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Ecler VEO-SWM44 Switcher 4x1 Presentation Switcher with VEOCast

Ecler VEO-SWM44 Switcher 4×1 Presentation Switcher with VEOCast Instruction Manual

Contents

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Product Information

- **Specifications**
    - **Model:** VEO-SWM44
    - **Product Type:** Presentation Switcher
    - **Resolution:** 4K
    - **Inputs:** 4 HDMI ports
    - **Output:** 1 HDMI port
    - **Feature:** VEOCast enabled

Product Usage Instructions

- **Important Safety Instructions**
    - Read the instructions carefully.
    - Keep the manual for reference.
    - Follow all warnings and instructions.
    - Avoid using near water or moisture.
    - Clean with a dry cloth only.
    - Ensure proper ventilation around the device.
    - Avoid placing near heat sources.
    - Do not tamper with the plug for safety reasons.
    - Avoid pinching or walking on the power cord.
    - Use only manufacturer-specified accessories.
    - Unplug during lightning storms or when not in use for a long time.
    - Refer servicing to qualified personnel.
- **Installation Instructions**
    - Connect up to 4 HDMI sources to the input ports of the switcher.
    - Connect the output HDMI port of the switcher to your display device.
    - Power on the switcher and your display device.

- Use the remote control or front panel buttons to switch between input sources.
- **Maintenance**
  - For optimal performance, maintenance should be performed by authorized Technical Services.

FAQs

- **Q: What should I do if I encounter a power issue with the switcher?**
  - **A:** Check the power cord and connections, ensure proper ventilation, and refer to the troubleshooting section in the manual.
- **Q: Can I connect non-HDMI devices to the switcher?**
  - **A:** It is recommended to use HDMI devices for best performance, but you can use converters for non-HDMI devices.
- **Q: How do I update the firmware of the switcher?**
  - **A:** Contact our customer support for guidance on firmware updates.

IMPORTANT REMARK

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

WARNING: SHOCK HAZARD - DO NOT OPEN
AVIS: RISQUE DE CHOC ÉLECTRIQUE - NE PAS OUVRIR

- The lightning flash with the arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.
- The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

- **WARNING** (If applicable): The terminals marked with the symbol " ⚡ " may be of sufficient magnitude to constitute a risk of electric shock. The external wiring connected to the terminals requires installation by an instructed person or the use of ready-made leads or cords.
- **WARNING:** To prevent fire or shock hazards, do not expose this equipment to rain or moisture.
- **WARNING:** An apparatus with Class I construction shall be connected to a main socket outlet with a protective earthing connection.

IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.

5. Do not use this apparatus near water.

6. Clean only with a dry cloth.

7. Do not block any ventilation openings. Install per the manufacturer's instructions.

8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for the replacement of the obsolete outlet.

10. Protect the power cord from being walked on or pinched particularly at the plugs, convenience receptacles, and at the point where they exit from the apparatus.

11. Only use attachments/accessories specified by the manufacturer.

12. Unplug the apparatus during lightening sorts or when unused for long periods.

13. Refer all servicing to qualified personnel. Servicing is required when the apparatus has been damaged in any way, such as a power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

14. Disconnecting from mains: Switching off the POWER switch all the functions and light indicators of the amplifier will be stopped, but fully disconnecting the device from mains is done by unplugging the power cord from the mains input socket. For this reason, it always shall remain readily operable.

15. Equipment is connected to a socket outlet with an earthing connection employing a power cord.

16. The marking information is located at the bottom of the apparatus.

17. The apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, according to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used per the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.
WARNING: This product must not be discarded, under any circumstance, as unsorted urban waste. Take it to the nearest electrical and electronic waste treatment centre.
NEEC AUDIO BARCELONA, S.L. accepts no liability for any damage that may be caused to people, animals or objects due to failure to comply with the warnings above.

IMPORTANT NOTE

- Thank you for choosing our VEO-SWM44 switcher. It is very important to carefully read this manual and to fully understand its contents before making any connection to maximize your use and get the best performance from this equipment.

- To ensure optimal operation of this device, we strongly recommend that its maintenance be carried out by our authorised Technical Services.

- All ECLER products are covered by warranty, please refer to **www.ecler.com** or the warranty card included with this product for the period of validity and conditions.

INTRODUCTION

VEO-SWM44 is a compact 4K presentation switcher that includes two HDMI 2.0, a USB-C and a BYOD wireless input via VEOCast technology and a HDMI 2.0 output, supporting resolutions up to 4K/60Hz 4:4:4 HDR10 and Dolby Vision. An integrated audio de-embedder provides stereo analogue balanced outputs on Euroblock connectors. VEO-SWM44 includes two USB 3.0 type B and 2 USB 3.0 type A ports to support soft codec applications and external devices like webcam and KVM kits. Input selection is available via auto-switching function, front panel buttons or RS-232. Display control is available via front panel buttons through CEC or RS-232. It also features smart EDID management and HDCP 2.2 support.

Features

- Bandwidth up to 18Gbps, resolution up to 4k @60hz, YUV, 4:4:4, HDR10 and Dolby Vision.
- Wireless BYOD (bring your device) capability via VEOCast (for macOS, iOS, Android and Windows devices).
- Provides up to 60W power supply, USB data and 4K video over USB-C.
- HDMI Audio is de-embedded via a balanced analog audio port on Euroblock connectors.
- HDCP2.2 Compliant.
- EDID Smart Management (via Dip-switch).
- Switching function via front panel, auto-switching function, RS-232.
- Configuration via web page (WiFi).
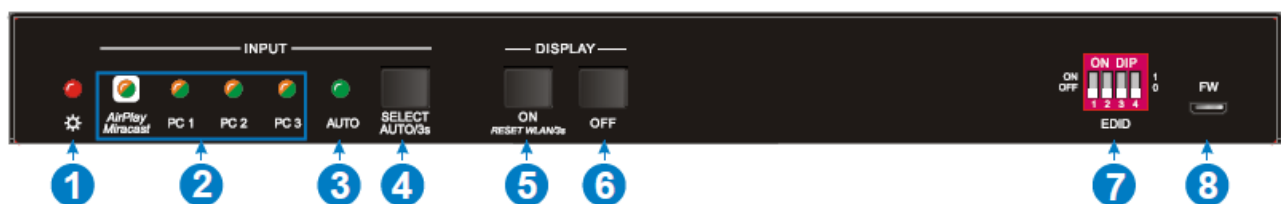- CEC and RS-232 commands for display control.

PACKAGE CONTENTS

- 1 x HDMI 4×1 4K Presentation Switcher
- 2 x Mounting Ears
- 4 x Rubber feet
- 1 x 5-pin Euroblock connector
- 1 x RS-232 cable (DB9 to 3-pin Euroblock)
- 1 x Wireless Antenna
- 1 x 24VDC/5A International Power Supply
- 1 x Quick Start and Warranty sheet

## PANEL DESCRIPTION

Front Panel

1.

    Power LED Indicator: The LED illuminates red when power is applied.

2. **Input Status LED indicators:** The LED illuminates orange when the video signal is detected on the corresponding input channel, and it will be off when there is no signal. It will illuminate green when the video

signal is chosen as the input source.

