iTrans USB32-S

USB 10G Switcher 2x1 with Auto Switching

INFOBIT　　　　　　**www.infobitav.com**　　　　**info@infobitav.com**
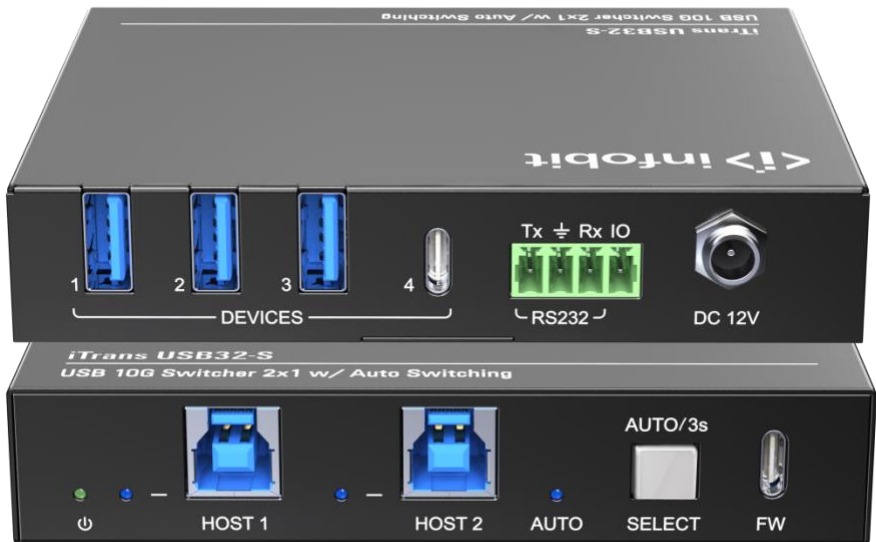
Preface

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.

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.

Table of Content

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1. Product Introduction

Thanks for choosing the iTrans USB32-S 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.

1.1 Feature

- 2x1 USB 3.2 switcher, 10G.

- Supports auto switching.

- Sufficient power(2A) for latest camera.

- Support button, RS232 and GPIO control.

- Share VC devices like camera, microphone, speakerphone, touch, keyboard, mouse, printer and USB storage between BYOD/BYOM PC and Room PC (or interactive OPS)

1.2 Package List

- 1 x iTrans USB32-S

- 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.

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2. 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
Power	
Power Ports	(1) 12V 2A DC IN
Power Connector	(1) Locking block
General	
Bandwidth	10Gbps
USB Version	USB3.2 gen2
Maximum Power Consumption	10.65W
Operation Temperature	-5~ +55℃
Storage Temperature	-25 ~ +70℃
Relative Humidity	10% ~ 90%
Dimension (W*H*D)	112mm x 21.7mm x 90mm
Net Weight	245g

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3. Panel Description

3.1 Front Panel
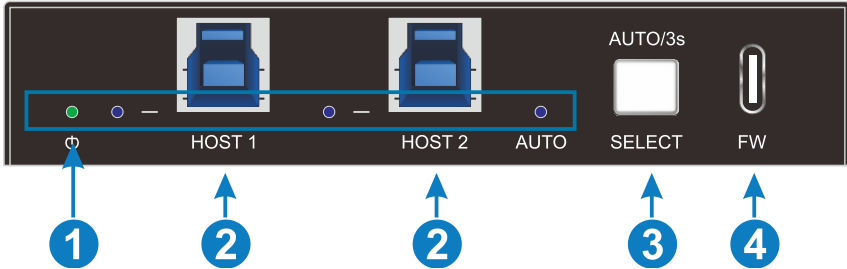
① **LED light:**

- 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.

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 three seconds to enter/exit automatic mode

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

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3.2 Rear Panel
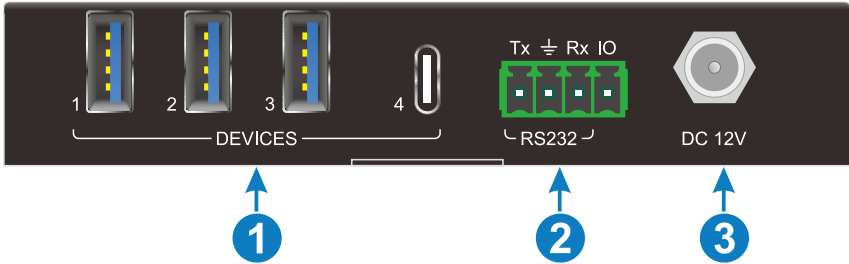
① **DEVICES:**

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 2A total current.

② **RS232 and GPIO:** 4-pin terminal block to connect central control device.

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 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.

