SDCP10

Wallplate Control Panel-10 buttons

Program buttons to send TCP/IP and RS232 commands to control projectors, screens, and other third-party devices.

SEADA

Showing the World

User Manual

VER 3.0

Thank you for purchasing this product

For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.

Surge protection device recommended

This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, lighting strikes, etc. Use of surge protection systems is highly recommended to protect and extend the life of your equipment.

Table of Contents

1. Introduction

1.1 Introduction to SDCP10

The Wallplate Control Panel is a 10-button IP enabled keypad controller aimed at providing customers simple and economic control solutions. With built-in PoE, it can receive power from PoE enabled ethernet switch. The keypad can control devices like presentation switches through LAN(PoE) port or RS232 port. It supports button configuration and control, also system firmware update on web UI.

1.2 Features

☆ Each button can be programmed to TCP/IP or RS232 commands simultaneously to control third party devices.

☆ Each button can be programmed to send the infrared codes simultaneously to control the third-party devices and support infrared code learning function.

☆ The unit may be programmed through the ETHERNET port, via the WEB GUI.

☆ Crystal and backlit buttons with easy user-friendly customizable changeable labels.

☆ Supports the POE function or optional power adapter power supply

☆ Dimension: 86mm long and 86mm wide.

1.3 Package List

① 1x SDCP10

② 1x Button labels

③ 1x 3-pin pluggable terminal block

④ 1x Power adapter (12VDC)

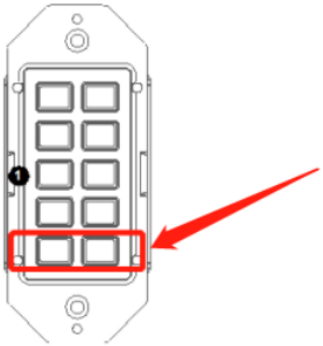
⑥ 2x Pack of screws

⑦ 1x User Manual

2. Panel Description

No.	Name	Description
1	Buttons	Ten buttons on front panel. The buttons are not defined by default. Users can configure functions for the buttons through WEB GUI
2	RS232	Connect to a RS232 enabled device for RS232 control.
3	LAN (PoE)	Connect to a network device such as an Ethernet switch, router for LAN control (Web UI & Telnet).
4	DC 12V	Connect to DC 12V power adapter

* Factory default setting (The factory default IP address is 192.168.1.254)



Press and hold the two buttons shown in the picture at the same time until all the backlights of the buttons blink 3 times, the keypad will be reset to factory defaults.

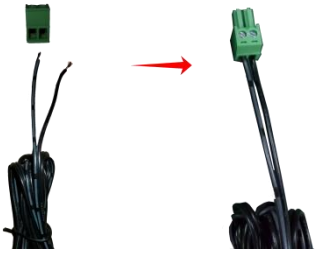
3. Specification

Technical	
Front panel	10 x Buttons (soft silicone buttons)
Back panel	1 x LAN (RJ45, PoE), 1 x RS232; 1 x DC 12V Power In
Operating Temperature	0°C to 45°C (32°F to 113°F)
Storage Temperature	-20°C to 70°C (-4°F to 158°F)
Humidity	10% to 90%, non-condensing
ESD Protection	Human-body Model, ±8kV (Air-gap discharge)/±4kV (Contact discharge)
Power Supply	DC 12V 1.5A
Consumption (Max)	1.3W
Device Dimension (mm) (W x H x D)	86 x 86 x 36 (UK, EU) 45 x 106x 36 (US)

4. Installation

If the ethernet switch does not support PoE and keypad cannot get power from PoE, users will need to make a power adapter with supplied phoenix connector to power the keypad through DC 12V port externally.

*Check and ensure that the power adapter is with 12V, and its current is equal to or more than 0.5A.



Plug in the 2-pin cable equipped phoenix connector to DC 12V port of the keypad. Connect the adapter to the power, the keypad should start to work (press any button, it should blink when powered).

5. Configuration settings

The keypad supports WEB GUI to setup devices and configure commands for the Keypad buttons and set network and system information. The Web UI can be accessible through a browser with latest version, e.g., Chrome, Firefox, Safari, Opera, IE10+, etc.

Step 1: Connect LAN (PoE) port of the keypad to an Ethernet switch using a straight UTP cable.

