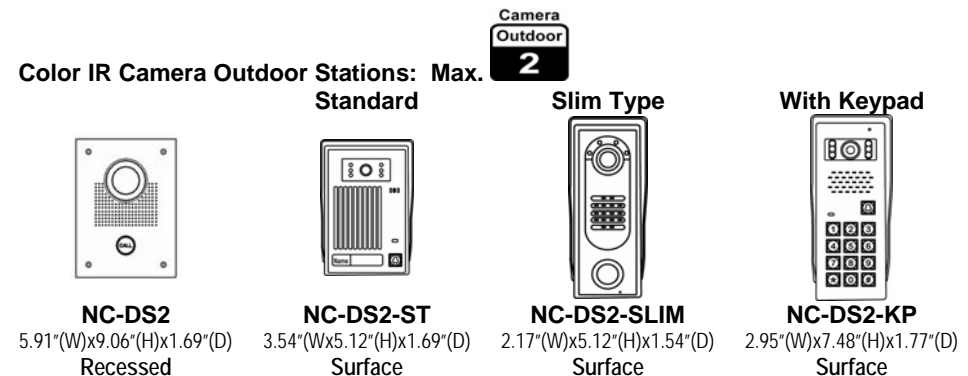
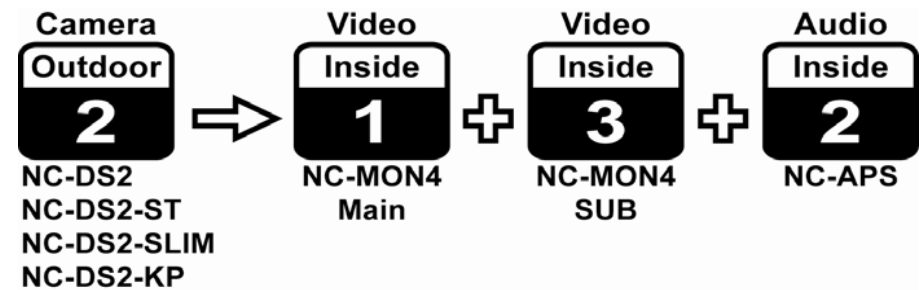
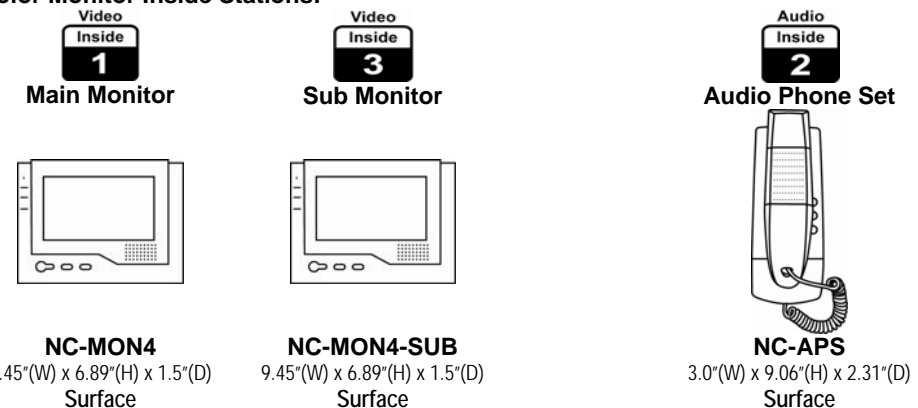


# Color IR Camera & Video Intercom System - 24 Series



## Color Monitor Inside Stations:





Additional Technology Security Inc.  
dba: Sentry US

5500 Stewart Avenue  
Fremont, CA 94538  
E-mail: info@SentryUS.com  
Tel: 1-800-916-8783  
International: 510-279-9992

ZRFID is an affiliate of Sentry US  
Specialized in Access Control Products

 Please read the Manual before attempting to use this product.

	<b>CAUTION</b> RISK OF ELECTRIC SHOCK DO NOT OPEN!	
TO REDUCE THE RISK OF ELECTRICAL SHOCK, DO NOT OPEN COVERS (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.		



**Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems).**

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

## CAUTION

### 1. Handle this product with care

Avoid any shock or bumping of the product. Improper handling could damage the product.

### 2. Requires a proper operating environment

The main and sub monitors are designed for indoor use. The allowable temperature range for operation of this product is between 14°F ~ 131°F / -10°C ~ 55°C. The camera outdoor stations are designed for outdoor use. The allowable temperature range for operation of this product is between -4°F ~ 131°F / -20°C ~ 55°C.

### 3. Check the power source voltage

The power source voltage should be within the specified range. (Product must meet the specifications).

### 4. Objects and liquid entry

Never push objects of any kind into this product as this may touch dangerous voltage points of short out parts that could result in a fire or electric shock. Never spill any kind of liquid on the indoor products.

### 5. Servicing

Do not attempt to service this product by yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all service to qualified servicing personnel.

## 24 SERIES FEATURES

### Color IR Camera Outdoor Stations:

#### NC-DS2

- 1/3" CCD; 420 TVL; 0.05 Lux
- 120 sec Communication Duration
- Duplex Communication Type
- Recessed Mounting
- IP55 Rating; 12V~14.5V DC, 200mA
- 5.91" x 9.06" x 1.69"
- 175mm x 230mm x 43mm

#### NC-DS2-SLIM

- 1/3" CCD; 420 TVL; 0.05 Lux
- 3.6mm Lens
- Hands-free Talking
- 120 sec Communication Duration
- Duplex Communication Type
- Surface Mounting
- IP55 Rating; 12V~14.5V DC, 100mA
- 2.17" x 5.12" x 1.54"
- 55mm x 130mm x 39mm

#### NC-DS2-ST

- 1/3" CCD; 420 TVL; 0.05 Lux
- 3.6mm Lens
- Hands-free Talking
- 120 sec Communication Duration
- Duplex Communication Type
- Surface Mounting
- IP55 Rating; 12V~14.5V DC, 100mA
- 3.54" x 5.12" x 1.69"
- 90mm x 130mm x 43mm

#### NC-DS2-KP (code only)

- 1/3" CCD; 420 TVL; 0.05 Lux
- 3.6mm Lens
- Hands-free Talking
- 120 sec Communication Duration
- Duplex Communication Type
- Personal Password Door Release
- Surface Mounting
- IP55 Rating; 12V~14.5V DC, 100mA
- 2.95" x 7.48" x 1.77"
- 75mm x 190mm x 45mm