3. **AUTO LED:** The LED illuminates green when the switcher is in auto-switching mode, and it will be off when exits the auto-switching mode.

4. **SELECT AUTO/3s:** Press the button to select the input source or press and hold it for at least 3 seconds to enable auto-switching mode. Please refer to the Front Panel Control chapter for more details about switching rules.

5. **DISPLAY ON:** Press the button to send the CEC "Display On" command to turn on the display. Note that the RS-232 command needs to be set by the user. If an exception occurs at the VEOCast input, press and hold the button for at least 3 seconds to reset it.

6. **DISPLAY OFF:** Press the button to send the "Display Off" command to turn off the display. Note that the RS-232 command needs to be set by the user. Long press 3s to enable/disable wireless input.
    - **Note:** When wireless input is disabled, the VEOCast input will be skipped on manual select seconds to reset it.

7. **EDID:** 4-pin DIP Switch for EDID Settings. Please refer to chapter EDID Settings for more details.

8. **FW:** Micro USB port for firmware upgrade.

Rear Panel
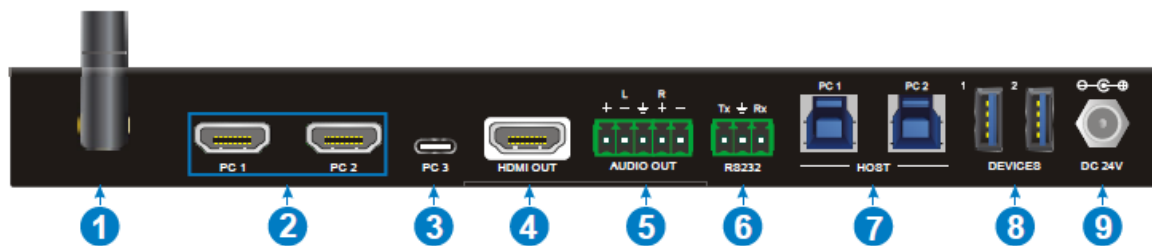
1. **VEOcast Antenna connection:** Connect to the external antenna.
2. **PC1 – PC2 Input:** Two type-A female HDMI input ports to connect HDMI source devices.
3. **PC3 Input:** Type-C USB with charging capability to connect devices with USB-C outputs.
   Note: USB-C Thunderbolt™ 4 or DP Alt mode compatible and at least a 60W power charging cable is recommended to ensure optimal performance.
4. **HDMI Output:** Type-A female HDMI output port to connect the display device.
5. **AUDIO OUT:** 5-pin Euroblock for audio de-embedding from HDMI output.
6. **RS-232:** 3-pin Euroblock to connect RS-232 controllers (e.g. PC) or third-party devices controllable via RS-232 commands.
7. **HOST (PC1 & PC2):** Two type-B USB 3.0 ports to connect PC1 and PC2 individually to access the USB peripherals connected to "Devices 1&2)".
8. **DEVICE (1&2):** Two type-A USB ports to connect USB devices to each PC1 or PC2 (e.g. KVM, Webcam…):
    - When the HDMI PC1 is selected as the video input source, the USB devices are switched to be controlled by the PC1 host.
    - When the HDMI PC2 is selected as the video input source, the USB devices are switched to be controlled by the PC2 host.
    - When the USB-C PC3 is selected as the video input source, the USB devices are switched to be controlled by the USB-C PC3. In this scenario audio, video and further data travel within the same wire.
    - When the VEOCast is selected as the video input source, the USB peripherals are not available for use.

These devices are only accessible through wired HDMI and USB-C connections.

9. **DC 24V Power Connector:** Plug in the included 24V DC power supply.

VEOCast Connection

VEOCast is a multiplatform wireless technology protocol allowing for two devices to detect and connect. Once connected, the source can be mirrored into the sink display without requiring additional applications. Devices like macOS, iOS, Android and Windows 10 can be used as input sources. When switching to the VEOCast input by pressing the "SELECT AUTO/3s" button, the Wi-Fi SSID and password will be shown on the display device as follows.
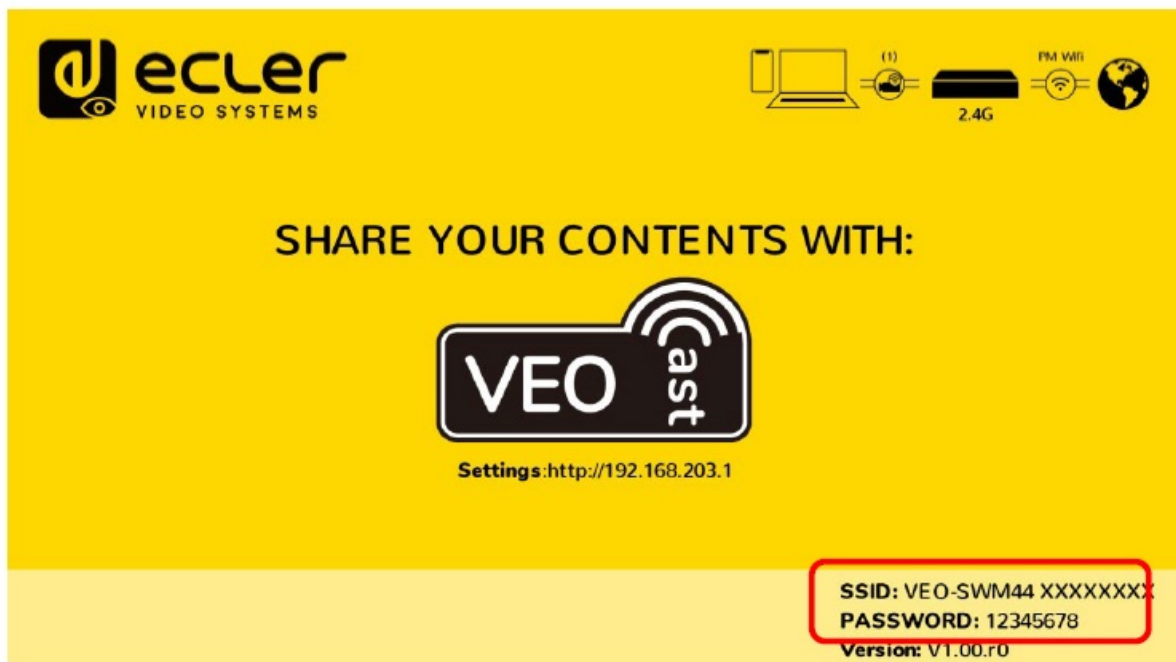

There are two working modes:

- **Screen sharing using the switcher internal wireless hot-spot**
    - A device will be able to share its screen when connected to the internal hot spot of the switcher.
    - In this scenario, the source will only be able to share its screen wirelessly to VEO-SWM44 but it won't be able to access the internet.

