CYP

CDPS-CS6
Auxiliary Control System

Operation Manual

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SAFETY PRECAUTIONS

Please read all instructions before attempting to unpack, install or operate this equipment and before connecting the power supply.

Please keep the following in mind as you unpack and install this equipment:

- Always follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Never spill liquid of any kind on or into this product.
- Never push an object of any kind into this product through any openings or empty slots in the unit, as you may damage parts inside the unit.
- Do not attach the power supply cabling to building surfaces.
- Use only the supplied power supply unit (PSU). Do not use the PSU if it is damaged.
- Do not allow anything to rest on the power cabling or allow any weight to be placed upon it or any person walk on it.
- To protect the unit from overheating, do not block any vents or openings in the unit housing that provide ventilation and allow for sufficient space for air to circulate around the unit.

REVISION HISTORY

VERSION NO.	DATE DD/MM/YY	SUMMARY OF CHANGE
RDV1	07/01/16	Preliminary Release
RDV2	21/04/16	Add WebGUI

CONTENTS

1. INTRODUCTION

The Auxiliary Control System for user utilizing it to cover the devices which would like to be controlled. The benefit for this auxiliary control system makes daily life with more convenience. It comes with eight trigger in which support 4 events to trigger. Moreover, four sets of relay out and IR out to expand control coverage on desired devices. IR In support IR learning function, device IR signal could be learned for controlling device by remote control. The scheduling function with daylight saving feature to provide the device be performed routinely or at setting time. Comprehensive user control interfaces are available which includes WebGUI, Telnet and console (RS-232 in). Installed with adopt switching hub to offer PoE function which makes more flexibility on installation.

2. APPLICATIONS
• Smart Home Installation
• Even hall/Showroom control

3. PACKAGE CONTENTS
• 1 x Auxiliary Control System
• 1 x IR Receiver
• 1 x IR Blaster
• 1 x Remote Control (CR-157)
• 2 x 5pin Terminal Block
• 4 x 2pin Terminal Block
• 1 x 5V DC Power adaptor
• Operational Manual

4. SYSTEM REQUIREMENTS
Input source equipment such as light, TV, power switch and ....etc. and PC/Laptop.

5. FEATURES

- 8 trigger in to active 8 events such as device on/ off and active
- 4 relay control out and IR out to control desired devices such as screen down/up, lighting on/off
- IR In supported IR learner functions
- IR out supported for extend IR signal to further distance allowing control the device installed in far end
- Multi user control interfaces includes WebGUI, Telnet and RS-232 (for unit control)
- Easily setting on WebGUI includes scheduling, trigger and relay setting
- PoE (power over Ethernet) supported
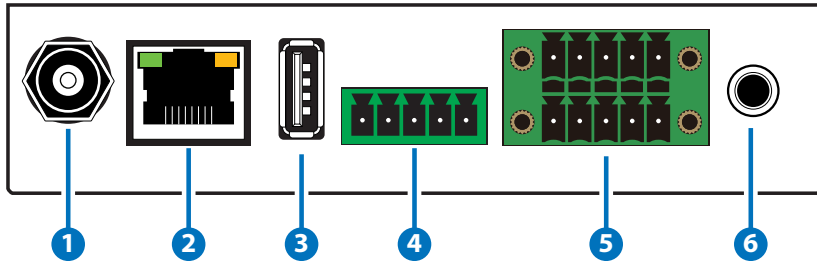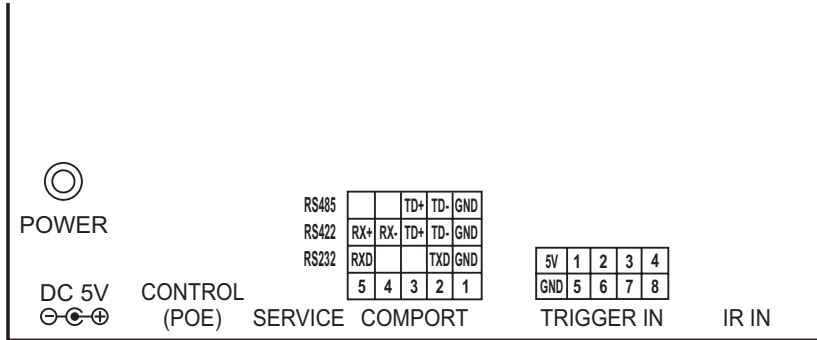- Easily firmware update via USB file

