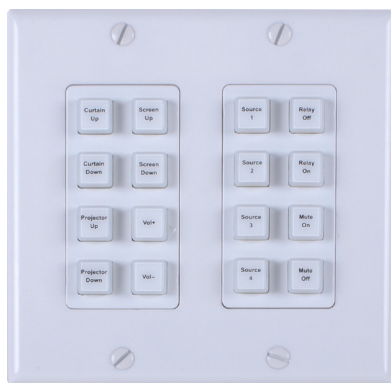




# CDPW-K1UD

16-Button Wall Plate Control Keypad



Operation Manual



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Version 1.1 August 2011

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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	22/06/15	Preliminary release
VR0	18/11/15	



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## 1. INTRODUCTION

The Wall-Plate Control System box is a fantastic and useful design for system installer and smart home user. With 16 direct macro buttons and extra 16 macro in WebGUI control which allows up to 16 to be execute within one push and a total of 128 commands capacity inside this box that can bring out a set of scenes in a seconds. Soft and colorful LED design fitting all environment purpose and PoE (Power over Ethernet) function ease power supply issue without extra DC power burden. Further, relay outputs design and scheduling function control settings can trigger master switch or any main switch of the installation environment that brings the world of control to whole.

## 2. APPLICATIONS

- Smart Home Installation
- Control Center
- Functional Room
- Show Room
- Ballroom

## 3. PACKAGE CONTENTS

- 1×Wall Plate Control System
- 1×USB Type A to Mini USB OTG Connector
- 1×3.5mm Terminal Block Pitch
- 1×5V/2.6A Power Adaptor
- 1×Button Stickers (28 pcs)
- 1×Operation Manual

## 4. SYSTEM REQUIREMENTS

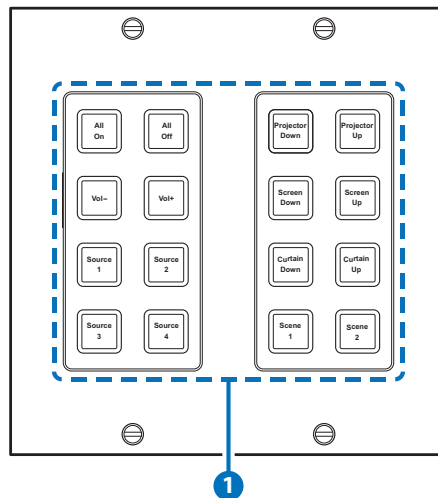
Active internet connection from Hub or Router and output to DC controllable device.

## 5. FEATURES

- 16 macro buttons and extra 16 macro buttons in WebGUI with up to 128 commands to implant for control system
- Supports Relays to control on/off of other devices
- Supports Scheduling control system and settings
- Supports scheduling memory over power blackout up to 48hrs
- Supports KeyPad, Telnet and WebGUI controls
- Supports PoE function or DC power supply selection
- US 2 Gang wall plate design with adjustable LED dim light
- Multiple uses for home, hotel room central control or conference room and etc.

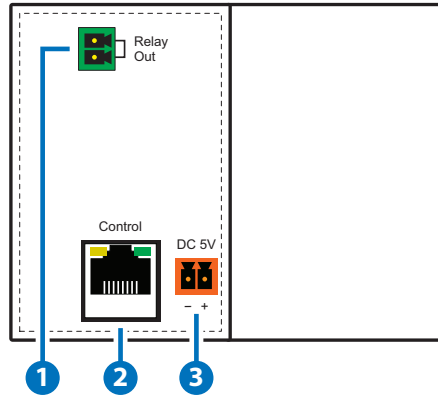
## 6. OPERATION CONTROLS AND FUNCTIONS

### 6.1 Front Panel



- 1~16 Macro Buttons:** Each buttons has 2 colors of LEDs adjustable from dim 0~100% and can be insert up to 16 commands. Further detail settings, please refers to section 6.6 WebGUI control.

## 6.2 Rear Panel



- 1 RELAY OUT:** Connect with device that supports DC 0~24V/5A power or signal that supports relay function.
- 2 Control:** Connect from PC/Laptop with active internet service or Telnet or WebGUI control with RJ-45 terminated cable. This slot supports PoE PD 48V function which means when the connected server/Hub support PSE 48v it can be powered without DC supply connection.
- 3 DC 5V:** Plug the 5V DC power adaptor included in the package and connect to AC wall outlet for power supply.

