Wireless Home Security System

User Manual
Rev. 1

Content

1. **System Installation Guide**

2. **User Operation Guide**

3. **Troubleshooting Guide**
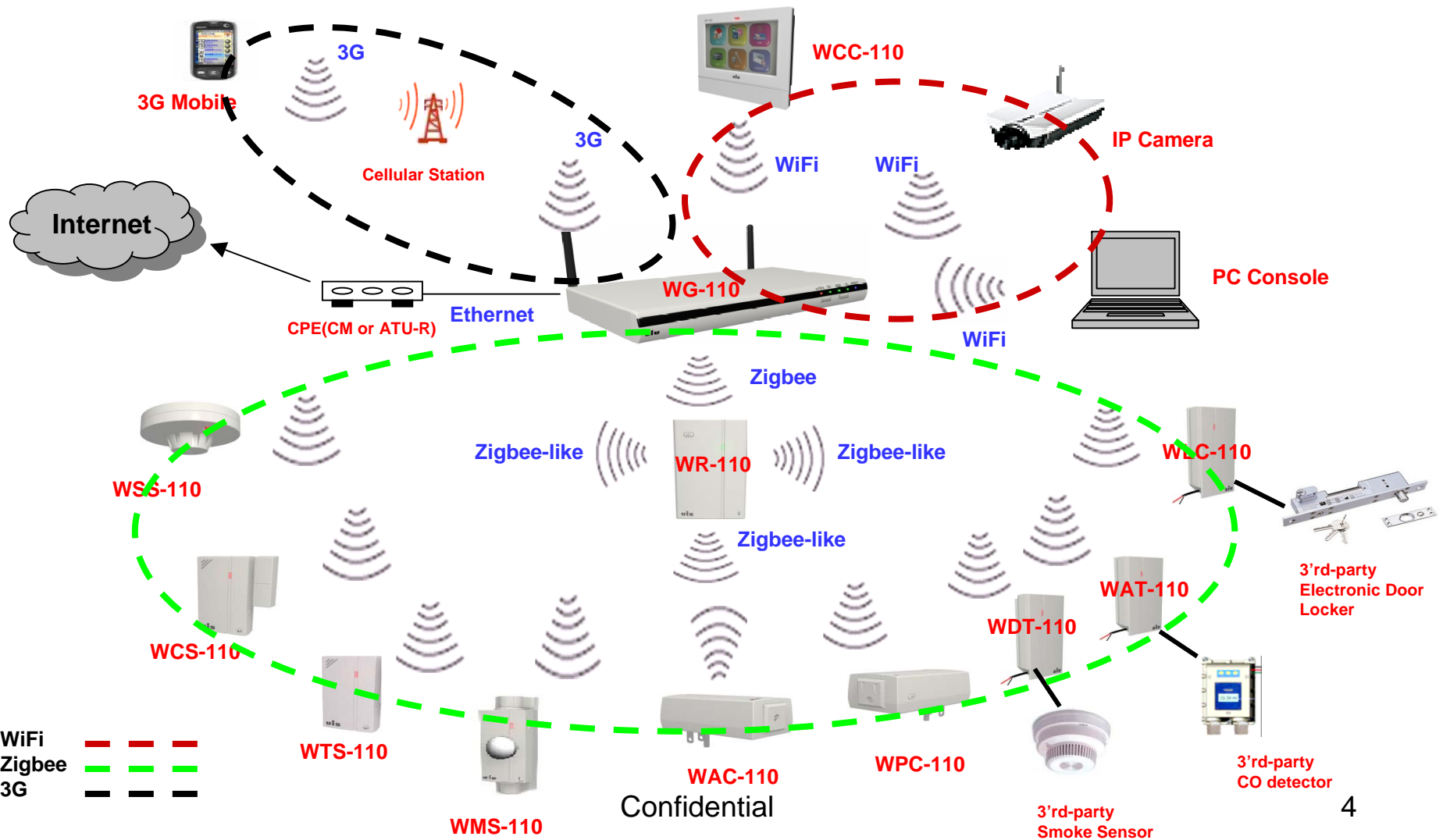
4. **Application Guide**
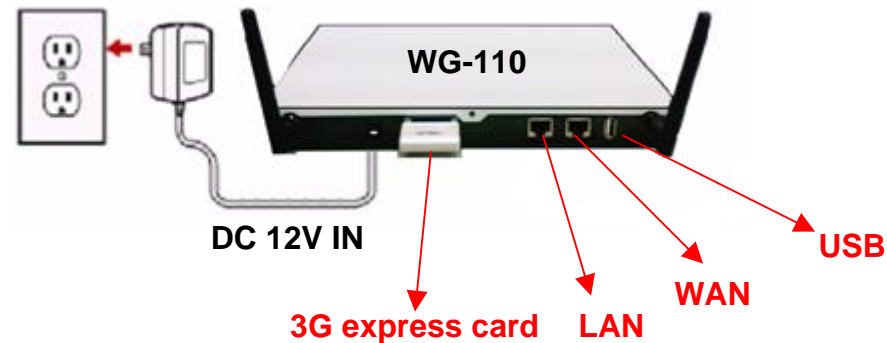
WG-110

## PC/HTTP Console Configuration Guide

System Architecture

UIS

3G

3G Mobile

3G

Cellular Station

WCC-110

IP Camera

WiFi   WiFi

Internet

WG-110

PC Console

CPE(CM or ATU-R)   Ethernet

WiFi

Zigbee

WSS-110

Zigbee-like   WR-110   Zigbee-like

WLC-110

Zigbee-like

3'rd-party
Electronic Door
Locker

WCS-110

WAT-110

WDT-110

WPC-110

WiFi
Zigbee
3G

WTS-110

WAC-110

WMS-110

3'rd-party
CO detector

3'rd-party
Smoke Sensor

Confidential

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System Setup

Step 1：**Power on the Gateway(WG-110) - plug adapter into the wall power socket**

DC 12V IN

3G express card   LAN   WAN   USB

Step 2：**It takes around 40 sec for Gateway to boot up and get ready, you may check out the LEDs of Power(blue) / Normal(green) to identify**


Antenna

Power

LED

3G

WAN   Confidential   Normal   Alarm

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System Setup
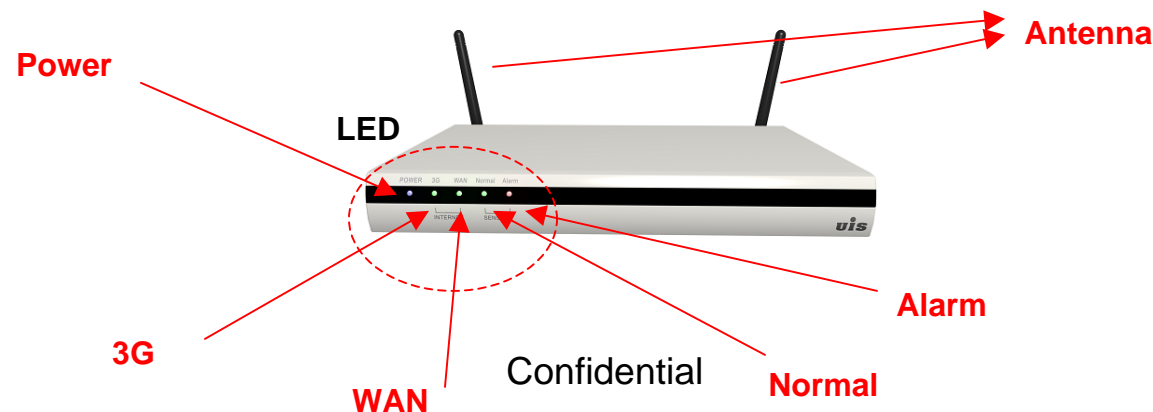
Step 3：**Set up WiFi connection between the PC and Gateway**
- **Power on your PC and enable WiFi(only 802.11b/g supported) network access**
- **Set PC's WiFi interface IP by using DHCP(dynamic IP)**
- **Search Gateway's SSID (you may see the default SSID value on the bottom side of Gateway while doing the first time setup) and get connected with Gateway (PC's WLAN IP address will be assigned by Gateway)**
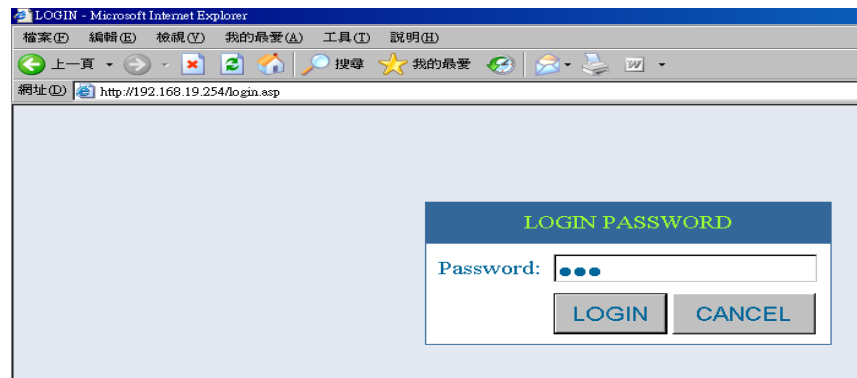

