched. If one item is not matched, then network will be disconnected.

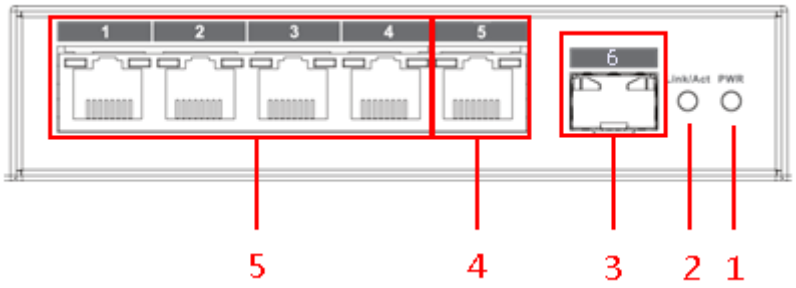

Figure 5-2

No.	Component Name	Note
1	Power indicator	Power indicator green light NO, means device is plugged to power.
2	Network indicator	Network indicator green light flashes, means fiber communication is normal.
3	Fiber port	External fiber network input interface. Support single fiber or dual fiber optical module input, external fiber and optical module port are LC type, see
4	Gigabit Ethernet port	External wired network input port. Support Gigabit.
5	MB Ethernet port	Internal switch, max MB. Talk, speed dome modules are directly connected into MB port, before it is shipped out from manufacturing.

Chart 5-1

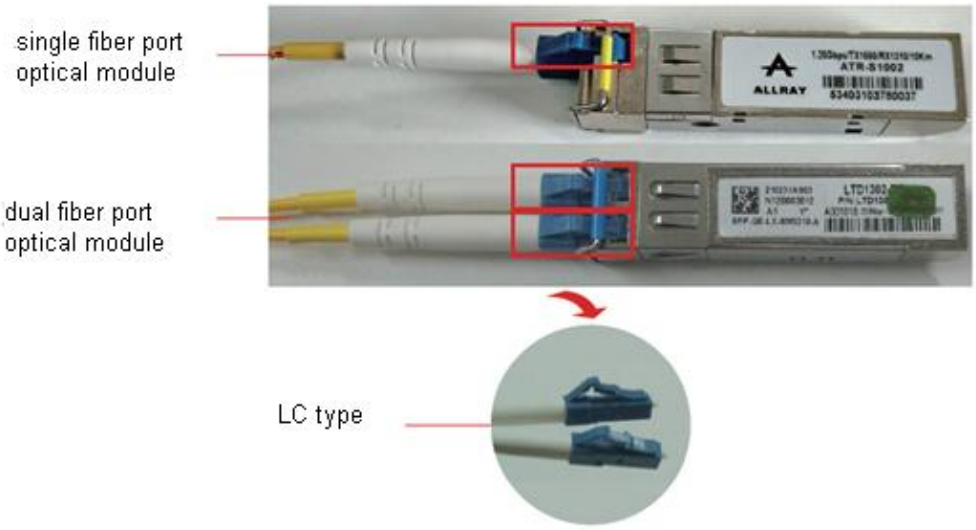
single fiber port
optical module
dual fiber port
optical module
LC type

Figure 5-3

6 WEB Config

Introduces digital emergency phone tower WEB config parameters and how to config.
Note:
Some parts of the tower shall connect to the platform. For platform operation please refer to corresponding manual.

6.1 System Login/Logout

Warning:
Before login, make sure the connection between PC and the tower.
To login system:
Step 1. On PC explorer, enter IP address of the digital emergency phone tower, press Enter. See

Figure 6-1

Note:
IP address of the tower can be set in Ch 6.2.3.
Step 2. Enter username and password.
Step 3. Click login.
Note:
Default device address is 192.168.1.110, default username and password are:admin. Please change your login password after first time login. To change password, refer to Ch 6.2.5.3.

6.1.1 System Logout

In logout page, you can reboot device, or exit system. Click exit, system returns to login

page.

6.2 System Config

6.2.1 Local Config

In Local Config interface, you can set device, system time and config.

6.2.1.1 Local Config

In System Config>Local Config>Local Config, you can set fill light sensor, brightness, reboot date, see Figure 6-2 and Chart 6-1.