## 6.3 Telnet Commands

COMMAND	DESCRIPTION	PARAMETER
<b>IPCONFIG</b>	Display the current IP configure	NONE
<b>SIPADDR XXX.XXX.XXX.XXX</b>	Set Ethernet IP address	XXX=0~255
<b>SNETMASK XXX.XXX.XXX.XXX</b>	Set Ethernet net mask	XXX=0~255
<b>SGATEWAY XXX.XXX.XXX.XXX</b>	Set Ethernet gateway	XXX=0~255
<b>SIPMODE N</b>	Set Ethernet IP mode	N=STATIC/DHCP



COMMAND	DESCRIPTION	PARAMETER
<b>VER</b>	Show unit firmware version	NONE
<b>FADEFAULT</b>	All configure and macro set to factory default	NONE
<b>ETH_FADEFAULT</b>	All Ethernet configure set to factory	NONE
<b>REBOOT</b>	System reboot	NONE
<b>HELP / ?</b>	Show command list	NONE
<b>HELP N</b>	Show descript of command	N : COMMAND NAME
<b>RELAY N N1</b>	Relay control	N(PORT)=1 N1=OPEN/CLOSE/TOGGLE
<b>LEDBLUE N N1</b>	Led blue backlight control	N(LEN NO.)=1~16 N1=% (0-100)
<b>LEDRED N N1</b>	Led red backlight control	N(LEN NO.)=1~16 N1=% (0-100)
<b>LEDBLUES N</b>	All blue led backlight control	N=% (0-100)
<b>LEDREDS N</b>	All red led backlight control	N=% (0-100)
<b>LEDSHOW N</b>	Led dimming mode control	LEDSHOW N N=ON/OFF/TOGGLE
<b>BACKLIGHT N</b>	All led backlight control	N=% (0-100)
<b>KEY_PRESS N RELEASE</b> <b>KEY_PRESS N HOLD</b>	Key press trigger type	KEY_PRESS N RELEASE N=PORT NUMBER KEY_PRESS N HOLD N=PORT NUMBER
<b>MACRO N</b>	Macro setting	MACRO RUN N N=MACRO ID (1~32) MACRO STOP

**Note:** Any commands will not be executed unless followed by a carriage return. Commands are case-insensitive.

## 6.4 Software Application

Please download the software from [www.cypress.com.tw](http://www.cypress.com.tw) with file name CDPS V2.000 and save it in a directory where you may use it later.

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

**Note:** The default IP setting is 192.168.1.50 and set the Static IP or DHCP via IP mode of CDPS V2.000. Click 'Save' then 'Reboot' for loading the new IP address.

Find Devices on Network				
Product Name	Description	IP Address	MAC Address	

Then user may use the IP Address to find the control device through Telnet or WebGUI tools.

MAC Address	F8:22:85:00:04:89
IP Address	192.168.5.241
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	v1.03
Hardware Version	v1.00

## 6.5 Telnet Control

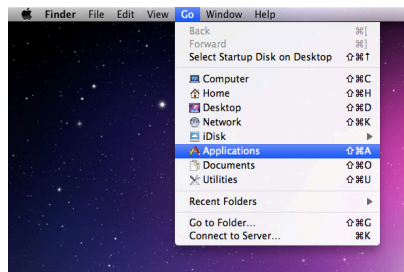
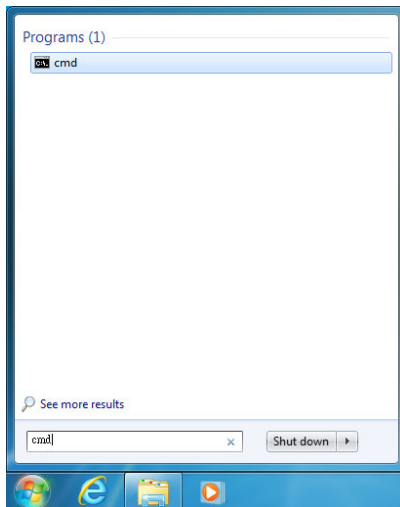
Before attempting to use the Telnet control, please ensure that both the Matrix (via the 'LAN /CONTROL' port) and the PC/Laptop are connected to the same active networks.

