COMPRO
TECHNOLOGY

Mini Dome Network Camera

Quick Installation Guide

Before attempting to set up or operate this camera, please read this installation guide and retain it for future reference.

Model No.

TN2200

QR-code for camera installation in the C4Home app.

♺ C E FC

Contents - Table of Contents

Important Notices

■ Regulatory Notice ■

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

FCC Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

■ Safety Rules ■

- The camera ought to be installed by a qualified technician.
- Place the camera on a steady surface whenever possible.
- Do not drop the camera body to the ground; it may cause the damage to main parts.
- Do not shake, move or disturb the camera when it is in operation, as such actions may result in the malfunction of the device.
- Power off the camera as soon as it is found smoking or smelt unusual.
- Please do not place the camera around the heat sources, such as television or microwave oven.
- Please do not remodel the camera; it may cause damage or fire.
- Please do not attempt to repair the camera on your own; contact Compro or your local distributor for repair service.

Product Overview

Package contents

The following is a list of items included in the package. Please check the package contents on your hand. If anything is missing, please don't hesitate to contact your local distributor.

Qty	Item	Description
1	Network camera	Compro TN2200 network camera
1	Wall mount base	For mounting the camera on the wall
4	Self-tapping screw	For fastening the wall mount base to the wall, or for ceiling mouting the camera without using wall mount base
4	Screw anchor	For fastening wall mount base in concrete
2	Screw for wall mount base	For fastening the camera to the wall mount base; must be used with rubber o-ring
2	Rubber O-ring	Prevents water from entering the casing
1	Hex key	For removing the camera's top cover
1	User's guide	Providing instructions on installation
1	Installation CD	Install IP camera via PC (Manual included)

■ Hardware Overview ■

Camera Layout
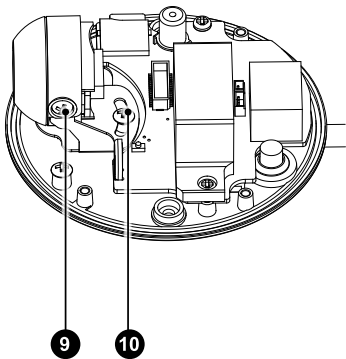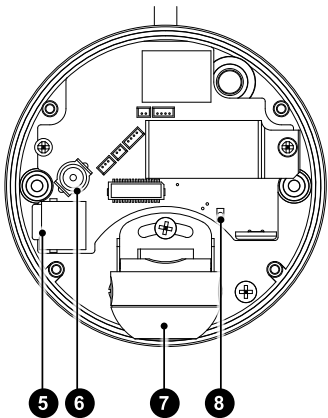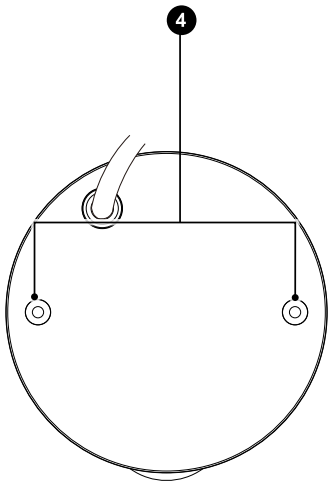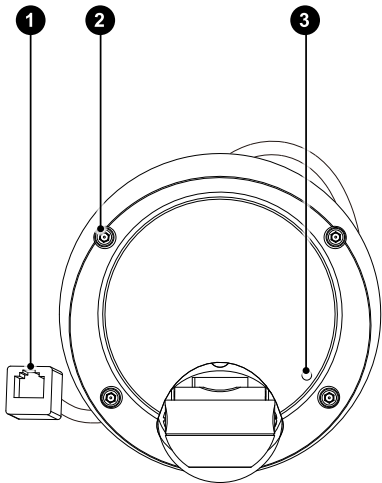
| No.	Name	Description
1	Ethernet port	For connection to the network
2	Socket head screw (4 in total)	To remove the top cover, unscrew the 4 socket head screws with the supplied L-shaped wrench
3	Microphone pinhole	For receiving ambient sound
4	Screw holes for wall mount base/ceiling mounting	For installing the wall mount base; for ceiling mouting the camera without the use of wall mount base
5	microSD card slot	Push the memory card in order to release it
6	Composite video jack	For connecting to a standad TV and helping you adjust camera during installation
7	Lens	Fixed iris, F 2.0, f 1.96mm
8	Reset button	Press and hold the button to reset the camera back to factory defaults
9	Tilt adjustment screw	2 tilt adjustment screws hold the tilting position of the camera
10	Pan adjustment screw	For holding the panning position of the camera