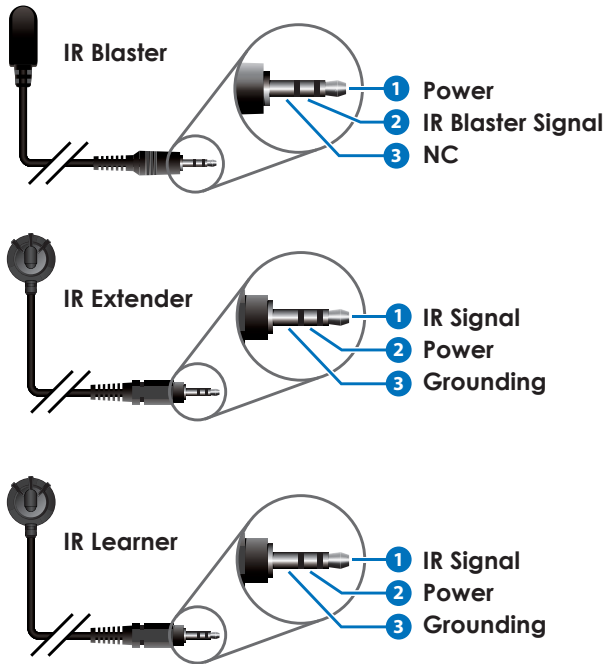# 6. OPERATION CONTROLS AND FUNCTIONS

6.1 Front Panel
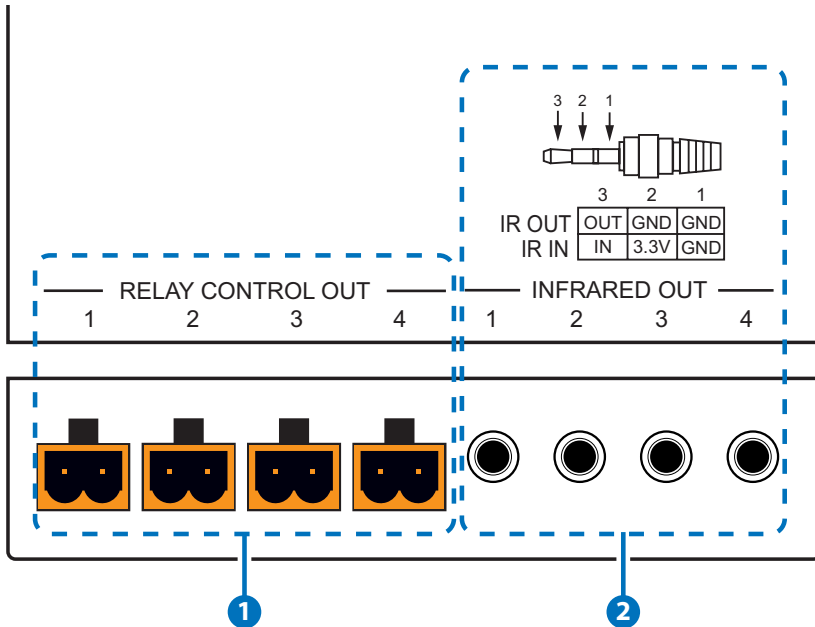
1 RELAY CONTROL OUT 1~4: Connect with control device's power ± line cable such as A/C sensor, IR sensor, or curtain sensor for control signal sending to activate the control devices.

2 INFRARED OUT 1~4: Connect with IR Blaster, IR Receiver or 3.5mm to D-Sub 9pin adaptor for IR signal transmitting or receiving.