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
```

This will bring us into the unit which we wish to control. 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
$IPADDR       : SET ETHERNET IP ADDRESS
$NETMASK      : SET ETHERNET NETMASK
$GATEWAY      : SET ETHERNET GATEWAY
$IPMODE       : 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
RELAY         : RELAY CONTROL
LEDBLUE       : LED BLUE BACKLIGHT CONTROL
LEDRED        : LED RED BACKLIGHT CONTROL
KEY_PRESS     : KEY PRESS TRIGGER TYPE
MACRO         : MACRO SETTING
LEDBLUES      : ALL BLUE LED BACKLIGHT CONTROL
LEDREDS       : ALL RED LED BACKLIGHT CONTROL
BACKLIGHT     : ALL LED BACKLIGHT CONTROL
LEDSHOW       : LED DIMMING MODE CONTROL
  
```

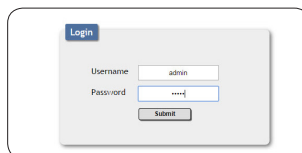
**Note:** Commands will not be executed unless followed by a carriage return. Commands are case-sensitive. If the IP is changed then the IP Address required for Telnet access will also change accordingly.

## 6.6 WebGUI Control

On a PC/Laptop that is connected to an active network system, open a web browser and type device's IP address on the web address entry bar. A security page will appear to ask for User and Password, please key in "admin" for both to enter.

**Note:** The Default IP setting is on Static with address at 192.168.1.50.

The browser will display the device's Macro Setting, Extension Macro, Command Settings, Schedule, Network and System Settings pages for users to control.



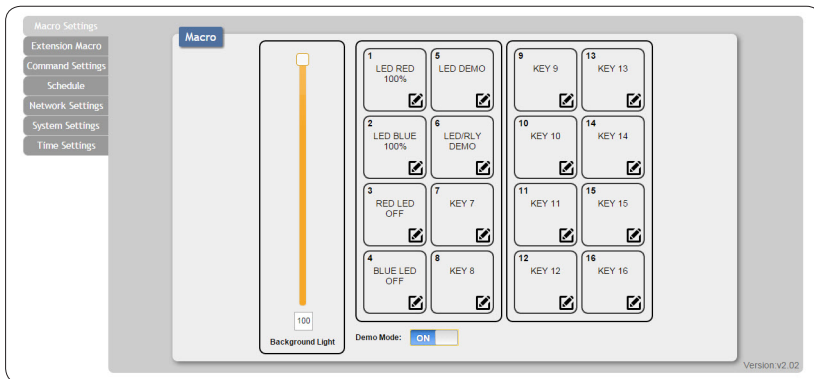
### 6.6.1 Macro Settings

The Background Light Bar allows user with instant change on the LEDs lighting percentage base on the original illuminate setting.

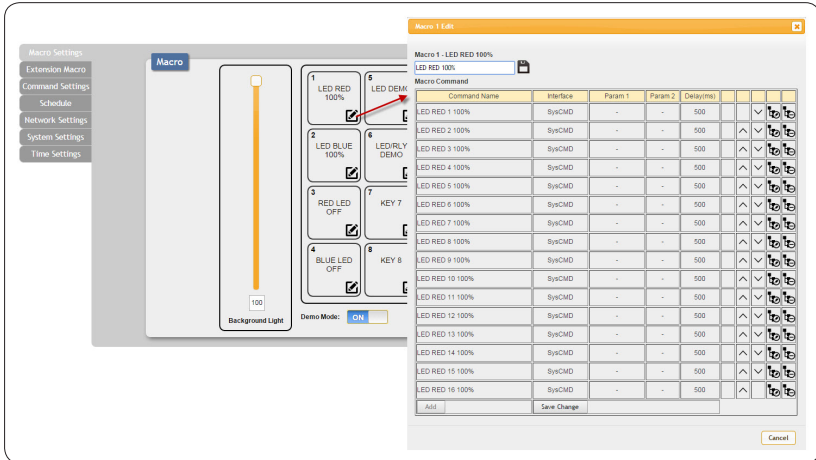
There are 6 Macro inserted as default setting for testing the Wall-Plate Control System's functionality. Click on Macro 1~6 to demonstrate the function of lighting LEDs.

