

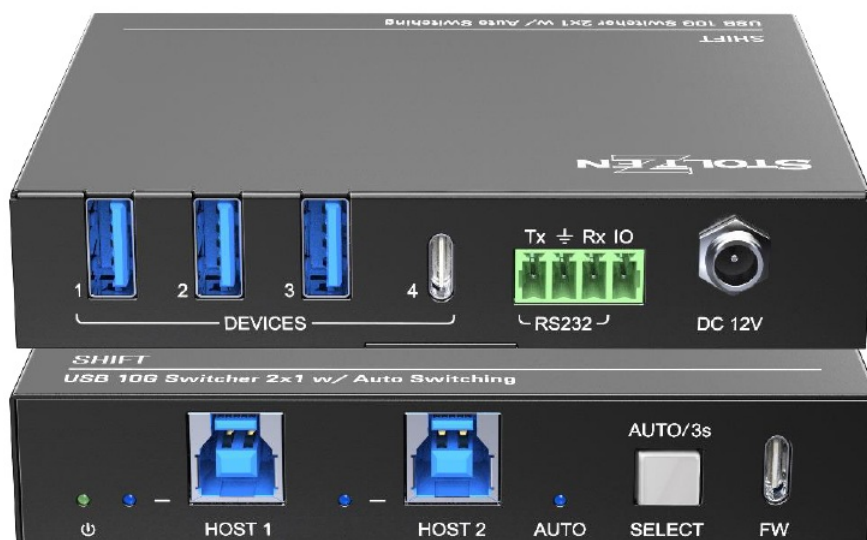
# STOLTZEN SHIFT USB 10G Switcher 2×1 with Auto Switching User Manual

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## STOLTZEN SHIFT USB 10G Switcher 2×1 with Auto Switching



## Product Specifications

- Product Name: SHIFT USB 10G Switcher 2×1 with Auto Switching
- Model: SHIFT\_2023V1.0
- Compatibility: USB devices
- Switching Type: Auto Switching
- Maximum Data Transfer Rate: 10Gbps

### 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 January, 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.

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### FCC Statement

This equipment complies with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. It may cause harmful interference to radio communications if not installed and used in accordance with the instructions. Operation of this equipment in a residential area may cause interference, and the user will be responsible for taking necessary measures to correct the interference.

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### Safety Precautions

- Read all instructions carefully before using the device.
- Keep the original box and packing material for future shipment.
- Follow basic safety precautions to reduce the risk of fire, electrical shock, and injury.
- Do not dismantle the housing or modify the module to avoid electrical shock or burn.
- Use supplies or parts that meet the product's specifications to prevent damage or malfunction.
- Refer all servicing to qualified service personnel.
- Avoid exposing the unit to rain, moisture, or water to prevent fire or shock hazard.
- Avoid putting heavy items on the extension cable to avoid extrusion.
- Do not remove the housing of the device as it may expose you to dangerous voltage or hazards.
- Install the device in a well-ventilated place to prevent overheat damage.
- Keep the module away from liquids to prevent fire, electrical shock, or equipment damage.
- If an object or liquid falls or spills on the housing, unplug the module immediately.
- Avoid twisting or pulling the cable ends by force to prevent malfunction.
- Do not use liquid or aerosol cleaners to clean the unit. Always unplug the power before cleaning.
- Unplug the power cord when the device is not in use for a long period of time.
- Dispose of scrapped devices properly by not burning or mixing with general household waste. Treat them as normal electrical waste.

### Product Introduction

Thanks for choosing the SHIFT 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, RS232 and GPIO.

## Feature

- 2×1 USB 3.2 switcher, 10G;
- Supports auto switching;
- Sufficient power(2A) for latest camera;
- Support button, RS232 and GPIO control.

## Package List

- 1 x SHIFT
- 2 x Mounting ears with 2 x screws
- 4 x Rubber feet
- 1 x 4-pin terminal block
- 1 x RS232 cable(3-pin to DB9)
- 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.