### Color Monitor Inside Stations:

#### NC-MON4 - Main

- 7" Screen
- 2 min. Talking Time
- Dual Transmission Mode
- Surface Mounting
- 12V~14.5V DC, 800mA, 50/60Hz
- Stand by 50mA
- 9.45" x 6.89" x 1.5"
- 240mm x 175mm x 38mm

#### NC-MON4-SUB

- 7" Screen
- 2 min. Talking Time
- Dual Transmission Mode
- Surface Mounting
- 12V~14.5V DC, 700mA, 50/60Hz
- Stand by 70mA
- 9.45" x 6.89" x 1.5"
- 240mm x 175mm x 38mm

### Inside Audio Station:

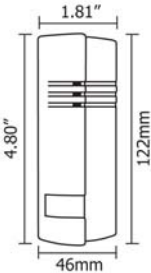
#### NC-APS

- Surface Mounting
- 12V~14.5V DC
- 3.0" x 9.06" x 2.31"
- 76mm x 230mm x 58mm

**Access Control Readers**

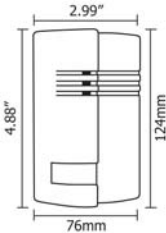
**Proximity ID Reader**  
**ACR-EM26SA**  
125 kHz, 9V~15V DC  
Wiegand 26, IP-65  
Current: 35mA/avg, 100mA/peak

**Mifare IC Reader**  
**ACR-MF26SA**  
13.56 MHz, 9V~15V DC  
Wiegand 26, IP-65  
Current: 35mA/avg, 100mA/peak



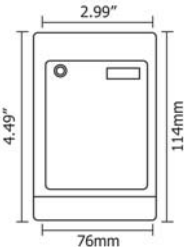
**Proximity ID Reader**  
**ACR-EM26STA**  
125 kHz, 9V~15V DC  
Wiegand 26, IP-65  
Current: 35mA/avg, 100mA/peak

**Mifare IC Reader**  
**ACR-MF26STA**  
13.56 MHz, 9V~15V DC  
Wiegand 26, IP-65  
Current: 35mA/avg, 100mA/peak



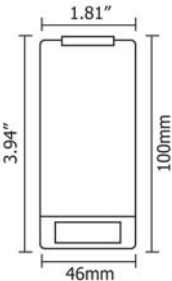
**Proximity ID Reader**  
**ACR-EM26STB**  
125 kHz, 9V~15V DC  
Wiegand 26, IP-65  
Current: 35mA/avg, 100mA/peak  
100mA/peak

**Mifare IC Reader**  
**ACR-MF26STB**  
13.56 MHz, 9V~15V DC  
Wiegand 26, IP-65  
Current: 35mA/avg,



**Proximity ID Reader**  
**ACR-EM26STC**  
125 kHz, 9V~15V DC  
Wiegand 26, IP-65  
Current: 35mA/avg, 100mA/peak  
100mA/peak

**Mifare IC Reader**  
**ACR-MF26STC**  
13.56 MHz, 9V~15V DC  
Wiegand 26, IP-65  
Current: 35mA/avg,



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## 24 SERIES FEATURES

### Color IR Camera Outdoor Stations:

#### NC-DS2

- 1/3" CCD; 420 TVL; 0.05 Lux
- 120 sec Communication Duration
- Duplex Communication Type
- Recessed Mounting
- IP55 Rating; 12V~14.5V DC, 200mA
- 5.91" x 9.06" x 1.69"
- 175mm x 230mm x 43mm

#### NC-DS2-ST

- 1/3" CCD; 420 TVL; 0.05 Lux
- 3.6mm Lens
- Hands-free Talking
- 120 sec Communication Duration
- Duplex Communication Type
- Surface Mounting
- IP55 Rating; 12V~14.5V DC, 100mA
- 3.54" x 5.12" x 1.69"
- 90mm x 130mm x 43mm

#### NC-DS2-SLIM

- 1/3" CCD; 420 TVL; 0.05 Lux
- 3.6mm Lens
- Hands-free Talking
- 120 sec Communication Duration
- Duplex Communication Type
- Surface Mounting
- IP55 Rating; 12V~14.5V DC, 100mA
- 2.17" x 5.12" x 1.54"
- 55mm x 130mm x 39mm

#### NC-DS2-KP (code only)

- 1/3" CCD; 420 TVL; 0.05 Lux
- 3.6mm Lens
- Hands-free Talking
- 120 sec Communication Duration
- Duplex Communication Type
- Personal Password Door Release
- Surface Mounting
- IP55 Rating; 12V~14.5V DC, 100mA
- 2.95" x 7.48" x 1.77"
- 75mm x 190mm x 45mm

### Color Monitor Inside Stations:

#### NC-MON4 - Main

- 7" Screen
- 2 min. Talking Time
- Dual Transmission Mode
- Surface Mounting
- 12V~14.5V DC, 800mA, 50/60Hz
- Stand by 50mA
- 9.45" x 6.89" x 1.5"
- 240mm x 175mm x 38mm

#### NC-MON4-SUB

- 7" Screen
- 2 min. Talking Time
- Dual Transmission Mode
- Surface Mounting
- 12V~14.5V DC, 700mA, 50/60Hz
- Stand by 70mA
- 9.45" x 6.89" x 1.5"
- 240mm x 175mm x 38mm

### Inside Audio Station:

#### NC-APS

- Surface Mounting
- 12V~14.5V DC
- 3.0" x 9.06" x 2.31"
- 76mm x 230mm x 58mm

## OPTIONS

### A. Electric Door Strikes for Metal Door



- Jaw Strength: 2000 lbs
- 12V DC

### B. Electric Door Strikes for Wood Door



- Jaw Strength: 2000 lbs
- 12V DC

### C. Buzzer



- 5~14V DC

#### Buzzer Connection:

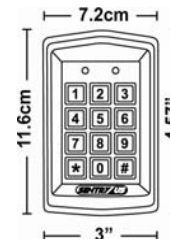
1. Connect the buzzer positive (+) to lock strike positive (+)
2. Connect the buzzer negative (-) to power negative (-)

## RELATED PRODUCTS from [www.ZRFID.com](http://www.ZRFID.com)

### Stand-Alone Access Control Keypads

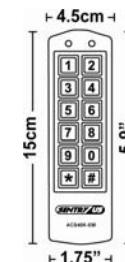
#### Stand-Alone Access Control Keypads w/ Built-in EM/125KHz Reader ACSK-EM