- Macro 1: Light up the Red backlight LED with 100% brightness sequentially from 1~16 with every 500ms.
- Macro 2: Light up the Blue backlight LED with 100% brightness sequentially from 1~16 with every 500ms.
- Macro 3: Switch off all the red backlight LED with 0% brightness.
- Macro 4: Switch off all the blue backlight LED with 0% brightness.
- Macro 5: LED show mode toggle, switch on / off Demo Mode
- Macro 6: Light up the Blue backlight LED with 10% brightness, Switch off all the blue backlight LED with 0% brightness, switch Off & On Relay 1 with delay of 1000ms.

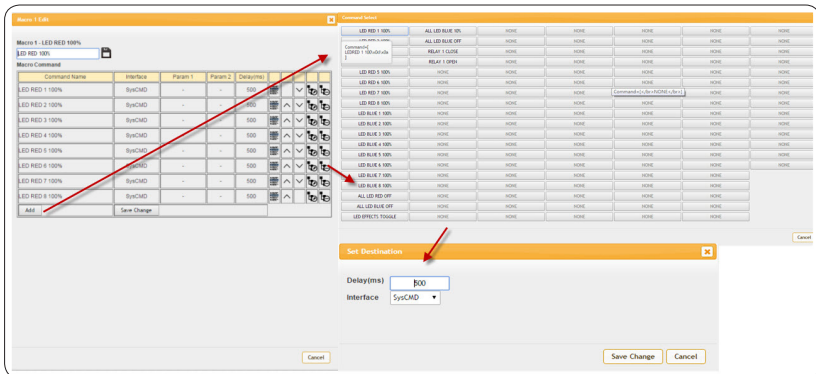
To disable default testing mode, click on Demo Mode/Marco 5 to switch on / off.



Click on the mark to edit 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 Wall-Plate Control Box/SysCMD, other devices connected within the same Telnet system/Internet area and Relay devices connected through the Relay outputs of Wall-Plate Control Box with delay time. It is suggested the delay time is >100ms once the setting is confirmed, double click on Save Change.



Command set to control the device within the same telnet system or internet area require to set its IP and Port number and it is strongly recommend to set the delay time>500ms in order to secure a successful command sending. Once the setting is done click on Save change.

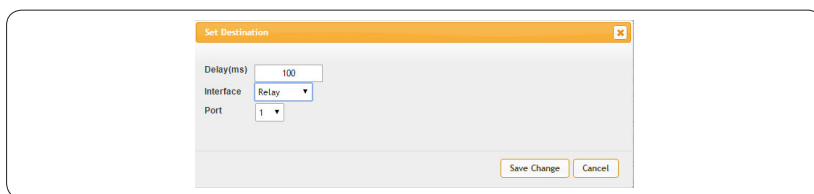


The 'Set Destination' dialog box has a title bar with a close button. It contains the following fields:

- Delay(ms): 100
- Interface: TELNET (dropdown menu)
- Telnet IP: 192.168.1.50
- Port: 23

At the bottom right, there are two buttons: 'Save Change' and 'Cancel'.

Command set to control the Relay devices require to set the Port number. Click on Save Change to confirm the setting.



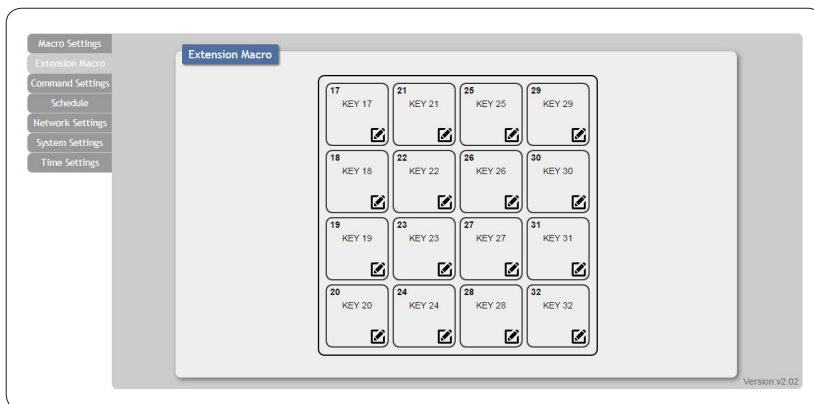
The 'Set Destination' dialog box has a title bar with a close button. It contains the following fields:

- Delay(ms): 100
- Interface: Relay (dropdown menu)
- Port: 1 (dropdown menu)

At the bottom right, there are two buttons: 'Save Change' and 'Cancel'.