Installation

Wall / Ceiling Mount

The camera can be mounted on a wall or ceiling with or without the supplied wall mount base installed. The wall mount base is generally used for wall mount applications when the camera's cable is not run through the mounting surface.
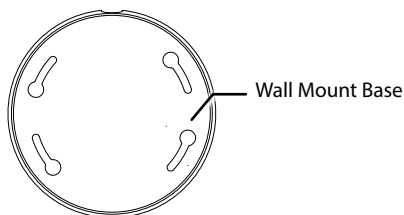
Wall Mount Base

If you want to feed the camera's cable through a dropped ceiling, you can drill a cable hole on the mounting surface and then mount the camera without using the wall mount base. The following sections explain 2 different mounting options.

Using Wall Mount Base

1. Use the supplied hex key to unscrew the top cover from the camera.
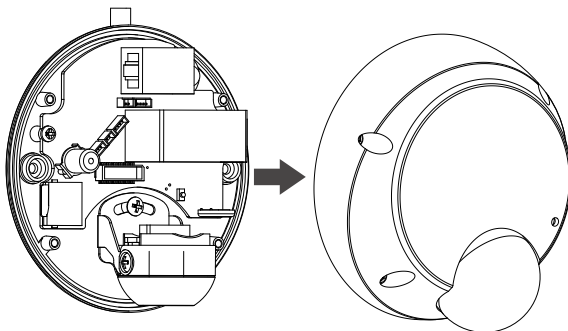
2. Stick the supplied drill template A to the wall (or place the wall mount base against the wall to mark the screw hole locations). Then drill 4 mounting holes on the wall.
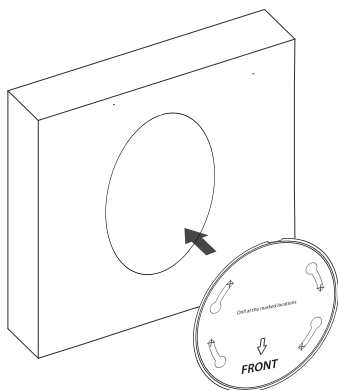
3. Then, if you're mounting on a concrete wall, insert a screw anchor into each of the mounting holes. After that, secure the wall mount base to the wall with the supplied self-tapping screws.
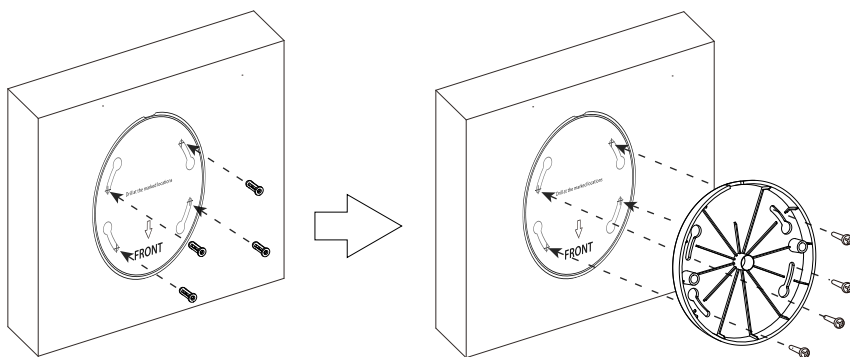
4. Fasten the camera to the wall mount base on the wall. Make sure you use a supplied rubber O-ring in between the screws and the screw holes (as circled) to avoid moisture entering the casing. Finally, re-attach the camera's top cover and secure the screws tightly with the supplied hex key.

