

# SCT-SW21UCKVM

## USB 10G Switcher 2x1 with Auto Switching



## User Manual

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Version: SCT-SW21UCKVM\_2023V1.1

## **Preface**

Read this user manual carefully before using the product. Pictures shown in this manual are for reference only. Different models and specifications are subject to real product.

This manual is only for operation instruction, please contact the local distributor for maintenance assistance. The functions described in this version were updated till March 30, 2023. In the constant effort to improve the product, we reserve the right to make functions or parameters changes without notice or obligation. Please refer to the dealers for the latest details.

## **FCC Statement**

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. It has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial installation.

Operation of this equipment in a residential area is likely to cause interference, in which case the user at their own expense will be required to take whatever measures may be necessary to correct the interference.

Any changes or modifications not expressly approved by the manufacture would void the user's authority to operate the equipment.



## SAFETY PRECAUTIONS

To ensure the best from the product, please read all instructions carefully before using the device. Save this manual for further reference.

- Unpack the equipment carefully and save the original box and packing material for possible future shipment
- Follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- Do not dismantle the housing or modify the module. It may result in electrical shock or burn.
- Using supplies or parts not meeting the products' specifications may cause damage, deterioration or malfunction.
- Refer all servicing to qualified service personnel.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Do not put any heavy items on the extension cable in case of extrusion.
- Do not remove the housing of the device as opening or removing housing may expose you to dangerous voltage or other hazards.
- Install the device in a place with fine ventilation to avoid damage caused by overheat.
- Keep the module away from liquids.
- Spillage into the housing may result in fire, electrical shock, or equipment damage. If an object or liquid falls or spills on to the housing, unplug the module immediately.
- Do not twist or pull by force ends of the cable. It can cause malfunction.
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.
- Unplug the power cord when left unused for a long period of time.
- Information on disposal for scrapped devices: do not burn or mix with general household waste, please treat them as normal electrical wastes.

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## 1. Product Introduction

Thanks for choosing the SCT-SW21UCKVM 10G hub, which is designed to switch the host and connect KVM devices to control the host. The hub can be controlled by button in front panel and GUI.

### 1.1 Feature

- 2x1 USB 3.2 switcher, 10G;
- Supports auto switching;
- Sufficient power(4.5A) for latest camera;
- Support button and GUI control.

### 1.2 Package List

- 1 x SCT-SW21UCKVM
- 2 x Mounting ears with 2 x screws
- 4 x Rubber feet
- 1 x DC12V2A power adaptor
- 1 x User manual

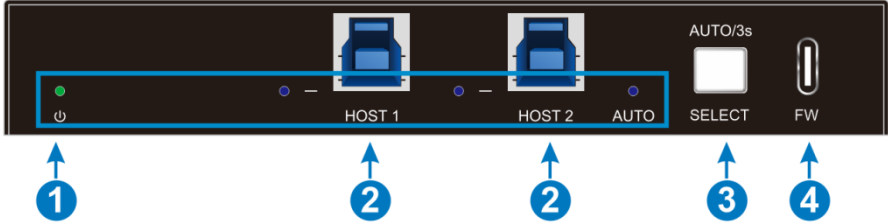
**Note:** Please confirm if the product and the accessories are all included, if not, please contact with the dealers.

## 2. Specification

<b>HOST</b>	
Host	(2) USB-B
Host Connector	(2) USB-B
Bandwidth	Up to 10Gbps
<b>DEVICES</b>	
Devices	(3) USB-A (1) USB-C
Device Connector	(3) USB-A (1) USB-C
Current	Three USB-A and one USB-C share 2A total current
<b>Control</b>	
Control Ports	(1) Button, (1) RJ45
Control Connector	(1) White non-luminous button, (1) RJ45
<b>Power</b>	
Power Ports	(1) 12V 2A DC IN
Power Connector	(1) Locking block
<b>General</b>	
Bandwidth	10Gbps
USB Version	USB3.2 gen2
Maximum Power Consumption	13W
Operation Temperature	-5~ +55°C
Storage Temperature	-25 ~ +70°C
Relative Humidity	10% ~ 90%
Dimension (W*H*D)	142mm x 21.7mm x 90mm
Net Weight	305g

### 3. Panel Description

#### 3.1 Front Panel



#### ① LED light:

- Power LED: The indicator illuminates green when powering on and flashes when the device's current is overloaded.
- HOST LED: When switching to the current host, the indicator illuminates blue, otherwise it turns off.
- AUTO LED:
  - Illuminates blue: auto mode
  - Flashing: Priority mode
  - Light off: Manual mode

**Note:** when in priority mode, the device can't switch the host via button.

② **HOST:** 2x USB-B 3.2 gen2, connect to the PC host.