## 6.6.2 Extension Macro

Click on Extension Macro to execute/edit more Macro action up to 16 more.



The 'Extension Macro' configuration screen shows a sidebar with the following menu items: Macro Settings, Extension Macro (selected), Command Settings, Schedule, Network Settings, System Settings, and Time Settings. The main area displays a 4x4 grid of 16 key slots, each with a key number and a checkbox:

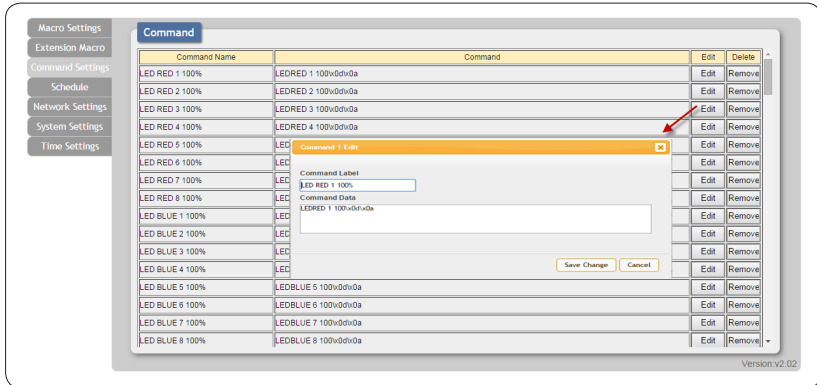
17 KEY 17	21 KEY 21	25 KEY 25	29 KEY 29
18 KEY 18	22 KEY 22	26 KEY 26	30 KEY 30
19 KEY 19	23 KEY 23	27 KEY 27	31 KEY 31
20 KEY 20	24 KEY 24	28 KEY 28	32 KEY 32

Each key slot has a checkbox in the bottom right corner, all of which are currently checked. The version 'Version v2.02' is displayed in the bottom right corner of the main area.

### 6.6.3 Command Settings

Click on Command Settings to insert new commands or delete commands.

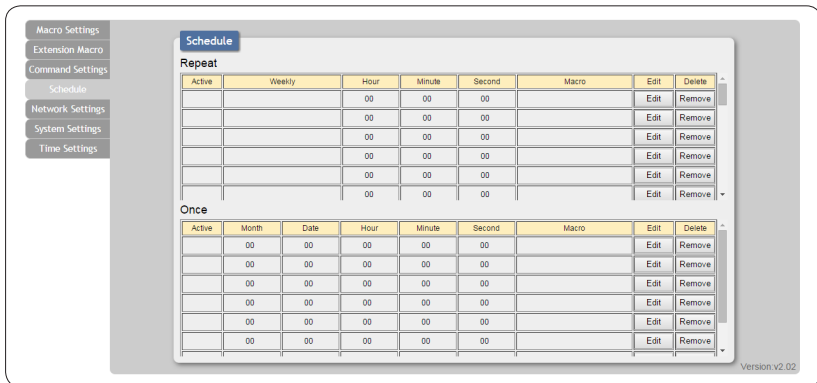
Command under 128 characters including space can be build up to 128 commands, command over 128 characters and under 512 characters including space can be build up to 32 command in addition with 96 commands of 128 characters under. Click on Save Change to save the command inserted.



### 6.6.4 Schedule

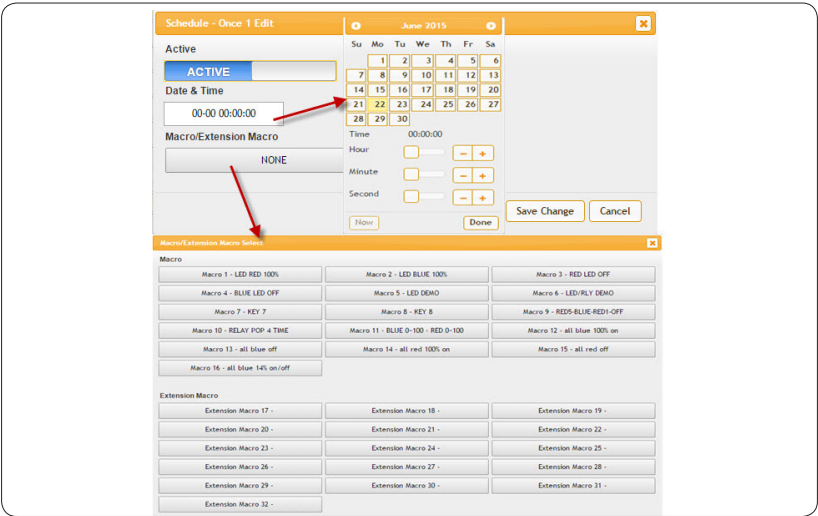
Click on Schedule to set the executing time schedule of the Macro(s).