SSID

WiFi signal

System Setup

Step 4：Set up PC console

- Open the IE browser(6.0 or above) and enter the Gateway IP (you may see the default IP address on the bottom side of Gateway while doing the first time setup)
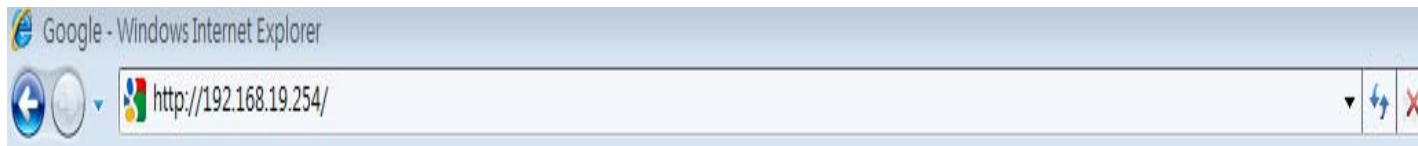
- Key in the login password "123" (factory default) to enter the main page

System Setup

Step 5：**Enter the main console of Gateway**

uis

System
Arm/Disarm
Repeater
Sensor
Siren
Automation
Surveillance
Notification
Logout

WHSS-Wireless Home Security System

Welcome to the setup home page of WHSS, you can configure all system components step-by-step via here.
If you encounter any difficulties to complete the setting, you may check out the User Manual, Website or contact the local channel rep you purchased from.

System Setup

Step 6：**Click "System" to change the console login password**

uis

System
▷ Password
▷ WAN
▷ LAN
▷ WLAN
▷ DDNS
▷ Reboot
▷ Reset

Arm/Disarm
Repeater
Sensor
Siren
Automation
Surveillance
Notification
Logout

System / Password

Old Password

New Password   (3-12 Numeric)

Confirm Password

Apply   Cancel

click here to take effect   **click here to abort**

System Setup

Step 7：**Click "WAN" to configure Gateway's WAN interface**

choose either one to connect to Internet (must be following up with your local ISP OR 3G mobile operator)

System Setup

Step 8：**Click "Dynamic IP" to configure Gateway's WAN interface**

System Setup

Step 9：**Click "Static IP" to configure Gateway's WAN interface**

System / WAN / Static IP

System
- Password
- WAN
- LAN
- WLAN
- DDNS
- Reboot
- Reset

Arm/Disarm
Repeater
Sensor
Siren
Automation
Surveillance
Notification
Logout

IP address	0	0	0	0
Subnet Mask	255	255	255	0
Default Gateway IP	0	0	0	0
DNS IP Address	210	241	192	201

Apply   Cancel

System Setup

Step 10 : **Click "3GPP" to configure Gateway's WAN(3G express card) interface**

System / WAN / 3GPP

Please enter the 3GPP parameters provided by your 3G mobile operator.

System
- Password
- WAN
- LAN
- WLAN
- DDNS
- Reboot
- Reset

Arm/Disarm
Repeater
Sensor
Siren
Automation
Surveillance
Notification
Logout

ISP   `1`   **user-definable**

APN   `fetims`

key in the value per your 3G provider

Apply   Cancel

System Setup

Step 11：**Click "LAN" to configure Gateway's LAN interface**

System Setup

Step 12 : **Click "WLAN" to configure Gateway's WLAN interface**

System / WLAN

System
- Password
- WAN
- LAN
- WLAN
- DDNS
- Reboot
- Reset

Arm/Disarm
Repeater
Sensor
Siren
Automation
Surveillance
Notification
Logout

SSID   UIS-Tony

you may change the value as required

Network key   [   ] (10 Numeric)

TX rate   Auto

Wireless LAN Security   WEP

you may define the key to enable WEP data encryption as required

Key length   64-bit

Key format   HEX

Auth mode   Open

Remark: please input the Network Key to enable WEP encryption, otherwise, leave it blank to disable.

Apply   Cancel

System Setup

Step 13 : **Click "DDNS" to configure Gateway's DDNS (Dynamic DNS) information**

System Setup

Step 14 : **Click "Reboot" to power reboot the Gateway**

System Setup

Step 15：**Click "Reset" to reset all settings to the factory default and power reboot the Gateway**

Repeater Setup

Step 16：Power on the Wireless Repeater (WR-110) and get connected with Gateway

- Plug adapter into the wall socket to power on the Repeater
- Push the back side "set" button of Repeater for 5 sec, the indicator will blink blue light twice and turn red light again
- Click "Join Repeater" button via the WG-110 console (see next page) to join the repeater
- Repeater's indicator will turn blue light to sync up the access ID with WG-110
- Wait couple seconds or click the "Refresh" button to check out the result
- Repeat above steps to join the other repeaters
- The max. distance between Gateway and Repeater is 30M as suggested

WG-110

WR-110
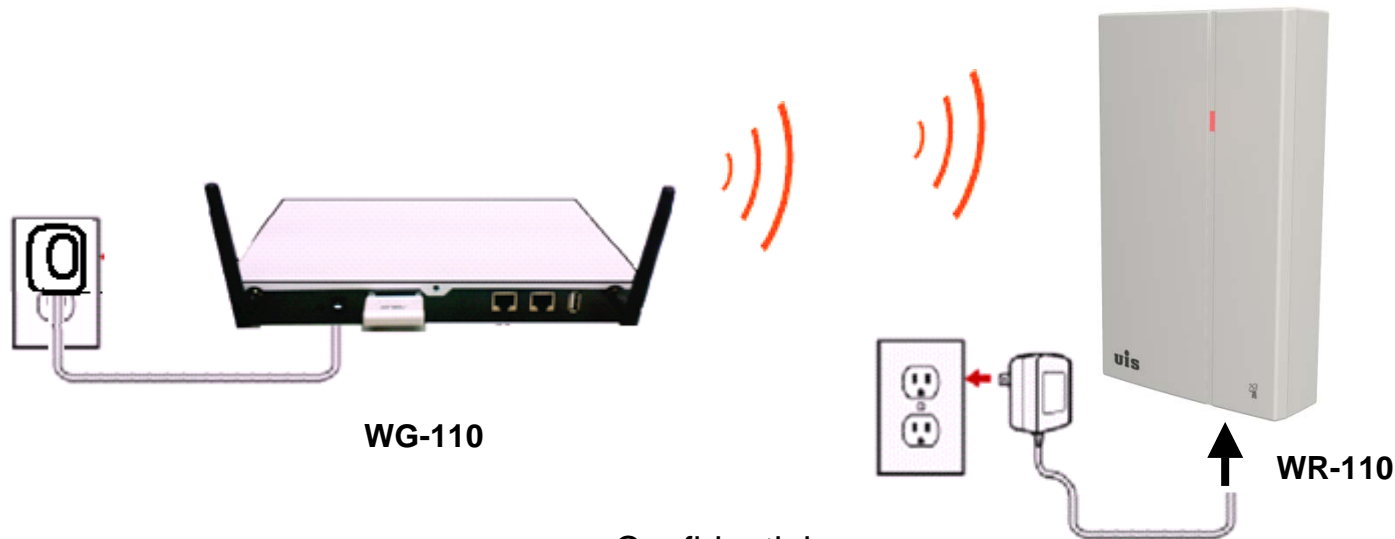
Repeater Setup

Step 17：**Click "Repeater" to configure repeaters**

you can join multiple Repeaters thru here

Click here to refresh the status

click here to clean all binding sensor information

the ID has to be matched (Repeater vs. Gateway) to complete the binding

the unique channel # between Repeater and Gateway

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Repeater Setup

Step 18：**Click the specific Repeater to configure**

Repeater Setup

System
Arm/Disarm
Repeater
Sensor
Siren
Automation
Surveillance
Notification
Logout

Repeater ID   1113000000000011

Repeater Channel   0001

Repeater Name

user-definable alias

Delete   Apply   Cancel

**click here to delete this Repeater connection**

1. Push Repeater's button (rear side) once
2. Push Device's button (rear side or left side nearby logo) once
3. Verify if Device's LED flashes three
   times (red color) in sec and meanwhile,
   verify if Repeater's LED flashes once (blue color)
4. Repeat the above actions for all rest devices

Device means for:
- Sensor
- Siren
- Controller
- Transducer

Remarks:
- while binding Smoke Sensor, after pushing
  the button, it will alarm three times in sec
- while binding Siren, after pushing
  the button, the LED will flash three
  times in around 15 sec
- the max. distance between Sensor
  and Repeater is 10M as suggested
- Sensor will send status update to
  Repeater automatically in every 10 minutes
- Gateway will put Sensor as "disconnected" status if
  Gateway didn't get Sensor's keep-alive signal (via Repeater)
  in 30 minutes (10 min/time x 3)