Rubber O-ring
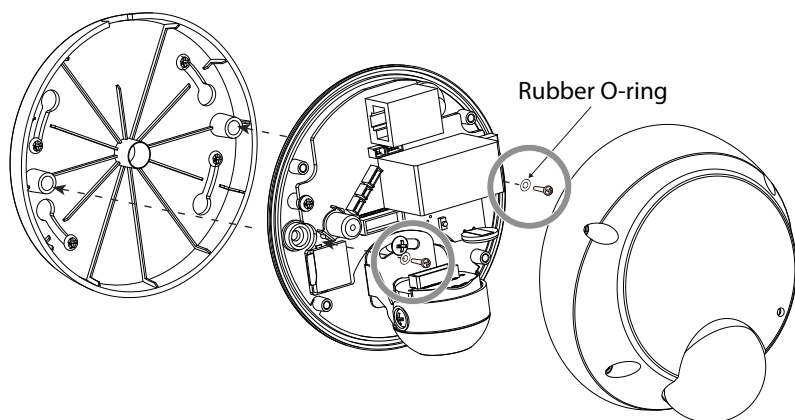
Note: Should you ever need to detach the mounted camera from the wall in the future, simply twist the camera in counter-clockwise direction and then pull it off the wall.
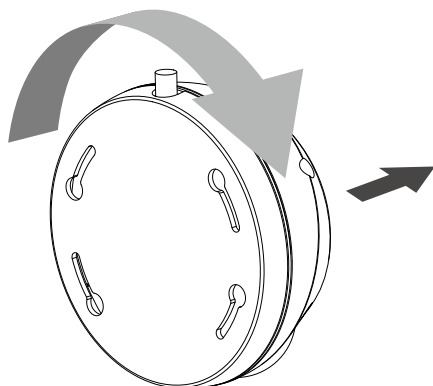
Without Using Wall Mount Base

1. Use the supplied hex key to remove the top cover.
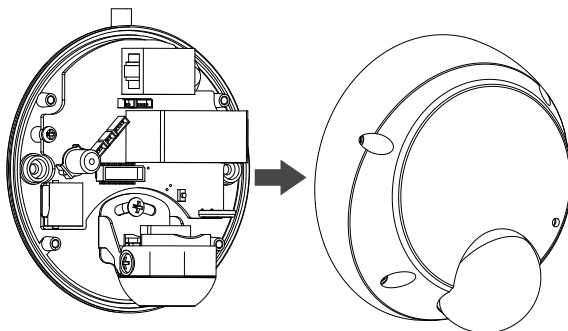
2. Drill 2 mounting holes on the mounting surface. The 2 screw holes should be spaced exactly 80 mm (3.15 inch) apart to correspond to the position of mounting holes on the camera. (Or use the supplied drill template B to drill the mounting holes.) Then drill a cable hole if you need to run the cable through the mounting surface.

80 mm

Cable Hole

FRONT
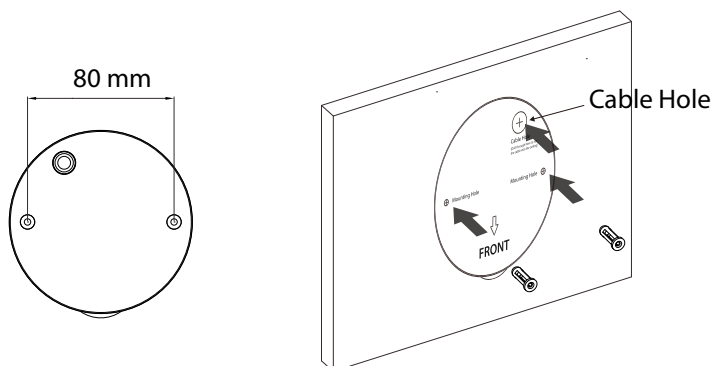
3. Fix the camera to the mounting surface with the supplied self-tapping screws. Make sure you use a supplied rubber O-ring in between the screws and the screw holes (as circled) to avoid moisture entering the casing. Feed the camera's cable through the cable hole. Lastly, re-attach the camera's top cover and secure the screws tightly with the supplied hex key.

