

# Versadrive SC-26

Speaker Management System

OPERATING MANUAL AND USER GUIDE

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[www.wharfedalepro.com](http://www.wharfedalepro.com)

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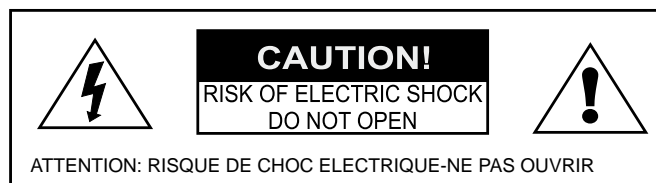
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# Important Warnings & Safety Instructions

1. Read these instructions
2. Follow all instructions
3. Keep these instructions
4. Heed all warnings
5. Do not use this apparatus near water
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with 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 a polarised or grounding plug. A polarised plug has two blades with one wider than the other. A grounding plug has two blades and a third grounding blade. The wide blade or the third blade is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched, particularly at the plug, receptacle and or the point where it exits from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Only use a stand, tripod, bracket or rack specified by the manufacturer, or sold with the apparatus. When a rack is used, use caution when moving the rack and apparatus combination to avoid tip-over or injury.




13. Unplug the apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified personnel. Servicing is required when the apparatus has been damaged in any way including but not limited to power supply cord or plug damage, liquid ingress, foreign objects in the chassis, exposure to rain/moisture or impact damage. In addition the unit must be serviced when you experience any abnormal operation.
15. CAUTION: These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not attempt to perform any servicing other than that contained in the operating instructions unless you are qualified to do so. In addition opening the casing will result in your warranty becoming null and void.
16. Do not install this apparatus in a confined space such as a book case or similar unit. Good ventilation should be maintained around the apparatus. Any vents, air-inlets or fans should not be obstructed by objects such as paper, table-cloths, curtains etc.
17. WARNING: To reduce the risk of fire or electric shock, do not expose the apparatus to rain or moisture. The apparatus should not be exposed to dripping or splashing and objects filled with liquids, such as vases, should not be placed on the apparatus.
18. WARNING: The mains plug/appliance coupler is used as a disconnect device, the disconnect device shall remain readily operable.



19. The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of non-insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.
  - Warning: To reduce the risk of electric shock, do not remove the cover (or back) as there are no user-serviceable parts inside. Refer servicing to qualified personnel.
  - The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance instructions in the literature accompanying the appliance.
20.  (Protective earthing terminal) The apparatus should be connected to a mains socket outlet with a protective earthing connection.



21.  Correct Disposal of this product. This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use local return and collection systems or contact the retailer where the product was purchased. They can take this product for safe environmentally friendly recycling.

## Front Panel Controls And Features



- **LCD Display:** Displays menu and settings information
- **X-Over:** To access crossover output settings
- **EQ:** To access equalization settings for all channels
- **Limiter:** To access limiting settings for output channels
- **Polarity:** Change signal polarity
- **Delay:** Access time correction delay controls
- **Load:** Load stored patches
- **Save:** Save current configuration to memory and delete patches
- **System:** Access system menu
- **Rotary Control:** Adjusts parameters and browses menu (rotate, short click and hold operation for editing different settings)
- **Input / Output LEDs:** Display mute, edit, signal and clipping
- **Mute / Edit buttons:** Press to mute, hold for 3 seconds to edit on both input and output channels
- **USB B Connection:** To connect to your PC.

## Rear Panel Features



- **IEC Mains connector**
- **Power switch**
- **Voltage select**
- **RS-485:** Link multiple Versadrives, or connect via network to your PC
- **6 x Balanced XLR Outputs**
- **2 x Balanced XLR Inputs**

# Editing Audio Settings

- To edit the settings, press and hold the MUTE/EDIT button for 3 seconds on the channel of your choice.
- Pressing the function button (i.e. EQ) will bring up the settings for that channel.
- Turn the rotary control to move between parameters (i.e. High gain).
- Press in the rotary encoder to select and edit a parameter.
- Once edited, click the rotary encoder once more to confirm the new value.

## Input Polarity Setting

Polarity can be changed independently for each channel on the Versadrive SC-26.

- To edit, hold in the MUTE / EDIT button for 3 seconds on the channel of your choice.
- Polarity [+] or [-] will be displayed and you can then turn the rotary control to change this setting.

## Input Delay Setting

The delay time can be changed for each channel from 0 – 1000ms.

- To edit, hold in the MUTE / EDIT button for 3 seconds on the channel of your choice.
- Delay time will be displayed in ms, turn the rotary control to change this time.