LED   **rear side button**

WR-110

LED   **rear side button**

WCS-110
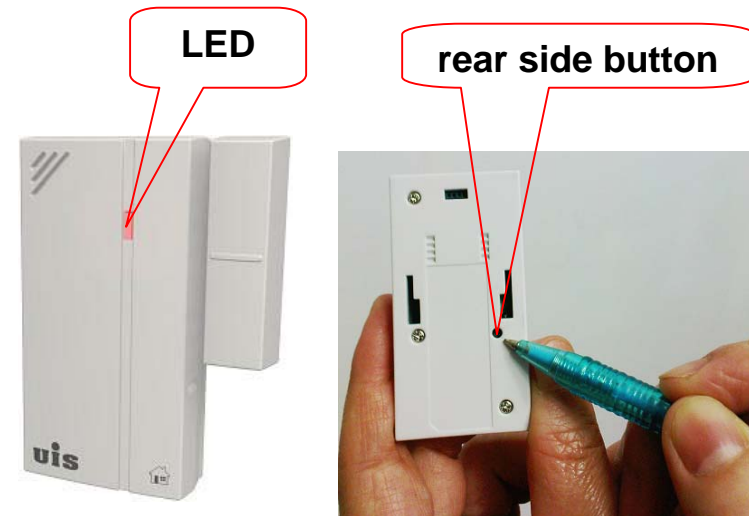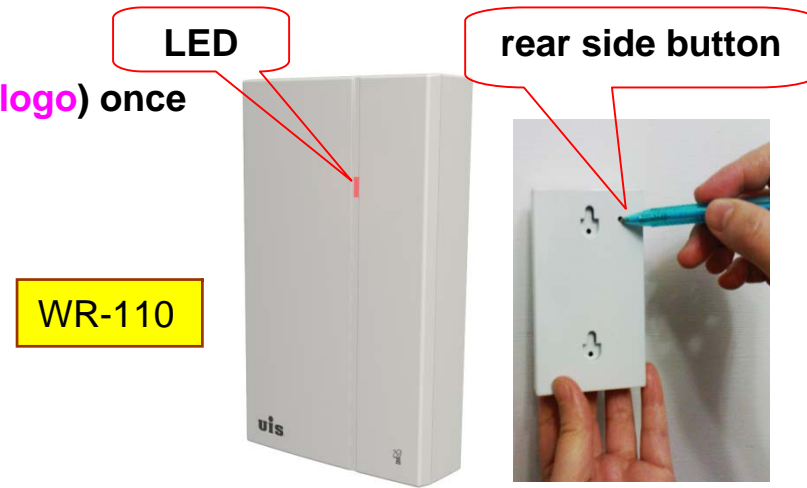
Siren Setup

Step 19：**Click "Siren" to configure sirens**

silent mode

alarm mode

Siren Setup

Step 20：Click the specific Siren to configure

Step 21：**Click "Automation" to configure controllers**

Orange means "turned-off"
Green means "turned-on"

Automation Setup

Step 22：**Click the specific Power Controller to configure**

Sensor Setup

Sensor ID   0001-001107

Sensor Type   Remote Power Switch

Sensor Name

Navigation menu:
- System
- Arm/Disarm
- Repeater
- Sensor
- Siren
- Automation
- Surveillance
- Notification
- Logout

Buttons: Delete   Apply   Cancel

Automation Setup

Step 23：**Click the specific Lock Controller to configure**

Sensor Setup

Step 24：**Click "Sensor" to display all binding sensor information**

click here to quick refresh all sensor status manually

Note:
• the console will be auto refreshed in every 20 sec

sensor name & id

sensor status or current value

sensor symbol

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Sensor Setup

Step 25 : **Click "PIR Motion Sensor" to configure**

user-definable alias

click here to enable the Partial Arm mode

click here to bind the multiple links with the automation-related controllers

Sensor Setup

Step 26：**Click "Temperature Sensor" to configure**

Sensor Setup

System
Arm/Disarm
Repeater
Sensor
Siren
Automation
Surveillance
Notification
Logout

Sensor ID   0001-000308

Sensor Type   Temperature Sensor

current value

Sensor Name

Value   19 ℃   **click here to swap the unit**

MAX   >= 60   **key in the max. threshold value**

MIN   <= -20   **key in the min. threshold value**

Siren Alarm   ☑ Enable

Switch link   ------ ▼ Add

**click here to enable
Siren alarm once above
threshold be reached**

Delete   Apply   Cancel

![UIS Logo]

Sensor Setup

Step 27：**Click "DI Transducer" to configure**

Sensor Setup

Step 28：**Click "Contact Sensor" to configure**

Sensor Setup

Step 29：**Click "Smoke Sensor" to configure**

Sensor Setup

Step 30 ： Click "AI Transducer" to configure

Arm/Disarm System

Arm/Disarm

System
Arm/Disarm
Repeater
Sensor
Siren
Automation
Surveillance
Notification
Logout

Disarm
Disable all burglarproof sensor alarms BUT enable all anti-disaster sensor alarms

Partial Arm
Enable all partial_arm_mode-enabled burglarproof sensor alarms AND enable all anti-disaster sensor alarms

Full Arm
Enable all sensor alarms

Burglarproof-type sensors: i.e. Contact Sensor, Motion Sensor....
Anti-disaster-type sensors: i.e. Smoke Sensor....

Current mode : Disarm

Mode Selection:

Disarm   Partial Arm   Full Arm

Surveillance Setup

Step 31 : Set up 3rd-party wired IP camera

WG-110/DHCP server

PC

WiFi

LAN

UTP

IP Camera

1. Connect WG-110 and IP camera by UTP cable OR thru external Ethernet switch
2. Gateway(WG-110) will release IP address to IP camera by DHCP protocol
3. Open PC browser and type in IP camera's IP address to enter IP camera's configuration console
4. Configure IP camera's IP address (fixed), WiFi SSID, HTTP port# and RTSP port#
5. Reboot both Gateway and IP camera

Surveillance Setup

Step 31：Set up 3rd-party **wireless** IP camera

WG-110/DHCP server

PC

WiFi

LAN

UTP
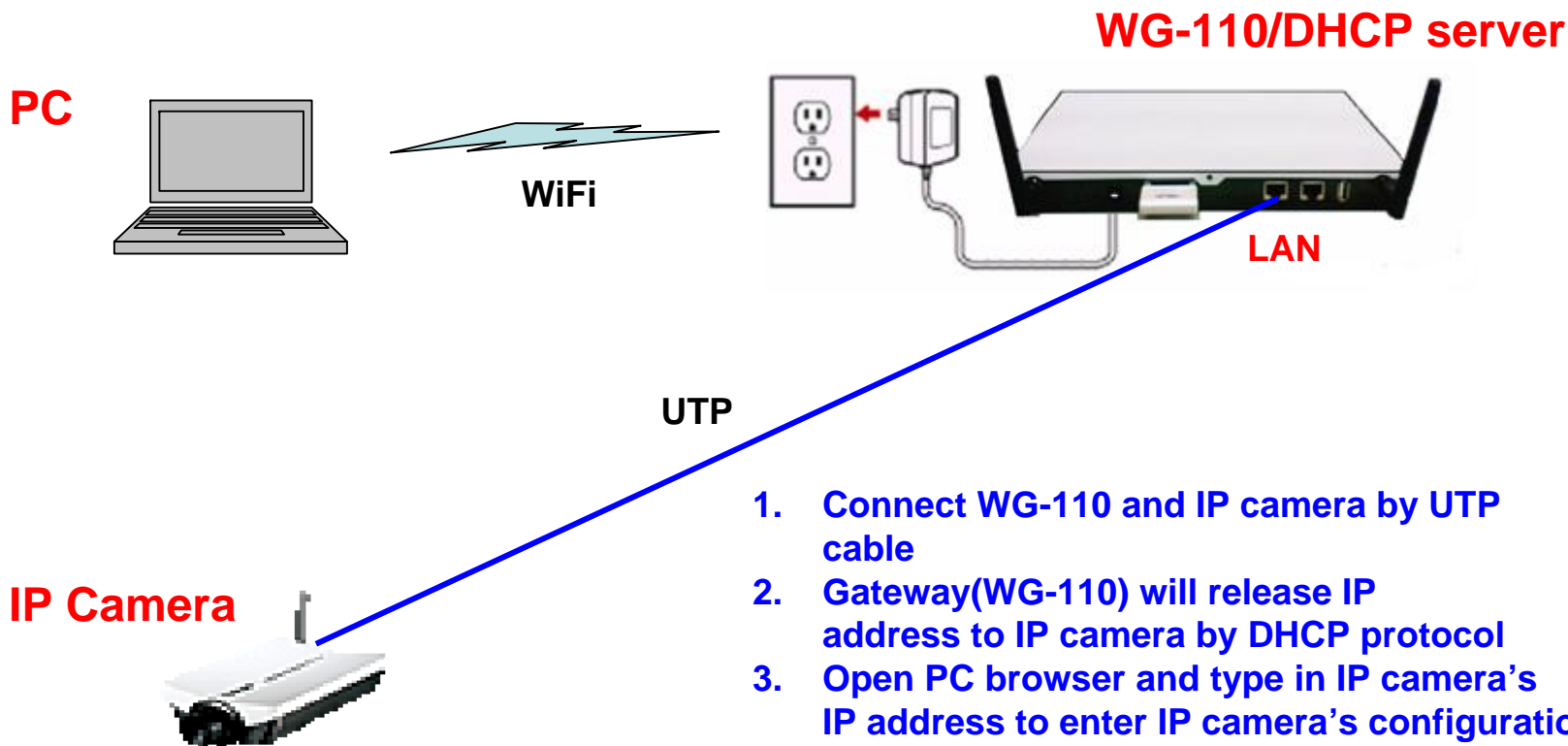
IP Camera

1. **Connect WG-110 and IP camera by UTP cable**
2. **Gateway(WG-110) will release IP address to IP camera by DHCP protocol**
3. **Open PC browser and type in IP camera's IP address to enter IP camera's configuration console**
4. **Configure IP camera's IP address (fixed), WiFi SSID, HTTP port# and RTSP port#**
5. **Disconnect the UTP connection and reboot both Gateway and IP camera**

