

GeoBox

S902 Datasheet

4x2 UHD Quad View Processor with Seamless switcher

4x HDMI 2.0 input and dual UHD output ports

*Maximum input: 4096*2160 @60Hz, 4:4:4 chroma sampling*

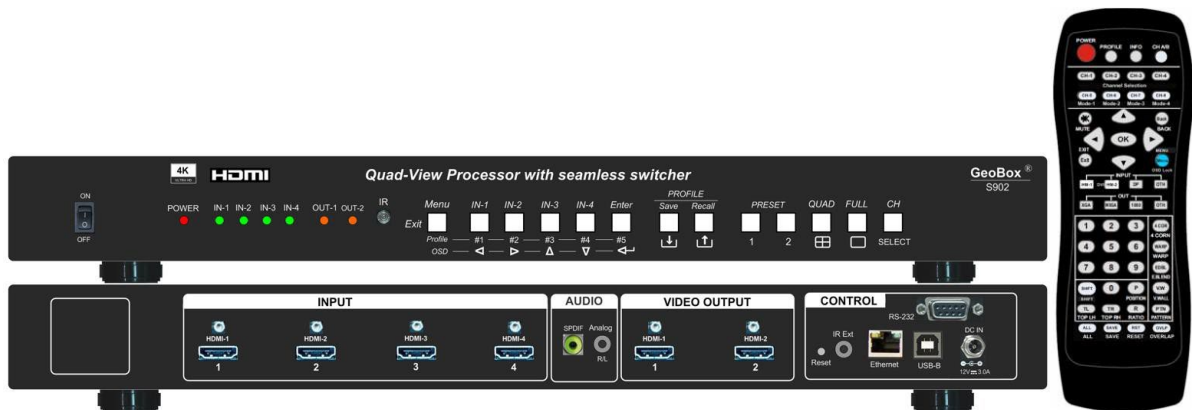
With the same or different display Windows in each output

Multiple display windows with flexible image size, cropping, location and overlap

Seamless switching in single or multi-view display modes

Image Fade in, Fade out, Dissolve and Wipe

True 10-bit processing and up/down scaling



Sales & Technical support

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Introduction

The S902 is a 4x2 UHD Quad-View processor that allows users to display up to four 4k/60 sources simultaneously on one or two UHD displays. This device offers a highly flexible and cost-effective solution for routing up to four 4k/60 sources to two separate displays simultaneously. Users can choose from 12 default multi-view layout presets and 20 custom Profile Presets to customize their display mode.

Featuring 4 HDMI 2.0 inputs and 2 HDMI 2.0 outputs, the S902 supports CEA video standard timings up to 4096*2160 @60Hz with 4:4:4 chroma sampling. Each output port can accommodate up to 4 windows, with each window capable of selecting an input source from any input port. Users have the option to assign the same input source to multiple windows and can adjust input selection, image positioning, resizing, cropping, and color settings for each window.

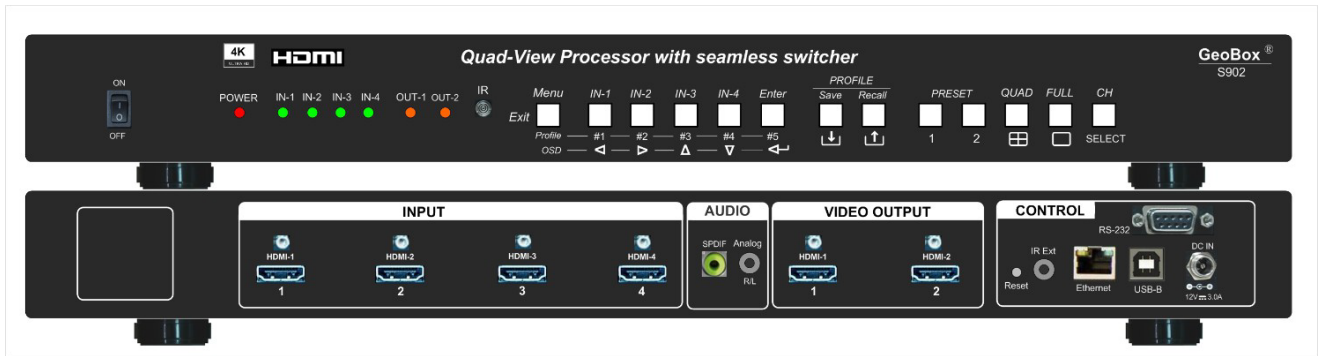
Users can prioritize display windows when they overlap and select one or multiple windows with the same configuration for any output port. The device offers 16 transition modes, including high speed seamless switching, Fade-in, Fade-out, Dissolve, and Wipe, with selectable duration for transitions. It integrates HDMI embedded audio, RCA SPDIF digital audio, and analog 3.5mm R/L audio jack R/L, allowing users to assign audio from input ports to each audio output port as needed.