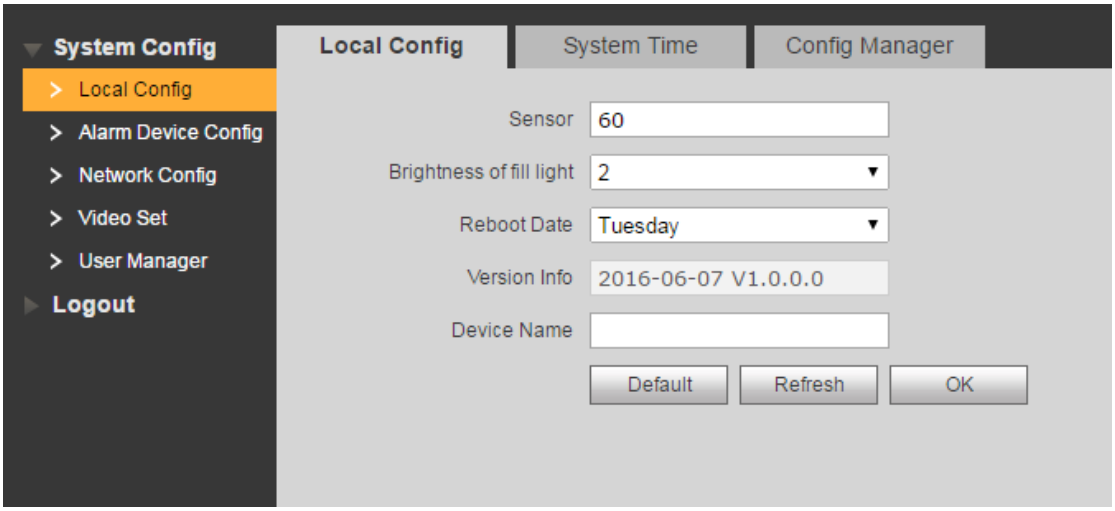

Figure 6-2

Parameter	Note
Sensor	When environment is dark, auto turn on fill light.
Brightness of fill light	Adjust fill light brightness, adjust range of 0~5. 0 means light off, the higher the number the brightness the light will be.
Reboot Date	Set device reboot date, default is Tuesday 2:00 A.M.
Version Info	Display device software version no.
Device Name	Set device name.
Default	Click “Default”，restore parameters in “Local Config >Local Config” tab to default.
Refresh	Click “Refresh”，to refresh this page.
OK	Click “OK”, to confirm modification in this page.

Chart 6-1

6.2.1.2 System Time

In System Config>Local Config>System Time, you can set date format, time format, system time and etc. See Figure 6-3 and Chart 6-2.

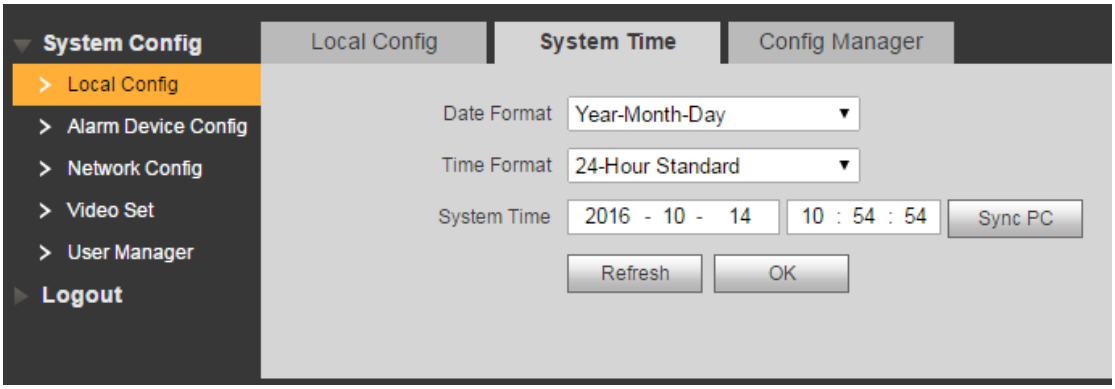

Figure 6-3

Parameter	Note
Date Format	Set date format.
Time Format	Set time format.
System Time	Set display time.
Sync PC	Click “sync PC”， to sync system time with local PC.
Refresh	Click “Refresh”, refresh current page.
OK	Click “OK”, confirm modification is this page.

Chart 6-2

6.2.1.3 Config Manager

In System Config>Local Config>Config Manager interface, you can set Export Config, Import Config and Default All, see Figure 6-4 and Chart 6-3.

