

SAFETY INFORMATION

Before you use this TW AUDIO product, read the manual carefully.

Loudspeakers can be checked and stamped according to BGV C1 by official departments. For more information contact TW AUDIO at info@twaudio.com or +49 (0) 71 41 - 48 89 80

GENERAL

The VERA10 is an asymmetrically designed Loudspeaker, equipped with one 10" driver and two 1" drivers adapted to a waveformer with either 80° or 120° dispersion horns available for the HF.

VERA10 by default is delivered in black colour and polyurea coating. Any other RAL color is possible as an option also (warnex structure paint).

VERA10 passive has two operation modes: passive and biamped, study the differences on Fig.4.

The VERA10 is designed to be driven with a DSP equipped amplifier. TW AUDIO recommends the Powersoft K3DSP AESOP, X4 or LAB Gruppen PLM + as system amplifiers. As an external controller for other amps we recommend to use the LAKE LM26 or LM44.

The VERA10 always requires a dedicated preset loaded on the amplifier/controller. Never use the VERA10 without this preset, and always be aware to have the correct preset loaded on your system amplifier before connecting the loudspeaker. The PRESET determines the output routing and the connection port on the APL4 panel. Be sure that the internal connections in the amplifier rack are identical to those shown in Fig.3.

In case of VERA10 in biamped mode, use the output 2 / 4 on the APL4. VERA10 in passive mode can be used in different ways depending on loaded preset. Go to the system examples for more information.

For best performance, line array system require proper optimization depending on it's size, curvature, weather condition and the room acoustics. For best system optimization TW AUDIO recommends professional acoustical measurement tools (phase and magnitude response).

Use EASE Focus 3 to find correct array settings.

COMBINATION WITH OTHER PRODUCTS

VERA10 can be combined with any TW AUDIO subwoofers products. Please be sure about proper time alignment. See also system example papers on www.twaudio.de for system combinations and setup examples.

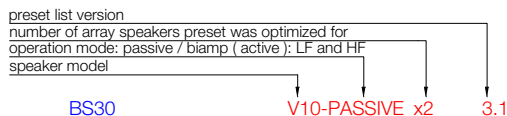
ACCESSORIES

VERA10 can be flown (RF300, SF10), ground-stacked (GF10) or mounted on speaker stand (SF10).

If you do have questions about your product, don't hesitate to contact TW AUDIO at support@twaudio.de or by phone: +49 (0) 71 41 - 48 89 89 55.

VERA10		BIAMPED	PASSIVE
Frequency range	[Hz]	60 - 16 000	
Power pgm/peak	[W]	LF: 500 / 1000 HF: 200 / 400	600 / 1200
Impedance	[Ohm]	LF= 16 HF= 16	12
Dispersion	[H°]	80 or 120	
Sensitivity	[dB]	LF= 103 HF= 111	104
max. SPL	[dB]	133,00	
Dimensions	[mm]	275 x 500 x 355	
Weight	[kg]	18	

FIG 1. PRESETS / REFERRED TO PRESETLIST A03.1



DEVICE PRESET NAME	
CHANNEL 1	CHANNEL 2
VERA10 PASSIVE	
BS30	V10-PASSIVE_x2____3.1
V10-PASSIVE_x2	V10-PASSIVE_x2____3.1
VERA10 ACTIVE (BIAMPED)	
V10-ACTIVE-LF_x6	V10-ACTIVE-HF_x6____3.1

Change CUT / FLAT / FULL within CH 1 settings !

