SDCP10 Wallplate Control Panel-10 buttons

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



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
1.1 Introduction to SDCP10	1
1.2 Features	1
1.3 Package List	1
2. Panel Description	2
3. Specification	3
4. Installation	3
5. Configuration settings	4
6. Device Settings	7
7. Command Settings	10
8. Network Settings	15
9. System Settings	16
10. Application	20

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

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

 $\frac{1}{2}$ Each button can be programmed to send the infrared codes simultaneously to control the third-party devices and support infrared code learning function.

- \ddagger The unit may be programmed through the ETHERNET port, via the WEB GUI.
- \Rightarrow Supports the POE function or optional power adapter power supply
- ${\rm tr}$ 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
		Ten buttons on front panel.
1	Buttons	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)	86 x 86 x 36 (UK, EU)
(W x H x D)	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):

SEADAS	SUCPIO P	rogram buttons to send TCP/IP and R5232 comman
	.	Usemame
	₽	Password

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.

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

"<u>System Settings</u>" 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.

			Network Settings	Sys	tem Set	tings	
					MC We	U Version:1 b Version:1	.2 .03
Device Name			Interface		Edit	Remove	Ŀ
_			-	1	Edit	Remove	
			-	2	Edit	Remove	
			-		Edit	Remove	
			-		Edit	Remove	
			-		Edit	Remove	
	Device Name - -	Device Name - -	Device Name	Device Name Interface - - - - - - - - - - - - - - - - - - - -	Device Name Interface - - 1 - - 2 - - - - - - - - - - - -	Device Name Interface Edit - - Edit	Device Name Interface Edit Remove - - Edit Remove

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:

									_			
-> C A Not secure 192.168.1.25	14				0	+ a	ਮ			20	•	y
	Key Settings Comm	nand Settings Device Settings	Group Settings Network Settings	System	Settings							
				MO	U Version	V1.0.3						
	Active	Device Name	Interface	Edit	Remove	-						
	Enable	Matrix Switcher	IP Control	Edit	Remove							
			· · · /	Edit	Remove							
	Enable	Video Wall	. /	Edit	Remove							
			R5232 Control	Edit	Remove							
	Disable			Edit	Remove							
		~		Edit	Remove							
	Disable			Edit	Remove							
				Edit	Remove							
	Disable			Edit	Remove							
				Edit	Remove							
	Disable			Edit	Remove							
				Edit	Ramova							
	Disable			Edit	Remove							
	Č na st			Edit	Remove							
	Disable			Edit	Remove							

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.

→ C A Not secure 192.168.1.254							0-	, Q	\$ ٠	•	0	9 1	e e)
	Key Settings C	ommand Settings	Device Settings	Group Settings	Network Settings	System	s Settings							
						Mi W	U Version : V leb Version : V	/1.0.3						
	Active	Device	Name	Int	inface	Edit	Remove	-						
	-			IP (Cantrol	Edit	Remove							
	Enable	Silative Si	afficies			Ede	Remove							
	Device Edit				8	Edit	Remove							
	Device Name:	Matrix Switcher			_	Edit	Remove							
	10.1.1.0	107 108 1 80				Edn	Remove							
	IP Address.					Edit	Remove							
	Port	5000				Ede.	Remove							
	Username:					Edit	Remove							
	Password					Edit	Remove							
						Ede	Remove							
				y Say	e « Cancel	≡dit	Remove							
						Edit	Remove							
	Dirabia					Ede	Remove	÷.						
						Edit	Remove							
	Dirable					Edit	Remove							
						Edt	Remove							

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:

Key Settions	Command Setti	Device Settings	Group Sattings	Network Settings	System	n Settinos	1				
NaX semula	Gommand Jett	owner settings	oroup semilia	network settings	M	CU Version	V1.0.3				
					W	leb Version	V1 14				
Artum	1	Territo Mana		adara	Ede	Ramons	1-				
PLOYE		Creative restrict		Control	C.da	Pantore					
Enable	N	latrix Switcher			549	Pamoua					
					Edt	Remove					
Enable		Video Wall	R\$23	2 Control	Edit	Remove					
-	Contract Contract					Remove					
Dis	Device Edit	Constant and the second second				Remove					
	Device Name:	Video Wall				Remove	1				
(OIS)	Baud Rate:	9600	-			Remove					
0.0	Parity Bits:	NONE				Remove					
605	2002200					Remove					
Dis	Data Bits:		•			Remove					
	Stop Bits:	1	-			Remove					
Dis					Control	Remove					
				· save	Gameer	Remove					
Disa	ble				Edit	Remove					
					Edit	Remove					

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

7. Command Settings

After "<u>Device Settings</u>" 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.