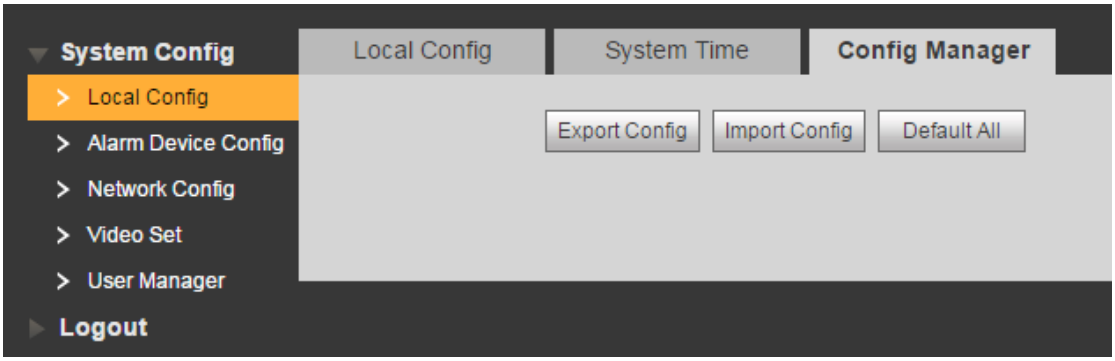

Figure 6-4

Note:
Please install plug-in if you see instructions pops up.

Parameter	Note
Export Config	Click “Export Config”, save local config to local, you can use it to restore default or import config and sync to other devices.
Import Config	Click “Import Config”, to restore backed up config date, or sync with other devices' config data.
Default All	Click “Default All”, restore all to default.

Chart 6-3

6.2.2 Alarm Device Config

If rader speed measuring is built in the tower, in System Config>Alarm Device Config interface, you can set speed measure limit and speed upper limit, see Figure 6-5.
When connecting to lattice screen, in System Config>Alarm Device Config interface, you can set LED info and Led info 2.

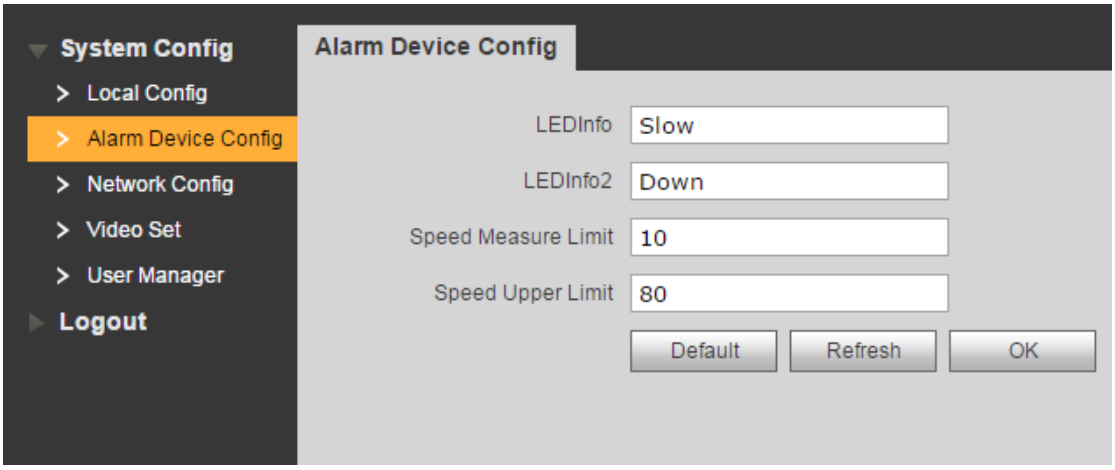

Figure 6-5

6.2.3 Network Config

In System Config>Network Config>TCP/IP interface, you can set the tower's IP address, subnet mask, default gateway and DNS address, see Figure 6-6.