For Huddle Room
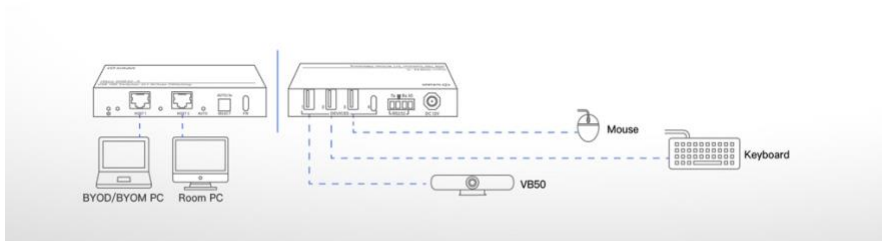
For Small Meeting Room
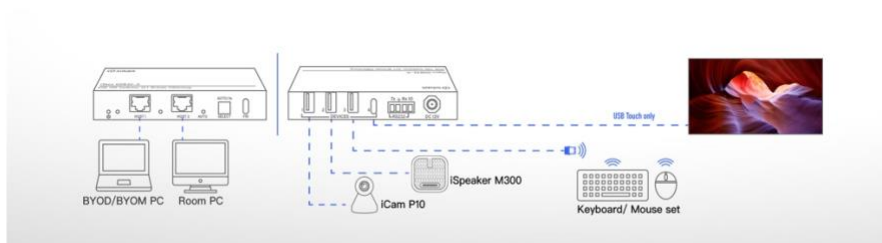
For Medium-to-large Meeting Room

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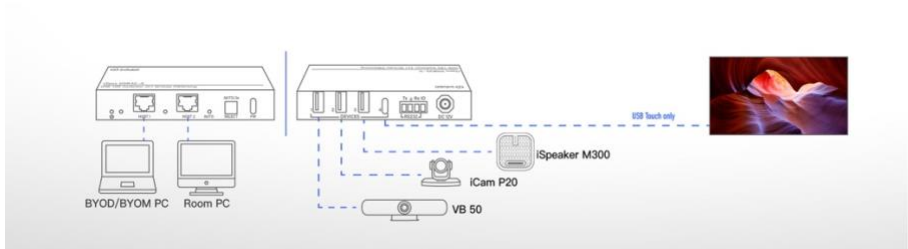## 5. Panel Drawing
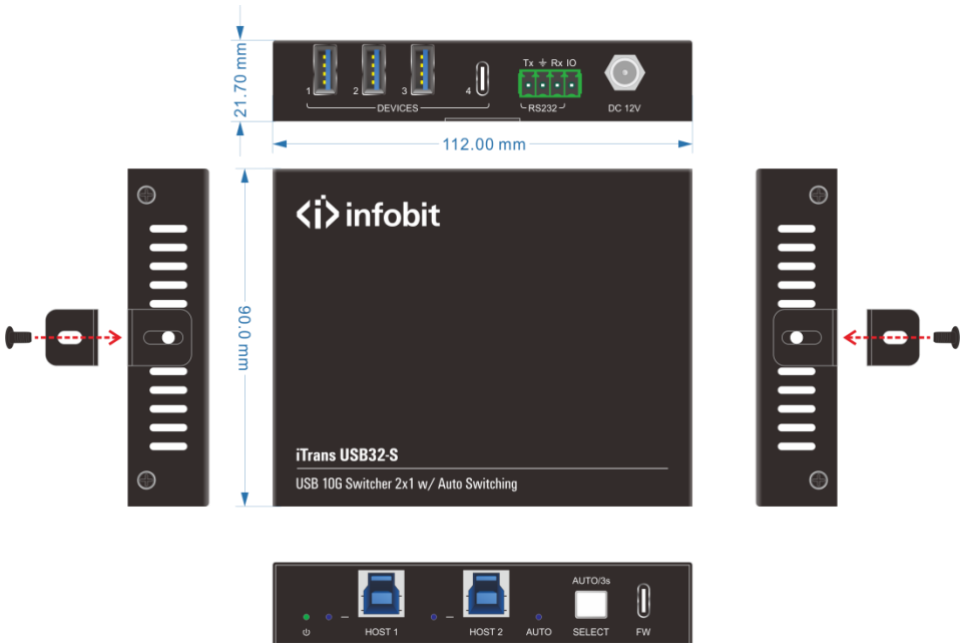
6. RS232 Control

Connect the RS232 ports of iTrans USB32-S, the hub can be control by the PC.

Baud Rate: 9600(default), 19200, 38400, 57600, 115200

6.1 Installation/uninstallation of RS232 Control Software

● **Installation** Copy the control software file to the computer

● **Uninstallation** Delete all the control software files in corresponding file path.