RS485			TD+	TD-	GND
RS422	RX+	RX-	TD+	TD-	GND
RS232	RXD			TXD	GND
	5	4	3	2	1

| 5V | 1 | 2 | 3 | 4 |
| GND | 5 | 6 | 7 | 8 |

POWER

DC 5V ⊖-◉-⊕　CONTROL (POE)　SERVICE　COMPORT　TRIGGER IN　IR IN

1 **DC 5V:** Plug the 5V DC power supply into the unit and connect the adaptor to an AC outlet.

2 **CONTROL (POE):** Connect with PC/Laptop or intra-net hub for Telnet/WebGUI control over the devices. If the connected Hub supports PoE function this device may not need to connect with power supply.

3 **USB:** This slot is reserved for factory firmware update only.

4 **COMPORT:** These slots are to connect with comport control devices such as RS-232/422/485 with RS baud rate up to 115200.

5 **TRIGGER IN:** Connect with event device's signal 5V lines such as window security alarm, door switch, and etc… for trigger signal sending back to Control System.

6 **IR IN:** Connect with IR Receiver included in the package for IR signal receiving and learning. Send the IR signal that is to be learned by press on the remote control in direct line-of-sight towards the Receiver and use the software to record the IR data into digital format. For software details please refers to section 6.5.

6.3 IR Pin Definition

IR Blaster

1. Power
2. IR Blaster Signal
3. NC

IR Extender

1. IR Signal
2. Power
3. Grounding

IR Learner

1. IR Signal
2. Power
3. Grounding

Note: Due to both IR Extender and IR Learner cables are with similar outlook, a part no. "CBL-IR10C3SA200A sticker has been placed to differentiate the difference on IR Learner.

6.4 RS-232/Telnet Command List

Command Name	Description	Parameter
IPCONFIG	Display The Current IP Configure	NONE
SIPADDR XXX.XXX.XXX.XXX	Set Ethernet IP Address	XXX=0~255
SNETMASK XXX.XXX.XXX.XXX	Set Ethernet Net Mask	XXX=0~255
SGATEWAY XXX.XXX.XXX.XXX	Set Ethernet Gateway	XXX=0~255
SIPMODE N	Set Ethernet IP Mode	N= "STATIC" or "DHCP"
VER	Show Unit Firmware Version	NONE
FADEFAULT	ALL Configure Set To Factory Default	NONE
ETH_FADEFAULT	ALL Ethernet Configure Set To Factory	NONE
REBOOT	System Reboot	NONE
HELP (?)	Show Command List	NONE
HELP N	Show Descript Of Command	N : Command Name
RELAY N N1	Relay Control	N(PORT)= 1~4 N1=OPEN/CLOSE/ TOGGLE
IREMITE N N1	IR Control	N(Port) = IR1~IR4 N1 = CYP Pronto Data EX: IREMIT IR1 9333,0-157,AF,14,40,14,18 ,14,43,14,1B,14,0-

Command Name	Description	Parameter
IRLEARN	IR Learning Command	NONE Note. It Will Return CYP Pronto Data When Send IR(30~50KHz) To IR In
COMCONF N1 N2 N3 N4	Driver COMPORT Config	N(Mode)=R S485/RS42 2/ RS232 N1=Bitrate (4800, 9600, 19200, 38400, 57600, 115200, 250000, 1000000) N2=DATA LEN (7, 8) N3= PARITY (NONE/ODD/ EVEN)\r\n N4 = STOP BIT (1)
COMSEND N	COM data send	N= Data (1-512 Characters)
MACRO N N1	Macro Setting	N = "RUN" or "STOP" N1 = 1~16 (Macro ID) or NONE EX: MACRO RUN 1 or MACRO STOP

6.5 Software Application

Please download the software from our website with file name CDPS V2.000 and save it in a directory where you may use it later.

Connect the Control System with an active network system and open the CDPS V2.000 application from the directory in a PC/Laptop. Click on Find Devices on Network and a list of the devices connected within the network system will show up.