③ **SELECT BUTTON:** 1x white non-luminous button, click to switch host, long press for 3s to enter/exit automatic mode; long press for 10s to factory default the machine.

④ **Firmware:** 1x USB-C, use for firmware upgrade.

## 3.2 Rear Panel



### ① DEVICES:

3x USB-A 3.2 gen2 for connecting KVM devices;

1x USB-C 3.2 gen2 for connecting camera device;

Four USB devices port share 4.5A total current.

② **TCP/IP:** RJ45 to connect central control device (e.g. PC).

③ **DC IN:** 1x locking block port to connect 12V2A DC power adapter.

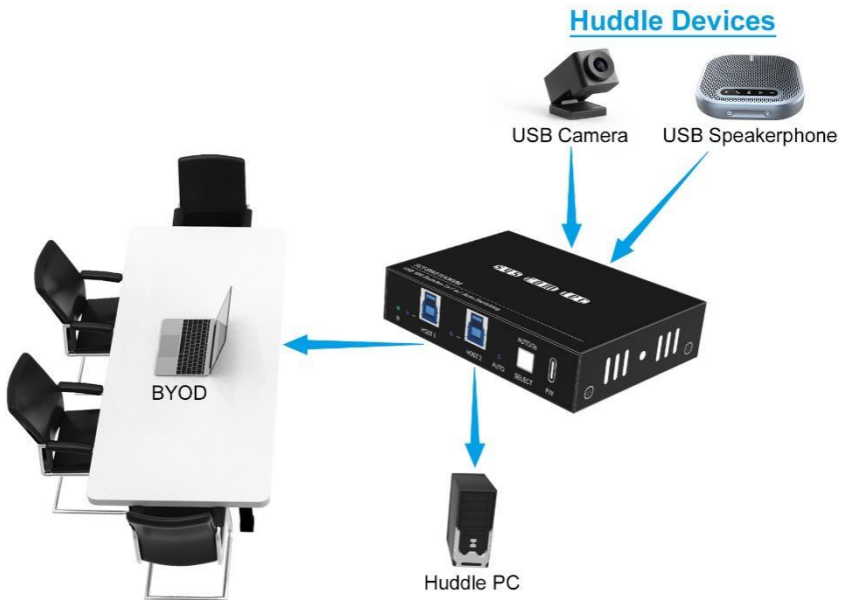


## 4. System Connection

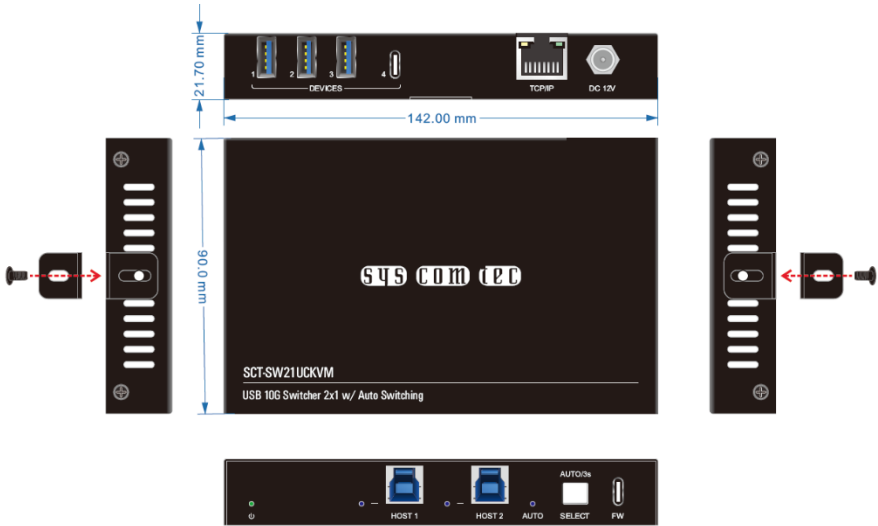
### Usage Precautions

- Make sure all components and accessories included before installation.
- System should be installed in a clean environment with proper temperature and humidity.
- All of the power switches, plugs, sockets, and power cords should be insulated and safe.
- All devices should be connected before power on.

The following diagram illustrates typical input and output connection that can be utilized with the transmitter



### 5. Panel Drawing



## 6. GUI Control

The switcher can be controlled via TCP/IP. The default IP settings are:

IP Address: 192.168.0.178

Telnet Port: 4001

Subnet Mask: 255.255.255.0

Type 192.168.0.178 in the internet browser, it will enter the below Operation page:



The screenshot shows a login interface for the SYS COM TEC device. It includes a logo at the top left, two input fields for 'User Name' and 'Password' (both containing the placeholder 'Please Enter'), a blue 'Login' button, and a version number 'Version: V1.0.0' at the bottom.