## Parametric EQ Settings

The parametric EQ works independently on each channel on both the inputs and outputs. The frequency response is 20Hz to 20kHz with a gain boost of 20dB [ +/- ] and an adjustable bandwidth between 0.05Oct – 3Oct.

- To edit, hold in the MUTE/EDIT button for 3 seconds on the channel of your choice.
- Use the rotary encoder to scroll between frequency, gain and bandwidth.
- Press the encoder to a parameter of your choice and rotate encoder accordingly.
- Press the encoder again to confirm value.
- You can also press the EQ button to toggle between channels.

## Shelving EQ Settings

The shelving EQ works independently on the output channels only with Hi Shelf and Lo Shelf options. Gain can be adjusted 20 dB [ +/- ] with a slope of +6 or + 12dB per octave.

- To edit, hold in the MUTE/EDIT button for 3 seconds on the channel of your choice.
- Press EQ and you can toggle from Parametric to Hi or Lo shelf.
- Press the encoder to a parameter of your choice and rotate encoder accordingly.
- Press the encoder again to confirm value.
- You can also press the EQ button to toggle between channels.

## Output Gain Settings

The output gain can be adjusted 12 dB [+/-] in 0.1dB increments, you can send one or both inputs to each output channel.

- To edit, hold in the MUTE/EDIT button for 3 seconds on the channel of your choice.
- Press GAIN and you will see a screen to edit which inputs are used on that output channel plus gain value in dB.
- Turn the encoder to toggle between gain value and input.
- Adjust the value using the rotary control similarly to the other settings.

## Output Limiter Settings

The dynamic limiter works independently on each channel. Parameters which can be adjusted include threshold -20dB to +20dB, Attack 0.3 to 100ms and Release 2/4/6/8/16/32x.

- To edit, hold in the MUTE/EDIT button for 3 seconds on the channel of your choice.
- Press LIMITER and you can edit your desired parameter.
- Use the rotary encoder to scroll between limiter parameters.
- Press the encoder to a parameter of your choice and rotate encoder accordingly.

## Crossover Settings

Each channel works independently with a HPF and LPF on each channel. Frequency response is between 20Hz – 20kHz with Linkwitz-Riley, Bessel and Butterworth algorithms with a slope of 12/18/24/48dB per octave. To edit, hold in the MUTE/EDIT button for 3 seconds on the channel of your choice.

- Press X-OVER and you can edit your desired parameter.
- Use the rotary encoder to scroll between crossover parameters.
- Press the encoder to a parameter of your choice and rotate encoder accordingly.

## Editing System Settings

The system settings are edited in a similar way to the audio settings, by utilising the rotary control for scrolling through different options. Press SYSTEM to access the system settings, scroll through and press on your selected setting. Rotate the control to make changes and press once more to confirm your setting. The following system settings can be edited:

- Device ID: Up to 250 units can be used together. To keep organised you can edit the number / order of particular Versadrive SC-26 units.
- Password: A 6 digit password can be set for safety at your venue and to lock the controls from unauthorised users.
- Backlight setting: Can be adjusted to stay on permanently or go off after 10s of editing.
- Current program: Displays the patch currently being used.
- System Information: Firmware version is displayed.

# PC Software Operation

The settings of the Versadrive SC-26 can be edited from your PC via USB connection. This can be done live during performance or you can store settings to the unit before your gig. An additional RS-485 connection allows long-distance network use allowing 250 units to be used at once while being up to 1500m away from the PC. When using multiple Versadrive SC-26 units, click the INTERFACE button on the right hand side of the window and you can select a different unit.

## EQ & Crossover Display

The Versadrive SC-26 central panel shows a visual display of the crossover and the EQ. You can either control the EQ using a click-and-drag method on the visual display or use the controls below.



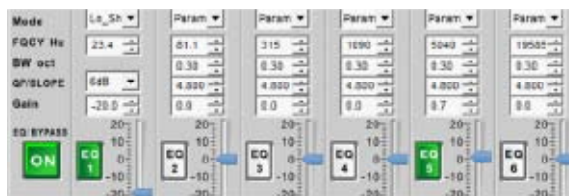
## Input & Output Select

To the right is a screenshot of the inputs. To edit click channels 1-6 and this will bring up all the settings. You can toggle to display the EQ curve or not using the CURVE button, while the link dropdown menu duplicates the settings across many channels i.e. if you set CH2 and CH3 to 'link\_1', the effect settings of CH1 will be replicated on CH2 and CH3.