Find Devices on Network			
Product Name	Description	IP Address	MAC Address

Double click on the product name and an InfoFrom will appear to show the products' detail.

MAC Address	F8:22:85:00:04:89
IP Address	192.168.1.50
Subnet Mask	255.255.255.0
Gateway IP	192.168.1.254
DNS	0.0.0.0
IP Mode	Static
Web GUI Port	80
Telnet Port	23
S / N	SN:2236
Firmware Version	v2.00
Hardware Version	v1.00

Then user may use the IP Address to find the control device through Telnet, WebGUI or even RS-232/Hyper Terminal tools.
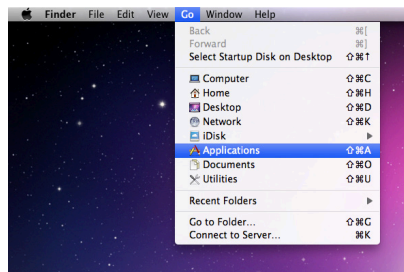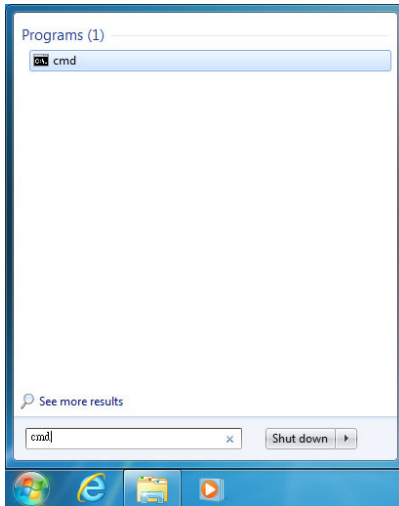
6.6 Telnet Control

To access the Telnet control in Windows 7, click on the 'Start' menu and type "cmd" in the Search field then press enter.

Under Windows XP go to the 'Start' menu and click on "Run", type "cmd" with then press enter.

Under Mac OS X, go to Go→Applications→Utilities→Terminal

See below for reference.

Once in the command line interface (CLI) type "telnet", then the IP address of the unit and "23", then hit enter.

```
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation.  All rights reserved.

C:\Users\Administrator>telnet 192.168.5.80 23
```

Type "help" to list the available commands.

```
Welcome to TELNET.
>?
HELP            : SHOW DESCRIPT OF COMMAND
                  USE <HELP N, N=COMMAND NAME> TO SHOW DESCRIPT OF COMMAND
?               : SHOW DESCRIPT OF COMMAND
                  USE <? N, N=COMMAND NAME> TO SHOW DESCRIPT OF COMMAND
IPCONFIG        : DISPLAY THE CURRENT IPCONFIG
SIPADDR         : SET ETHERNET IP ADDRESS
SNETMASK        : SET ETHERNET NETMASK
SGATEWAY        : SET ETHERNET GATEWAY
SIPMODE         : SET ETHERNET IP MODE
VER             : SHOW UNIT FIRMWARE VERSION
FADEFAULT       : ALL CONFIGURE SET TO FACTORY DEFAULT
ETH_FADEFAULT   : ALL ETHERNET CONFIGURE SET TO FACTORY DEFAULT
REBOOT          : SYSTEM REBOOT
IREMIT          : SEND IR CONTENET
IRLEARN         : LEARNING IR CODE
TRIGGER         : TRIGGER SETTING
RELAY           : RELAY CONTROL
COMCONF         : DRIVER RS232 CONFIG
COMSEND         : SEND DATA VIA COM PORT
MACRO           : MACRO CONTROL
```

Note: Commands will not be executed unless followed by a carriage return. Commands are case-insensitive. If the IP is changed then the IP Address required for Telnet access will also change accordingly.

6.7 WebGUI Control

On a PC/Laptop that is connected to an active network system, open a web browser and type device's IP address (default setting IP: 192.168.1.50) on the web address entry bar.

A security page will appear to ask for User and Password, please key in "admin" for both and click Submit to enter. The browser will display device's Macro Setting, Extension Macro, Command, Network & System Settings control pages for users to control.