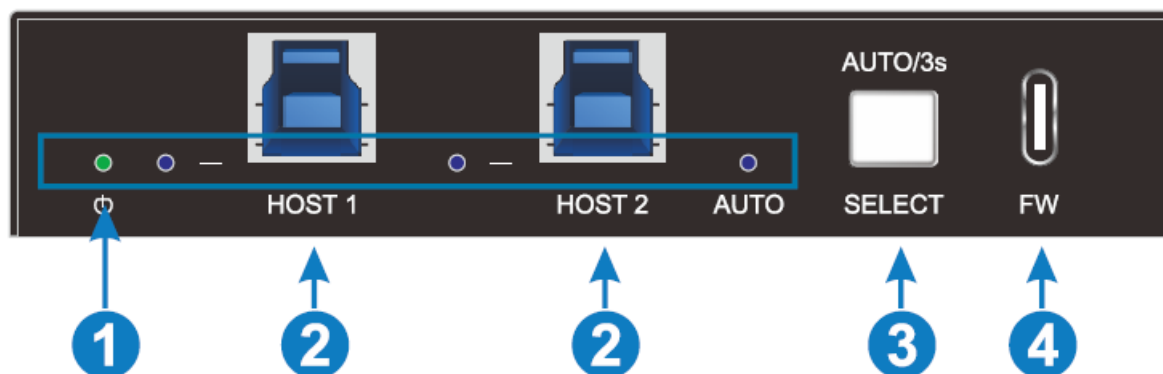
## Specification

HOST	
Host	(2) USB-B
Host Connector	(2) USB-B
Bandwidth	Up to 10Gbps
DEVICES	
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
Control	
Control Ports	(1) Button, (1) RS232, (1) GPIO

Control Connector	(1) White non-luminous button, (1) 3-pin terminal block, (1) 1-pin terminal block
<b>Power</b>	
Power Connector	Locking block
<b>General</b>	
Bandwidth	10Gbps
USB Version	USB3.2 gen2
Maximum Power Consumption	10.65W
Operation Temperature	-5~ +55°C
Storage Temperature	-25 ~ +70°C
Relative Humidity	10% ~ 90%
Dimension (W*H*D)	112mm x 21.7mm x 90mm
Net Weight	245g

## Panel Description

### Front Panel

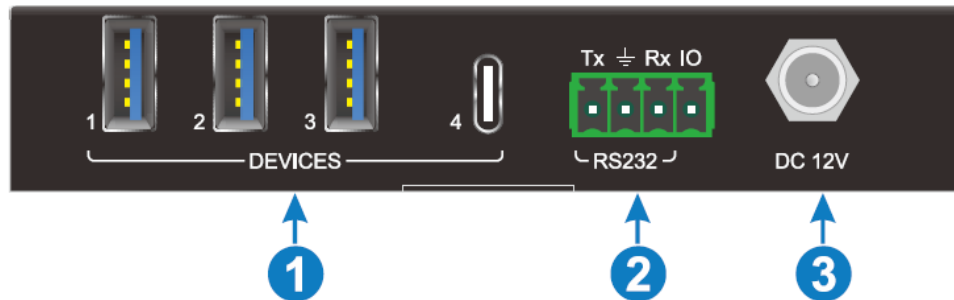


### LED light

- **Power LED:** The indicator illuminates green when powering on and flashes when the devices current is overloaded.

- **HOST LED:** When switching to the current host, the indicator illuminates blue, otherwise it turns off.
- **AUTO LED:** When entering the automatic switching mode, the indicator illuminates blue, otherwise it turns off.
- **HOST:** 2x USB-B 3.2 gen2, connect to the PC host.
- **SELECT BUTTON:** 1x white non-luminous button, click to switch host, long press for three seconds to enter/exit automatic mode
- **Firmware:** 1x USB-C, use for firmware upgrade.

## Rear Panel



### 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 2A total current.

**RS232 and GPIO:** 4-pin terminal block to connect central control device.

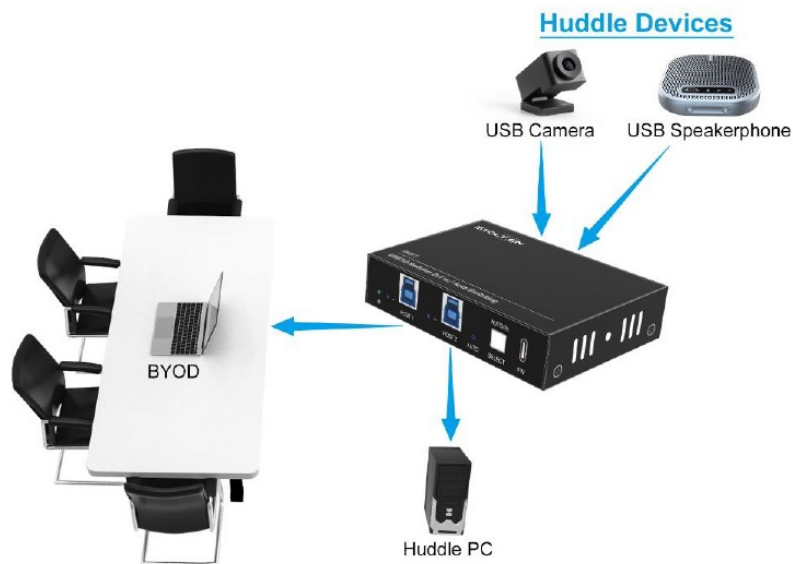
**DC IN:** 1x locking block port to connect 12V2A DC power adapter.