Surveillance Setup

Step 32：**Key in IP Camera's <u>Alias</u>, <u>IP address</u>, and <u>Port mapping</u> to add into**

IP camera's RTSP port#

IP camera's HTTP port#

**Gateway's RTSP port#
(must be above 1024)**

**Gateway's HTTP port#
(must be above 1024)**

click here to add IP camera

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Surveillance Setup

Step 33 : **Reboot Gateway to take effect**

UIS

- System
- Arm/Disarm
- Repeater
- Sensor
- Siren
- Automation
- **Surveillance**
  - ▷ Setup
  - ▷ Monitoring
- Notification
- Logout

You must reboot gateway

IP Camera Setup

Name	IP Cam	RTSP Port	Mapping Port	Web Page	Mapping Port	Add
	192.168.					✓

Name	IP Cam	RTSP Port	Mapping Port	Web Page	Mapping Port	Delete
Door	192.168.21.64	554	1054	80	1080	🗑

Cancel

click here to delete IP camera

Surveillance Setup

Step 34 : **Choose IP camera to monitor**

using HTTP to display   using RTSP to display (to be available soon)

Surveillance Setup

Notification Setup

Step 35：**Click "Notification" to configure SMS notifications**

Notification / SMS

click here to enable SMS notification

System	
Arm/Disarm	
Repeater	
Sensor	
Siren	
Automation	
Surveillance	
Notification	
▷ SMS	
▷ EMail	
Logout	

SMS Enable ☐ Enable

PhoneNo. 1 886987654321 **(country code + mobile num)**

PhoneNo. 2 886987654322

PhoneNo. 3 886987654323

PhoneNo. 4 886987654324

Apply Cancel

up to 4 mobile numbers could be entered

Notification Setup

Step 36：**Click "Notification" to configure Email notifications**

click here to enable email notification

key in SMTP server's IP or Domain Name

Notification / Email

click here to enable SMTP authentication as required

Email Service	☐ Enable
SMTP Server	_____ (IP or Domain Name)
Authentication	☐ Yes
User name	_____
Password	_____
Email Address No.1	sales@wss.uisco.com.tw
Email Address No.2	_____
Email Address No.3	_____
Email Address No.4	_____

key in username/password

System
Arm/Disarm
Repeater
Sensor
Siren
Automation
Surveillance
Notification
▷ SMS
▷ EMail
Logout

Apply   Cancel

up to 4 email addresses could be entered

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System Logout

Step 37：**Click "Logout" to logout the system**

click

WG-110
Touch Console Configuration Guide

WCC-110 / Front View

Arm/Disarm status indicators/
Boot status

Touch screen

Battery status
indicators

Item	Description
Touch screen	7" 800x480 16:9 WVGA TFT color LCD displays with Touch panel
Battery status indicators	Dual Color LED(Green, Red) to show the battery status of 1. In charging (AC power on) - Red LED blinking , 2.Battery discharge- Yellow continue , 3.low battery – Red LED continue on 4. Normal(AC power on, battery high) – Green LED continue on
Arm/Disarm status indicators/ Boot status	Dual Color(Blue,Red)LED to show the status of the Arm/Disarm Status 1.Full(Partial) Arm: Red LED blinking ; 2.Disarm: Blue continue on 3.Booting --Blue LED blinking

WCC-110 / Back View
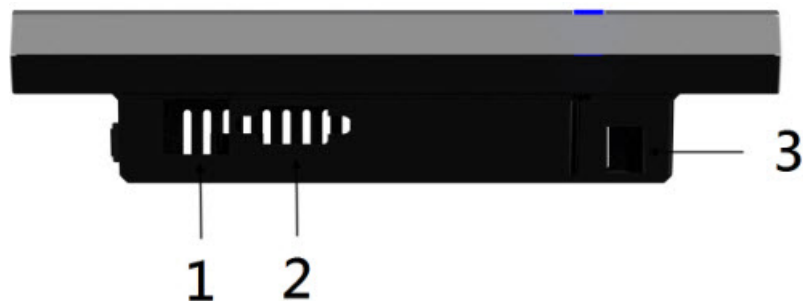
#	Item	Description
1	Ethernet (RJ-45) port	Connects to an Ethernet 10/100 based network.
2	External display (VGA) port	Connects to a display device (e.g. external monitor, LCD projector.
3	DC-in jack	Connects to an AC adapter.

WCC-110 / Side View
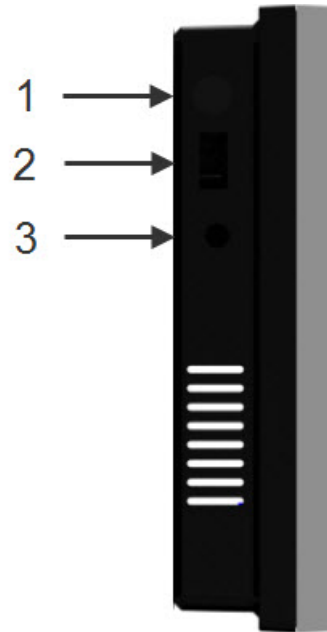
#	Item	Description
1	Power button	Turn on/off Console Controller
2	USB 2.0/1.1 port	Connects to USB devices (e.g. USB camera, USB keyboard).
3	Speaker jack	Connects to audio devices (e.g. external speakers).

WCC-110 Setup

Power ON :

1. **Plug in the power adapter**
2. **Push the power button to power on the device**

WCC-110 Setup

1. Key in password The default value is "123"

Please enter password:

Clear

Login

2. Click here to login

| 1 | 2 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 0 |

WCC-110 Setup

Click here to logout

Touch here to enter into the setup main console

To be available

Touch here to enter into the Gateway setup screen

WCC-110 Setup

Same as PC console

WCC-110 Setup

Touch here to enter into the setup main console

Touch here to enter into the WCC-110 setup screen

WCC-110 Setup

Touch here to enter into the password setup screen

WCC-110 Setup

Close   Apply   Keypad

Old Password   :   [   ]
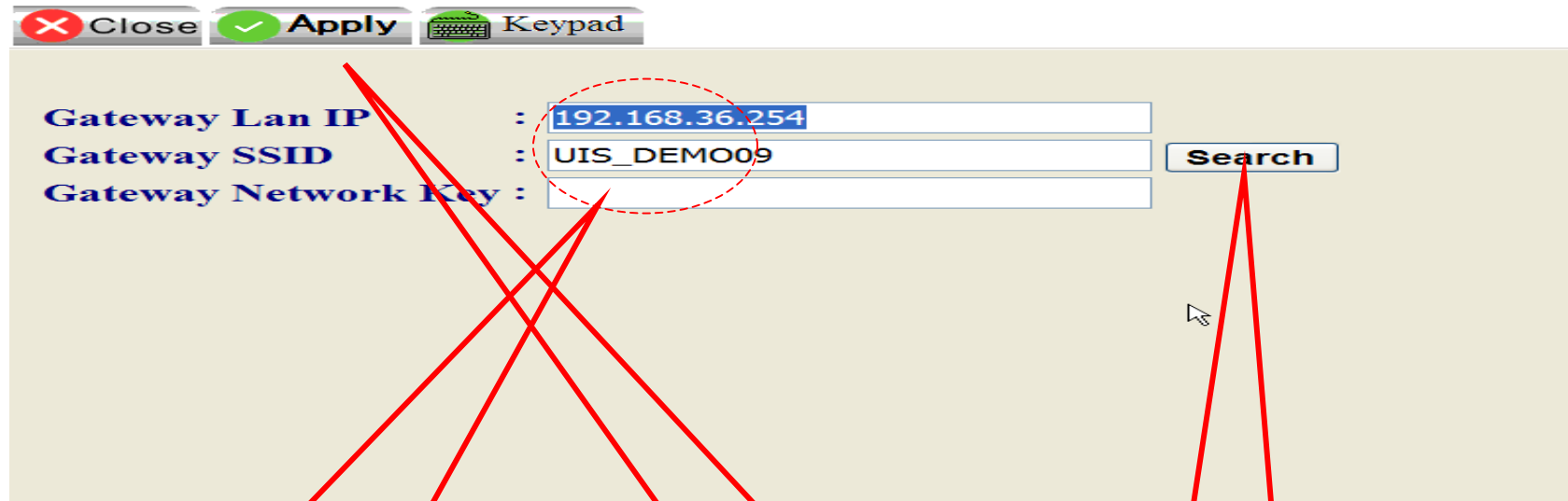New Password   :   [   ]   (3-12 Numeric)
Confirm Password   :   [   ]