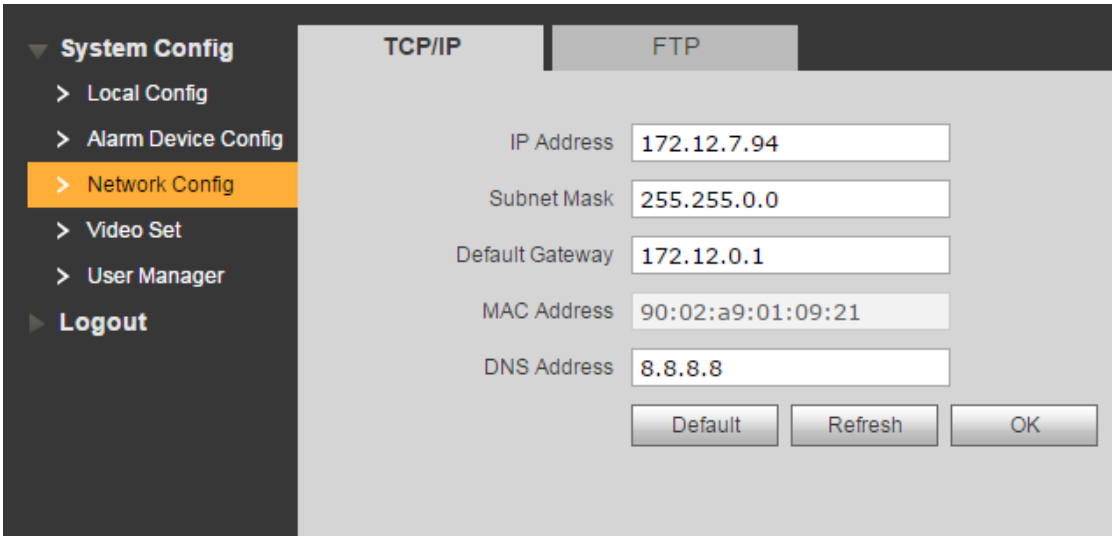

Figure 6-6

6.2.4 Video Set

Video set includes video set and audio set.

6.2.4.1 Video Set

In System Config>Video Set>Video Set interface, you can set camera video brightness, contrast, HUE and etc. See Figure 6-7.

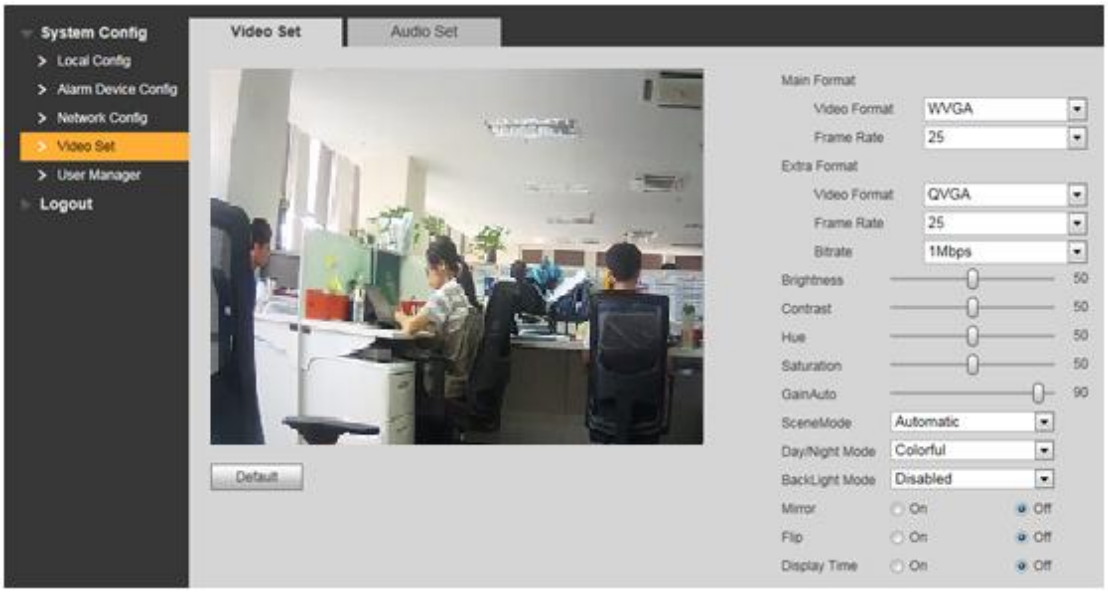

Figure 6-7

Note:

Please install plug-in if you see instructions pops up.