Screen sharing with Apple devices (Airplay)

1. Connect a compatible macOS or iOS device to VEO-SWM44 SSID using WiFi settings
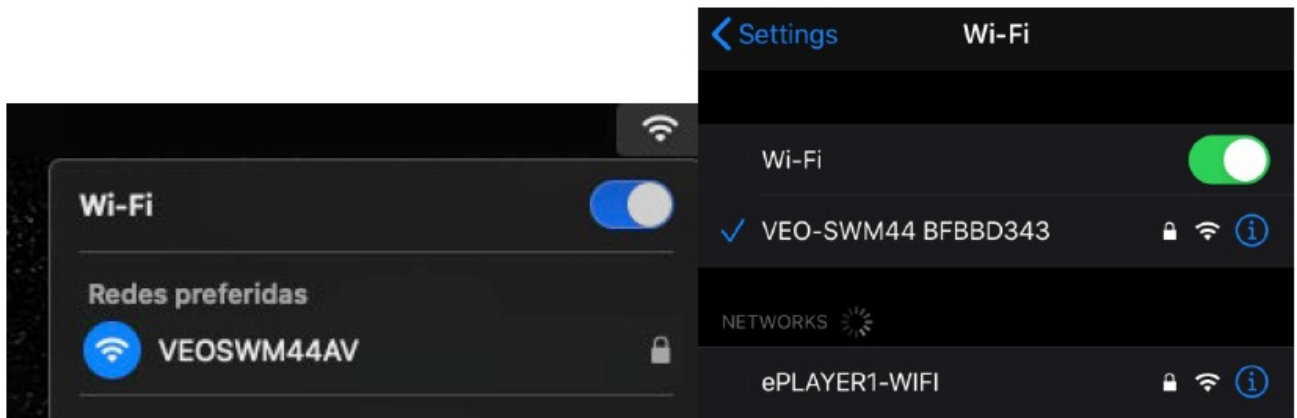
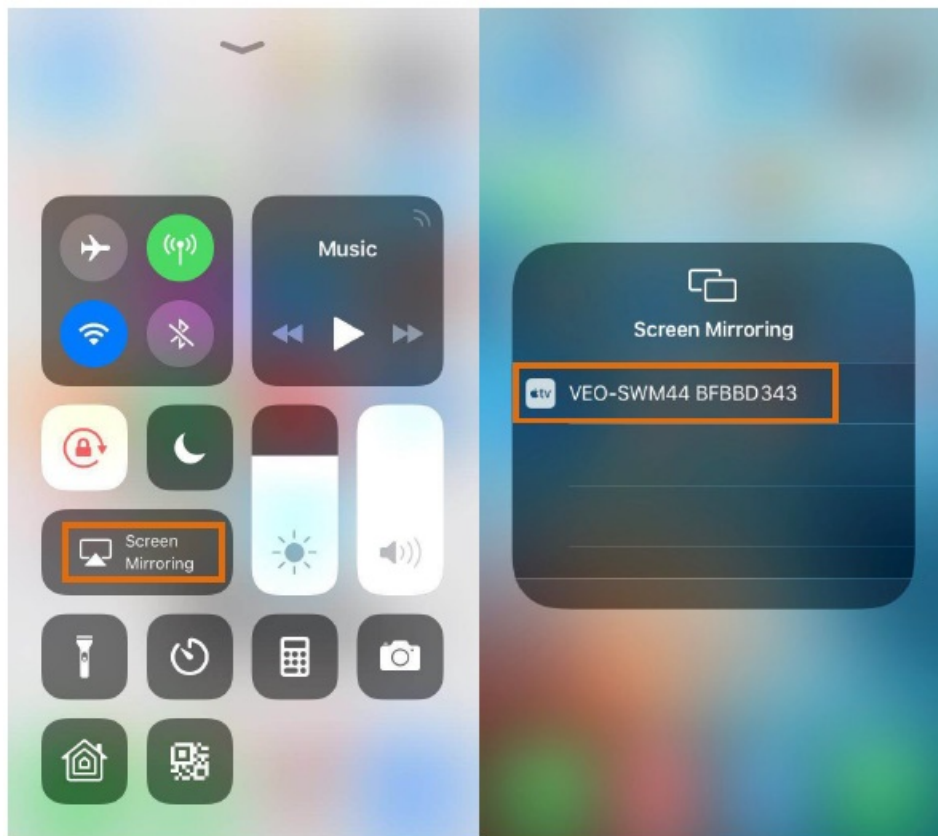

macOS   iOS

2. Slide the screen to enter Control Center, click on Screen Mirroring and then the VEO-SWM44 SSID to start casting.

macOS

iOS

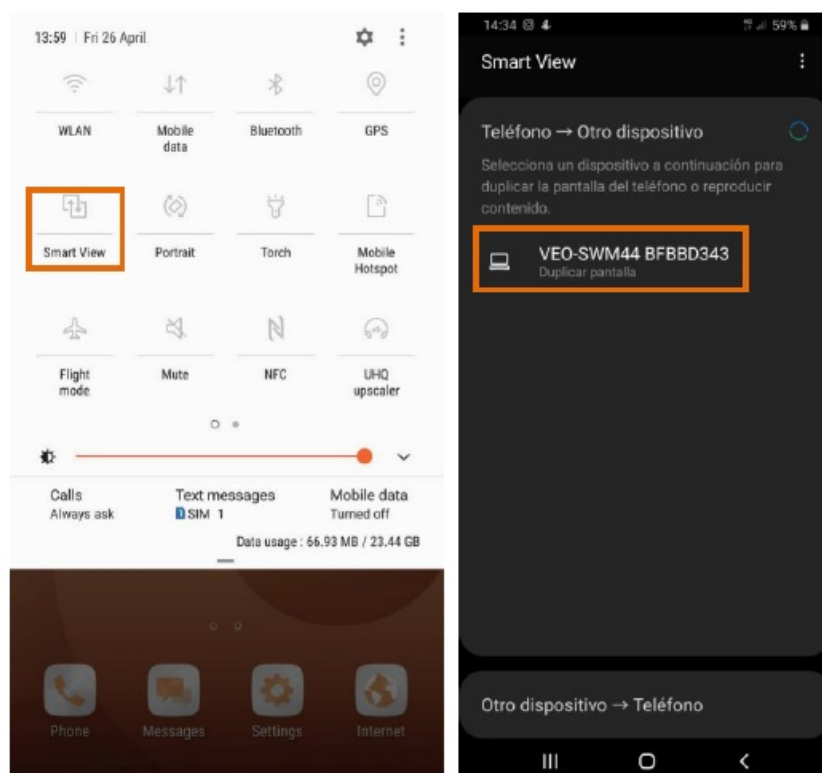**Screen sharing with Android Devices**

1. Connect your Android device to VEO-SWM44 SSID using Wi-Fi settings
2. Slide down the Android screen and click on the Android Screen Mirroring options (Smart View for Samsung in this example) and click on VEO-SWM44 to start casting.

- **Note:** in case your smartphone doesn't include a Screen Mirroring app, you can download it from the Google Play Store.