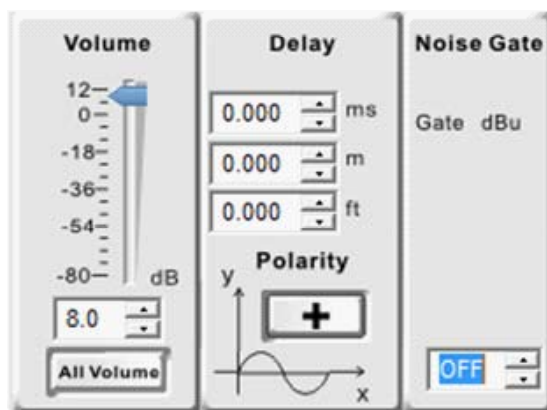
## EQ Control

For each of the two inputs EQ, A 6 band parametric EQ can be assigned. For the outputs, the EQ can be toggled between parametric, hi shelf and lo shelf. All features including slope, gain, mode and frequency can be controlled easily with the interface with options to bypass the whole EQ, or bypass specific bands. Please note you can also click and drag on the EQ graphical display for added convenience.



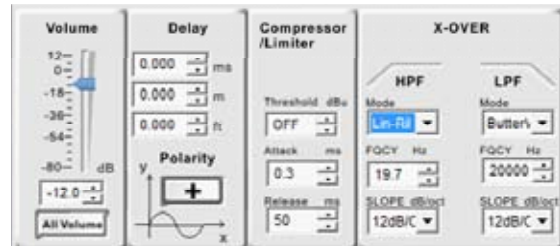
## Additional Input Channel Settings

When a particular input channel is selected for editing, to the left of the EQ, volume, polarity, delay and a noise gate can be set. The delay setting also has control over feet.



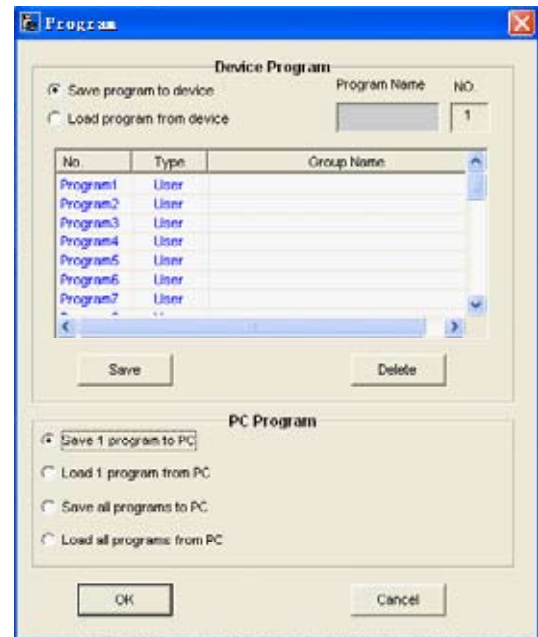
## Additional Output Channel Settings

When an output channel is selected for editing, to the left of the EQ, volume delay and polarity can also be edited. The output channels also have access to crossover, compressor and limiting settings which can be similarly as you would do in the stand alone operation. The crossover frequency is also shown graphically on the EQ display above.



## Saving and Recalling Settings

The Versadrive SC-26 can operate a combination of loading and saving patches to both your PC and Versadrive SC-26 unit. The operation works for single patches but also has the ability to load the full 30 patches to your PC or device too (i.e. 'Store All Programs To Device'). Using the REPORT function also displays Versadrive SC-26 settings in a spreadsheet format which can be exported to Excel or saved for later reference. The program name and number is displayed clearly in the top left of the screen under the Wharfedale Pro logo.