Parameter		Note
Main Format	Video Format	Adjust video image resolution, as 720P, WVGA, D1 and QVGA. ● 720P：resolution 1280×720. ● WVGA：resolution 800×480. ● D1：resolution 720×576. ● QVGA：resolution 320×240.
	Frame Rate	Adjust image transmission speed, as 25 fps and 30 fps.
Extra Format	Video Format	Adjust video image resolution as WVGA, D1 and QVGA. ● WVGA：resolution 800×480. ● D1：resolution 720×576. ● QVGA：resolution 320×240.
	Frame Rate	Adjust image transmission speed, as 25 fps and 30 fps.
	Bit Rate	According to actual device input network, select 256Kbps, 1Mbps, 2Mbps and 3Mbps.
Brightness		Adjust video image brightness.
Contrast		Adjust video the brightest and darkest contrast.
HUE		Adjust video color and saturation.
Saturation		Adjust video image bright degree.
Gain Auto		Adjust video image brightness, when set gain, if brightness exceeds this limit, it will have noisy point and lower video quality.
Scene Mode		Select scene of environment of this device.
Day/Night Mode		Select day/night mode of environment of this device.
Backlight Mode		Backlight mode can be any of the following： ● Backlight ● WDR ● HLC. ● Disabled
Mirror		Enable, horizontally flip video
Flip		Enable, vertically flip video.
Display Time		Enable, display time on video.
Default		Click Default, restore all parameters in video set tab to default.

Chart 6-4

6.2.4.2 Audio Set

In System Config>Video Set>Audio Set interface, you can slide to adjust MIC volume and

beep volume, see Figure 6-8.

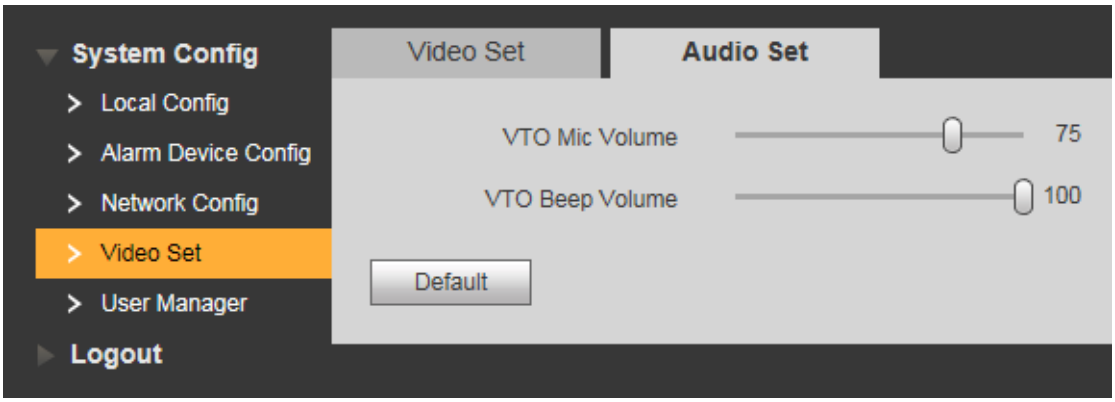

Figure 6-8

6.2.5 User Manager

You can add, delete user or modify user password.

6.2.5.1 Add User

Step 1. Select System Config>User Manager.
Step 2. Click Add User.
Step 3. Set interrface parameter, see Figure 6-9.