Note:

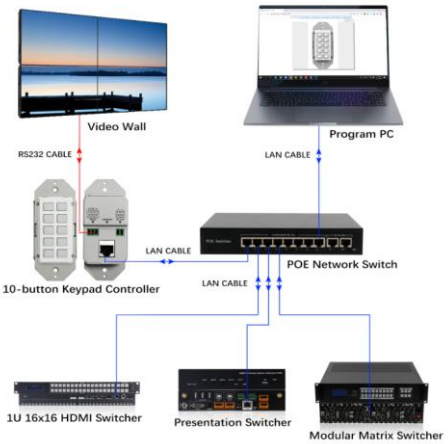
•If the switch supports PoE, the keypad can receive power from it. Otherwise, connect a DC 12V power adapter to the keypad. The power adapter is not included, for how to make a power adapter, please refer to “Make a Keypad Power Adapter with Phoenix Connector” section.

•The default network mode of the keypad is DHCP, ensure the ethernet switch is connected to a DHCP server such as a router.

Step 2: Connect a PC to the same network.

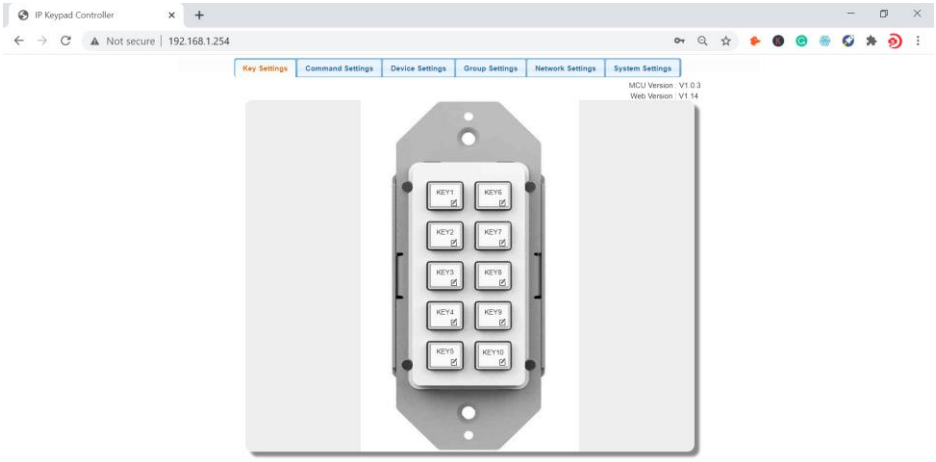
Step 3: Power on all devices.

See the following diagram:



Input the IP address (the factory default IP address is 192.168.1.254) to the browser and press Enter. The following Login window will display. Input the default Username(admin) and Password(admin):

Click “Login” to enter the following page.

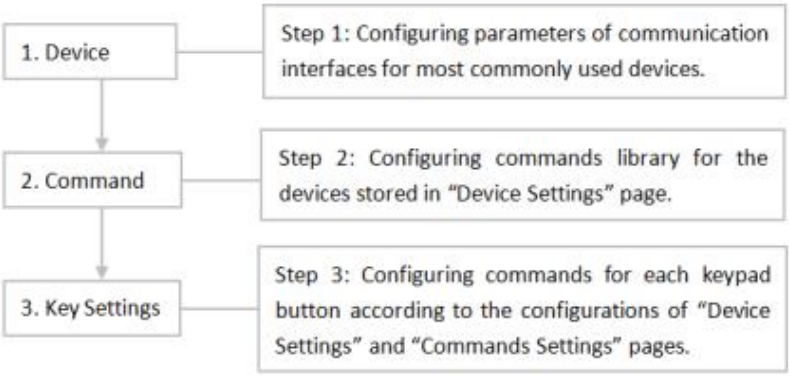


The main page includes 5 interfaces: **Key settings, Command Settings, Device Settings, Network Settings and System Settings.**

"Device Settings", "Command Settings" and "Key Settings" are used to configure and store functions for buttons.