Screen sharing with Windows 10

1. Press ⊞ + P and then click "Connect to a wireless display" in the pop-up window.
2. Click on VEO-SWM44 to start casting.
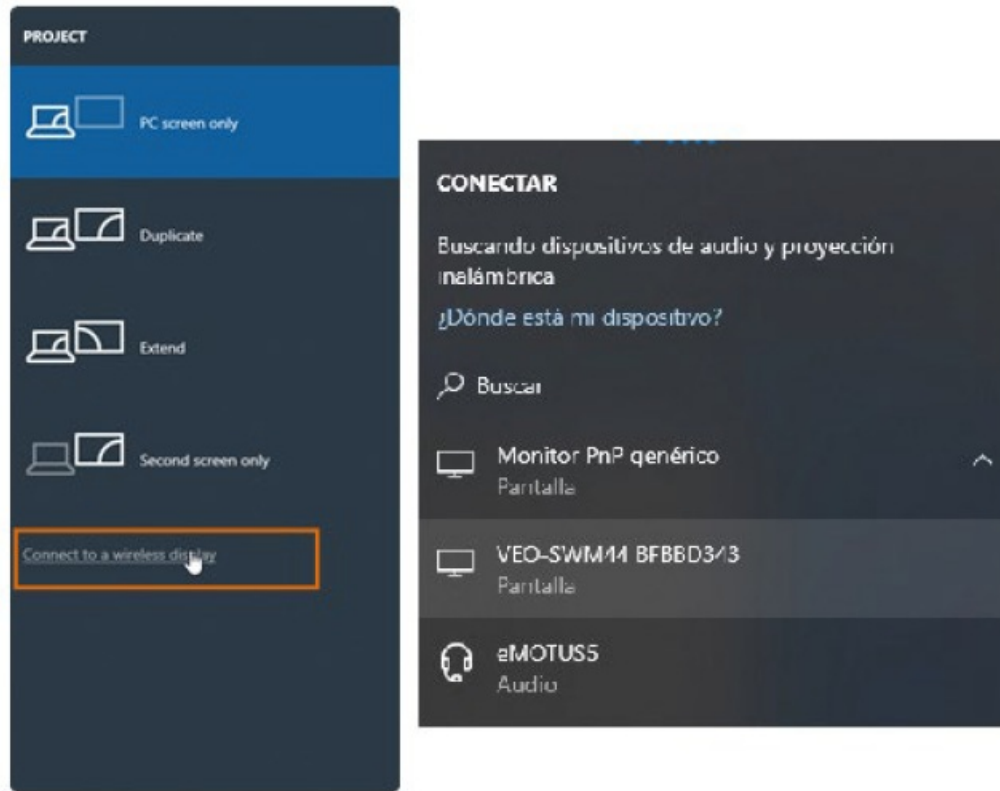
Screen sharing when the source and switcher are connected to an existing network

- In this scenario, both the VEO-SWM44 and the source device need to be previously connected to a common wireless network when screen sharing.
- To do that, first, it's required to enter the network credentials on the settings web page. See the Web settings chapter for more information,
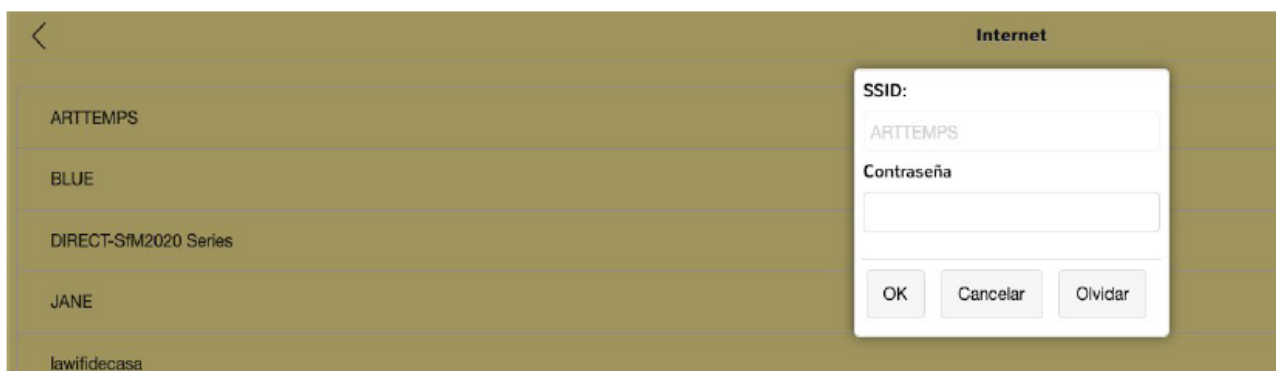
- If both the source device and VEO-SWM44 are connected to the same network, the source device will be able to share content with VEO-SWM44 without the need to previously connect to the switcher's internal hot-spot.
- In this case, the source device will also be able to browse the internet as long as the common existing network has access to it.
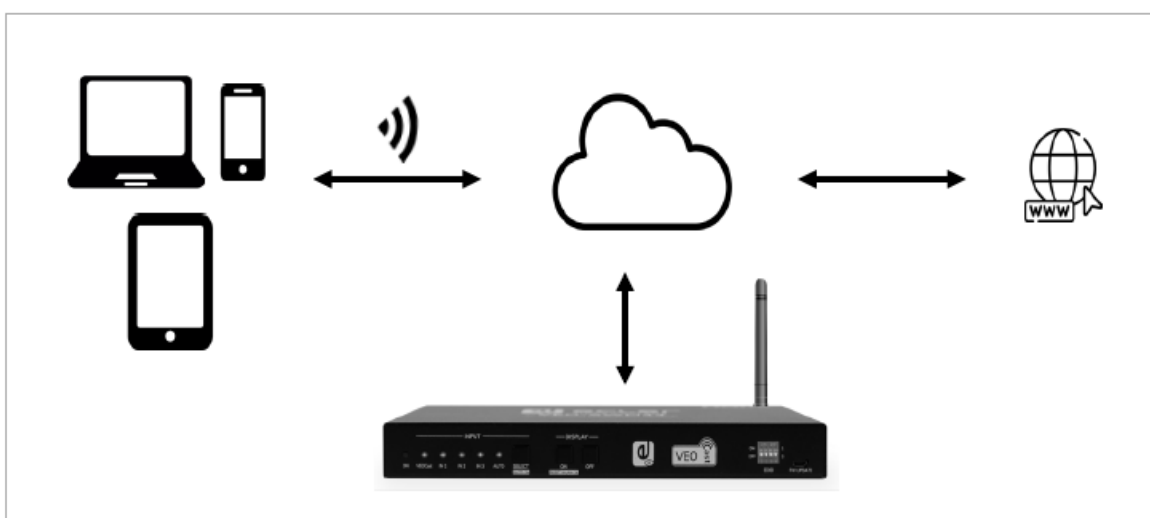
WEB SETTINGS

Once connected to the VEO-SWM44 SSID, it will be possible to customize the device settings by entering the web page available at 192.168.203.1 (Default IP).