Control options for the unit include IR controller, front panel push button, USB, WebUI, and Ethernet, providing versatile control methods for various applications. Users can recall up to 20 custom Profile Presets through different control systems. Designed for continuous operation in a 24/7 environment, the S902 offers easy configuration, low entry barriers, cost-effectiveness, reliability, and flexibility for a wide range of applications.

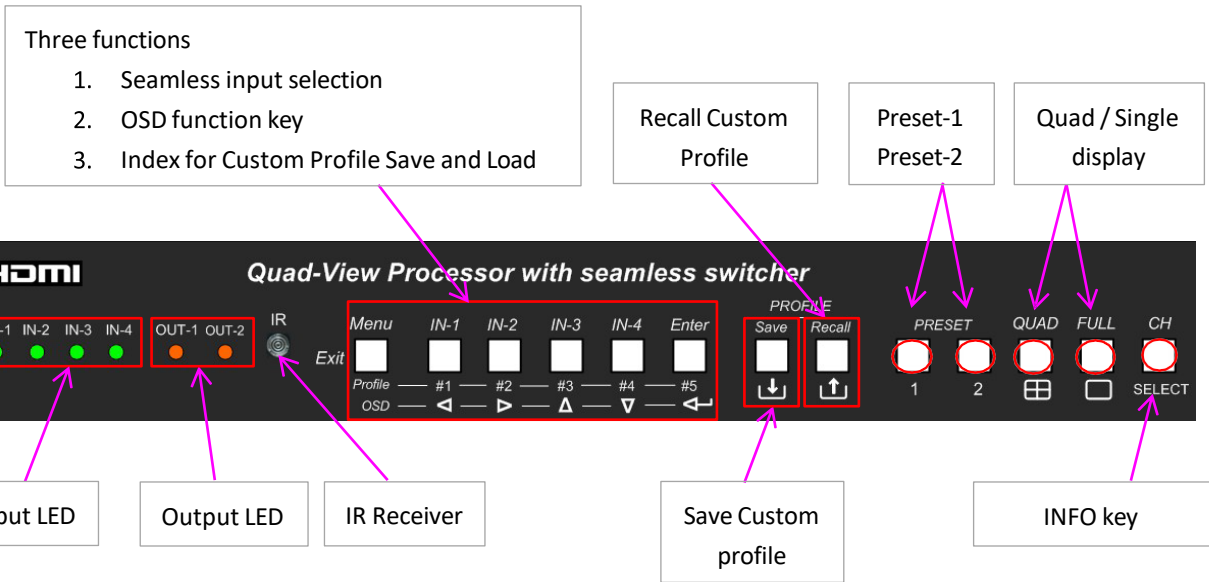
Application

- Digital signage
- Security & surveillance systems
- Education
- Conference room
- Presentation halls
- Video content post production
- Video editing studio