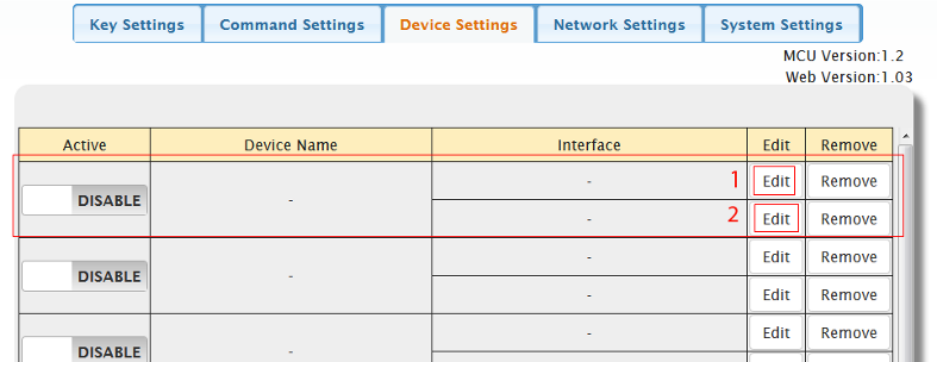
"Network Settings" is used to configure DHCP/Static IP information.

"System Settings" is used to configure general system settings.

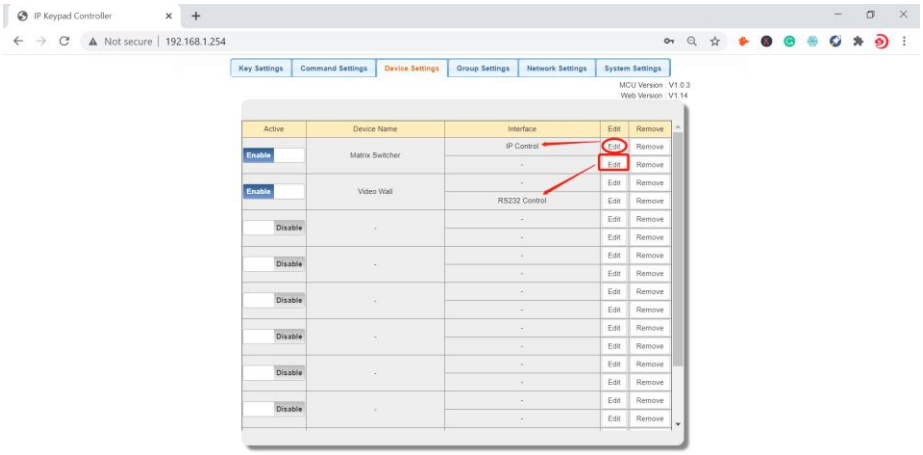


6. Device Settings

This section allows you to configure device library for most used devices. See operation in detail as below.



The controlled devices can be connected to a LAN (via network) port or RS232 port of the keypad. Users can configure IP control parameters and RS232 control parameters for these most used devices by clicking the “Edit” to start:



6.1 Configurations of IP Control:

(1) Click the first “Edit” to enter device name and IP information like the following page.

(2) Configure the items in the picture above.

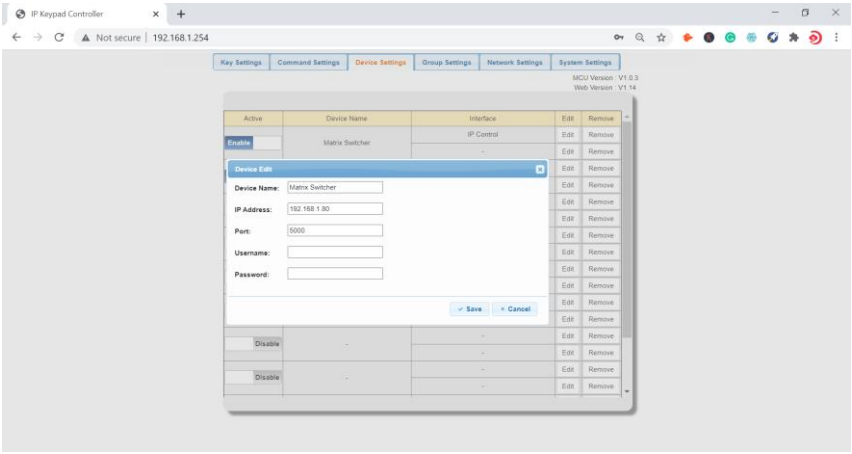
- **Device Name**: Configure a device name for the controlled third-party device.

  Note: The length of each “Device Name” shall not exceed 16 characters and can include letters, numbers, and underscores.

- **IP Address:** Input the IP address of the controlled device.
- **Connect Port**: Input the port number of the controlled device.
- **Username**: Input the telnet control username of the controlled device.
- **Password**: Input the telnet control password of the controlled device.

Note: The Connect Port, Username and Password are provided by third-party devices manufacturers and can be found in instructional documentations.

(3) Click “Save” to save all configurations above.