IP Keypad Controller × +													-	Ø	
← → C ▲ Not secure 192.168.1.254							0	Q	☆	٠	0	0	Ø	* 🤅	•
	Key Settings	Command Settings	Device Settings	Group Settings	Network Settings	Syster	m Settings								
						M	ICU Version : V Veb Version : V	1.0.3							
	Device Name	Command Name		Command		Edit	Remove	<u>^</u>							
						Edit	Remove								
						Edit	Remove								
						Edit	Remove	а.							
						Edit	Remove								
	Matrix Crutators					Edit	Remove								
	maine ownoner	-				Edit	Remove								
						Edit	Remove								
		*				Edit	Remove								
		÷				Edit	Remove								
						Edit	Remove								
		-				Edit	Remove								
						Edit	Remove								
		-				Edit	Remove								
		-				Edit	Remove								
	Midea Mark					Edit	Remove								
	video Wall					Edit	Remove								

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

→ C A Not secure 192.168.1.254							0-	Q	\$ ٠	0	0	• 0	*	9	
	Key Settings	Command Settings	Device Settings	Group Settings	Network Settings	Syste	n Settings								
						N V	CU Version V /eb Version V	1 14							
	Device Name	Command Nam	•	Command		Edit	Remove								
						Edit	Remove								
						Edit	Remove								
						Edit	Remove								
		Command Edit 1				COL	Remove	н.							
	Matrix Switc	Command Name:	Switch 1 to ALL				Remove								
		HEX String Enable:	• String HEX				Remove								
		Command:	tal.				Remove	н.							
		End Flag:	Irin Ir	In • None			Remove	н.							
					✓ Save ×	Cancel	Remove								
						Edit	Remove								
						Edit	Remove								
						Edit	Remove	н.							
	Video Wall					Edit	Remove								
						Edt	Remove	•							

- (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.

Command Edit 1	Command Edit 2
Command Name: South 1 to ALL HEX String Enable: • String · HEX Command: Ist End Flag: · Vin · V · Vin • None	Command Name: Switch 1 to all by HEX HEX String Enable: String Command: S1 41 4c 4c 2e
✓ Save ➤ Cancel	✓ Save × Cancel

- (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 "<u>Command Settings</u>" 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).





			RIN C				
Key Edit 1							
Key alias edit:							
KEY 1	Save						
Command							
Device Name	Command Name	Interface	param/1	paran2	Delay(ms)	Est.	Remove
					108	Edit	Remove
					100	Edit	Remove
					100	Edit.	Remove
					100	Ed.	Remove
					100	Ed.	Remove
					100	Edit.	Remove
							Save

- 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

Wallplate Control Panel-10 buttons

			KEY1	KEY6			web	version : v1.14
Key Edit 1								-
Key alias edit:		Save						
Command:								
Device Name	Comma	and Name	Interface	param1	paran	Delay(ms)	Edit	Remove
Device Name	Comma	and Name	Interface	param1	paran	n2 Delay(ms) 100	Edit Edit	Remove Remove
Device Name	Comma	and Name	Interface	param1	paran	n2 Delay(ms) 100 100	Edit Edit Edit	Remove Remove Remove
Device Name Device List Ma	Comma atrix Switcher	and Name		param1 fideo Wall	paran	2 Delay(ms) 100 100 100	Edit Edit Edit Edit	Remove Remove Remove
Device Name	Comma atrix Switcher	and Name		param1 fideo Wall	paran X	2 Delay(ms) 100 100 100 100	Edit Edit Edit Edit Edit	Remove Remove Remove Remove
Device Name Device List	Comma atrix Switcher - -	and Name		fideo Wall	paran	Delay(ms) 100 100 100 100 100 100 100 100	Edit Edit Edit Edit Edit Edit	Remove Remove Remove Remove Remove Remove
Device Name Device List Ma	Comma atrix Switcher - - -	and Name		param1 fideo Wall - -	paran X	Delay(ms) 100 100 100 100 100 100 100 100 100 100 100 100 100	Edit Edit Edit Edit Edit Edit Edit	Remove Remove Remove Remove Remove Remove Remove
Device Name Device List Ma	Comma atrix Switcher - - - -	and Name		rdeo Wall		Delay(ms) 100 100 100 100 100 100 100 100 100 100	Edit Edit Edit Edit Edit Edit Edit	Remove Remove Remove Remove Remove Remove Remove Save