The main menu will appear as follows:

Settings	↻
🛜 Internet	›
🖼 Resolution	1920x1080_60P ›
[ ] Display mode	Fit to screen ›
🌐 Language	English ›
🔒 Password	12345678 ›
Device Name	VEO-SWM44 BFBBD343 ›
Broadcast	›
Compatible Mode	›
Hide IP Settings	›
WiFi Channel	›
VEOCast	Auto ›
Upgrade	›
⏻ Reboot	›
Reset to factory default	›
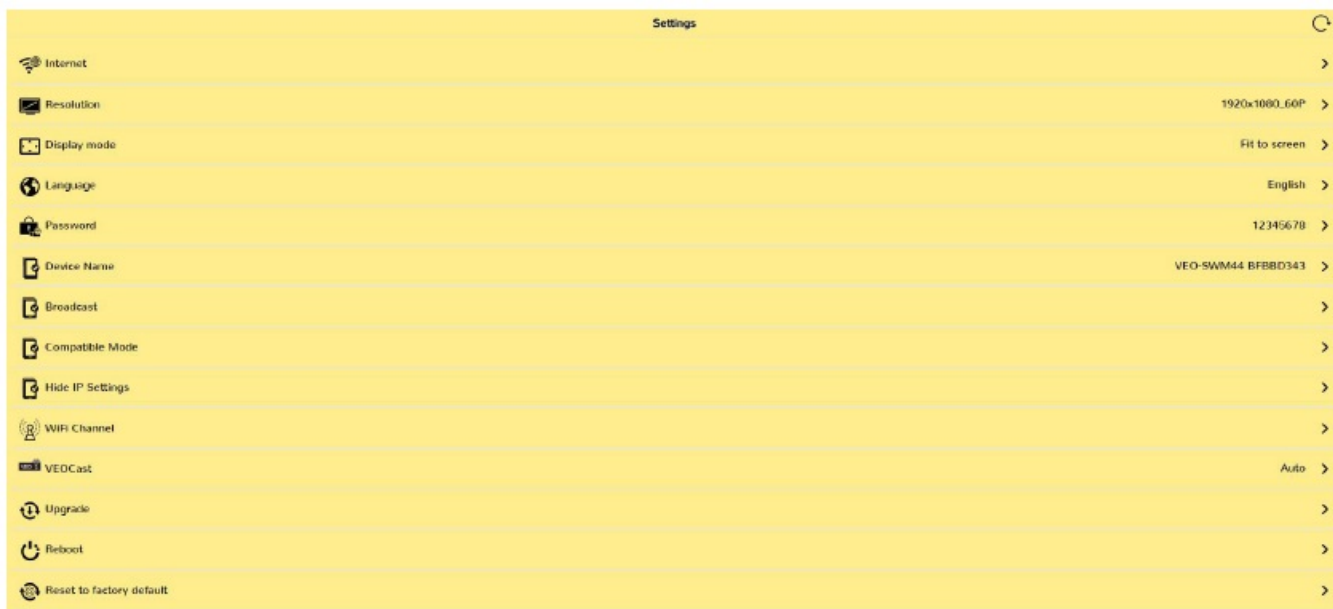
Network settings can be consulted at the bottom of the in-built WEB GUI settings page.

SSID : VEO-SWM44 BFBBD343   Password : 12345678
MAC : D0:C0:BF:BB:D3:43   IP : 192.168.203.1
Firmware Version : 1.0.2   WiFi Channel : 11

Internet

- This menu will show all the WiFi networks available to connect your VEO-SWM44 to an existing network (DHCP mode).
- Manual setup is also available through the "add network" tab.

Seguridad

WPA/WPA2   OPEN

SSID:

Resolution

- This menu allows you to choose the output video resolution.

1024x768_60P	⦾
1280x800_60P	⦾
1920x1200_60P	⦾
1280x720_60P	⦾
1920x1080_60P	⬤
3840x2160_30P	⦾
1920x1080_60P RGB	⦾
3840x2160_30P RGB	⦾

Display mode

- With this option, it is possible to adapt the image shown choosing between "Fit to screen" and "Zoom to screen" adjustments.

Fit to screen	⬤
Zoom to screen	⦾

OK   Cancel

Language

- The settings menu is available in many languages selectable through this section.

Password

- This section allows changing the password of the VEOCast connection.

Device Name

- This allows you to customize the name of the device that appears on the screen.

Broadcast

- This allows us to hide the VEO-SWM44 internal WiFi hotspot. When this mode is activated, manual access is required to enter the switcher's WiFi SSID and its WEB GUI page.
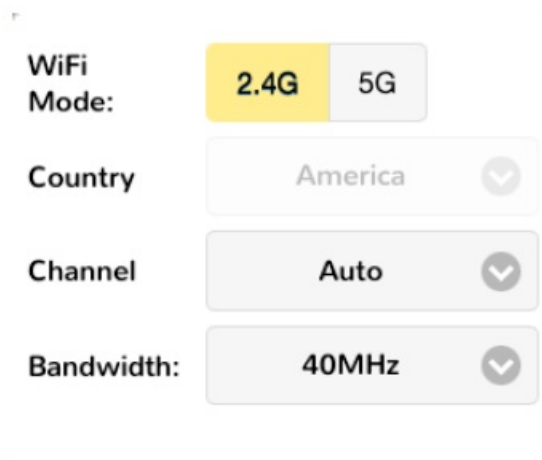
Compatible Mode

- It optimizes the performance of devices with older HDCP versions that could cause issues while screen sharing.

Hide IP Settings

- With this setting, it is possible to hide the IP address shown on the welcome screen of the device to avoid unwanted access to the settings page.

WiFi Channel

- With this setting, it is possible to set the preferred WiFi band and channels.

VEOCast

- This option will bring an optimized performance of the screen-sharing feature due to the differences present in each of the most common operating systems. "Auto" mode is the recommended setting.

Upgrade

- This tab will look for the latest firmware available. If an Internet connection is available, the automatic update service will be automatically enabled. It is completely required that the VEO-SWM44 is connected to the internet to complete this process.

FRONT PANEL CONTROL

Manual Switching
When the switcher is in manual switching mode, pressing the "SELECT AUTO/3s" button repeatedly will navigate between the four video inputs. Each corresponding source LED will light green immediately.
Auto Switching
Pressing and holding the "SELECT AUTO/3s" button for at least three seconds will enable auto-switching and turn the "AUTO" LED green. Auto Source can work either by Hot Plug or TMDS detection. See chapter RS-232 Control to learn how to switch between modes. When auto switching enabled, the switcher will switch according to the following rules:

- When a new input is connected, the switcher automatically selects it. The input source can also still be switched

manually.

- When an active displayed source is removed, the switcher will switch back to the first active input following the established input priorities. The default order of priority is PC1 > PC2 > PC3> VEOCast. It is also possible to rearrange the priority order using the according control commands.
- See Chapter RS-232 Control for further information.
- If there's a power cut, the switcher will reconnect to the last active input selected before shutdown upon power restoration.
- If AUTO mode is deactivated, the current input source will not be changed.
- **Note:** VEOCast input is not considered to be active when there is no screen-sharing connection.

Display Control

- **Manual Control:** Pressing the "DISPLAY ON/OFF" buttons on the front panel will simultaneously send RS-232 and CEC commands to turn on/off the display device.
- **Auto Control:** When detecting a video input signal (Hot Plug Detection), the switcher will automatically send CEC and RS-232 commands to turn on the display device.
- Please refer to the chapter Special Commands for more details regarding RS-232 remote control.