Note: If you do not want to save the configurations, you can click “Cancel” to cancel the operations.

6..2 Configurations of RS232 Control:

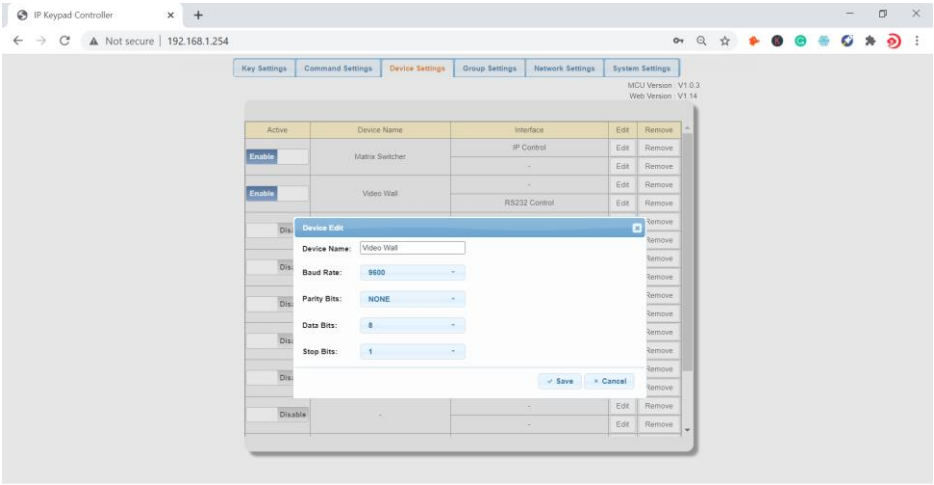
(1) Click the second “Edit” to enter the following page.

(2) Configure the items in the picture above. These parameters are provided by the third-party devices manufacturers and can be found in the instructional documentations.

- **Device Name**: The “Device Name” configured in the first “Edit” tab.
- **Baud Rate**: Select the baud rate from the drop-down menu.
- **Parity Bits**: Select the parity bits from the drop-down menu.
- **Data Bits**: Select the data bits from the drop-down menu.
- **Stop Bits**: Select the stop bits from the drop-down menu.

(3) Click “Save” or “Cancel” to save or cancel the configurations above.

If you click “Save”, the page will return to the “Device Settings” tab automatically. After successful configuration, the “Device Settings” page will look like the following:

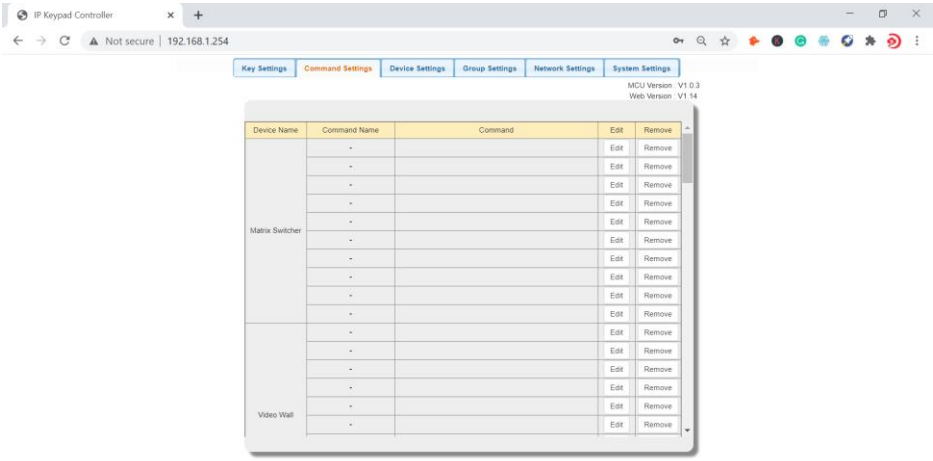


Note: The “Remove” buttons in last column allow you to remove the corresponding configurations for IP Control/RS232.