**Note:** The scheduling system support up to 48hrs of memory under power blackout after that the system will reset the time automatically back to 2015/01/01 00:00:00.

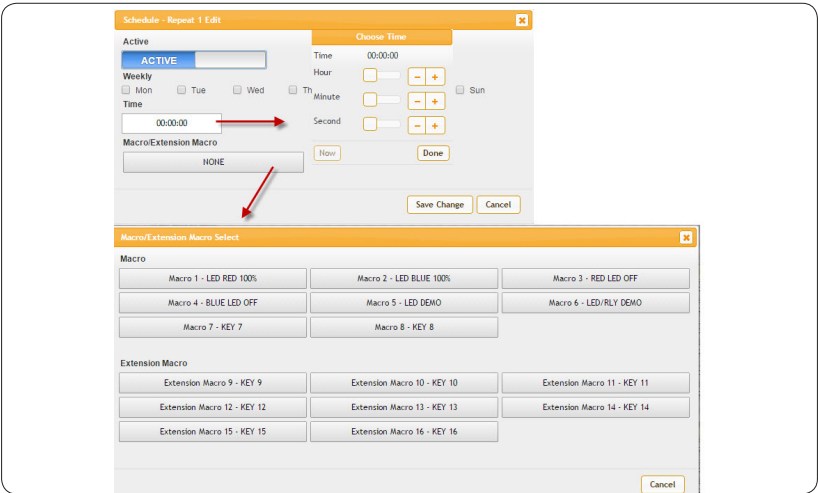




Click on Edit from Repeat column to set the macro command(s) to be activated repeatedly on a set time.

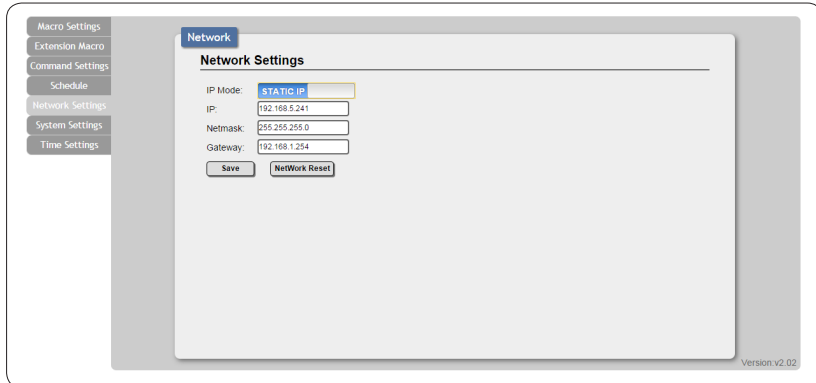


Click on Edit from Once column to set the macro command(s) to be activated on a set time only.



## 6.6.5 Network Settings

Click on Network Settings to reset the IP, Netmask or Gateway address.

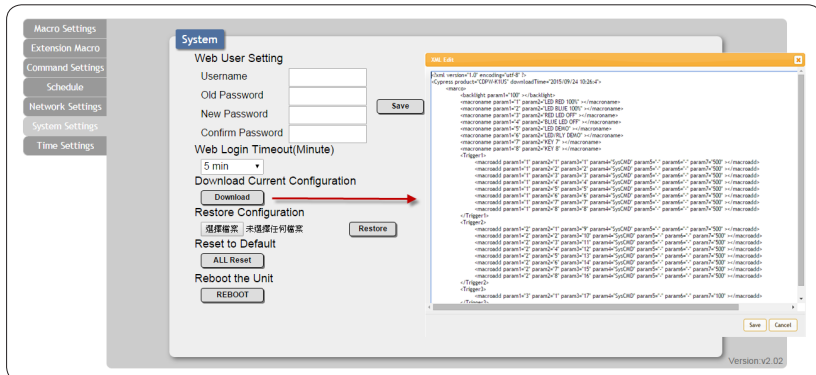


## 6.6.6 System Settings

Click on System Settings to reset the WebGUI login password and timeout setting and save or download the Macro settings.