6.7.1 Macro Settings

Click on 'Macro Settings' to execute or rename macro. There are 5 Macros inserted as default setting for testing the control system's functionality. Click on Macro 1~5 to demonstrate the functions:

• Macro 1: Close relay from 1~8 sequentially every 100ms

• Macro 2: Open relay from 1~8 sequentially every 100ms

• Macro 3: Toggles relay from 1~8 sequentially every 100ms

• Macro 4: Send IR signal from 1~8 sequentially every 100ms with LED illuminant on front panel.

• Macro 5: Send out command "Hello World" from COM port 1~2 sequentially every 100ms.

Macro 1~8 works align with Trigger IN 1~8 which means, when a trigger signal is activated the control system will execute the command under Macro Setting.
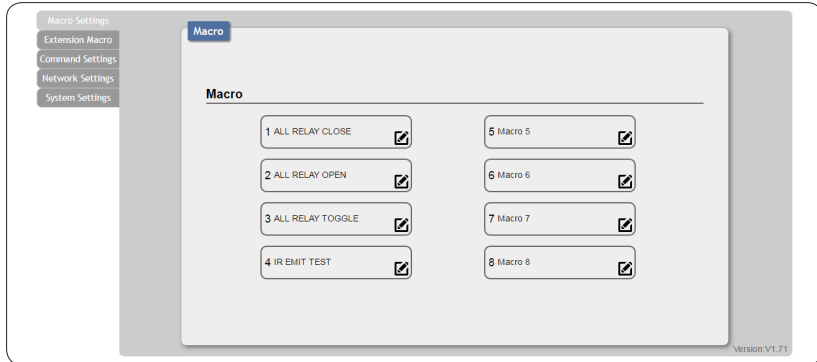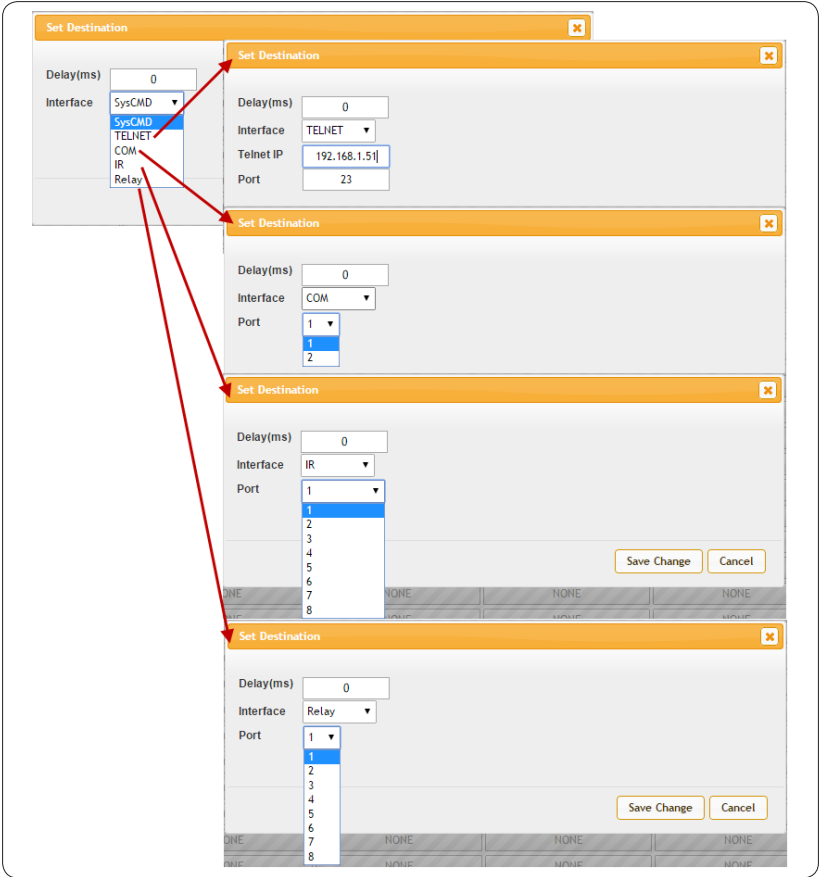
Click on the ✏ mark to edit the command settings. ∧∨ Up/down arrows are to move the command up or down and 🗑 button is to delete the command.