EDID Settings

- The Extended Display Identification Data (EDID) is used by the source device to match its video resolution with the connected display.
- The DIP switch on the front panel can be used to set the EDID to a fixed value to ensure compatibility with video resolution.
- The switch represents "0" when in the lower (OFF) position, and it represents "1" while putting the switch in the upper (ON) position.

- **Note:** The EDID DIP switch is only used for setting the EDID of the HDMI source device, and the USB-C source device will automatically gain the EDID of a display device.

Switch Status	Video Resolution	Audio Format
0000	EDID Pass-through	
0001	1280×720@60Hz	Stereo
0010	1920×1080@60Hz DVI	–
0011	1920×1080@60Hz 8bit	Stereo
0100	1920×1080@60Hz 8bit	High Definition
0101	1920×1200@60Hz 8bit	Stereo
0110	3840×2160@30Hz 8bit	Stereo
0111	3840×2160@30Hz 8bit	High Definition
1000	3840×2160@30Hz 8bit HDR	Stereo
1001	3840×2160@60Hz Deep Color	Stereo
1010	3840×2160@60Hz Deep Color HDR	High Definition

Switch Status	EDIT	Note
1011	User-defined EDID 1	
1100	User-defined EDID 2	The five user-defined EDIDs can be uploaded by sending the RS-232 command "#UPLOAD_USER_EDID [PARAM]", please refer to the chapter *Function Setting* for more details.
1101	User-defined EDID 3	
1110	User-defined EDID 4	
1111	User-defined EDID 5	

- **Stereo:** LPCM 2CH.
- **High Definition Audio:** LPCM 8Ch, AC-3 6Ch, DTS 5.1, Dolby Digital5.1, DTS-HD7.1, Dolby TrueHD 7.1
- **Deep Colour:** 8bit, 10bit, 12bit

RS-232 Control

- Connect the RS-232 port to the control device (e.g. PC, Third-party control system) using a cable with a DB9 connector.
- The switcher can be controlled by sending the RS-232 commands listed below.

RS-232 Communication protocol

- **The serial parameters for a correct transmission are:**
  - **Baud rate:** 9600
  - **Data bit:** 8

- **Stop bit:** 1
- **Parity bit:** none

List of commands

- The ending mark of the command is "<CR><LF>".

Command	Description	Command & Feedback Example
#GET_FIRMWARE_VE RSI ON	Get the firmware version.	@V1.0.0
#FACTORY_RESET	Restore to factory defaults.	@FACTORY_RESET
#REBOOT	System reboot.	@REBOOT
		#HELP SET_AV
		@SELECT VIDEO AND AU DIO INPUT PORT
	Get the command details.	#SET_AV PARAM1
#HELP [PARAM]	l [PARAM]=Null; Get all command list. l [PARAM]=Any command; Get the Englis h description and usage of the command.	PARAM=A,PC1,PC2,PC3 A – VEOCast PC1 – HDMI1
		PC2 – HDMI2
		PC3 – TYPE-C
#SET_RST_WIRELESS	Reset VEOCast power	@RESET WIRELESS DEVICE
#SET_KEYPAD_LOCK 1	Lock front panel buttons.	#SET_KEYPAD_LOCK 1
#SET_KEYPAD_LOCK 0	Unlock (D efault).	front	panel	buttons	#SET_KEYPAD_LOCK 0
#GET_KEYPAD_LOCK	Get the locking status of the front panel bu ttons.	@KEYPAD_LOCK 1

#SET_RS232_BAUD PARAM	Set the RS232 baud rate.	@RS232_BAUD 9600
	· [PARAM] = 00~06 (Baud Rate)	
	00 – 115200	
	01 – 57600	
	02 – 38400	
	03 – 19200	
	04 – 9600	
	05 – 4800	
	06 – 2400	

Source Switching

Command	Description	Command & Feedback Example
#SET_AV A	Select the input source: VEOCast (Default).	@AV VEOCast
#SET_AV PC1	Select the input source: PC1.	@AV PC1
#SET_AV PC2	Select the input source: PC2.	@AV PC2
#SET_AV PC3	Select the input source: PC3.	@AV PC3
#GET_AV	Get the current input source.	@AV PC1
#SET_AUTO_SWITCH 0	Disable auto-switching mode.	@AUTO_SWITCH 0
#SET_AUTO_SWITCH 1	Enable auto-switching mode.	@AUTO_SWITCH 1
#GET_AUTO_SWITCH	Get the auto-switching status.	@AUTO_SWITCH 1
#SET PRIORITY:X>X>X>X	Set the input priority[X]: 0 – Wireless input, 1 – HDMI input 1, 2 – HDMI input 2, 3 – Type-C.	SET PRIORITY :1>2>3>0
#GET PRIORITY	Get the current input priority	PRIORITY :1>2>3>0
#SET_WIRELESS_INPUT X	Turn On/Off the Airplay/Miracast input X=0 Off X=1 On default	@WIRELESS INPUT ON @WIRELESS INPUT OFF
#GET_WIRELESS_INPUT	Check the status of the Airplay/Miracast input	@WIRELESS INPUT ON @WIRELESS INPUT OFF
#SET_DETECT_MODE [PARAM]	Set the detecting mode for auto switching :[PARAM] = 0, 1 0 = TMDS, 1 = 5V(Default)	@DETECT_MODE 0

CEC/RS-232 Function Setting

The ending mark of the command is "<CR><LF>".

Command	Function	Command & Feedback Example
#SET_SYNCACT_CEC 1	Enable the function of automatically sending CEC commands. When detecting a video input signal or not detecting any video signal, the switcher will automatically send the corresponding CEC command to control the display device.	@SYNCACT_CEC 1
#SET_SYNCACT_CEC 0	Disable the function of automatically sending CEC commands.	@SYNCACT_CEC 0
#GET_SYNCACT_CEC	Get the function setting status of automatically sending CEC commands.	@SYNCACT_CEC 1
#SET_SYNCACT_RS232 1	Enable the function of automatically sending RS-232 commands. When detecting a video input signal or not detecting any video signal, the switcher will automatically send the corresponding RS-232 command to control the display device.	@SYNCACT_RS232 1
#SET_SYNCACT_RS232 0	Disable the function of automatically sending RS-232 commands.	@SYNCACT_RS232 0
#GET_SYNCACT_RS232	Get the function setting status of automatically sending RS-232 commands.	@SYNCACT_RS232 1
#SET_DISPLAY 1	Power on a display device (Simultaneously sending CEC and RS-232 commands to the display device).	@DISPLAY 1
#SET_DISPLAY 0	Power off the display device (Simultaneously sending CEC and RS-232 commands to the display device).	@DISPLAY 0

Function Setting

The ending mark of the command is "<CR><LF>".