Outlook

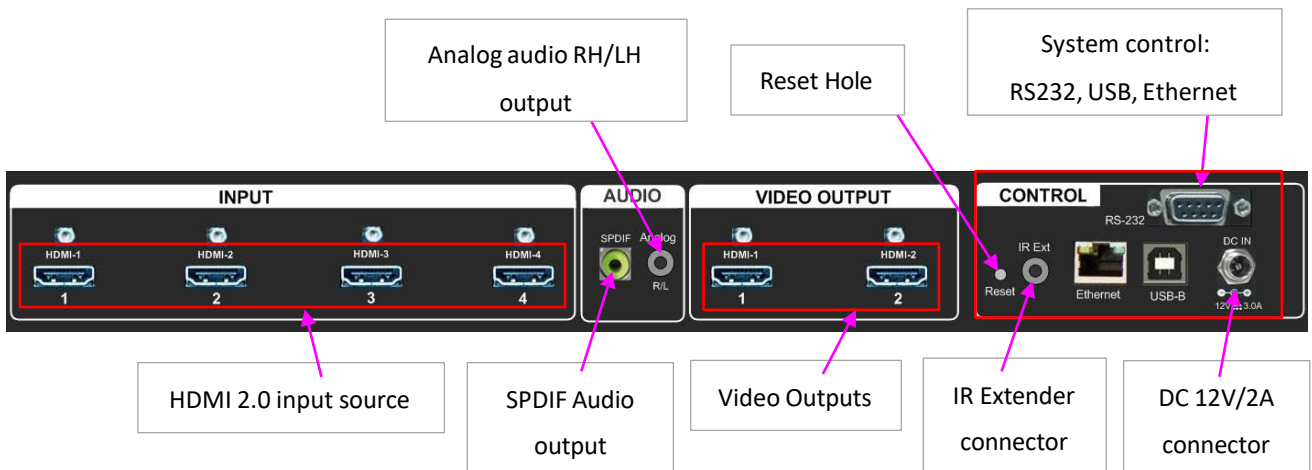


Front panel



Back panel

User can connect signal source to any of the input ports for two output ports.



Specifications

- ✧ Input ports: 4x HDMI 2.0. Max. input resolution: 4096*2160 @60Hz.
- ✧ Supports interleaved and progressive input signals with 4:2:0/4:2:2/4:4:4, 8/10-bit color.
- ✧ Supports CEA standard video timings with high end scaling up and down up to 600 MHz.
- ✧ Two simultaneous HDMI 2.0 output displays with the same output resolution, shared the same signal sources and display Windows.
- ✧ Each Window can select one input signal from any input port. The same signal source can be assigned to the two different windows.
- ✧ Each output display shows up to 4 Windows with flexible window location, resizing, scaling, positioning, cropping and color correction. PIP/POP and Overlapping are included.
- ✧ User can set Overlap priority in each output port separately.
- ✧ If two output ports select the same display Windows, it will show the same Window setup. If select different Windows, user can adjust Window setup independently.
- ✧ Support 16 Transition effects including Seamless, Fade-in, Fade-out, Dissolve and Wipe. Only Fade-in/Out is functional in multiple Windows mode switching.
- ✧ Seamless switching in source selection and display mode switching.
- ✧ Output signal: Progressive full color RGB 4:4:4.
- ✧ HDCP: V2.2/V1.4 compliant.
- ✧ Support xvYCC 8/10/12-bit wide color gamut input signal processing.
- ✧ 1-2 frame latency based on different application: 16.7ms-33.3ms (V=60Hz)
- ✧ Preset 14 output timings and 12 EDID from XGA to 3840*2400 @60 for each input port.
- ✧ Selectable OSD transparency and turn-off time.
- ✧ Image freeze, flip and upside down.
- ✧ Box ID for multiple boxed individual control.
- ✧ Standby mode to allow user cuts off output signal when no input signal is detected.
- ✧ Control: Front panel keypad, IR remote controller, RS232, USB, Ethernet, WebUI.
- ✧ 12 system presets and 20 custom Profile presets. The preset includes transition effect.
- ✧ Selectable high end video processing: 3:2:2 cadence, diagonal correction and noise reduction.
- ✧ High quality scaling engine for image scaling up and down in the range from XGA to 4k/2k.
- ✧ 3D motion adaptive de-interlace for interlaced input.
- ✧ Embedded HDMI audio, SPDIF digital and analog R/L 3.5mm Jack audio outputs. Each audio output can select independent audio source from the inputs.
- ✧ ESD Protection: ±15kV (Air-gap discharge), ±8kV (Contact discharge)
- ✧ DC power supply: DC adapter: 12V 2A (100V-240V), max. Power consumption: 22.5W, standby: 1.9W
- ✧ Working environment: 40 ° C, 10-90% RH
- ✧ Dimensions (Body only): 440mm*160mm*41mm (without protruding parts).
- ✧ Weight: 2.4kg (body only)
- ✧ CE/FCC/RoHS Certified
- ✧ 2 Year Warranty, extension package is available up to 5 years.