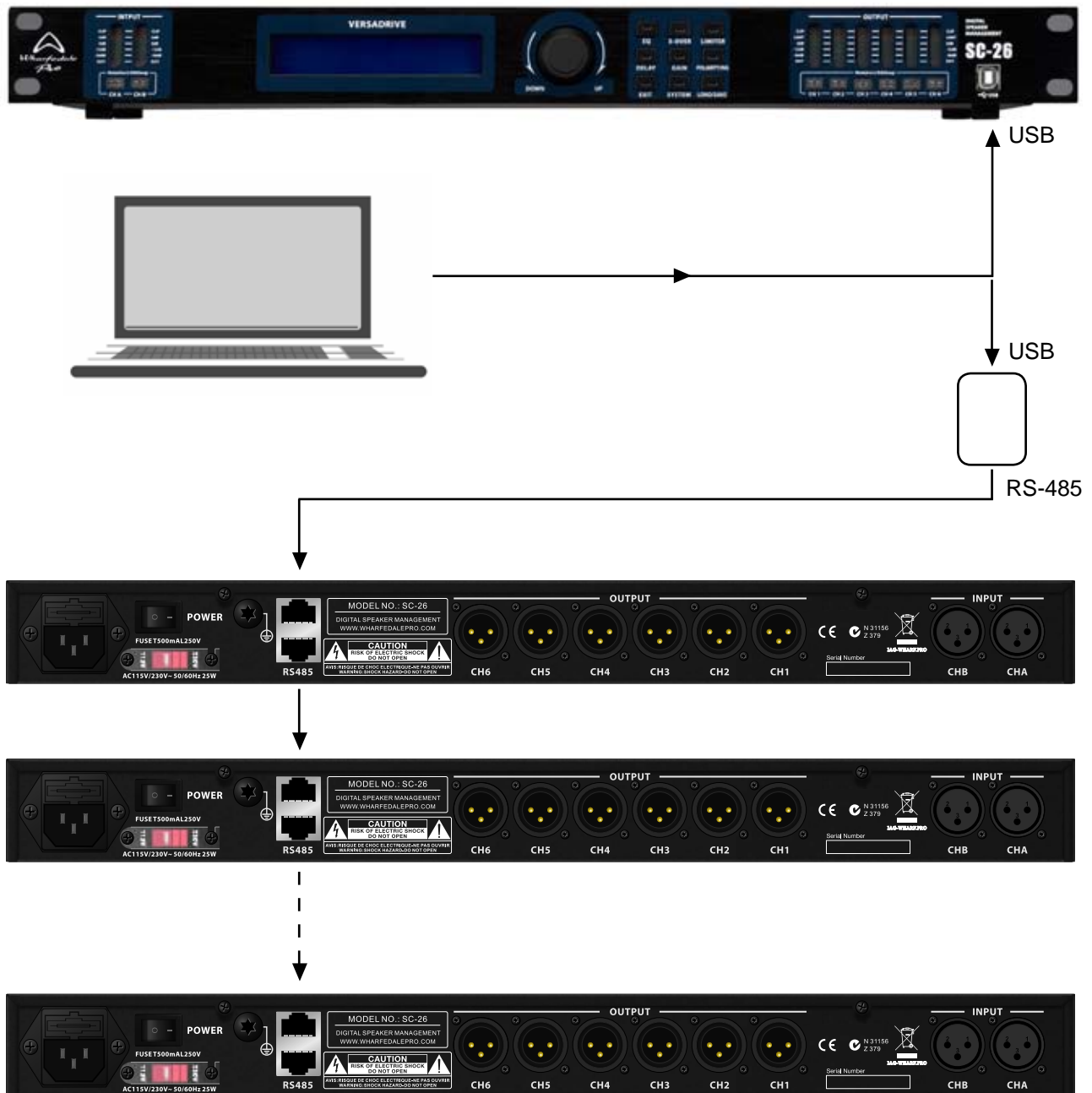
## Password protect

The password protect options do not just work on the output gain. Each effect, input and output can be selected using the tick-box interface on the password screen meaning some controls require a password to edit and some do not.



## Connecting Your Versadrive SC-26

The diagram below shows how to connect your Versadrive SC-26 to your PC and linking multiple units. Please note that the Versadrive SC-26 works with PC only. Install the drivers supplied on the CD-ROM or download via [www.wharfedalepro.com](http://www.wharfedalepro.com).



# SPECIFICATION

Model Name	SC-26
Frequency Response ( $\pm 0.5\text{dB}$ )	20Hz - 20KHz
DSP	32-bit
A/D D/A Converter	24-bit / 96 kHz
S/N Ratio	>110dB
Delay time range	0-1000ms
Filter Types	Linkwitz-Riley, Bessel, Butterworth Up to 48dB/oct.
EQ	6-band parametric / low shelf / high shelf
Memory	30 save slots
Number of inputs	2
Number of outputs	6
Input connection	XLR
Output connection	XLR
PC connections	USB / 2 x RS485
Net Weight	3.6kg / 7.94lbs
Gross Weight	4.6kg / 10.14lbs
Product Dimensions	44 x 482 x 190mm
Dimensions (Packed) HxWxD	98 x 562 x 362mm

### **WHARFEDALE PRO LIMITED WARRANTY**

Wharfedale Pro products are warranted of manufacturing or material defects for a period of one year from the original date of purchase. In the event of malfunction, contact your authorized Wharfedale Pro dealer or distributor for information.

\*Be aware that warranty details may differ from country to country. Contact your dealer or distributor for information. These terms do not infringe your statutory rights.



Wharfedale Professional

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