Click on ⊞ Insert button/Add to insert commands. Command can be set to control the Control System/SysCMD, other devices connected within the same Telnet system/Internet area, RS-232 COM ports, IR and Relay devices connected through the Relay outputs of Control System with delay time. It is suggested the delay time is >100ms once the setting is confimed, double click on Save Change.

Command set to control the devices within the same telent system or internet area require to set its IP and Port number and it is strongly recommand to set the delay time >500ms in order to secure a successful command sending. Command set to control the Relay devices require to set the Port number. Click on Save Change to confirm the setting.
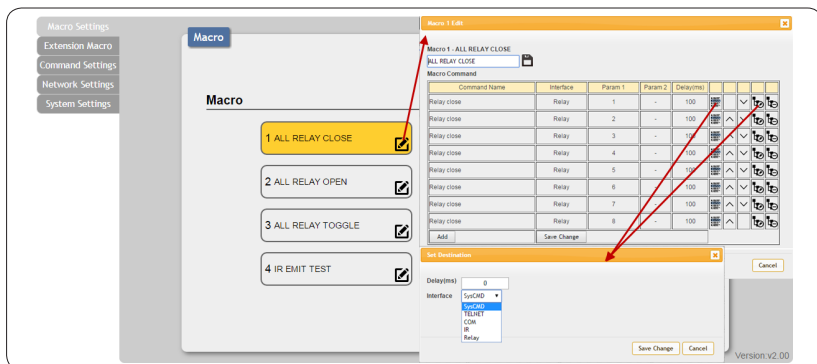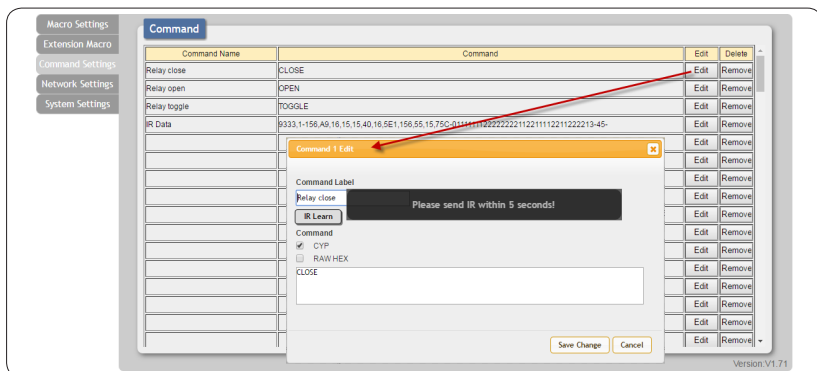
6.7.2 Extension Macro

Click on 'Extension Macro' to execute/edit more Macro action up to 8 more.
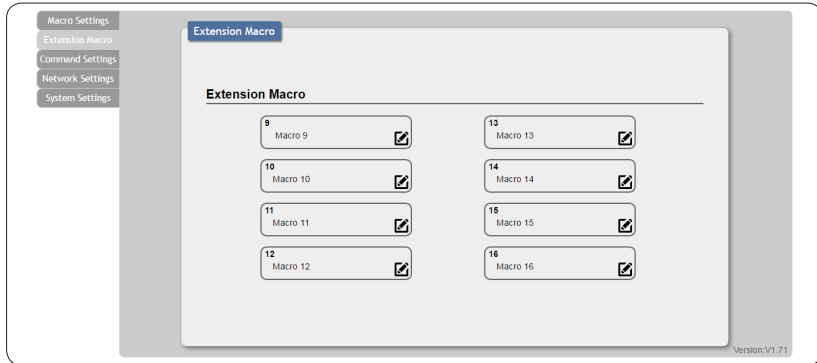
6.7.3 Command Settings

Click on 'Command Settings' to edit or delete commands up to 128 sets. Insert the command directly in the bottom colum of Command Edit and name the command on the top colum then click on Save Changes to store the command.