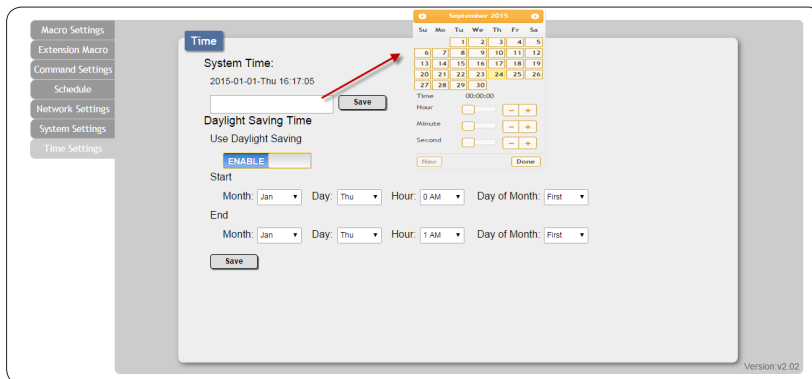
Reset to Default allows IP and login ID & password to be reset back to factory default.

System time setting is also done on this page. Simply click on the white column and a calendar will appear for your selection.

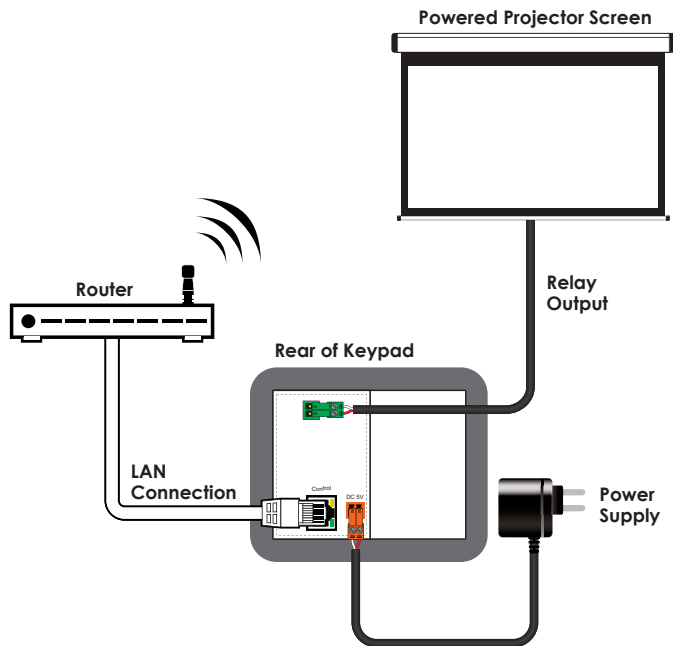


## 6.6.7 Time Settings

Click on 'Time Settings' to set the system time and to enable/ disable Daylight Saving Time(DST) function. Simply click on the white column and a calendar will appear for your selection with current timing setting. Another simple few clicks to enable/disable DST with its start and end.



**7. CONNECTION DIAGRAM**



## 8. SPECIFICATIONS

<b>Input Ports</b>	16×Buttons
<b>Output Ports</b>	1×Relay (Terminal Block), 1×IP Control (RJ-45)
<b>Power Supply</b>	5V/2.6A DC (US/EU standards, CE/FCC/UL certified)
<b>ESD Protection</b>	Human body model: ±8 kV (air-gap discharge) ±4 kV (contact discharge)
<b>Dimensions</b>	92mm (W)×35.5mm (D)×103.5mm (H)/ Jack Excluded 92mm (W)×38mm (D)×103.5mm (H)/ Jack Included
<b>Weight</b>	238g
<b>Chassis Material</b>	Metal
<b>Color</b>	White
<b>Operating Temperature</b>	0°C~40°C/32°F~104°F
<b>Storage Temperature</b>	-20°C~60°C/-4°F~140°F
<b>Relative Humidity</b>	20~90% RH (non-condensing)
<b>Power Consumption</b>	6.1 W

## 9. ACRONYMS

ACRONYM	COMPLETE TERM
CLI	Command Line Interface
GUI	Graphical User Interface
IP	Internet Protocol
LAN	Local Area Network
PoC	Power over Cable







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