Prospect functions in the future

- ✧ UDP control through Ethernet.
- ✧ Chromakey function.
- ✧ Programmable background with customized picture and logo.

System Connection

Each display Window can select signal from any input port. Each output can display up to 4 windows. Each window can be located at any position with flexible resizing, cropping, aspect ratio, color correction and overlap priority setting. The Window displayed in two outputs must have the same Window setup.



Output ports configuration

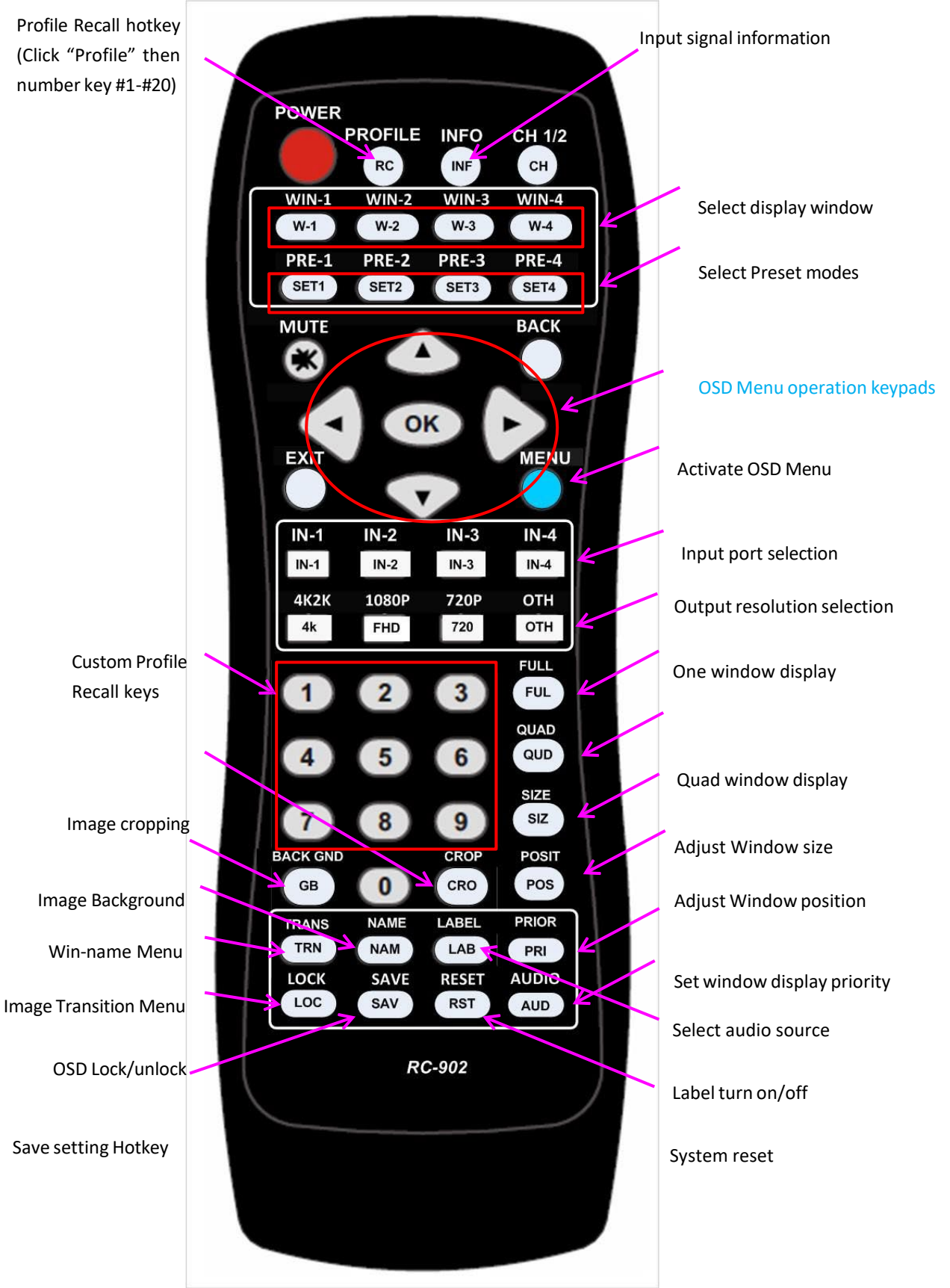
- OSD can only be showed in Output-1
- Each output can display up to 4 Windows.
- The Window position, size and cropping in two output ports will be the same.
- User can select different Windows for each output with different setup.
- If each output shows different Windows, user can flexibly manipulate the Windows without affecting another Output port.