For IR command Learning, press IR Learn first then press the remote control in direct line-of-sight to the IR Reciever connected from the IRL port within 5 seconds. A comand string will show in the bottom colum. Click on Save Changes to store the command.
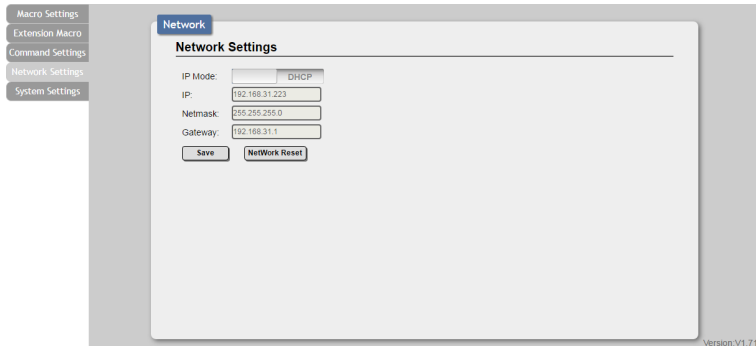
Note: *Some command may require to add a carriage return (eg:\r or \x0D) in the end to allow the system to recognize it as an end of the command.*

For IR command saving, insert the command on the bottom colum and click on CYP/RAW HEX which indicate the IR command type and click on Save changes to store the command. Under uncertainty of the IR command type click on RAW HEX to ensure a successful command saving.

Command under 128 characters including space can be build up to 128 commands, command over 128 characters and under 512 characters including space can be build up to 32 command in addition with 96 commands of 128 characters under. Click on Save Change to save the command inserted.