## System Connection

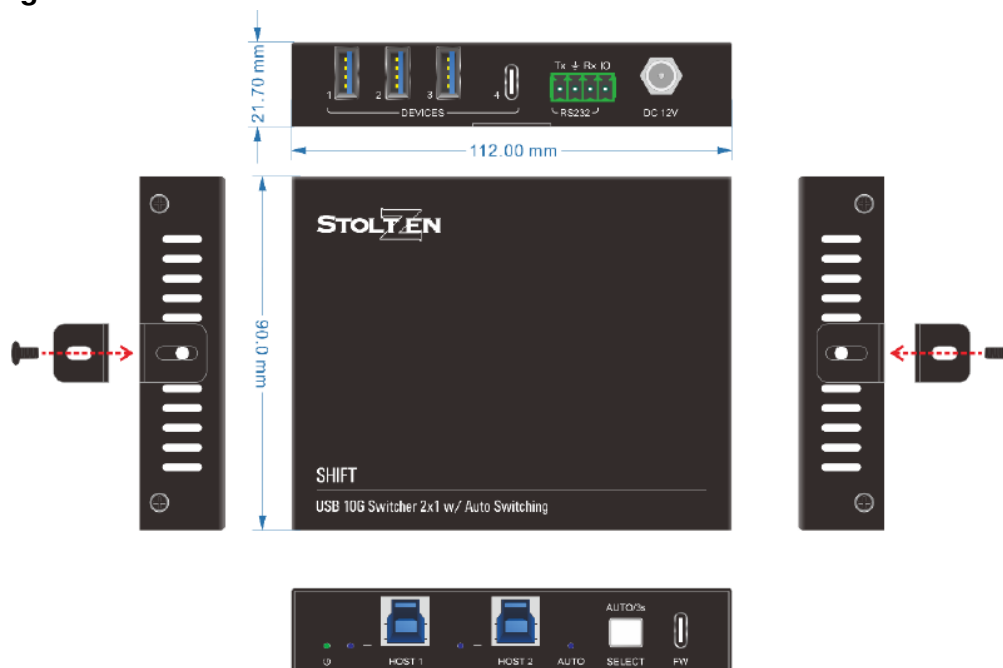
### Usage Precautions

- 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



## Panel Drawing



## RS232 Control

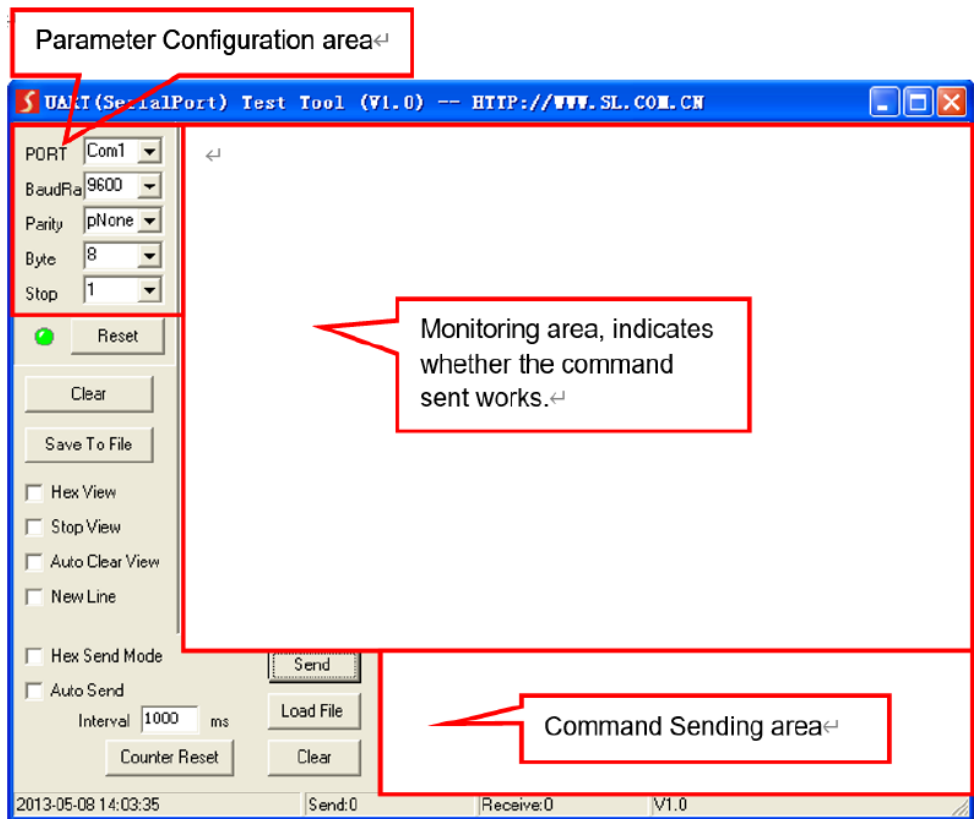
Connect the RS232 ports of SHIFT, the hub can be control by the PC. Baud Rate: 9600(default), 19200, 38400, 57600, 115200

## Installation/uninstallation of RS232 Control Software

### Basic Setting

Firstly, connect SHIFT with host and devices. Then, connect it with a computer which is installed with RS232 control software. Double-click the software icon to run this software.