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:

	KEY1	KEY6	
Key Edit 1			
Key alias edit:			
KEY1 Save			
Command:			
Device Name Command Name	Command D	estination	
Device Name Command Name	Command D Delay(ms)	Destination	
Device List Matrix Switcher	Command D Delay(ms) Interface	Internet -	
Device Name Command Name Device List Matrix Switcher	Command D Delay(ms) Interface Command:	Telnet •	
Device Name Command Name Device List Matrix Switcher	Command D Delay(ms) Interface Command:	testination 100 Teinet - Switch 1 to ALL - Switch 1 to ALL	
Device Name Command Name Device List Matrix Switcher	Command D Delay(ms) Interface Command:	100 Telnet Switch 1 to ALL Switch 1 to ALL Switch 1 to all by HEX	✓ Save ≤ Cancel
Device Kalle Command Kalle Device Last Matrix Switcher	Command D Delay(ms) Interface Command:	Too Telest Switch 1 to ALL Switch 1 to ALL Switch 1 to ALL Switch 1 to ALL	✓ Save = ⊄ Cancel
Device Hame Command Hame Device Last Matrix Switcher	Command D Delay(ms) Interface Command:		× Save × Cancel

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.

IP Keypad Controller × +										-	٥	×
← → C ▲ Not secure 192.168.1.254							P Q	\$	•	0 1	• •	:
	Key Settings	Command Settings	Device Settings	Group Settings	Network Settings	System Settings	1					
						MCU Version Web Version	V1.0.3 V1.14					
	Netwo	ork Setting										
	IP Mg	de Static 🗸										
	IP Add	IESS Stanc 4										
	Netro	HINK 255 255 255 0										
	Galey	ay 192.168.1.1										
	Save											

- **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.

Custom Costin	
system setting	y
Username	Username
Old Password	Old Password
New Password	New Password
Confirm Password	Confirm Password
Save Language Sett	ting
Web Login Tin	neout(Minutes)
10 min	-
Download Cur	rrent Configuratio
Download Restore Config	guration
Select a File Reset to Defai	Restore
Reset Reboot the Un	nit
Reboot Custom Web I	JI Logo
Select Logo (png) Web Upgrade	Upload
Select a File MCU Upgrade	Upgrade
Select a File	Upgrade

(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).

Web Login	Tim	eout(Minutes)
10 min	-	
5 min		ent Configura
10 min		5
15 min		
20 min		uration
30 min		70
40 min		
50 min		t
60 min		

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.

Name	Date modified	Туре
configMatrix switcher configMatrixTVBYOD	9/10/2020 6:11 PM 9/12/2020 9:14 AM	Configuration sett Configuration sett

(5) Reset to Default

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

🚱 IP Keypad Controller 🛛 🗙 🕂											C	9	×
← → C ▲ Not secure 192.168.1.254		1	01	Q	☆	٠	0	C	۲	ø	*	৩	÷
	192,168.1254 says The device has been reset, and the page will be automatically refreshed after confirmation.	0.) 54											
	Language Setting Language Setting Fanan Terrane Research	1											
	Versional Current Configuration	L											
	Result Dis Weinkit	L											
	Web Upgrade Skrig 11 E Storeth MCU Upgrade Skrig 11 E Storeth												

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.

Wallplate Control Panel-10 buttons

(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 "<u>Configure Functions for Buttons</u>" 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.