Outdoor IP-65  
12V~15V DC



#### Stand-Alone Access Control Slim Type Keypad w/ Built-in EM/125KHz Reader ACS45K-EM

Outdoor IP-65  
12V~15V DC



## 7" COLOR MONITOR INSIDE STATION

Model	NC-MON4	NC-MON4-SUB
Type	Main Monitor	Sub Monitor
Screen Size	7"	
Voltage	12V ~14.5V DC, 50/60Hz	
Stand by	50mA	
Mode	Dual Transmission	
Working Current	800mA	
Talk Time	2 min	
Working Temperature	14°F ~ 131°F / -10°C ~ 55°C	
Mounting Type	Surface	
Dimension	9.45" x 6.89" x 1.5" / 240mm x 175mm x 38mm	

\*Specifications are subject to change without notice

## AUDIO PHONE SET

Model	NC-APS
Voltage	12V~14.5V DC
Stand by	70mA
Working Current	100mA
Mounting Type	Surface
Dimension	3.0" x 9.06" x 2.31" / 76 x 230 x 58 mm

\*Specifications are subject to change without notice

## LIMITED WARRANTY

### LIMITED ONE (1) YEAR WARRANTY AND EXCLUSIONS

Manufacturer warrants to the original consumer purchaser and not for the benefit of anyone else that this product at the time of its sale by Manufacturer is free of defects in materials and workmanship under normal and proper use for one (1) year from the purchase date. Manufacturer's only obligation is to correct such defects by repair or replacement, at its option, if within such one (1) year period the product is returned prepaid, with proof of purchase date, and a description of the problem. This warrant excludes and there is disclaimed liability for labor for removal of this product or reinstallation. **This warranty is void if this product is installed improperly or in an improper environment, overloaded, misused, opened, abused, or altered in any manner, or is not used under normal operating conditions or not in accordance with any labels or instructions.** There are no other implied warranties of any kind, including merchantability and fitness or a particular purpose, but if any implied warranty is required by the applicable jurisdiction, the duration of any such implied warrant, including merchantability and fitness of or a particular purpose, is limited to one (1) year. **Manufacturer is not liable for incidental, indirect, special, or consequential damages, including without limitation, damage to, or loss of use of, any equipment, loss sales or profits or delay or failure to perform this warranty obligation.** The remedies, provided therein are the exclusive remedies under this warranty, whether based on contract, tort or otherwise.

## PACKAGE CONTENTS

### NC-DS2



- One (1) NC-DS2
  - One (1) Flush Mounting Back Cover
  - Four (4) Long Mounting Screws
  - One (1) Allen Wrench
  - One (1) Manual

### NC-DS2-ST



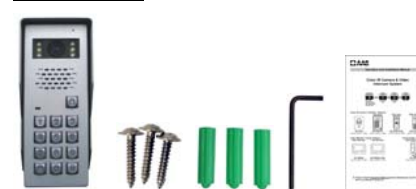
- One (1) NC-DS2 -ST
  - Three (3) Short Mounting Screws
  - Three (3) Wall Anchors
  - One (1) Allen Wrench
  - One (1) Manual

### NC-DS2-SLIM



- One (1) NC-DS2 -SLIM
  - Two (2) Short Mounting Screws
  - Two (2) Wall Anchors
  - One (1) Manual

### NC-DS2-KP



- One (1) NC-DS2 -KP
  - Three (3) Short Mounting Screws
  - Three (3) Wall Anchors
  - One (1) Allen Wrench
  - One (1) Manual

### NC-MON4



- One (1) NC-MON4
  - One (1) Metal Mounting Bracket
  - Two (2) Short Mounting Screws
  - Two (2) Wall Anchors
  - One (1) Power Connector Cable
  - Two (2) 4-wire Connector Cables
  - One (1) Manual

### NC-MON4-SUB



- One (1) NC-MON4-SUB
  - One (1) Metal Mounting Bracket
  - Two (2) Short Mounting Screws
  - Two (2) Wall Anchors
  - One (1) Power Connector Cable
  - Two (2) 4-wire Connector Cables
  - One (1) Manual

### NC-APS



- One (1) NC-APS
  - One (1) Mounting Plate
  - Two (2) Short Mounting Screws
  - Two (2) Wall Anchors
  - One (1) 4-wire Connector Cables
  - One (1) Manual

For any returns, please include all components listed above with original packaging in **Resalable Condition**. **Absolutely No Returns** will be accepted if any component is missing/damaged.

### IMPORTANT NOTE!

The Main monitor (NC-MON4) and Sub monitor (NC-MON4-SUB) must be used with Sentry US's 14.5V DC power supply (AC-POWERDC) and each monitor requires its own power supply.

### Delete All Settings

1. Enter programming mode.
2. Press the # button and the unit will beep two "Di Di" sounds as a reminder.
3. Press the # button again and two additional beeps will sound.
4. Continuously press the # button seven times to delete all settings. Unlocking time turns to one second. The Admin Codes are same as before. After 5 seconds, all settings will set back to default.
5. Press the \* button to quit.

\* NC-DS2-KP works with code only. No EM Card.

### SPECIFICATIONS

#### COLOR IR CAMERA OUTDOOR STATION

Model	NC-DS2	NC-DS2-ST	NC-DS2-SLIM	NC-DS2-KP
Unit Type	Standard	Standard	Slim	With Keypad
Power	12V ~ 14.5V DC			
Electric Current	Working ≤ 200mA			
Image	1/3" CCD; 420 TV Lines			
Camera Lens	72° ken; 3.6mm Lens			
Illumination	0.05 Lux			
Communication Duration	120 sec			
Communication Method	Duplex communication type			
Working Temperature	-4°F ~ 131°F / -20°C ~ 55°C			
IP Rating	IP55			
Mounting Type	Recessed	Surface	Surface	Surface
Dimension	9.06x5.91x1.69 in 230x150x43 mm	3.54x5.12x1.69 in 90x130x43 mm	2.17x5.12x1.54 in 55x130x39 mm	2.95x7.48x1.77 in 75x190x45 mm

\*Specifications are subject to change without notice



## CODE ACCESS FOR NC-DS2-KP

*The original factory defaulted Programming / Master Code is 1234. Input a 4 digit password to have the door strike or the lock unlocked.*

### Change the Master Code

1. Shut down the power of the unit by pressing down and holding the \* button.
2. Press the \* button again to turn on the unit; a long continuous tone will sound.
3. When the tone stops, another tone will beep. Enter the new 4 digit Master Code.

### Entering Programming Mode

1. Press the \* button plus enter your 4 digit Master Code.
2. You have successfully entered the programming mode when the unit beeps three sounds and the LED is flashing.
3. Press the \* button to quit.

### Set the Unlocking Time

Factory default setting is 5 seconds.