The default user name and password is:

User Name: Admin

Password: admin

The username and password can be modify in GUI setting.

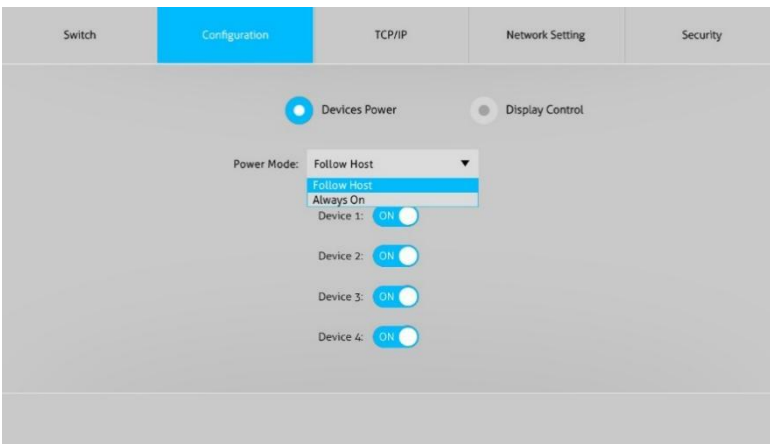
## 6.1 Switch



- Select which host to be controlled by devices: HOST 1 or HOST 2.
- Select the switch mode: Manual/Auto/Priority HOST1/Priority HOST 2
- Display follow: After setting in configuration tab, the display will switch source when the host was changed.
- Display ON/OFF: Turn on/off the display.

## 6.2 Configuration

### 6.2.1 Devices Power



Power mode: Choose the devices power mode.

- Follow Host: When there is no source connected, the devices port will close the

power to the connecting devices.

- Always On: The devices port always supply the power to the connecting devices.
- Device 1-4: Turn on/off the device port power.

## 6.2.2 Display Control

The screenshot shows the 'Display Control' configuration page. At the top, there are tabs for 'Switch', 'Configuration', 'TCP/IP', 'Network Setting', and 'Security'. The 'Configuration' tab is active. Below the tabs, there are two radio buttons: 'Devices Power' (unselected) and 'Display Control' (selected). Below these are several input fields: 'IP Address', 'Telnet Port', 'Format' (dropdown menu), 'Command Ending' (dropdown menu), 'Display Switch Follow HOST 1', 'Display Switch Follow HOST 2', 'Display ON', and 'Display OFF'. A 'Save' button is located at the bottom of the form.

When there is a display (such as touch panel) connecting with two host sources and under the same network with the SCT-SW21UCKVM, we can control the display via the TCP/IP command setting.

## 6.3 TCP/IP

The screenshot shows the 'TCP/IP' configuration page. At the top, there are tabs for 'Switch', 'Configuration', 'TCP/IP', 'Network Setting', and 'Security'. The 'TCP/IP' tab is active. Below the tabs, there are several input fields: 'IP Address', 'Telnet Port', 'Format' (dropdown menu with 'ASCII' selected), 'Command Ending' (dropdown menu with 'NULL' selected), and 'Command' (text input field with 'xxxxxx' entered). At the bottom, there are 'Confirm' and 'Cancel' buttons.

Send the TCP/IP command to other devices which is under the same network as SCT-SW21UCKVM.

### 6.4 Network setting

Switch Configuration TCP/IP **Network Setting** Security

MAC Address: 44-33-4C-C9-35-12

DHCP  Static IP

IP Address: 192.168.0.178

Subnet Mask: 255.255.255.0

Gateway: 192.168.0.1

Confirm

Choose the GUI login address: DHCP or Static IP.

### 6.5 Security

Switch Configuration TCP/IP Network Setting **Security**

Host Name Device Name

Host 1 Device 1 Device 2

Host 2 Device 3 Device 4

Save

Credentials

User Name: admin

New Password: admin

Confirm

Firmware Upgrade

C:\ Browse

Upgrade

Factory Default

Name: Setting the host name and devices name.

Credentials: Setting the login user name and password.

Firmware Upgrade: Upgrade the MCU firmware.

Factory Default: Click to factory reset the machine.

## 7. Control Commands

### 7.1 Commands to SCT-SW21UCKVM

This part of commands is used to control the SCT-SW21UCKVM, you can connect the TCP/IP port to a center controller directly, then send commands to control the SCT-SW21UCKVM via the center controller.