Command	Description	Command & Feedback Example

#SET_OFF_CNT 1	Set the number of sending DISPLAY OFF command to 1 time.	@OFF_CNT 1
#SET_OFF_CNT 2	Set the number of sending DISPLAY OFF command to 2 times.	@OFF_CNT 2
#GET_OFF_CNT	Get the number of sending DISPLAY OFF command.	@OFF_CNT 1
#SET_OFF_DELAY [PARAM]	Set the delay time of sending the DISPLAY OFF command to [PARAM]. [PARAM]=5~100 (1=100ms).	#SET_OFF_DELAY 5
		@OFF_DELAY 5
#GET_OFF_DELAY	Get the delay time of sending the DISPLAY OFF command.	@OFF_DELAY 5
#SET_OUTPUT_HDCP [PARAM]	Set the HDCP mode of the output port to [PARAM]. [PARAM]=1~3: 1 – ACTIVE 2 – ON 3 – OFF	#SET_OUTPUT_HDCP 1
		@OUTPUT_HDCP 1
#GET_OUTPUT_HDCP	Get the HDCP mode of the output port.	@OUTPUT_HDCP 1
#SET_SW_HDCP_MODE [PARAM]	Switch the input ports to support HDCP2.2 status. [PARAM]= 0/1. 0 – UNSUPPORT HDCP2.2 1 – SUPPORT HDCP2.2	#SET_SW_HDCP_MODE 1
		@SW_HDCP_MODE 1
#GET_SW_HDCP_MODE	Get the HDCP2.2 status of input ports.	@SW_HDCP_MODE 1
#UPLOAD_USER_EDID [PARAM]	Upload the user-defined EDID [PARAM]. PARAM = 1 ~ 5 1 – User-defined EDID 1 2 – User-defined EDID 2 3 – User-defined EDID 3 4 – User-defined EDID 4 5 – User-defined EDID 5 When the command is applied, the system prompts to upload the EDID file (.bin). The operation will be cancelled in 10 seconds.	#UPLOAD_USER_EDID 1
		@USER_EDID 1 READY PLEASE SEND EDID DATA IN 10S OK/ERROR

#SET_DTIME [PARAM1]: [PARAM2]	When not detecting the video input signal, set the auto power-off time of the display device to [PARAM1]: [PARAM2]. The default time is 10 minutes. [PARAM1]=0~30 minutes. [PARAM2]=0~1800 seconds.	#SET_DTIME 1:30
		@DTIME 1:30
#GET_DTIME	Get the auto power-off time of the display device.	@DTIME 30:0

Special Commands

Note: The below commands don't need an ending mark.

Command	Description	Command & Feedback Example
	Set the ASCII RS-232 command **XXXX** to be sent to control the third-party device when the **DISPLAY ON** button is pressed.	#SET_ON_05_30:1234
		567
#SET_ON_[PARAM1]_	l [PARAM1] = 00~06 (Baud Rate) 00 – 115200	@BAUDRATE: 4800
[PARAM2]: XXXX	01 – 57600	@DELAY TIME: 30 s
	02 – 38400	@DISPLAY ON TO
	03 – 19200	
	04 – 9600	
	05 – 4800	SEND:1234567
	06 – 2400	
	l [PARAM2] = 00~99. The delay time of sending the command.	
	l XXXX: Any ASCII code (up to 48 bytes).	

Command	Description	Command & Feedback Example
	Set the HEX RS-232 command **XX XX** to be sent to control the third-party device when the **DISPLAY ON** button is pressed.	#SET_H_ON_05_30:31
		32 33 34 35
#SET_H_ON_[PARAM1	l [PARAM1] = 00~06 (Baud Rate) 00 – 115200	@BAUDRATE: 4800
]_ [PARAM2]: XX XX	01 – 57600	@DELAY TIME: 30 s
	02 – 38400	@DISPLAY ON HEX TO
	03 – 19200	SEND:31 32 33 34 35
	04 – 9600	
	05 – 4800	
	06 – 2400	
	l [PARAM2] = 00~99. The delay time of sending the command.	
	l XX XX: Any HEX code (0-9, A; up to 20 bytes. It must have a blank between 2 different XX).	
	Set the ASCII RS-232 command **XXXX** to be sent to control the third-party device when the **DISPLAY OFF** button is pressed.	#SET_OF_05_30:ABCD
		EGG
#SET_OF_[PARAM1]_	l [PARAM1] = 00~06 (Baud Rate) 00 – 115200	@BAUDRATE: 4800
[PARAM2]: XXXX	01 – 57600	@DELAY TIME: 30 s
	02 – 38400	@DISPLAY OFF TO
	03 – 19200	SEND:ABCDEFG
	04 – 9600	
	05 – 4800	
	06 – 2400	
	l [PARAM2] = 00~99. The delay time of sending the command.	
	l XXXX: Any ASCII code (up to 48 bytes).	

Command	Description	Command & Feedback Example
	Set the HEX RS-232 command **XX XX** to be sent to control the third-party device when the **DISPLAY OFF** button is pressed.	#SET_H_OF_05_30:41
		42 43 44 45
#SET_H_OF_[PARAM1]_ [PARAM2]: XX XX	l [PARAM1] = 00~06 (Baud Rate) 00 – 115200 01 – 57600 02 – 38400 03 – 19200	@BAUDRATE: 4800 @DELAY TIME: 30 s
		@DISPLAY OFF HEX
		TO SEND:41 42 43 44
	04 – 9600 05 – 4800 06 – 2400 l [PARAM2] = 00~99. The delay time of sending the command. l XX XX: Any HEX code (0-9, A; up to 20 bytes. It must have a blank between 2 different XX).	45

FIRMWARE UPGRADE

When the device is connected to the internet, the firmware update will be done automatically.
In case of a manual update, the following steps should be followed:

1. Prepare the latest upgrade file (.bin) and rename it as "FW_MERG.bin" on PC.
2. Power off the switcher and connect the FW port of the switcher to the PC with a USB cable.
3. Power on the switcher, and then the PC will automatically detect a U-disk named "BOOTDISK".
4. Double-click the U-disk, and a file named "READY.TXT" will be shown.
5. Directly copy the latest upgrade file (.bin) to the "BOOTDISK" U-disk.
6. Reopen the U-disk to check the filename "READY.TXT" whether automatically becomes "SUCCESS.TXT", if yes, the firmware was updated successfully, otherwise, the firmware updating failed, the name of the upgrade file (.bin) should be confirmed again, and then follow the above steps to update again.
7. Remove the USB cable after the firmware upgrade.
8. After the firmware upgrade, the switcher should be restored to factory default by sending command.

TROUBLESHOOTING & MAINTENANCE

Problems	Potential Causes	Solutions
Output image with white noise.	Bad quality of the connecting cable	Try another high-quality cable.
	Fail or lose connection	Make sure the connection is good.
	HDCP issues	Check compatibility
No output image when switching	No signal at the input/output end.	Check if there is any signal at the input/ output end.
	EDID issues	Check resolutions compatibility
	Fail or lose connection.	Make sure the connection is good.
The POWER indicator doesn't work or does not respond to any operation	Fail connection	Make sure the power cord connection is good.
	Power Supply is damaged	Check the power supply
Cannot control the device by control device (e.g. a PC) through an RS-232 port	Wrong RS-232 communication parameters or connection.	Type in the correct RS-232 communication parameters and check the connection.
	RS-232 port is damaged	Send it to the authorized dealer for checking.