Rubber O-ring
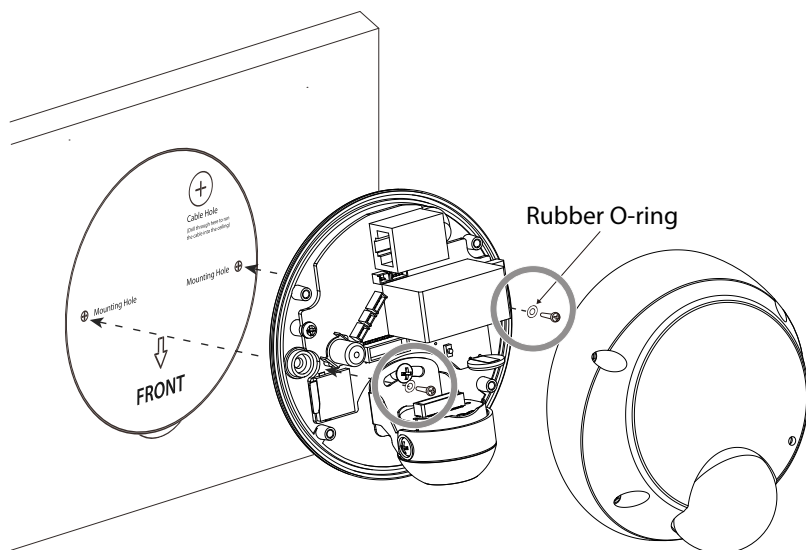
■ Connect the Cables ■

This camera can only be powered using PoE (Power-over-Ethernet), which allows electrical power and IP data to be both delivered on a single Ethernet cable. The following instructions explain ways to connect this PoE-enabeld network camera.

Using a PoE Switch

If the Ethernet ports on your network switch/router support PoE, connect your camera in the following way:

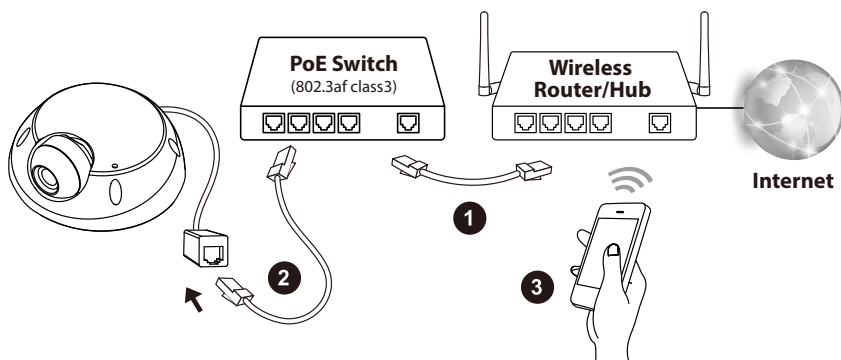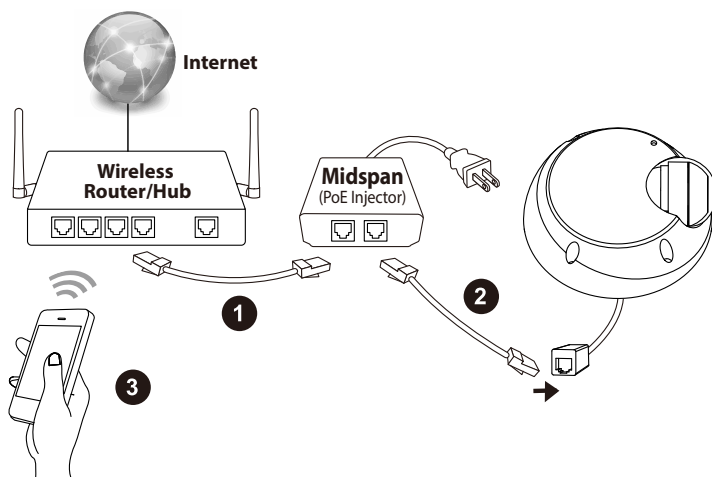1. Ethernet cable from wireless router/hub to PoE switch/router: Connect the PoE switch/router with the wireless router/hub that has been connected to your Cable/ADSL modem for internet connecting.

2. Ethernet port of the camera: Use the RJ-45 Ethernet cable (not supplied in the package) to connect the Ethernet port of the network camera to the PoE port of your PoE switch/router.