WCC-110 Setup

Touch here to enter into the network setup screen

WCC-110 Setup

Close   Apply   Keypad

Gateway Lan IP   : 192.168.36.254
Gateway SSID   : UIS_DEMO09   Search
Gateway Network Key :

1. Key in Gateway's LAN IP, SSID(if know) & WiFi network key(if have)

3. Click here to activate all settings

2. Click here to searching for WiFi SSID(if don't know), move to the next page to continue

WCC-110 Setup

1. Choose the right SSID that you're going to get connected with Gateway

2. Key-in the WiFi key if have

3. Click here to get connected
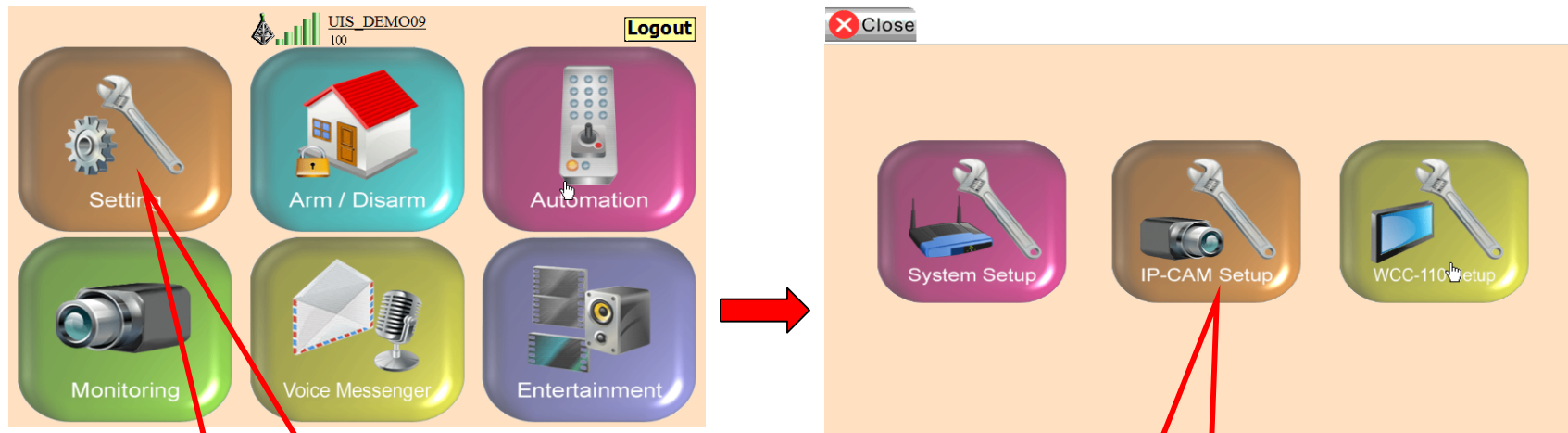
WCC-110 Setup

Touch here to enter into the setup main console

Touch here to enter into the IP Camera setup screen

WCC-110 Setup

Close | Return | View Up | View Down | Keypad

Key-in IP Camera's IP address(if know)

Please input IP Cam Address :

Apply

DHCP IP address release table

Renew

Click here to renew the table

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4. **Application Guide**

PC/HTTP Console

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Arm/Disarm

Disarm
Disable all burglarproof sensor alarms BUT enable all anti-disaster sensor alarms

Partial Arm
Enable all partial_arm_mode-enabled burglarproof sensor alarms AND enable all anti-disaster sensor alarms

Full Arm
Enable all sensor alarms

Burglarproof-type sensors: i.e. Contact Sensor, Motion Sensor....
Anti-disaster-type sensors: i.e. Smoke Sensor....

Current mode : Disarm

Mode Selection:

Disarm   Partial Arm   Full Arm

PC/HTTP Console

Show up the real-time mode once changed

WCC-110 Console

Touch here to enter into the Arm/Disarm main console

Choose either mode you prefer

WCC-110 Console

Touch here to enter into the automation-related main console

WCC-110 Console

2. Choose the IP Cam you want to watch
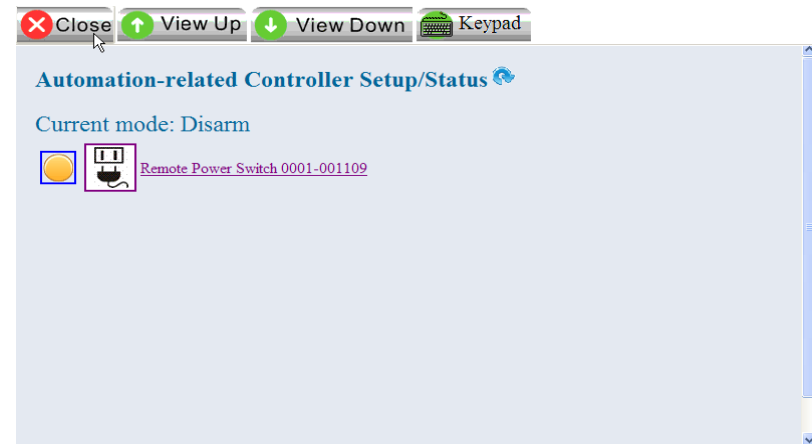
1. Touch here to enter into the Monitoring main console

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Troubleshooting Tips
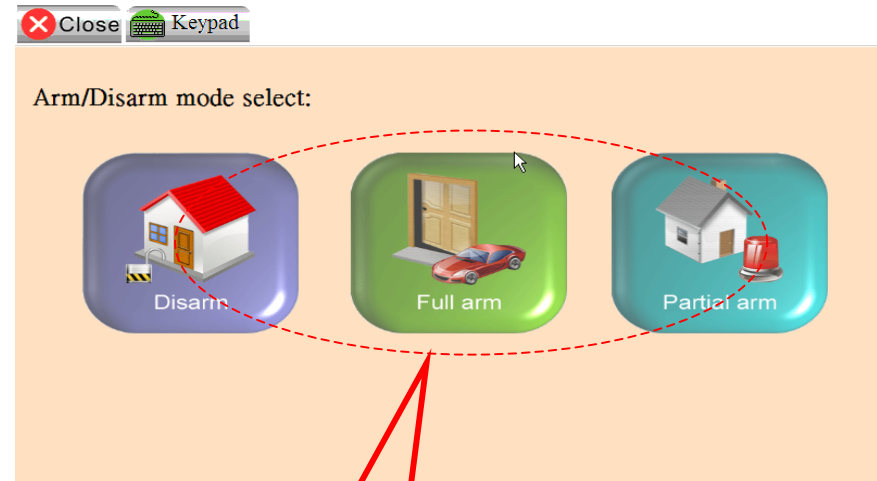

Sensor Setup/Status

Current mode: Partial Arm

18°C — Temperature Sensor 0001-000308

Smoke Sensor 0001-000928

PIR Motion Sensor 0001-000706

Contact Sensor 0001-000110

DI Transducer 0001-001208

22 — AI Transducer 0001-001307

Partial Arm mode be disabled

Troubleshooting Tips

sensor(vs. magnet) in open mode

Troubleshooting Tips

Arm/Disarm

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Logout

Disarm

Disable all burglarproof sensor alarms BUT enable all anti-disaster sensor alarms

Partial Arm

Enable all partial_arm_mode-enabled burglarproof sensor alarms AND enable all anti-disaster sensor alarms

Full Arm

Enable all sensor alarms

Burglarproof-type sensors: i.e. Contact Sensor, Motion Sensor....
Anti-disaster-type sensors: i.e. Smoke Sensor....

Current mode : Disarm

Mode Selection:

Disarm   Partial Arm   Full Arm

Error: Door/Window Sensor ID-000110 Status Error

Back

you can't enable Partial or Full Arm mode while WCS is in open mode

Sensor Setup/Status

Current mode: Disarm

19℃ Temperature Sensor 0001-000308

Smoke Sensor 0001-000928

PIR Motion Sensor 0001-000706

Contact Sensor 0001-000110

Troubleshooting Tips

disconnected, has to re-do the binding with Repeater (or, you may have to delete it first)