1. Enter programming mode.
2. Enter 00 (this is a special code group); the unit will beep two “Di Di” sounds as a reminder.
3. Enter a 2 digit desired lock/delay operation time (01 to 99 seconds).
4. Press the \* button to exit.

### Add User Codes

1. Enter programming mode.
2. There are 40 group codes to choose from: 01 to 40. It should be inputted in front of the 4 digit codes from 31 to 40 group codes. Input once 4 digit codes to open the door for a long time until twice the same code to have it closed.
3. Input the 4 digit code. If the unit beeps two sounds, it is unsuccessful. If it beeps three sounds, then the User Code is successfully set.
4. Press the \* button to quit.

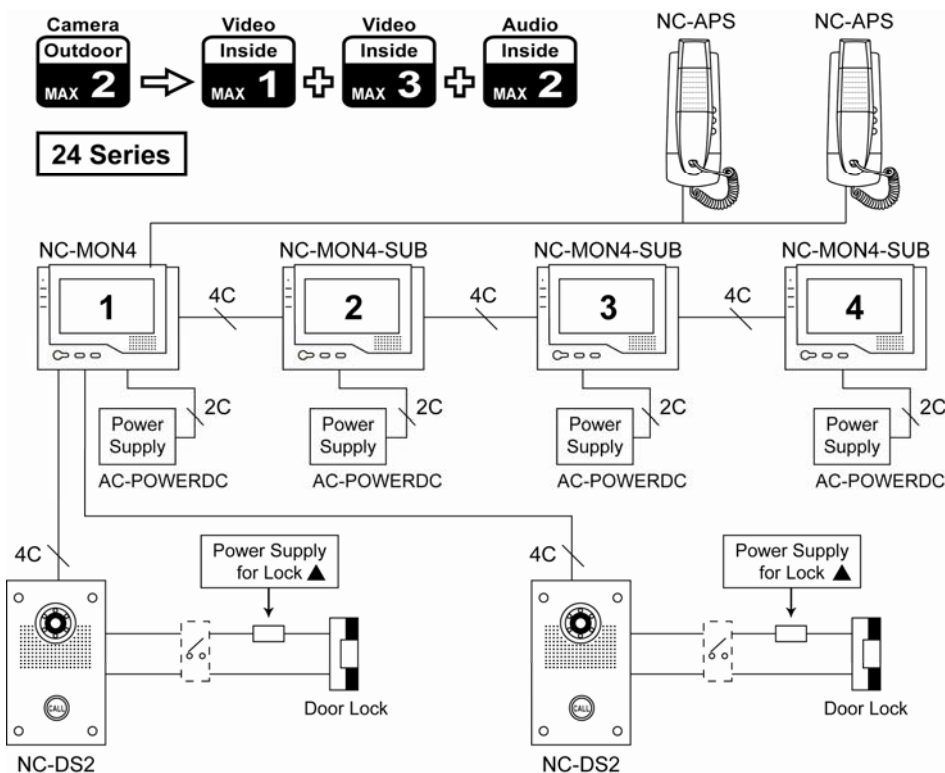
### Delete User Codes

1. Enter programming mode.
2. Enter one of the code groups from 01 to 40.
3. Press the # button to delete the codes of which position you just inputted. E.g. input 01, means delete the codes on the position 01
4. The code is successfully deleted when the unit beeps three “Di Di” sounds as a reminder.
5. Press the \* button to quit.

### Delete a Code Directly

1. Enter programming mode.
2. Press the # button; the unit will beep two “Di Di” sounds as a reminder.
3. Input the 4 digit code that you want to delete.
4. It is successfully deleted after the unit beeps three sounds.
5. Press the \* button to quit.

## APPLICATION DIAGRAM



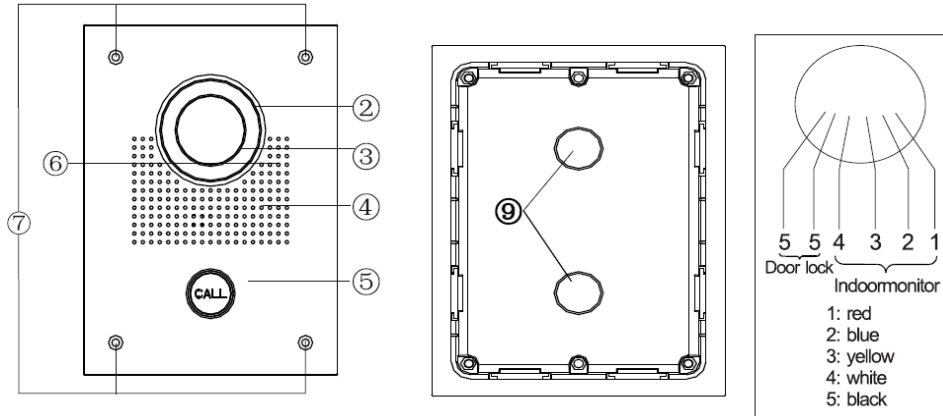
▲ Door lock requires a separate power supply

**NOTE: Power supply (AC-POWERDC) sold separately.**

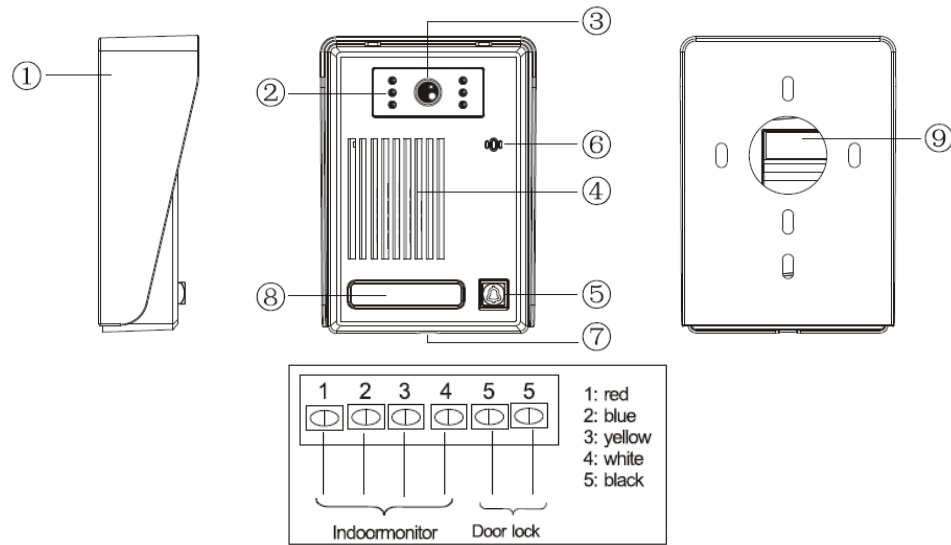
## PARTS & FUNCTIONS – COLOR IR CAMERA OUTDOOR STATION

No.	Name	Description
1	Water Cover	Protect the camera from outside water
2	LED Assistant	Provide lighting during night time for better visibility
3	CCD Camera	Capture the image to send to the monitor
4	Speaker	Sound from the monitor is delivered
5	Calling Button	Call the indoor phone to communicate
6	Microphone	Delivers and sound voice when communication with the indoor phone
7	Screw Hole	Install the screws
8	Name Plate	Show residential name
9	Connection Wiring	Connection with the monitor