FIG 2. TYPICAL ARRAY CORRECTION

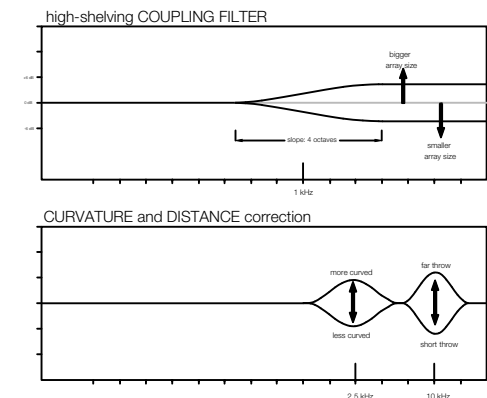


FIG 3. TW AUDIO APL4-K / K3 AMPLIFIER RACK

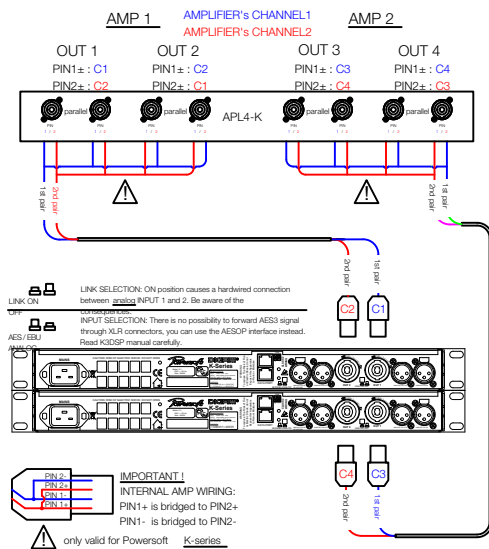


FIG 4. INTERNAL WIRING DIAGRAM AND OPERATION MODES

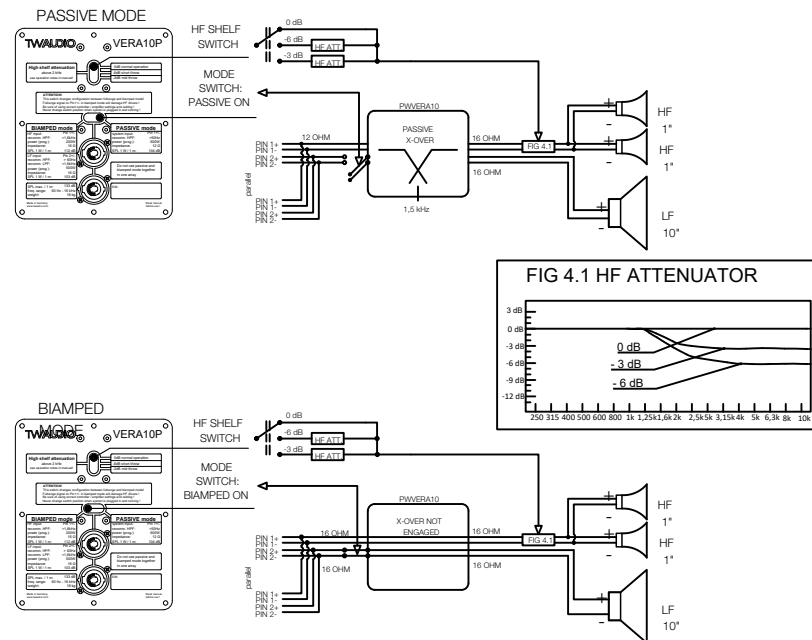
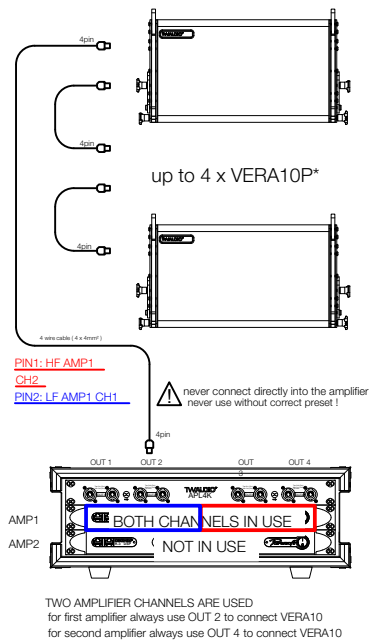
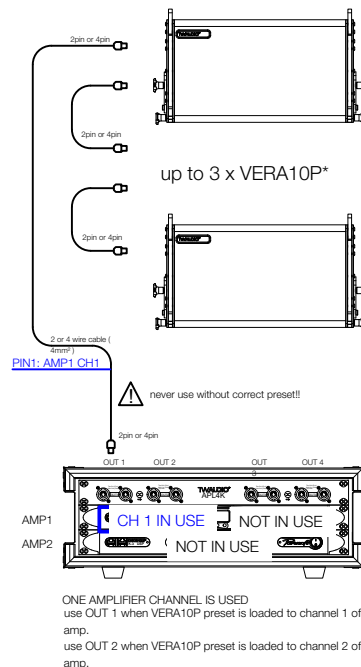


FIG 5. VERA10 BIAMPED MODE



*NOTES:
- for long term high SPL requirements, drive 4 x VERA10 on one POWERSOFT K3DSP channel (4 OHM operation)
- for lower SPL requirements, it is possible to drive up to 8 x VERA10 on one POWERSOFT K3DSP channel (2 OHM operation)

FIG 6. VERA10 PASSIVE MODE



*NOTES:
- for long term high SPL requirements, drive 3 x VERA10 on one POWERSOFT K3DSP channel (4 OHM operation)
- for lower SPL requirements, it is possible to drive up to 6 x VERA10 on one POWERSOFT K3DSP channel (2 OHM operation)