6.7.4 Network Settings

Click on 'Network Settings' to set the device's IP configuration. Once the changes are saved the system will reset the IP address on device automatically and user will need to re-enter the IP address to continue the WebGUI control.
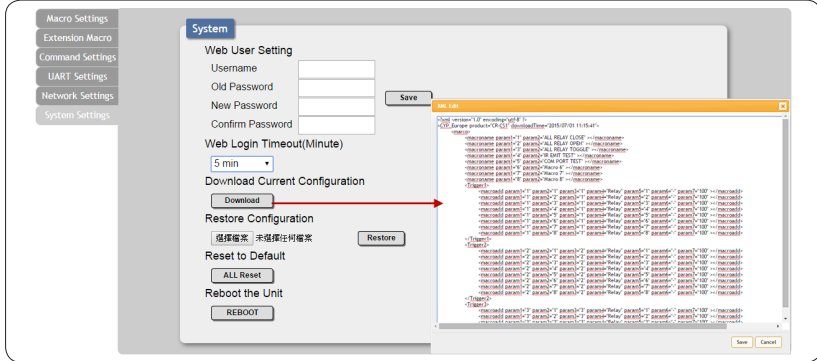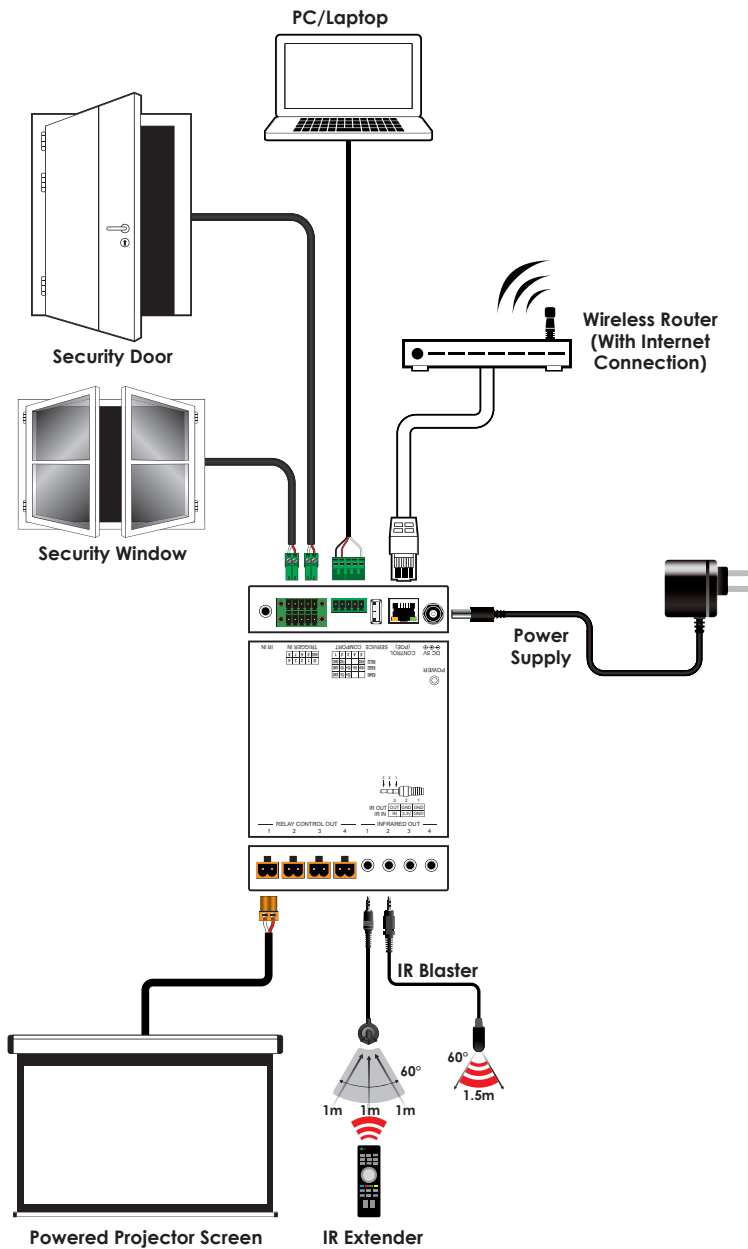
System Settings

Click on 'System Settings' to reset the WebGUI login password and save or download the Macro settings. Reset to Default allows IP and login ID & password to be reset back to factory default.

Note: Please ensure that all commands and settings have been saved before performing Reset as this procedure may restore all settings back to factory default.

7. CONNECTION DIAGRAM

PC/Laptop

Security Door

Security Window

Wireless Router (With Internet Connection)

Power Supply

IR Blaster

60°

60°
1.5m

1m 1m 1m

Powered Projector Screen

IR Extender

RELAY CONTROL OUT
1   2   3   4

INFRARED OUT
1   2   3   4

8. SPECIFICATIONS

Input Ports	8 x Trigger in (0~15v) with 4 events triggering
	1 x IR (with IR learning supported)
	1 x USB (Service only)
Output ports	4 x IR
	4 x Replay Output
Control Interface	1 x COMPORT
	1 x CONTROL (With PoE)
IR Frequency	30~50kHz
Baud Rate	Up to 115200bps
Power Supply	5VDC/2.6A (US/EU standards, CE/FCC/ UL certified)
ESD Protection	Human Body model:
	±8kV (air-gap discharge)
	±4kV (contact discharge)
Dimensions	128mm (W) x 108mm (D) x 25mm (H)/ Jack Excluded
	128mm (W) x 118mm (D) x 25mm (H)/ Jack Included
Chassis Material	Metal
Silkscreen Color	Black
Operating Temperature	0˚C~40˚C / 32˚F ~ 104˚F
Storage Temperature	-20˚C~60˚C / -4˚F ~ 140˚F
Relative Humidity	20~90% RH (no condensation)
Power Consumption (W)	5

9. ACRONYMS

ACRONYM	COMPLETE TERM