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

TECHNICAL SPECIFICATION

VIDEO PERFORMANCES

- **Input Resolution HDMI:** Up to 4Kx2K@60Hz 4:4:4 HDR10, Dolby Vision
- **USB-C (DP Alt Mode compliant):** Up to 4K@30Hz 4:4:4
- **VEOCast:** Up to 4K@30Hz 4:4:4
- **Output Resolution** Up to 4Kx2K@60Hz 4:4:4 HDR10, Dolby Vision
- **Color depth** Up to 12-bit
- **Signal Bandwidth** 18 Gbps Input (HDMI 2.0b)
- **HDCP** 2.2/1.4 Compliant
  Video Input Connectors
    - 2 x Type A female HDMI
    - 1 x Type C USB 3.0 with DP ALT-MODE connector
    - 1 x External Antenna connector
- **Video Output Connectors** 1 x Type A female HDMI
- **HDMI Distance** up to 10 meters (33 feet) with Ecler VEO cables

AUDIO PERFORMANCES

- **Audio** Formats Dolby® Atmos, Dolby® TrueHD, Dolby® Digital Plus, Dolby® Digital, DTS-X™, DTS-HD Master Audio™, DTS 5.1™, PCM;
- **Sample Rate** up to 24-bit
- **PCM Bit rate** 32 KHz, 44.1 KHz, 48 KHz, 88.2 KHz, 96 KHz, 176.4 KHz, 192 KHz
- **Frequency Response** 20Hz–20KHz, ±3dB
- **Max Output Level** 2.0Vrms ± 0.5dB
- **THD+N** < 0.05%, 20Hz – 20KHz bandwidth, 1KHz sine at 0dBFS level (or max level)
- **SNR** >80dB, 20Hz – 20KHz bandwidth
- **Audio Connectors** 5-pin Euroblock (Balanced Stereo)

CONTROL

- **Control**
  - ports 1 x 4-pin DIP switch
  - 2 x HOST (PC1&PC2),
  - 2 x DEVICES
  - 1 x RS-232
  - 1 x FW Update
- **Control Connectors**
  - 2 x Type-B USB 3.0
  - 2 x Type-A USB 3.0
  - 1x Type-C USB 3.0
  - 1 x 3-pin Euroblock
  - 1 x Micro-USB

NETWORK

- **WLAN Standards** IEEE 802.11ac
- **Wireless Band** 2.4 GHz / 5 GHz
- **Max Wireless Coverage** ≤5m, environment dependent, reduce disturbance to increase transmission distance up to 15m
- **OS Supported Versions** iOS 7 or above, MacOS, Android 4.0 or above, Windows 8.1 or above

ENVIRONMENTAL

- **Operating Temperature** -5˚C – +55˚C / 23˚F – 131˚F
- **Humidity** 10 – 90% RH (no condensation)

POWER SUPPLY

- **Power Consumption** 85 W Max with the included PSU 60W Max power charging over USB-C
- **Power Supply** AC 100V ~ 240V 50/60Hz Output: DC 24V—5A

MISCELLANEOUS

- **Dimensions (WxHxD)** 238 x 24.5 x 135 mm / 9.37 x 0.96 x 5.31 in.
- **Weight** 1.25 kg / 2.75 lb
- **Shipping Dim.** (WxHxD) 350.5 x 77 x 255 mm / 13.79 x 3.03 x 10.03 in.
- **Shipping Weight** 1.90 kg / 4.18 lb

MECHANICAL DIAGRAM
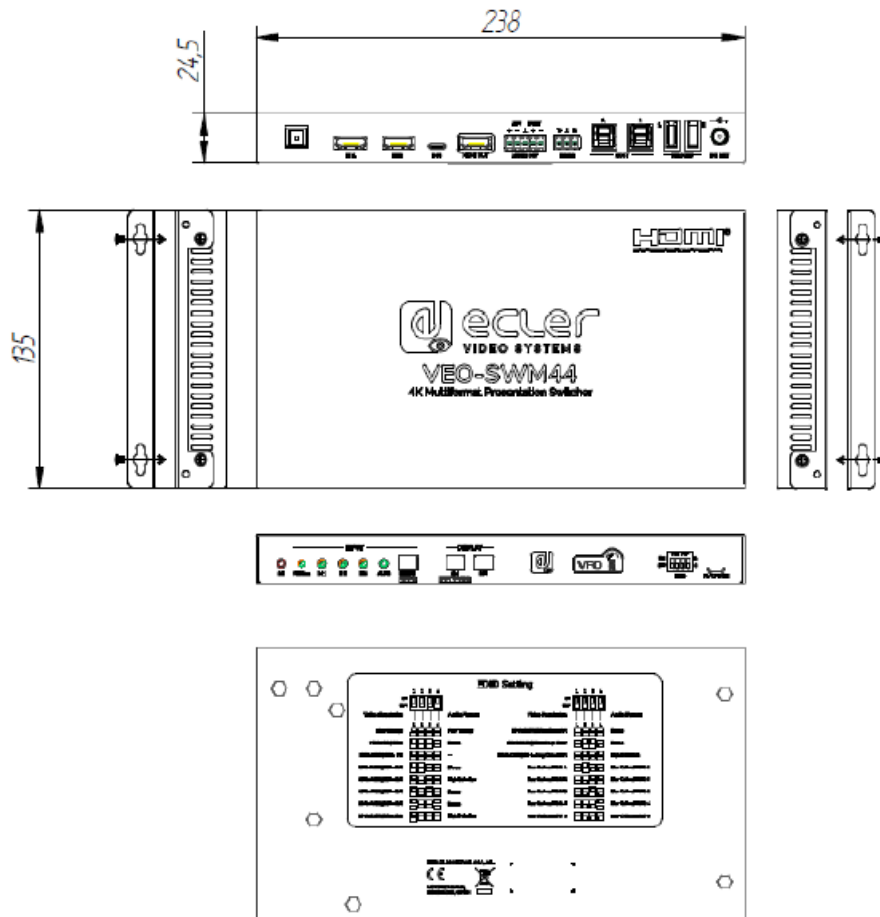
All product characteristics are subject to variation due to production tolerances. NEEC AUDIO BARCELONA S.L. reserves the right to make changes or improvements in the design or manufacturing that may affect these product specifications. For technical queries contact your supplier, or distributor or complete the contact form on our website, in Support / Technical requests.

CONTACT

- Motors, 166-168 08038 Barcelona
- Spain - (+34) 932238403
- **information@ecler.com**.
- **www.ecler.com**.

Documents / Resources

Ecler VEO-SWM44 Switcher 4x1 Presentation Switcher with VEOCast [pdf] Instruction Manual
VEO-SWM44 Switcher 4x1 Presentation Switcher with VEOCast, VEO-SWM44, Switcher 4x1 Presentation Switcher with VEOCast, Presentation Switcher with VEOCast, Switcher with VEOCast, VEOCast

References

- **User Manual**