Here we take the software CommWatch.exe as example. The icon is showed as below.



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The interface of the control software is showed as below.

Please set the parameters of COM number, bound rate, data bit, stop bit and the parity bit correctly, only then will you be able to send command in Command Sending Area.

**Note:** To control SHIFT via RS232 port, the communication protocol parameters should be configured in the right manner: Baud rate: 9600; Data bit: 8; Stop bit: 1; Parity bit: none.

## RS232 Communication Commands

The command end symbol is <CR><LF>

Command	Function	Feedback Example
>Help	>Help	<RS232 Commands: >Get Status                      Print Status >Reboot                              System Reboot >Factory Reset                      Reset System To Default Setting

## USB 10G Switcher 2×1 with Auto Switching

		<p>&gt;SetRS232Baud [param1]                      Set RS232 Baud</p> <p>param1 = 9600(Default), 19200, 38400, 57600, 115200</p> <p>&gt;SetAutoSwitch [param1]                      Set Auto Switch Mode</p> <p>On Or Off param1 = On, Off</p> <p>&gt;SetIO Mode [param1]                      Set IO Control Mode [param1]</p> <p>param1 = 00~02</p> <p>00: IO Control Mode Off(Default)</p> <p>01: Whenever The IO Level From High To Low, Switch The Host</p> <p>02: When The IO Level Is High, Switch To Host 1. When The IO Level Is Low, Switch To Host 2</p> <p>&gt;SetUSB [param1]                      Set USB Device Switch To Host [param1]</p> <p>param1 = 01~02: USB Host 1~2</p> <p>&gt;SetDevicePower [param1] [param2]      Set Device</p> <p>[param1] Power On Or Off</p> <p>param1 = 00~04 00: All Device 01~04: Device 1~4</p> <p>param2 = On, Off</p>
>GetStatus	>GetStatus	<p>&lt;SHIFT</p> <p>&lt;FW Version: 1.0.0</p> <p>&lt;USB</p> <p>Device All Host      1</p> <p>&lt;HostLink</p> <p>Host      1 2</p>

#### USB 10G Switcher 2×1 with Auto Switching

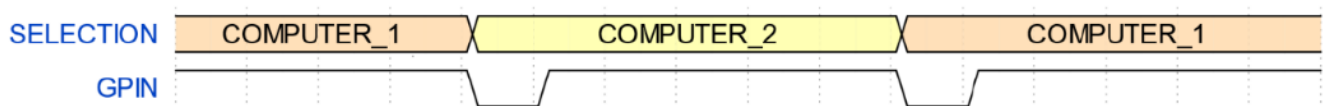


		Link    N N <Device Power Device    1   2   3   4 Power    0   0   0   0 <RS232Baud: 9600 <AutoSwitch On <IOMode 0
>Reboot	>Reboot	<Reboot
>SetUSB	>SetUSB 01	<USB Device All Host    1
>FactoryR eset	>FactoryR eset	<FactoryReset
>SetAutoS wic h	>SetAutoS wic h On/Off	<SetAutoSwitch On <SetAutoSwitch Off
>SetRS23 2Baud	>SetRS23 2Baud 9600	<SetRS232Baud: 9600
>Set Device P ower [param1] [ param2]	>Set Device 1 Off >SetDevice 0 O ff	<Set Device Power Device 1 Power    0 <SetD evice Power Device    1   2   3   4 Power    0   0   0   0
>SetIOMo de	>SetIOMod	<SetIOMode

## GPIO Mode

The GPIO of SHIFT have two modes: PULSE mode(default) and LEVEL mode.

- The GPIN pulse mode is the factory default. Each transition from HIGH to LOW on GPIN pin will force a PC change. See the following picture for the explanation of the mode.



- The GPIN level mode uses a level “0” (short to ground) and “1” (open or voltage higher than threshold) to select a specific HOST.

A level “0” or short to ground: HOST2 is selected.

A level “1” or open: HOST1 is selected.

**NOTE:** In Level mode, can't switch hosts by pressing button

## 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 not 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.

## 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.

### Warranty

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

#### 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.

#### 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.

## 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.

**Documents / Resources**

	<p><a href="#">STOLTZEN SHIFT USB 10G Switcher 2x1 with Auto Switching</a> [pdf] User Manual SHIFT USB 10G Switcher 2x1 with Auto Switching, USB 10G Switcher 2x1 with Auto Switching , Switcher 2x1 with Auto Switching, 2x1 with Auto Switching, Auto Switching, Switching</p>
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