6.2 Basic Setting

Firstly, connect iTrans USB32-S 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:

CommWatch.exe

The interface of the control software is showed as below:
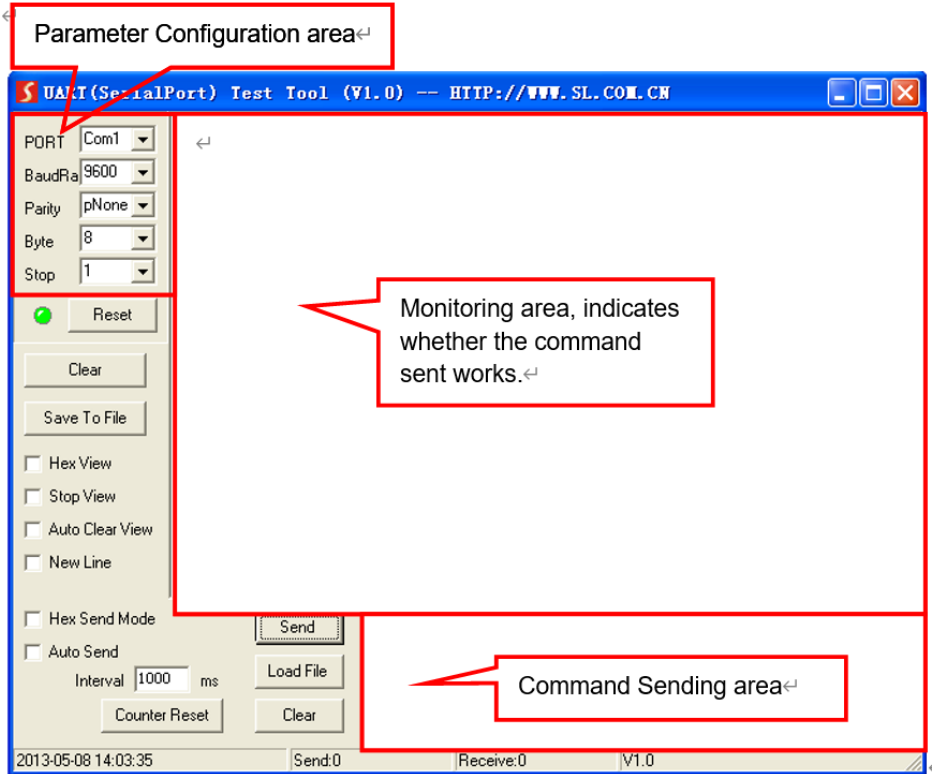
Parameter Configuration area

UART(SerialPort) Test Tool (V1.0) -- HTTP://WWW.SL.COM.CN

PORT Com1
BaudRa 9600
Parity pNone
Byte 8
Stop 1

Reset

Clear

Save To File

☐ Hex View
☐ Stop View
☐ Auto Clear View
☐ New Line

☐ Hex Send Mode
☐ Auto Send
    Interval 1000 ms
    Counter Reset

Send

Load File

Clear

Monitoring area, indicates whether the command sent works.

Command Sending area

2013-05-08 14:03:35   Send:0   Receive:0   V1.0

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 iTrans USB32-S 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.

6.3 RS232 Communication Commands

The command end symbol is <CR><LF>

| Command	Function	Feedback Example
>Help	>Help	<RS232 Commands:

		>GetStatus Print Status
		>Reboot System Reboot
		>FactoryReset Reset System To Default Setting
		>SetRS232Baud [param1] Set RS232 Baud
		param1 = 9600(Default), 19200, 38400, 57600, 115200
		>SetAutoSwitch [param1] Set AutoSwitch Mode On Or Off
		param1 = On, Off
		>SetIOMode [param1] Set IO Control Mode [param1]
		param1 = 00~02
		00: IO Control Mode Off(Default)
		01: Whenever The IO Level From High To Low, Switch The Host
		02: When The IO Level Is High, Switch To Host 1. When The IO Level Is Low, Switch To Host 2
		>SetUSB [param1] Set USB Device Switch To Host [param1]
		param1 = 01~02: USB Host 1~2
		>SetDevicePower [param1] [param2] Set Device [param1] Power On Or Off
		param1 = 00~04
		00: All Device
		01~04: Device 1~4
		param2 = On, Off
>GetStatus	>GetStatus	<iTrans USB32-S <FW Version: 1.0.0 <USB Device All

		Host 1
		<HostLink
		Host 1 2
		Link N N
		<DevicePower
		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
>FactoryReset	>FactoryReset	<FactoryReset
>SetAutoSwitch	>SetAutoSwitch On/Off	<SetAutoSwitch On <SetAutoSwitch Off
>SetRS232Baud	>SetRS232Baud 9600	<SetRS232Baud: 9600
>SetDevicePower [param1] [param2]	>SetDevice1 Off >SetDevice0 Off	<SetDevicePower Device 1 Power 0 <SetDevicePower Device 1 2 3 4 Power 0 0 0 0
>SetIOMode	>SetIOMode 1	<SetIOMode 1

7. GPIO Mode

The GPIO of iTrans USB32-S 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.
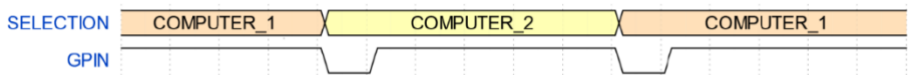
- The GPIN level mode uses a level "0" (short to ground) and "1" (open or voltage higher than threshold) to select a specific HOST.

    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

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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.		
POWER 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.

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9. Customer Service

The return of a product to our Customer Service implies the full agreement of the terms and conditions hereinafter. There 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.