3. Make sure your smartphone is able to go to internet via your wireless router.

Using a Non-PoE Switch

If you are using the camera with a non PoE capable network switch/router, please prepare a PoE injector (midspan, optional) first in order to power the camera. Then connect your camera in the following way:

1. Ethernet port on PoE injector: Use a RJ-45 Ethernet cable (not supplied in the package) to connect the RJ-45 connector on PoE injector marked "IN". Then connect the wireless router/hub.

2. Ethernet port on camera: Attach a RJ-45 Ethernet cable (not supplied in the package) from the "OUT" RJ-45 connector on PoE injector to the Ethernet port of the network camera.

3. Make sure your smartphone is able to go to internet via your wireless router.

■ Install C4Home App and Add Camera ■

Make sure your smartphone is able to go to internet via your wireless router. Then download the C4Home app from Apple store or Google Play and install to your smartphone. Start C4Home app and register your personal C4Home account.
(You can scan the QR-code below on your smartphone to add C4home app.)

iPhone

Android

Login to the C4Home account and click "+" to add new camera, we provide 3 ways to add your camera:

- Scan the QR code on the Ethernet connect of camera (or the first page of this installation guide), it will automatically add your camera to the list.

- Direct input the camera ID (10 digitals under the QR code) and password (default: admin) to add your camera.
- Click "iWizard" button on add camera page to search the available network camera from your local network and setup.

Now you can watch live video of your network camera from your smartphone or tablet.


Note:
If you don't have wireless connection in your local network, please refer to the user's manual on the installation CD to install the network camera via PC.

■ Adjust the Lens

To adjust the direction of the lens, you need to remove the camera's top cover first. You can connect the camera's composite video jack to the video input jack of your TV to aid you in lens adjustment.
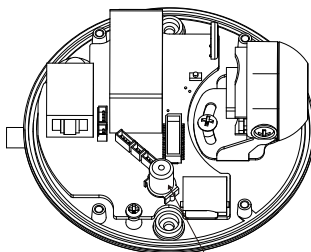
Composite Video Output

Adjust Pan/Tilt

To adjust the camera's panning or tilting position:

1. Loosen the pan adjustment screw and then gently twist the lens holder left or right to adjust the camera's panning position. The camera allows for 40 degrees of pan adjustment, as shown in below figure.

40°
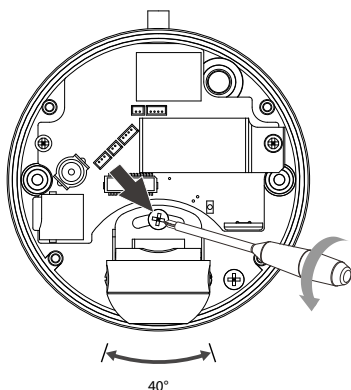
2. Tighten the pan adjustment screw and then, if necessary, go on to adjust the tilting position.

3. Loosen the tilt adjustment screw on both sides of the lens holder, as shown in below figure, and then gently tilt the lens holder up or down to adjust the camera's tilting position. The camera allows for 90 degrees of tilt adjustment.
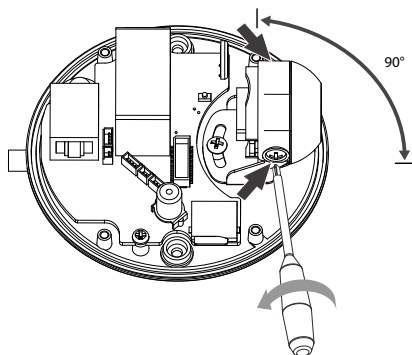
4. Having obtained the optimal result, tighten the tilt adjustment screws and re-attach the top cover to complete the operation.

■ Change SD Memory Card ■

The camera comes with a 4GB microSD card pre-installed inside the housing. The SD memory card is user-upgradeable. The following explains how to change the SD memory card.

1. Power off the camera. Then loosen the fixing screws on the top cover with the supplied hex key and remove the top cover.