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AI/DI Transducer Applications
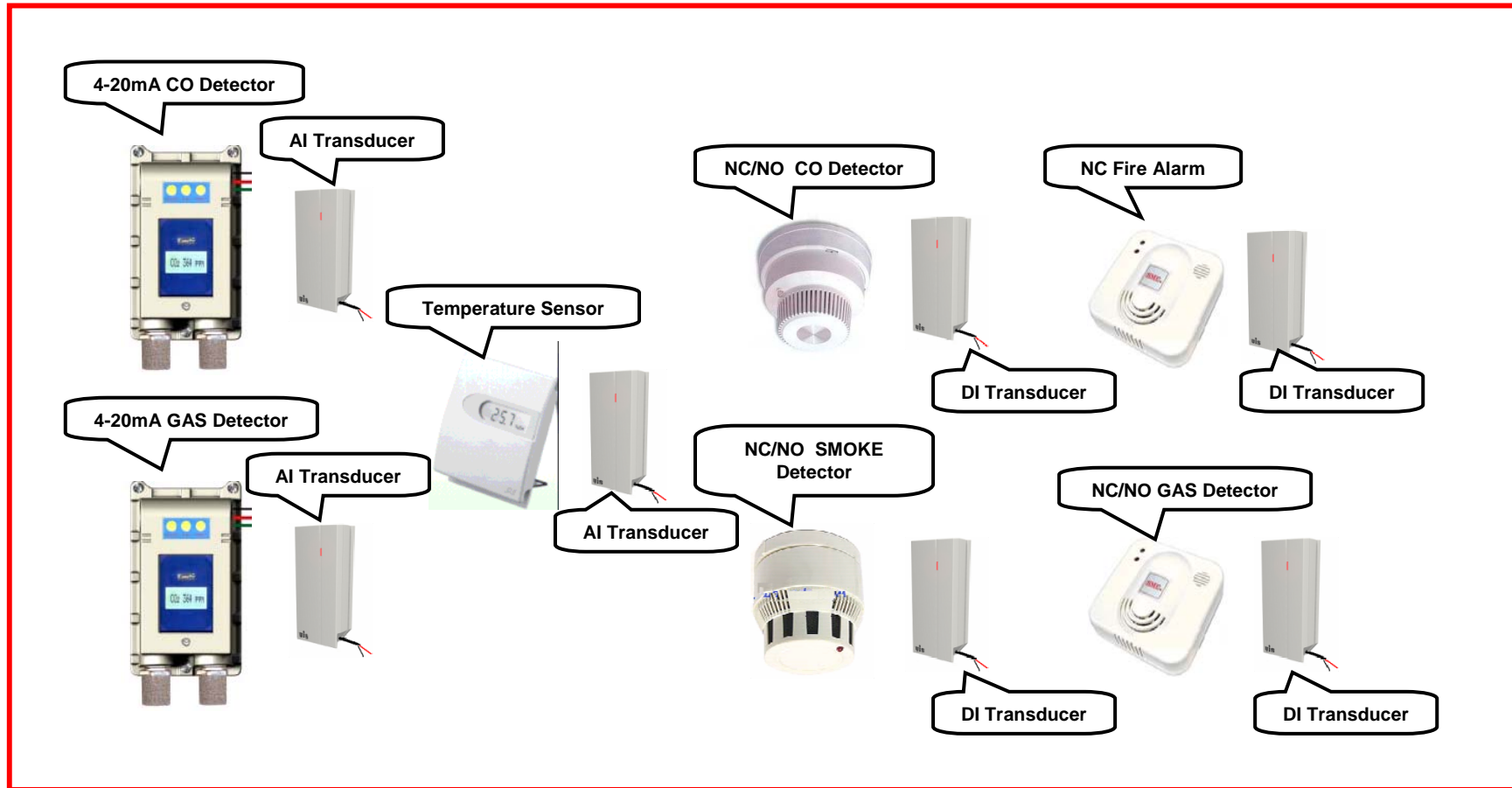
4-20mA CO Detector

AI Transducer

NC/NO CO Detector

NC Fire Alarm

Temperature Sensor

DI Transducer

DI Transducer

4-20mA GAS Detector

AI Transducer

NC/NO SMOKE Detector

NC/NO GAS Detector

AI Transducer

DI Transducer

DI Transducer

AI/DI Transducer Applications

NC/NO_relay-type disaster sensor

DI Input

4-20mA AI Input

+
-

AI/DI Transducer

Linear-type (data retrievable) disaster sensor

AI/DI Transducer Applications

DC12v Adapter

CO sensor

DC+

DC-

CX-96R

DI Transducer

+

-

AI/DI Transducer Applications

Smoke Detector

DC12V Adapter

1
3
4
5
2
6

DI Transducer

+
-
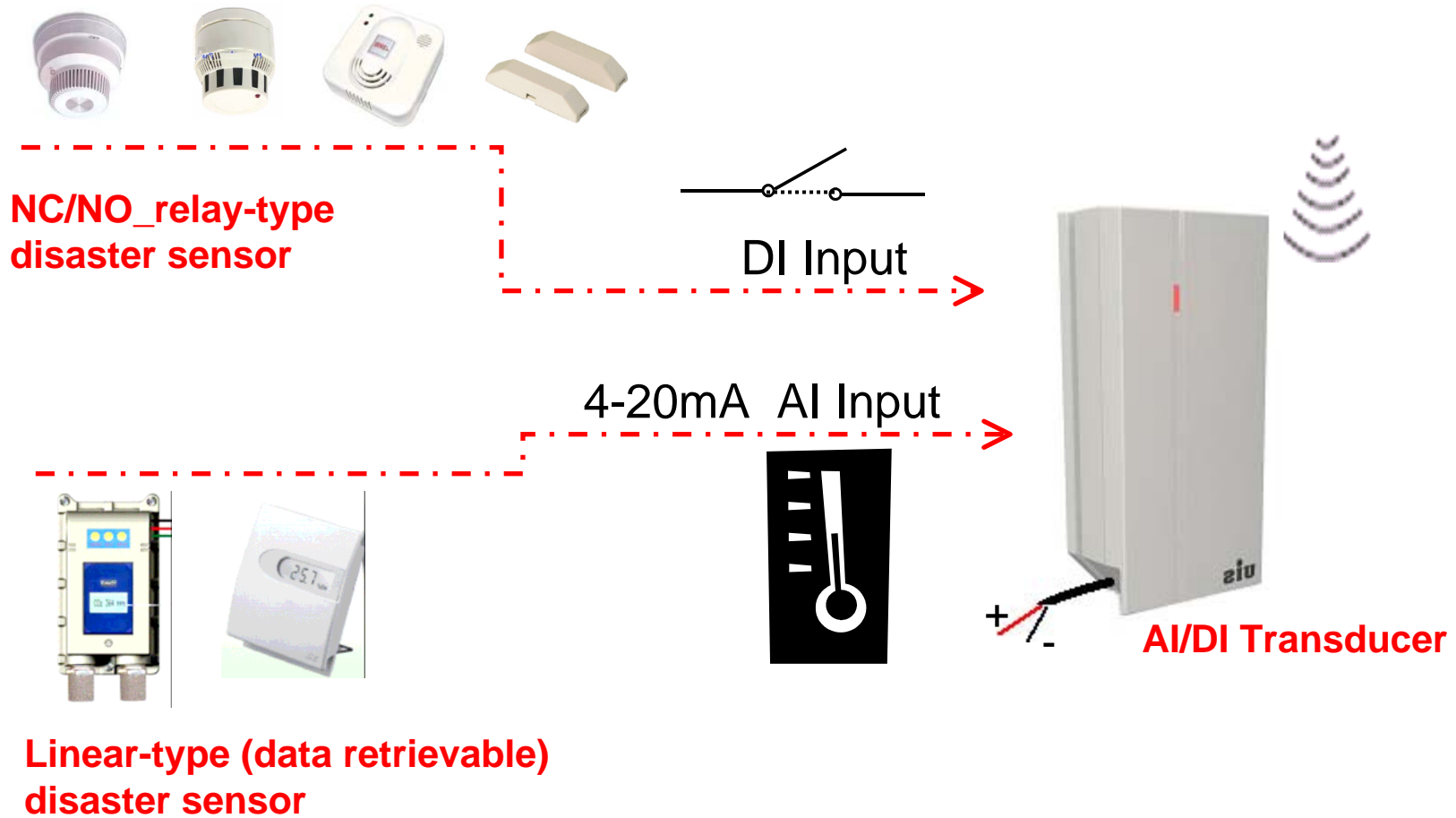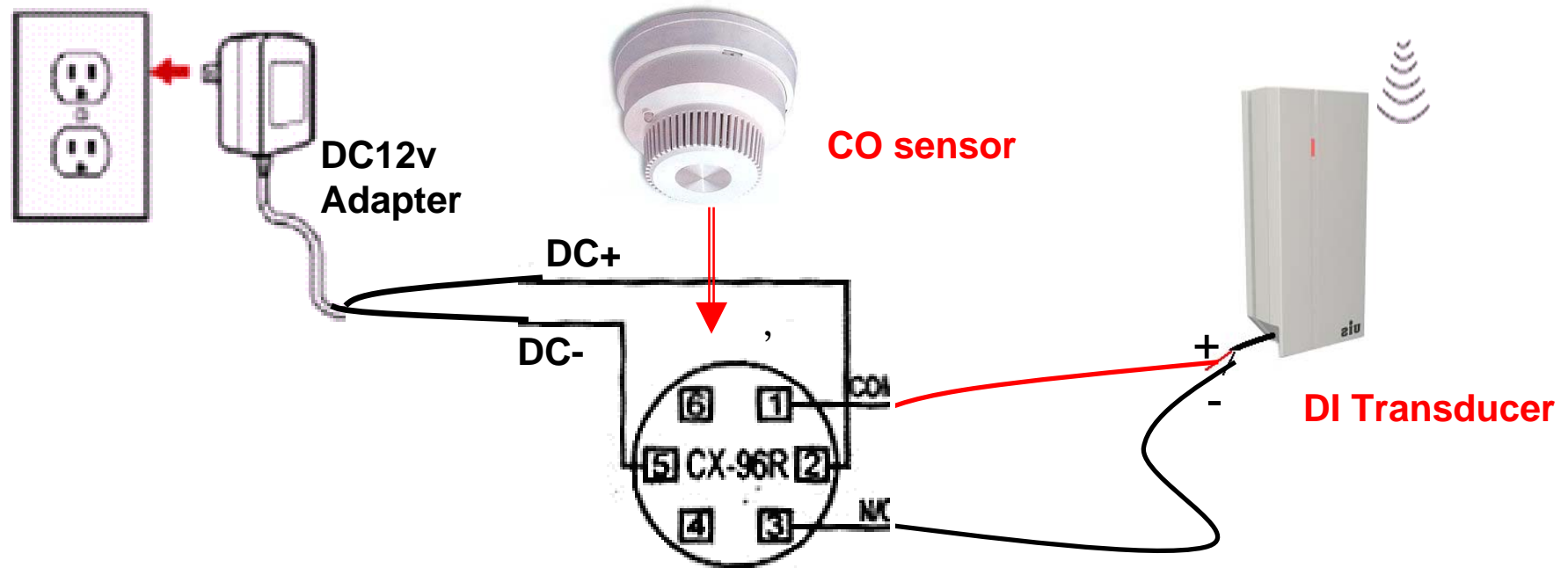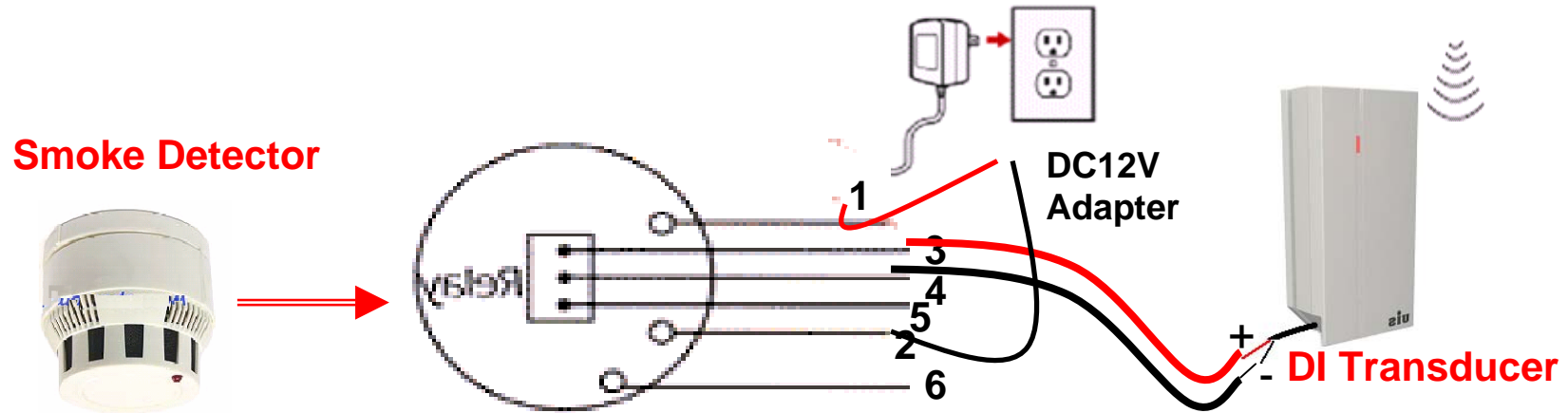
Colour Cores: 1. Red (DC-12V) 2. Black (Negative) 3. White (Normal Open)
4. Blue (Common) 5. Green (Normal Close)
6. Yellow (for Remote Indicator)