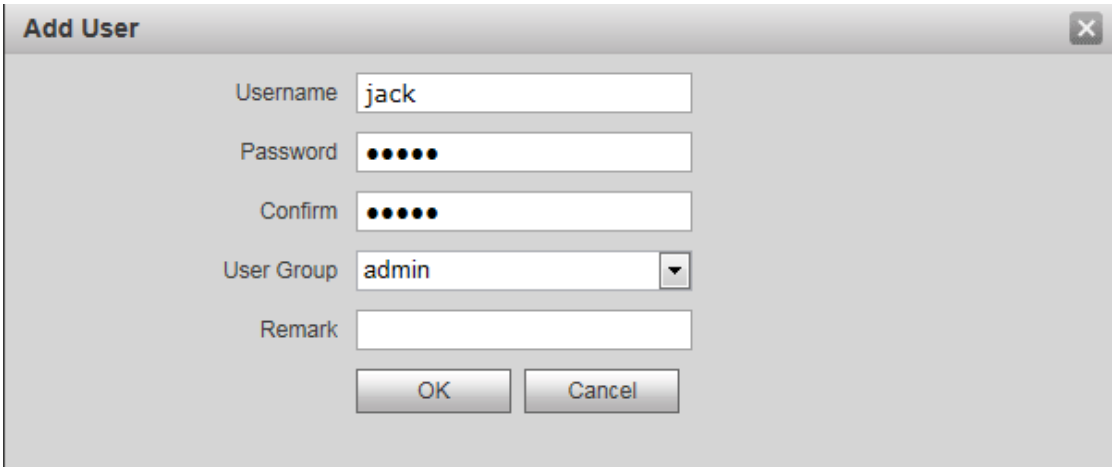

Figure 6-9

Note:
Currently the system supports two groups of user: admin and user. An admin has higher right, who can view, edit, delete system config right. A user only has view right of system config.

Step 4. Click OK, see Figure 6-10.

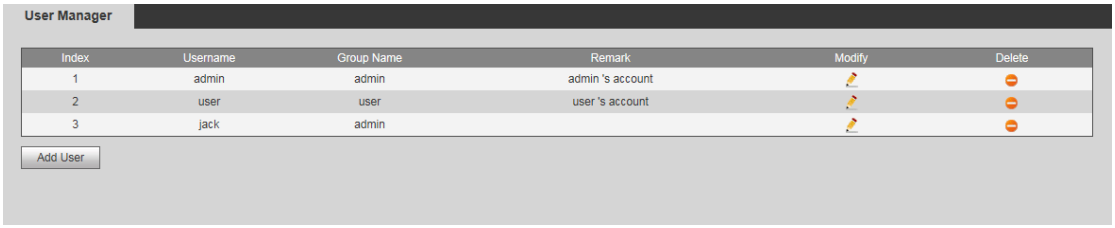

Figure 6-10

6.2.5.2 Delete User

Click  to delete user.

6.2.5.3 Modify User Password

Step 1. Click  . See Figure 6-11.

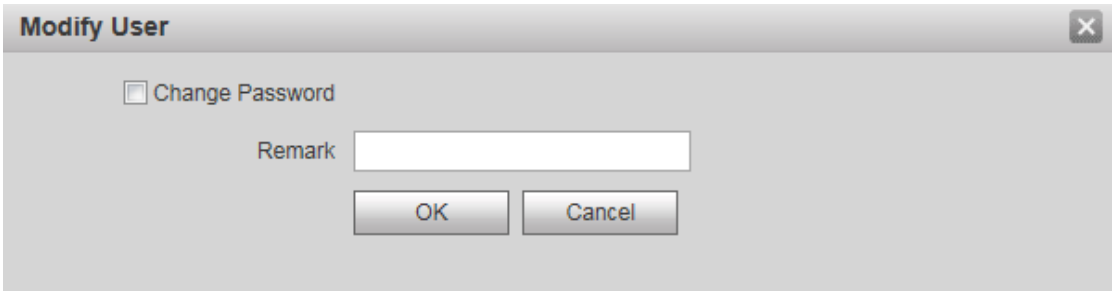

Figure 6-11

Step 2. Select Change Password. The interface shows old password, new password and confirm new password.

Step 3. Configure interdace parameter info.

Step 4. Click OK to complete.

Appendix 1 Technical Specifications

Model	**VTA8111A**
OS	
OS	Embedded LINUX OS
Light/Siren	
Light	1 light, NO at night, support alarm flashing
Siren	Optional. 1 siren, create alarm tone with light
Alarm	
Alarm Input	2-ch, for alarm link
Alarm Output	2-ch, for alarm link
Video	
Camera	1.3 MP CMOS HD camera
Lens	Pinhole, for high vandal-proof level
Backlight	Auto backlight, distance is not lower than 0.5 meters
Optimization	Digital NR, WDR, HLC and etc.
String Overlay	Support channel name or network name overlay on video
Audio	
Mode	Bidirectional video talk
Input	Omnidirectional MIC
Output	Built-in speaker, external active loudspeaker
Intensity	Echo restrain and digital NR
Material	
Material	2mm high strength SGCC cold-roll steel sheets
Protection	
Vandal-proof	IK10
Protection	IP65
Anti-tamper	Support
Anti-lock picking	Support
Damp-proof	Support
Lighting Protection	Support
Specification	
Power	AC 176V-264V@47Hz-63Hz
Consumption	VTA8111A：80W Add speed dome：40W（6 inch）
Work	Temperature：-30℃~+60℃

Environment	Humidity：10%RH~95%RH

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