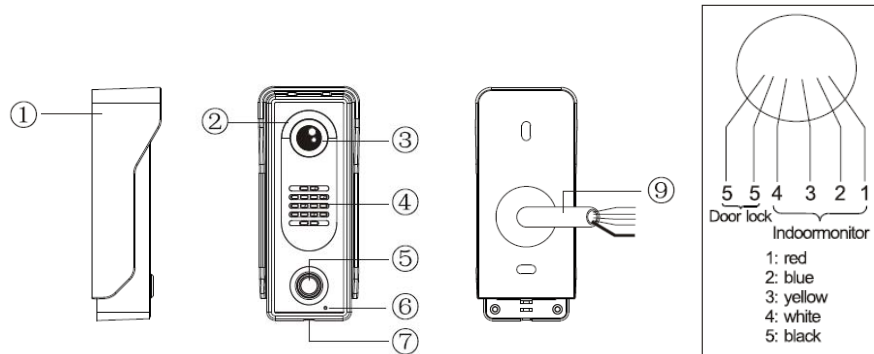
## NC-DS2



## NC-DS2-ST



## NC-DS2-SLIM



## 3. Communication Among The Optional Monitors & Audio

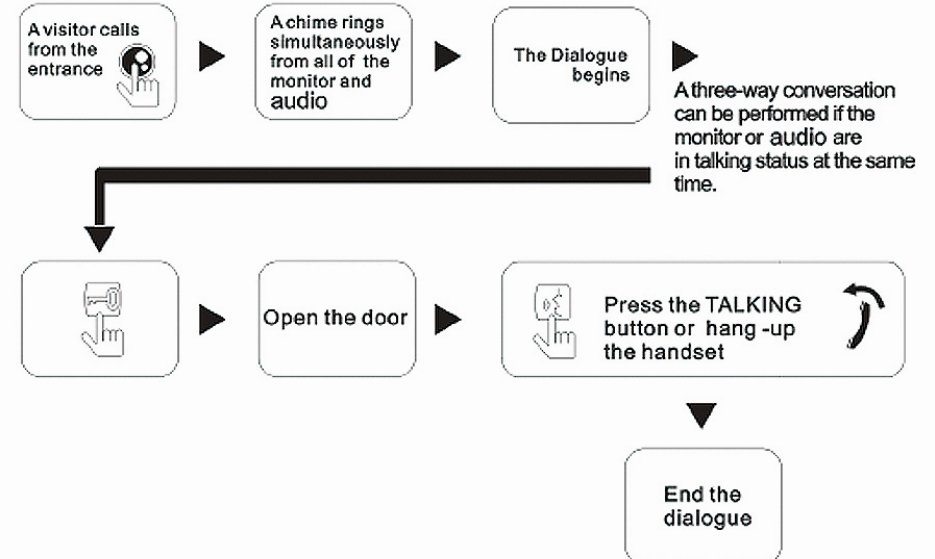
### ■ Call from the master monitor



### ■ Call to master monitor from the audio



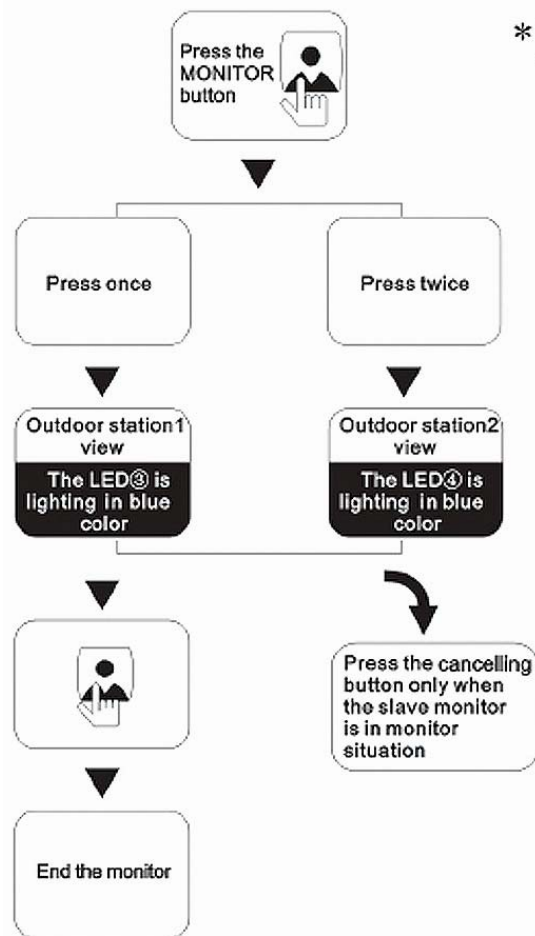
### ■ Conversation among the monitors and outdoor station



\* Dialogue among the monitors, outdoor stations, and audio is possible only when the image of the visitor is displayed on the monitor screen.