Installing location

kitchen | Bed room | Bed room | Bed room

Bath room | Living room

Ceiling mount

Top of the ladder

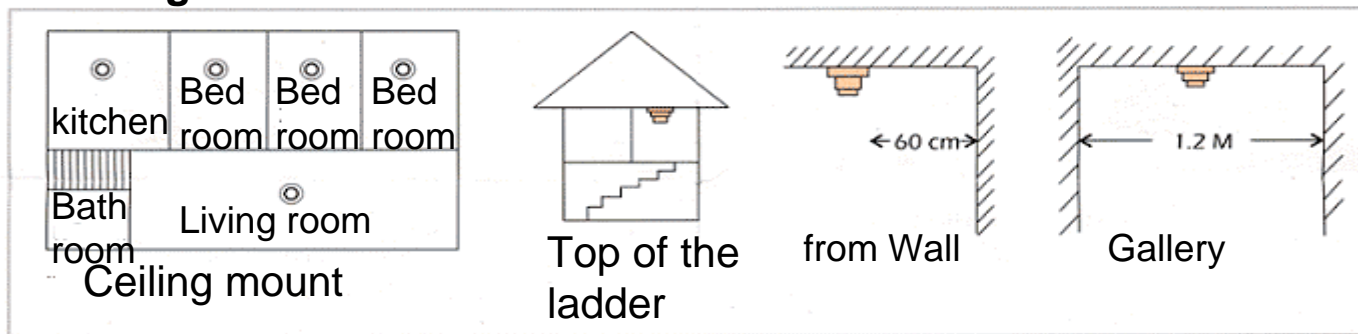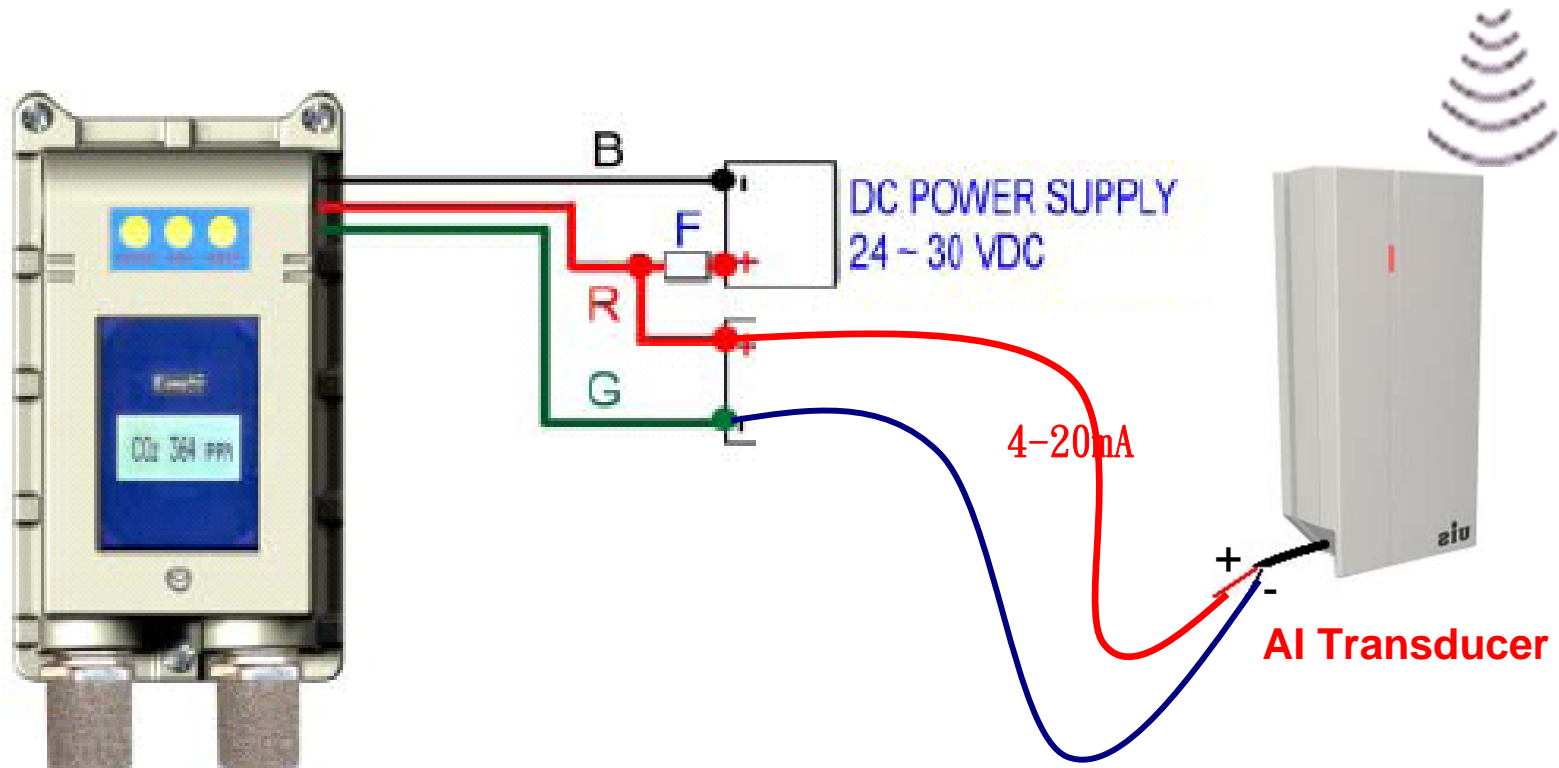←60 cm→ from Wall