2. Locate the microSD card slot. Then push the pre-installed SD card gently to release it.

microSD card slot
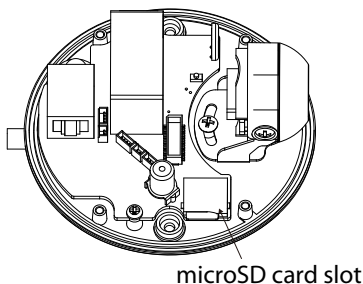
3. Pull the SD card out and insert a new one into the slot. Finally, re-install the top cover to complete the upgrade.

Operation

■ Instant Monitoring ■

From C4Home iPhone/Android App

When you enable and register the C4Home service, you can use the C4Home app on your iPhone, Android phone or tablet to manage and watch live video of Compro cloud network cameras.

The C4Home app is a safe and easy way to monitor your home, office and your valuable possessions from anywhere in the world. No router setup required, only needs to start your C4Home app and login with your account, you can watch live video of your network camera and manage multiple cameras from your smartphone or tablet on hand.

C4Home Login Page
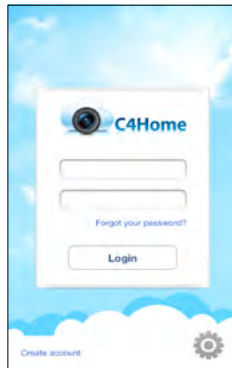
Start the C4Home app from your smartphone, you can login here with your own Account ID and Password. If you forgot your password, please click the "Forgot your password" button, the system will send the password to your register email account.

Icon	Name	Description
Create account	Create account	Here you can create the new account, please input the new account ID, password and email account for account registration.
⚙	Setup	Here you can input your account ID, password and server address (default server: www.c4home.com) for enable/disable auto-login. And you can choose the display language here.

Camera Page

After login the C4Home app, you will see the camera page, here shows the camera list, you can click to watch the live video or you can click the buttons below for more features.

Icon	Name	Description
Edit	Edit	Click here to remove the installed network camera from list.
+	Add Camera	Click here to add camera to the list.
	Camera Setup	Here you can setup more details for each camera: • **Camera Settings:** Setup the camera name and password • **Stream Settings:** Seup the Codec, Resolution, Frame rate for video streaming and Enable/Disable audio and Codec for audio streaming. • **Notification Settings:** Enable/Disable motion detection and select the sensitivity level for motion detection. • **Sharing Settings:** Enable/Disable the camera sharing to others. You can add your friends' account ID to share the live video watching. • **Firmware Update:** Firmware update direct from your smartphone. • **Private Mode:** Enable/Disable private mode to protect your privacy.
	Camera Page	List all the available camera here and you can click to watch the live video.
	Event Page	List all the happened events by time, includes the camera online/offline and motion detection. You can click the listed event to watch: • **Liveview:** Watch the live video of network camera. • **Snapshot Playback/Download:** Playback and download the snapshots. When the event trigger, the camera will take 3 snapshots for record and you can know what's happened.

Icon	Name	Description
	Setup Page	Click here for basic settings of C4Home app: • **Language:** Select the display language for C4Home app. • **Stream Buffer Size:** Setup the stream buffer size for low, median or high. • **Auto Login:** Enable/Disable auto login for C4Home app. • **Push Notification:** Enable/Disable the push notification for your device. If you enable it, it will send you the push notification when event triggered. • **Logout:** Logout the C4Home app.
	About Camera	Here will shows the version number of C4Home app and copyright information.

Note:
For complete C4Home app introduction, please refer to the C4Home user's manual on the installation CD.

■ Reset to the Factory Default Settings ■

If you forget your system password or if you feel your IP camera has been acting weird, you can follow the steps below to reset the camera to its default state in which it will be obtaining IP address from the available local DHCP server. To reset the camera:

1. Detach the camera's top cover. Locate the reset button as shown in below figure.
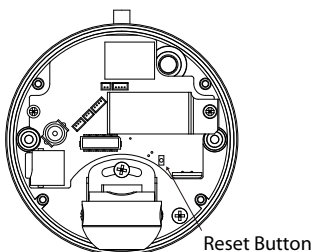
Reset Button

2. Press and hold the reset button for about 10 seconds.

3. After the camera is reset, it will take 1 minute to reboot. Please wait patiently and start the Compro iWizard later again to scan for and re-configure the camera.