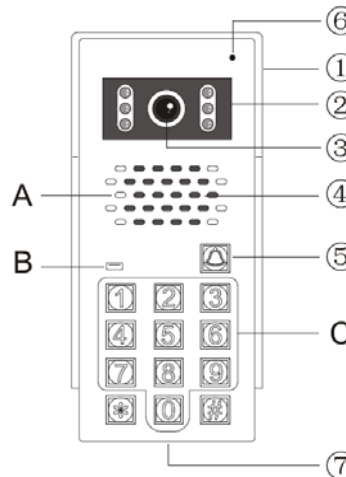
## 2. Monitor



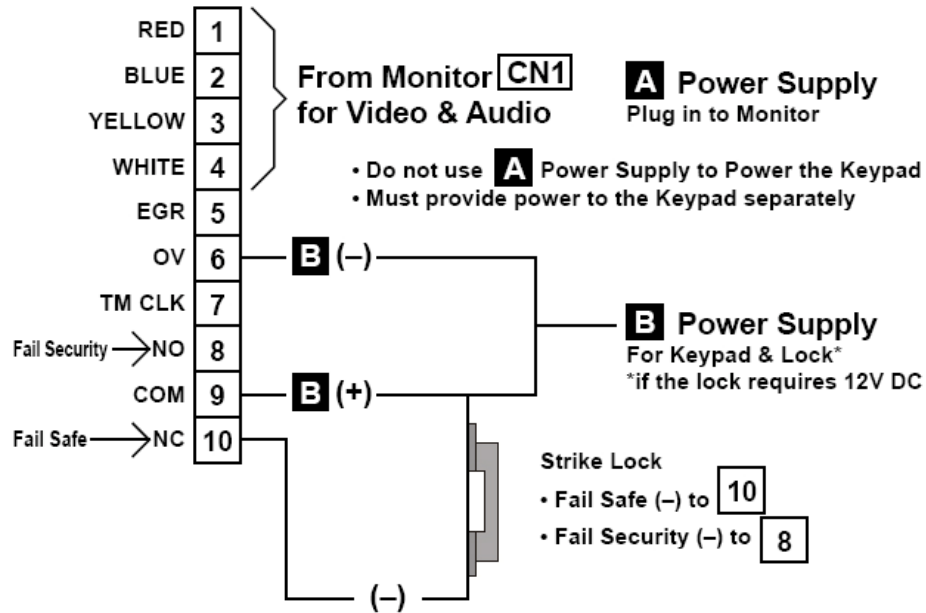
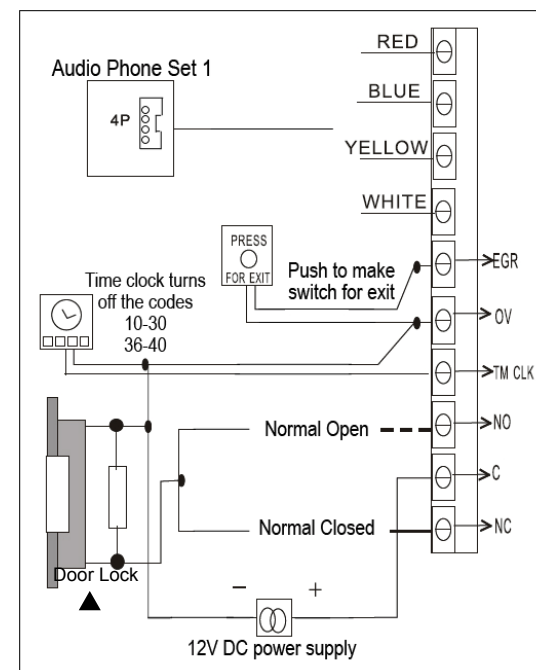
## NC-DS2-KP

Additional:

- A. Light Sensor
- B. LED Indicator
- C. Keypad Access



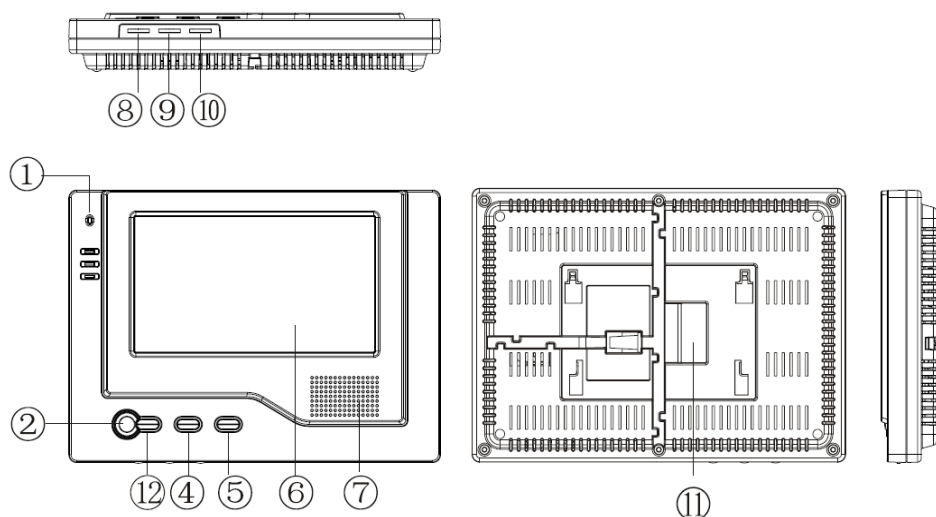
### \* Pass Code



▲ Requires a separate power supply

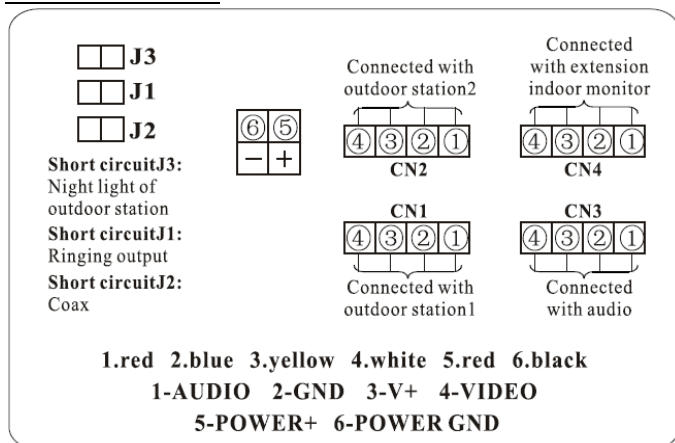
## PARTS & FUNCTIONS - COLOR MONITOR INSIDE STATION

### NC-MON4 & NC-MON4-SUB



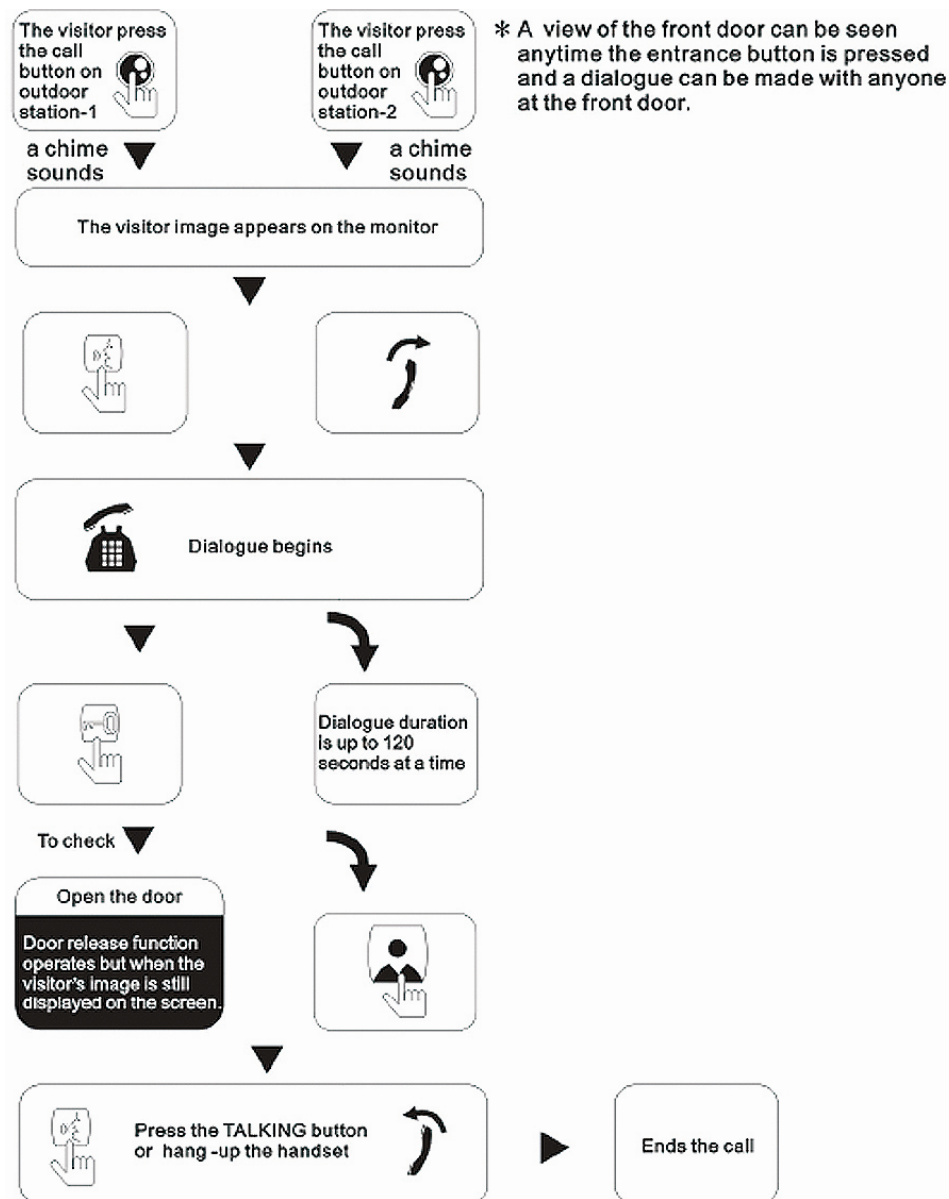
No.	Icon	Description	No.	Icon	Description
1		Microphone	7		Speaker
2		Monitor	8		Talking Volume
3		Hang Off	9		Brightness
4		Door Lock Releasing	10		Chrome/Contrast
5		Talking	11		System Terminal
6		TFT Display/CRT	12		Calling