Window Overlapping and priority setting

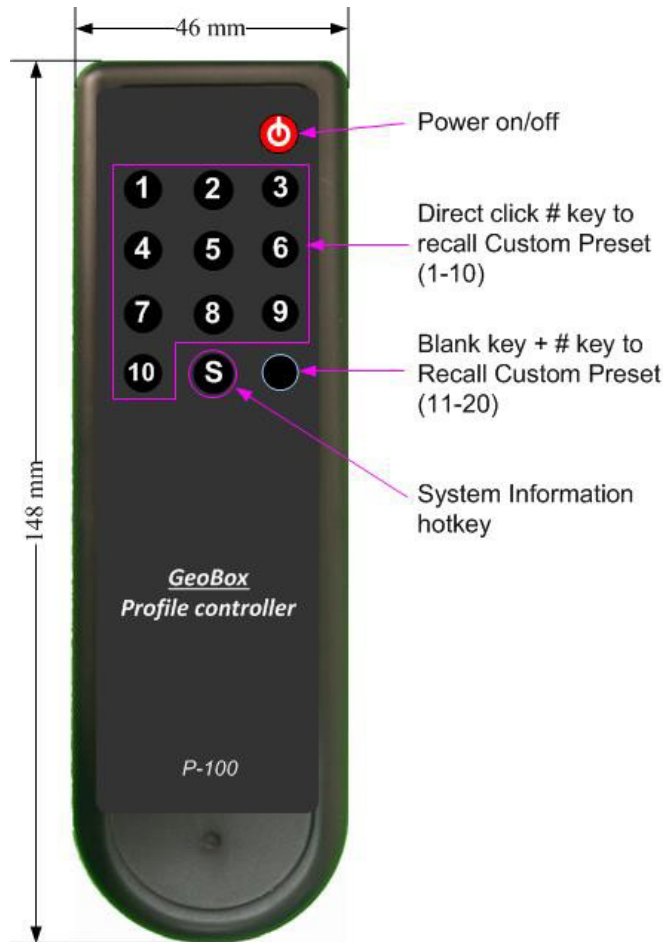


- 4 display Windows can be location at any location with overlapping. User can select the priority for overlapping.

RC-902 Controller for system Setup



P-100 Controller for User Preset modes recall (Optional)



- Directly click number keys 1-10 will recall Custom Profile 1-10.
- If click Blank key first, then click other number key, it can recall Custom Profile 11-20.
- Click "S" key will pop-up Input/Output and FW version system information.

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