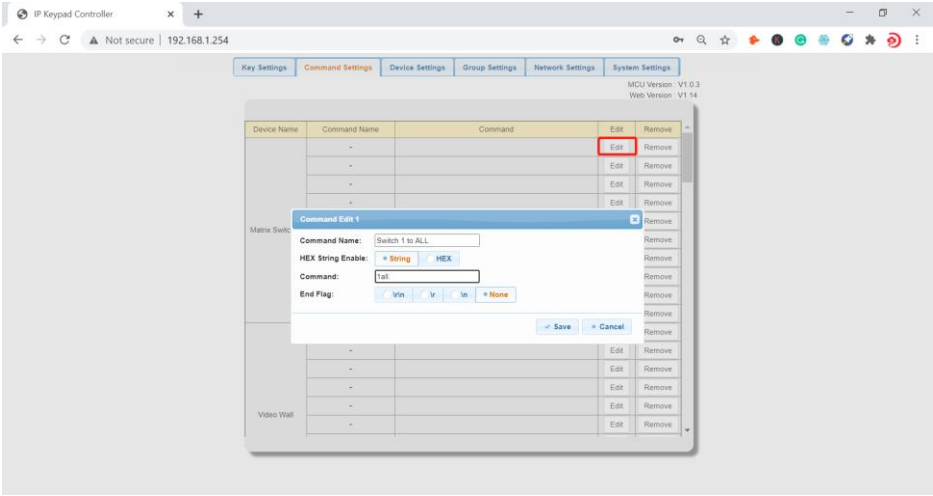
7. Command Settings

After "Device Settings" is configured successfully, click "Command Settings" to set control commands for the stored devices in "Device Settings" section.

Note: The control commands are provided by third-party devices manufacturers and can be found in instructional documentations.



(1) Click "Edit" to enter the following page.



(2) Configure the items in the picture above.

- **Command Name**: Set a name for this command.

  Note: The length of each "Command Name" shall not exceed 32 characters and can include letters, numbers, and underscores.

- **HEX String Enable**: Select the command type accordingly to the controlled devices.
- **Command:** When the command is string, it will have the end flag for selections, but when using HEX, it will have no end flag.

(3) Click "Save" or "Cancel" to save or cancel the configurations above.

If you click "Save", the page will return to the "Command Settings" tab automatically.

Note: The "Remove" button in last column allow you to remove the corresponding command of third-party device.

(4) Repeat steps from (1) to (3) to program other commands.

After "Command Settings" is configured successfully, click "Key Settings" to configure commands for each keypad button. For each button, it can configure 6 commands at most.

(1) Click the bottom right corner of the button (red box of Fig 1, take KEY1 as an example) to enter the following page (Fig 2).