### NC-MON4 - Main

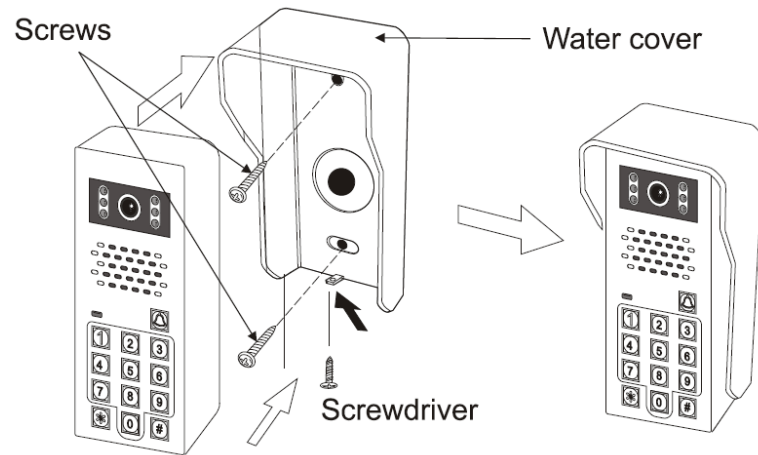


## OPERATION

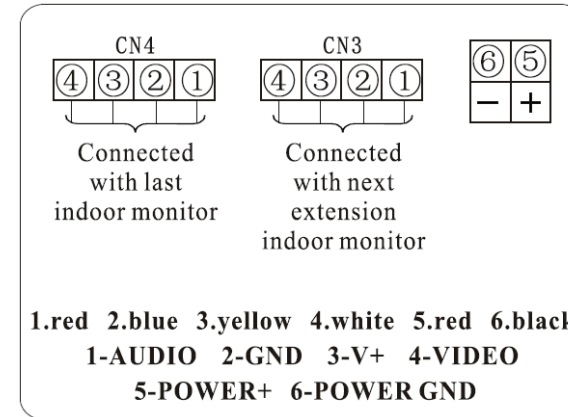
### 1. Visitor Call



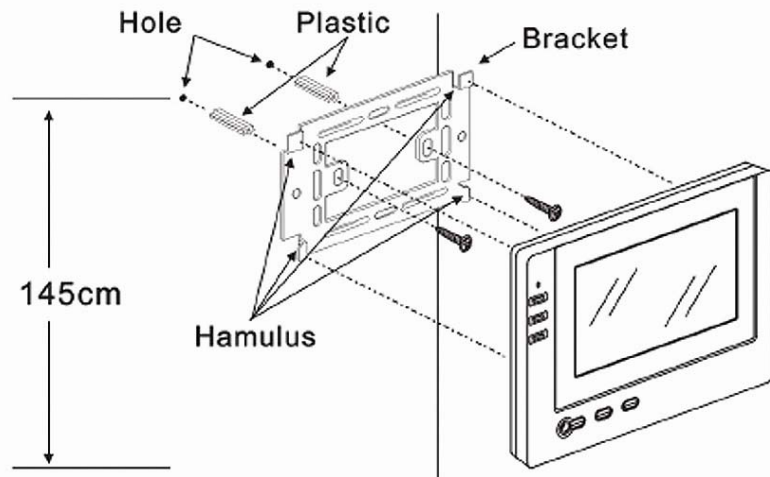
## NC-DS2-KP



## NC-MON4-SUB

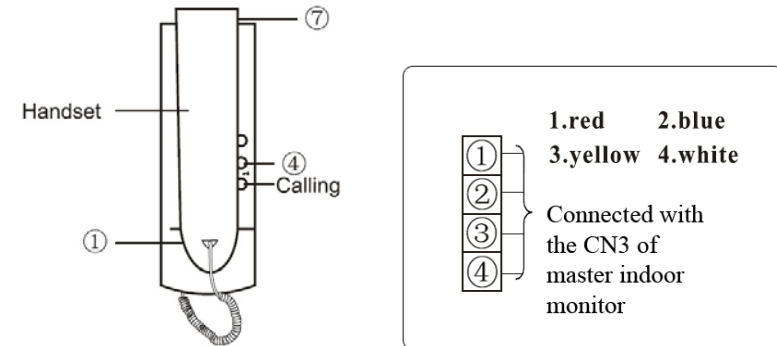


## NC-MON4 & NC-MON4-SUB



## AUDIO PHONE SET PARTS & FUNCTIONS

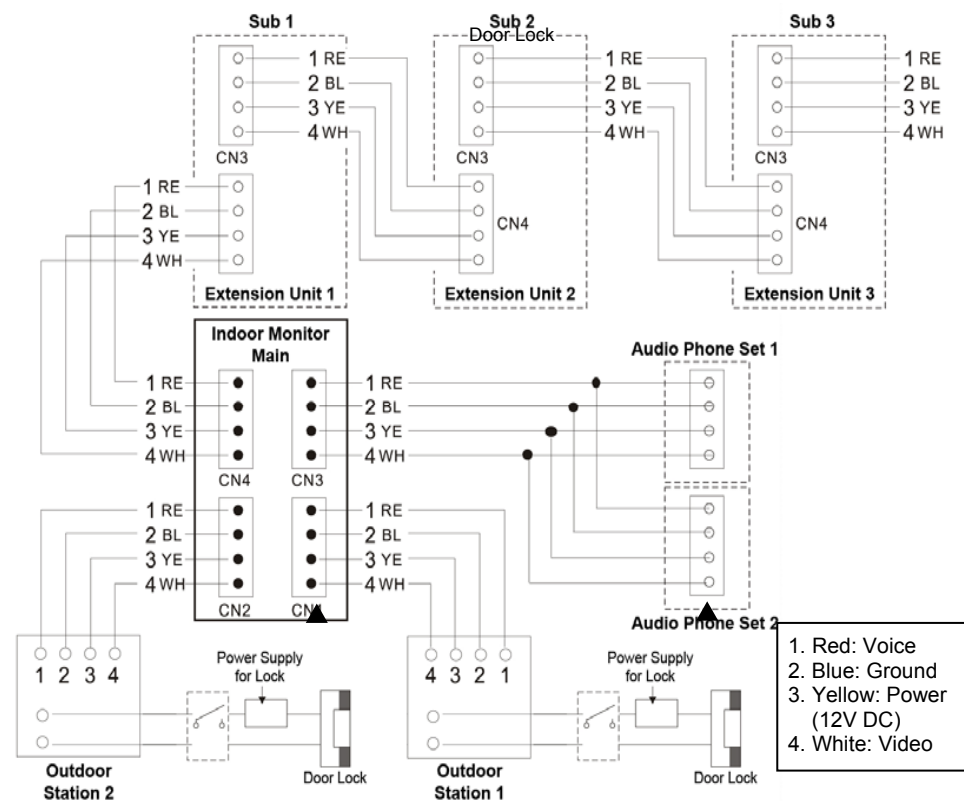
### NC-APS



### Instructions:

1. System Cable: Non-STP core cable, wire  $\geq 0.5\text{mm}^2$ , from Outdoor Station to the farthest monitor  $\leq 200\text{ft} / 70\text{m}$ .
2. Each monitor should be paralleled. One Main monitor can extend up to 3 Sub monitors. One Main monitor can connect to a maximum of 2 Outdoor Stations.
3. The handset monitor only has 2 function buttons.
4. Each Video Door Phone is 12V DC~14.5V DC / 1.3A.

## WIRING CONNECTION SYSTEM DIAGRAM

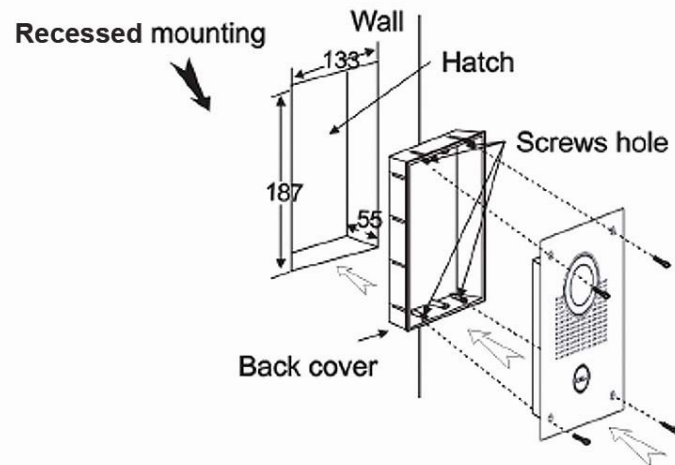


### ▲ Requires a separate power supply

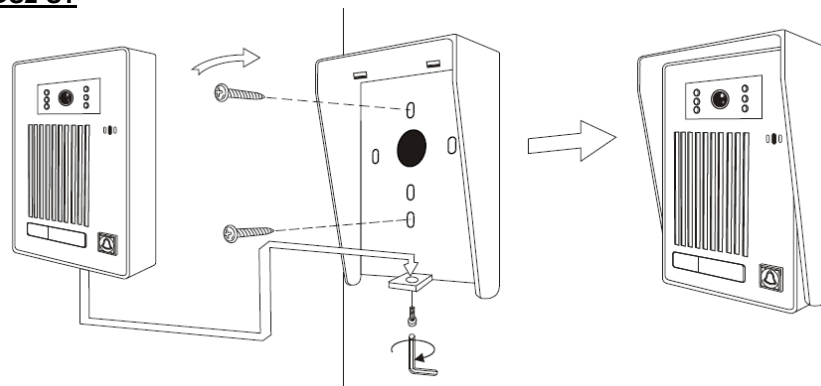
**Note:** Socket CN1 is just retained for outdoor station in alone system (like as an outdoor unit is matched with an indoor unit). Please recheck the polarity of CN1 and have the 4-wire connected as per the enclosed label

## INSTALLATION

### NC-DS2



### NC-DS2-ST



### NC-DS2-SLIM