Technical Specifications

■ TN2200 Technical Specifications ■

CAMERA	Sensor	1/3" CMOS 2-Megapixel sensor
	Lens	Fixed iris, F 2.0, f 1.96mm
	Zoom	10x digital
	Angle of View	105°
	Min Illumination	1.0 lux
	Shutter Time	1/5 ~ 1/16000 Sec.
	Camera Angle Adjustment	40° pan, 90° tilt
VIDEO	Video Format	M-JPEG, H.264
	Resolutions	160x120, 320 x 240, 640 x 480, 1280 x 1024, 1600 x 1200
	Frame Rate	• WebVUer: Up to 15 FPS at 1600x1200 • C4Home App: Up to 30 FPS at 640x480
	Video Streaming	Dual video stream supported
	Image Settings	• Adjustable image size and quality • AGC, AWB, AES • Configurable brightness, saturation and sharpness
	Analog Video Output	Yes, RCA output for lens adjustment
AUDIO	Compression Format	G.711 PCM 64 Kbit/sec, AAC
	Audio Input / Output	Built-in microphone
Network	Security	User ID / Password protection
	Ethernet	10/100 Base-T, autosensing, RJ-45
	Support Protocols	3GPP, ARP, DDNS, DHCP, DNS, FTP, ICMP/IPv4, IGP, HTTP, NTP, PPPoE, QoS, RSP, RTSP, SMTP, TCP/IP, UDP, UPnP
Firmware	Firmware	• Support UPnP • Support online firmware update

Web Browser	Internet Explorer (ActiveX)	• Remotely viewing and adjust camera settings • Capture snapshots and recording video
	Supported Viewing Devices	• PC, laptop, tablet, nettop with IE8 • iPhone®/iPad, BlackBerry, Android™, WM, PDA, or cell phones with web browser (MJPEG mode) • Mac OS 10.6 (Live view in M-JPEG mode only)
Mobile Monitor	C4Home App	Free mobile applications for iPhone and Android • Smart motion detection and push notification • Private mode • Mobile digital zoom control • Air firmware update • Dropbox cloud storage for event snapshot • SD card playback for event recording • Share video to others • Watch 4 channels at the same screen (Android only, not support iOS)
	MJPEG Mode	Viewing of camera image via phone browsers
	3GPP Mode	Viewing of camera image via 3G phones (3GPP Streaming)

General	Video Surveillance	Free bundles ComproView 32-channels video management software
	Local Storage	Built-in microSD memory slot (inside case) (with a pre-installed 4GB memory card)
	Operating Condition	Temperature: 0 °C ~ 50 °C (32 °F ~ 122 °F) Humidity: 20~80% RH non-condensing
	Weather Resistance	IP66-Rated
	Impact Protection	IK09-Rated
	Power Supply	PoE (Power-over-Ethernet) only IEEE 802.3af Class 3
	System Requirements	• Computer with 2.8GHz Dual-Core processor and 2GB memory or above • Supported Operating Systems: Windows XP SP3, Vista SP1, Windows 7, Windows 8, Mac OS 10.6 (Live view in M-JPEG mode only) • PoE switch or PoE midspan (PoE injector) with IEEE 802.3af Class 3 support
	Package Contents	• Network camera • Software CD • Quick installation guide • Wall mount base • Selp-tapping screw • Screw anchor • Screws for wall mount base • Rubber O-ring • Hex key
	Dimensions	103mm x Ø100 x 56 mm (L x W x H)
	Weight (Net)	270g

* Specifications are subject to change without prior notice.

Technical Support Information

Contact Compro Technical Support

If you need any technical support, fill out the online form (http://comprousa.com/en/form.htm) or directly email to support@comprousa.com.

Compro Technology, Inc.
www.comprosecurity.com
Tel. +886 2 2918 0169, Fax +886 2 2915 2389
4F, No.12, Alley 6, Lane 45, Pao Shin Road,
Hsintien District, New Taipei City 231, Taiwan

COMPRO
TECHNOLOGY

www.comprousa.com