Fig 1

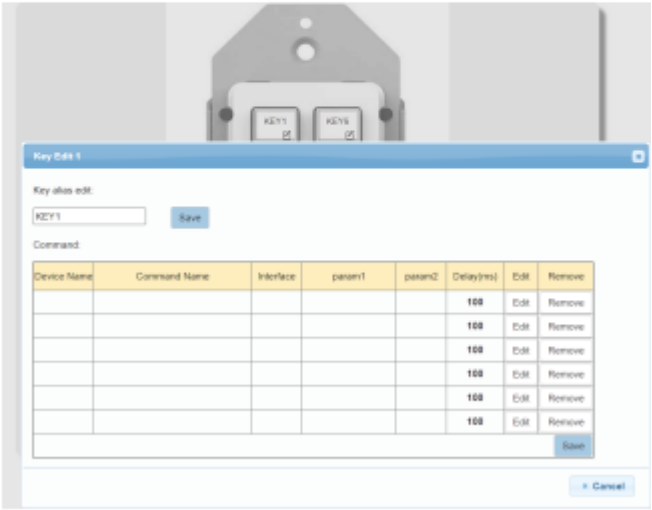


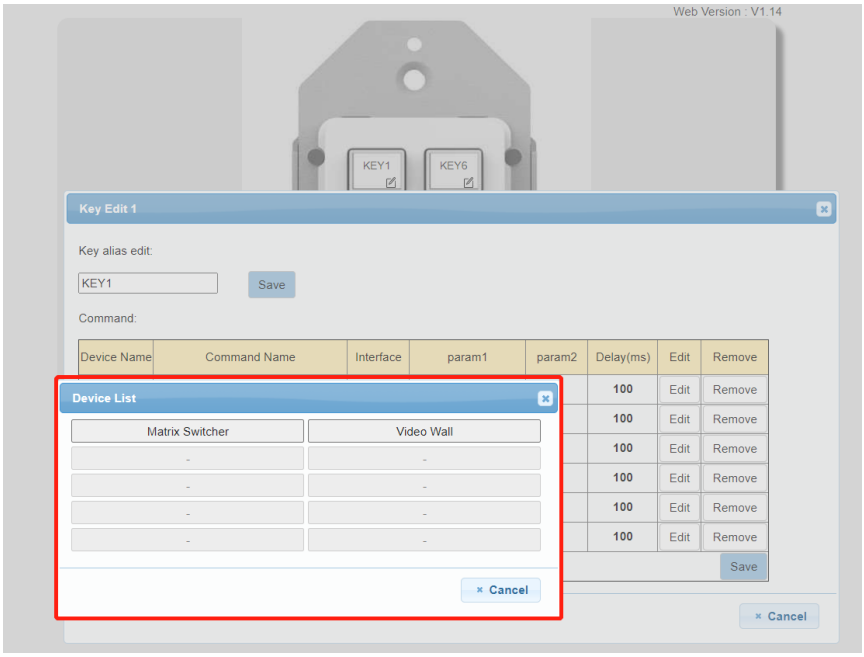
Fig 2

(2) Configure the items in the picture above.

- **Key alias edit**: Configure a name for the button. then click “Save” to take effect.

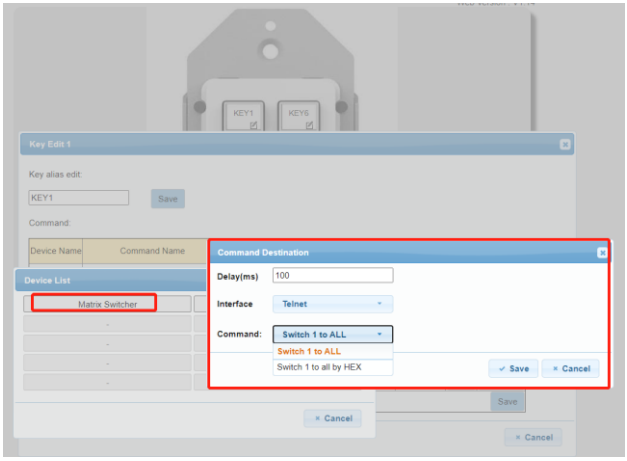
  Note: The length of each button’s name shall not exceed 24 characters and can include letters, numbers, and underscores.

Command: Click “Edit” in the web table to choose devices that are needed to be programmed



This window displays the Device Names you set in “Device Settings” section.

a) Click the “Matrix Switcher” button in the above window to enter the following page:



b) Configure the items in the picture above.

- **Delay (ms)**: Set the delay time for the command to be sent to the controlled device when pressing the button. It can be left blank.
- **Interface**: Select the control interface from the pull-down list. (Telnet or RS232).

  Note: Select the interface according to the actual connection requirements.
- **Command:** Select one command from the drop-down menu.

c) Click “Save” to save the configurations.

Note: If you do not want to save the configurations, click “Cancel”.

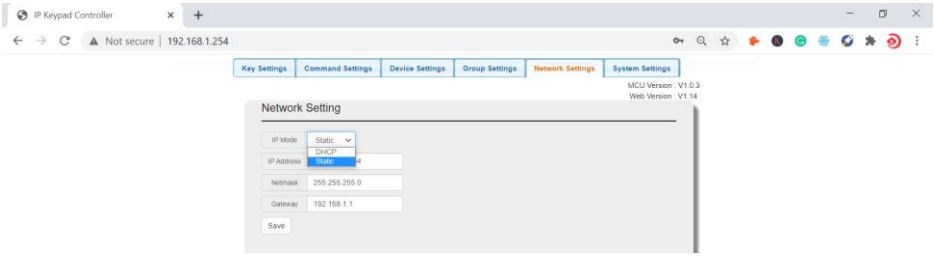
d) Repeat steps from a) to c), to configure other commands.

Note: The “Remove” buttons in last column allow you to remove the corresponding commands configured for the button.

Click “Save” to save all the configured commands to KEY1 button.

8. Network Settings

"Network Settings" is available to configure the keypads network information. Click on the "Network Settings" submenu to enter the configuration page.

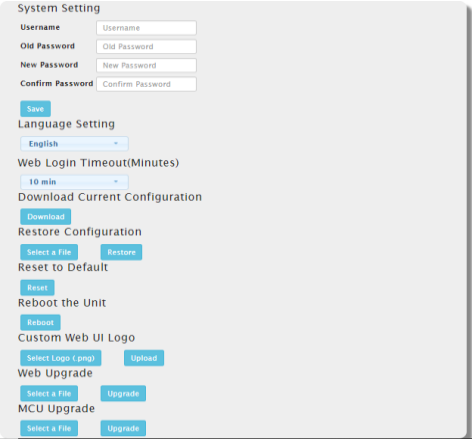


- **DHCP:** When DHCP mode is enabled on the keypad, the keypad should connect to the network with DHCP server. The IP address, Netmask, and gateway parameters will be automatically assigned by DHCP server.
- **Static:** When keypad is set to Static IP mode, the IP address, netmask, and gateway parameters can be assigned manually.
- **Save:** Save the configuration changes.