1.2 M Gallery

B

DC POWER SUPPLY
24 ~ 30 VDC

F

R

G

4-20mA

+
-

AI Transducer

Symbol description：
DC POWER SUPPLY：24VDC ~30VDC。
AI Transducer：To transfer 4 ~ **20** mA current to wireless digital datat。
B：Black wire R：Red wire G：Green wire
F：Fuse GTF200-FL **recommend** adopt 0.2A or 0.1A Fuse

AI/DI Transducer Applications

power supply
15...40 VDC
24 VAC ±20%

4-20mA current

+ **AI Transducer**

-
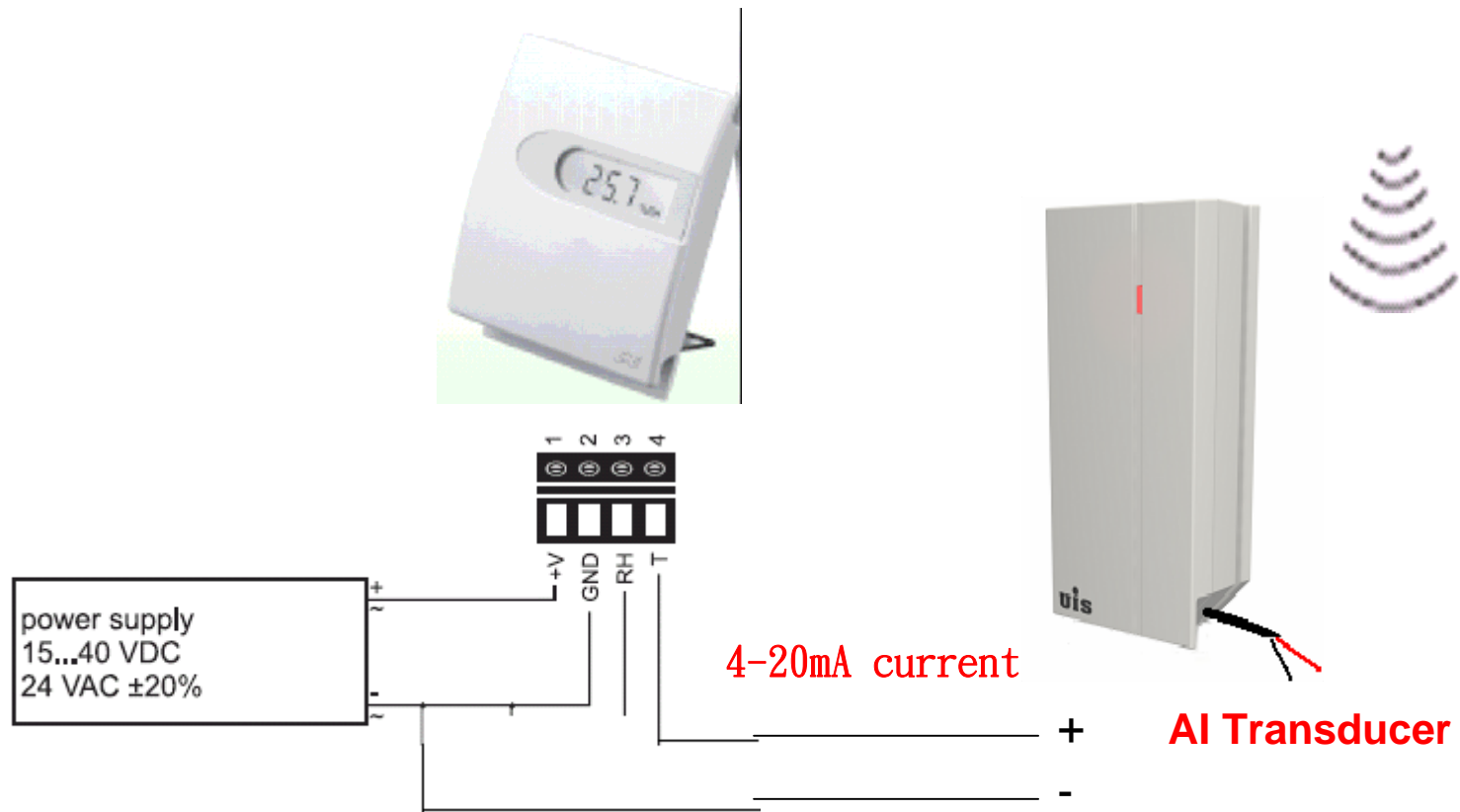
To transform the Temperature Sensor signal into wireless control signal by using AI Transducer(4-20mA).

AI/DI Transducer Applications

Electric Lock

manual button switch

WLC-110

Orange

Brown

Red

AP-10
DC 12V
1A
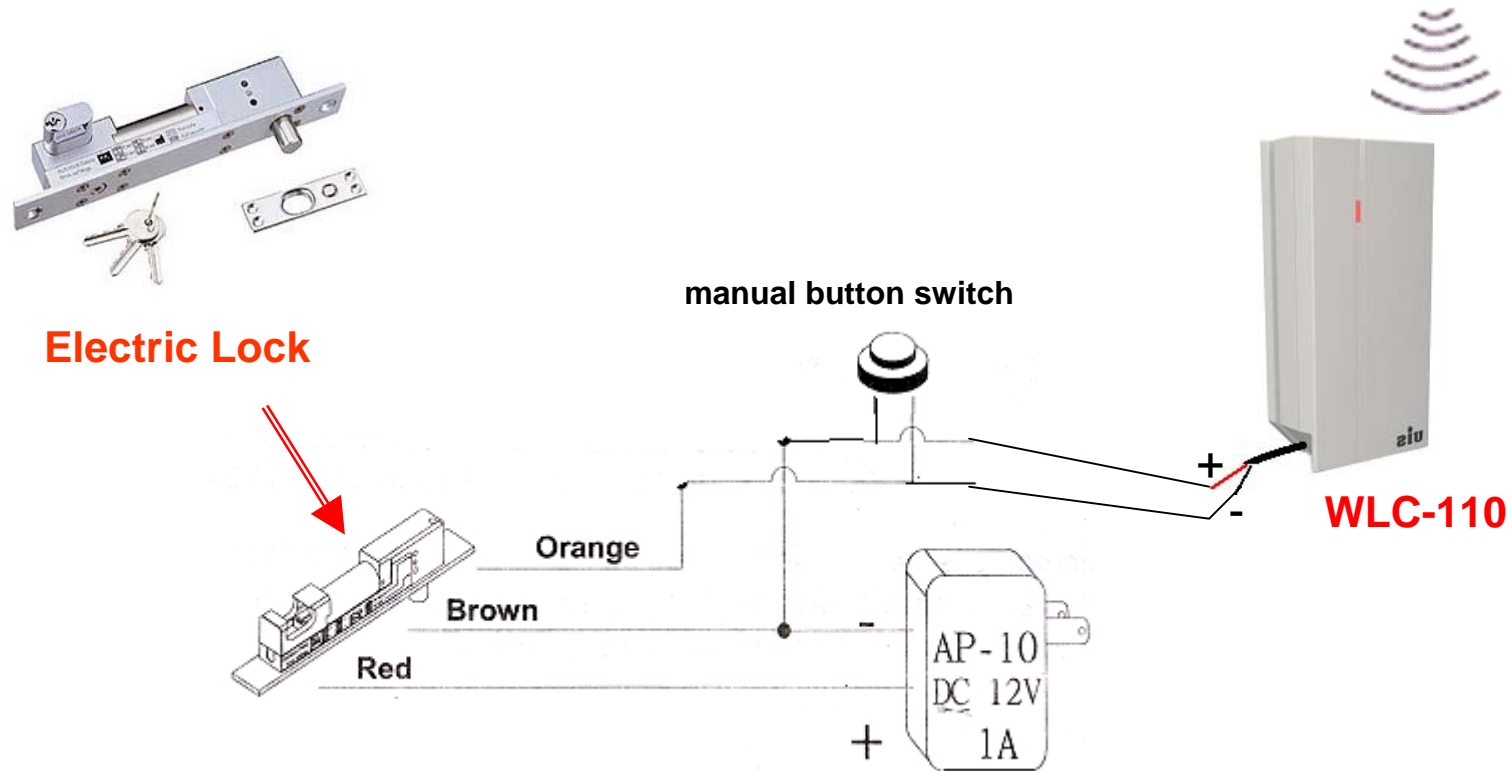
To transform a conventional Electric Lock signal into wireless control signal by Lock Controller

CAUTION !!

- Risk of explosion if battery is replaced by an incorrect type
- Dispose of used batteries according to the instructions

3G WWAN Cards Purchase Inf.

- 3G express card is an option for customer to purchase from the third-party (non-UIS product), it's highly recommended to choose from UIS's AVL suppliers.
- 3G WWAN cards support list of WG-110

Brand	Model Number	FCCID Number
Option NV	GE0441	NCMOGE0441
Sierra Wireless Inc.	AirCard 880E	N7NAC880E

- The customer should purchase the 3G WWAN cards which shall be FCC approved.
- 3G WWAN cards must not exceed a maximum ERP of 1.5W for part 22H.
- 3G WWAN cards must not exceed a maximum EIRP of 2W for part 24E.

The End