Command	Description	Example & Feedback
>Help	Print All Commands	>Help
		.....
>GetStatus	Print Status	>GetStatus
		<SCT-SW21UCKVM <V1.0.0a <HOST 01 <AutoSwitch On <HostLink Host 1 2 Link Y Y <DevicePowerMode: Follow Host <DevicePower Device 1 2 3 4 Power 1 1 1 1 <DisplayFollow On
>Reboot	System Reboot	>Reboot
		<Reboot
>Reset	Reset System to Default Setting	>Reset
		<Reset
>SetUSB [param1]	Set USB Device Switch to Host [param1] param1 = 01~02: USB Host 1~2	>SetUSB 1
		<SetUSB 01
>SetAutoSwitch	Set AutoSwitch Mode On or	>SetAutoSwitch On

[param1]	Off param1 = On, Off	<SetAutoSwitch On
>SetDevicePowerMode [param1]	Set Device Power Mode param1 = 00~01 00: Follow Host 01: Always On	>SetDevicePowerMode 01  <SetDevicePowerMode: Always On
>SetDevicePower [param1] [param2]	Set Device [param1] Power On Or Off param1 = 00~04 00: All Device 01~04: Device 1~4 param2 = On, Off	>SetDevicePower 00 Off  <SetDevicePower Device 1 2 3 4 Power 0 0 0 0
>setdisplayfollow [param1]	Set Display Follow On Or Off param1 = On, Off	>SetDisplayFollow On  <SetDisplayFollow On

## 7.2 Commands to Third-party Device

This part of commands is used to control the third-party device, you need to connect the SCT-SW21UCKVM, the third-party and the center controller in a same local area network.

>Display [param1]	Control Display On Or Off param1 = On, Off	>Display On  <Display On
keypress:x	x= 0, 1, 2, 3, they correspond to the 4 commands on the GUI page, 0=Switch to Host 1, 1=Switch to Host 2, 2=Display On, 3=Display Off.	keypress:1  <b>No feedback</b>



When you use the command **keypress:x**, you also need to set the parameters on the GUI page.

For example: If you set the parameters as below and you save the command **keypress:2** in the center controller.

IP Address:	192.168.0.111
Telnet Port:	4010
Format:	ASCII ▼
Command Ending:	CR+LF ▼
Display Switch Follow HOST 1:	moni1switch
Display Switch Follow HOST 2:	moni2switch
Display ON:	moni-on
Display OFF:	moni-off

The SCT-SW21UCKVM will send the command **moni-on** to the TV when you send the command **keypress:2** to the SW21UCKVM via the Crestron Controller.

## 8. Troubleshooting & Maintenance

Problems	Potential Causes	Solutions
Color losing or no video signal output in HDMI display.	The connecting cables may not be connected correctly or it may be broken.	Check whether the cables are connected correctly and in working condition.
No HDMI signal output in the device while local HDMI input is in normal working state.		
Output image with white noise.		
<b>POWER</b> indicator doesn't work or no respond to any operation.	Loose or failed power cord connection.	Ensure the power cord connection is good.

**Note:** *If your problem still remaining after following the above troubleshooting steps, please contact your local dealer or distributor for further assistance.*

## 9. Customer Service

The return of a product to our Customer Service implies the full agreement of the terms and conditions hereinafter. These terms and conditions may be changed without prior notice.

### 1) Warranty

The limited warranty period of the product is fixed three years.

### 2) Scope

These terms and conditions of Customer Service apply to the customer service provided for the products or any other items sold by authorized distributor only.

### 3) Warranty Exclusion

- Warranty expiration.
- Factory applied serial number has been altered or removed from the product.
- Damage, deterioration or malfunction caused by:
  - ✓ Normal wear and tear.
  - ✓ Use of supplies or parts not meeting our specifications.
  - ✓ No certificate or invoice as the proof of warranty.
  - ✓ The product model showed on the warranty card does not match with the model of the product for repairing or had been altered.
  - ✓ Damage caused by force majeure.
  - ✓ Servicing not authorized by distributor.
  - ✓ Any other causes which does not relate to a product defect.
- Shipping fees, installation or labor charges for installation or setup of the product.

### 4) Documentation:

Customer Service will accept defective product(s) in the scope of warranty coverage at the sole condition that the defeat has been clearly defined, and upon reception of the documents or copy of invoice, indicating the date of purchase, the type of product, the serial number, and the name of distributor.

**Remarks:** Please contact your local distributor for further assistance or solutions.



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