Note: The keypad default network settings are, Static, and the default IP address is 192.168.1.254.

9. System Settings

"System Settings" is available to configure system functions. Click the "System Settings" submenu to enter the configuration page like below.



(1) Web User Settings

This tab is used to change web login username and password.

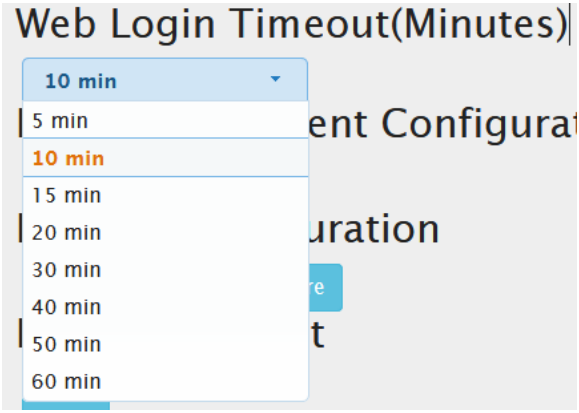
- **Save**: Click "Save" to take effect.

The default Username and Password are both set to "admin".

Note: Password starts with letters, numbers, or underscores, it must be within 4 to 16 characters in length.

(2) Web Login Timeout (Minutes)

Configure web login timeout to automatically exit the web configurator in a set time. Click to configure the timeout from the drop-down menu (5-60 minutes optional).



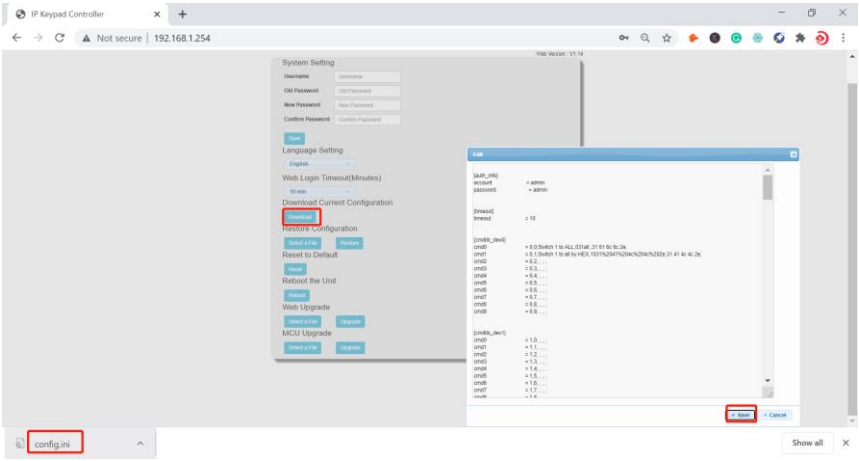
The default timeout is 10 min.

(3) Download Current Configuration

Click “Download” to save current configurations.

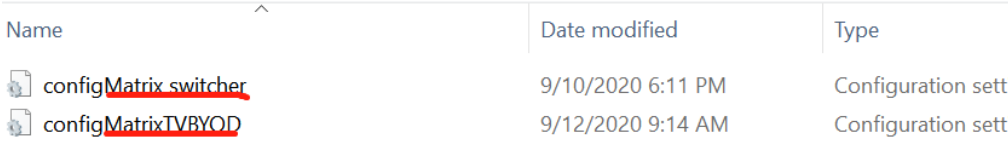
- **Save:** Click “Save” to save the configuration file to local
- **Cancel**: Click “Cancel” to cancel saving the settings.

Note: The saved .bin file name cannot be changed, otherwise keypad will not be able to restore the configuration.



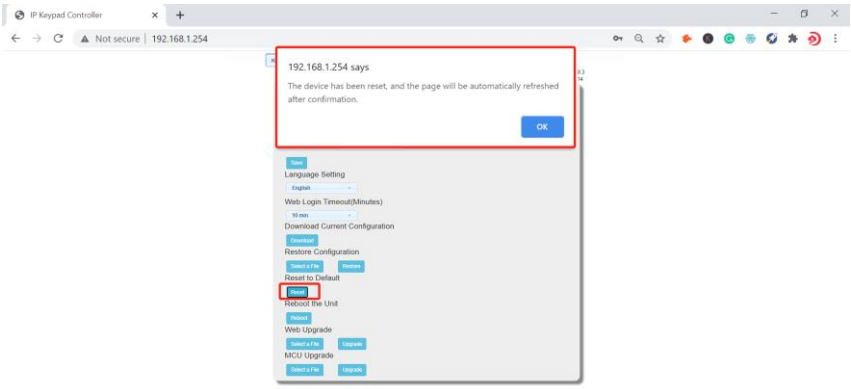
(4) Restore Configuration

- **Select a File**: Click “Select a File” to select a saved configuration bin file from local PC.



(5) Reset to Default

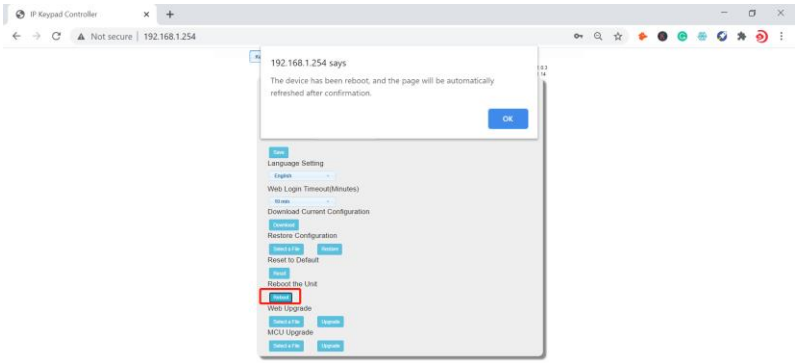
Click “Reset” to reset the keypad to factory default settings. The following window will pop up.



Note: The keypad will reboot automatically, and keypad settings will be cleaned after successfully reset.

(6) Reboot the Unit

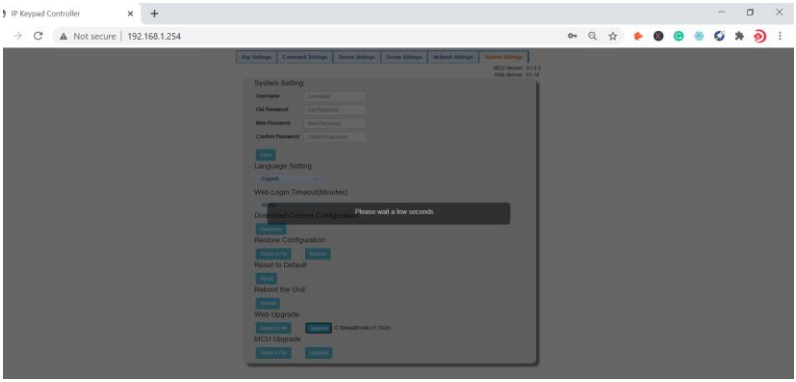
Click “Reboot” to reboot the unit. A notice window will pop up as follows:



After rebooting the keypad successfully, the buttons on the front panel will blink 3 times and the web page returns to the login page.

(7) Web Upgrade

- **Select a file**: Select a Web UI upgrade .bin file from the local PC.
- **Upgrade**: Click “Upgrade” to start Web UI upgrade. A notice window will pop up as follows:



When web UI upgrading is completed, the keypad will reboot automatically, and the web page will be refreshed automatically.

(8) MCU Upgrade

- **Select a file**: Select an MCU upgrade bin file from the local PC.
- **Upgrade**: Click “Upgrade” to start MCU upgrade.

The keypad will reboot, and the web page will be refreshed automatically when the MCU upgrading is completed.

10. Application

The keypad can control third-party devices through LAN(PoE) or RS232 port. Before installation, ensure the keypad functions have been configured properly and saved to the buttons through the web UI (See "**Configure Functions for Buttons**" on "**Configurations on Web UI**" section).

1. Connect the controlled third-party device to LAN(PoE) port or RS232 port of the keypad.
2. Connect the DC 12V power adapter to the keypad.

   Note: If the controlled device connected to LAN (PoE) port supports PoE function, the keypad can receive power from it and no additional power adapter is needed.
3. Power on all devices.
4. Press the buttons on front panel of the keypad to control the third-party devices.