

SAFETY INFORMATION

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 89 0

GENERAL

The C12 loudspeaker is a bass-reflex enclosure equipped with coaxial drivers 12" one responsible for low-mid frequencies and 1.4" compression driver responsible for region above 1,1 kHz. Horn dispersion is 50 x 70 degrees (HxV). Study Fig 2.

C12 as default is available in black colour and warnex structure paint coating. All RAL colours for new enclosures are possible upon request.

The C12 product is equipped with passive crossover optimized for group delay as well as frequency response. Crossover has 2 operation modes: PASSIVE and BIAMP. In both modes x-over is always engaged (FIG 4.)

The C12 can be used with 2 or 4 wires speaker cables. In PASSIVE mode connection to the C12 is done via the PIN 1+/- . In BIAMP mode PIN1 is connected to HF driver while PIN2 is connected to LF one. (study Fig 4 for differences)

The C12 is designed to be powered by any professional amplifier available on the market, without additional processing. For FOH application TW AUDIO recommends the Powersoft K3DSP AESOP or LAB PLM as a system amplifiers. As an external controller for other amps it's recommended to use the LAKE LM26 or LM44. TW AUDIO, for FOH application, offers loudspeaker presets for 3 platforms: K-DSP and M-HDSP series from Powersoft and for Lake Controller. If you are using these platforms, always be aware to have the correct preset loaded on your system amplifier before connecting the loudspeaker.

COMBINATION WITH OTHER PRODUCTS

C12 can be combined with any TW AUDIO subwoofers products on the condition that correct preset into mentioned amplifier's platform is loaded. When preset is used all the loudspeakers are phase coherent in common frequency range.

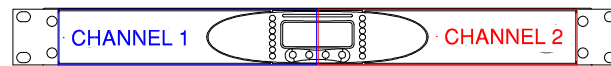
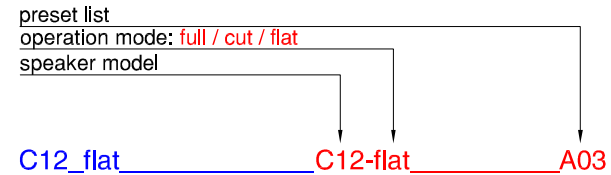
Please see system examples papers on www.twaudio.com for system combinations and setup examples.

ACCESSORIES

C12, as a main purpose, is used as wedge monitor. In addition, C12 can be flown (SBM12, DHST), or mounted on speaker stand directly using pole mount available on enclosure or using swivel bracket SBM12 combined with HSF. Air cargo rigging tracks allow to mount SBM12 without any tools. Simply click into place.

If you have any further questions about your product don't hesitate to contact TW AUDIO on support@twaudio.com or by phone +49 (0) 71 41 - 48 89 89 55

FIG 1. PRESETS / REFERED TO POWERSOFT KDSP PRESETLIST A03



PRESET NAME	
CHANNEL 1	CHANNEL 2
BS18	C12-cut A03
BS30	C12-cut A03
C12_flat	C12-flat A03

FIG 2. Dispersion angles

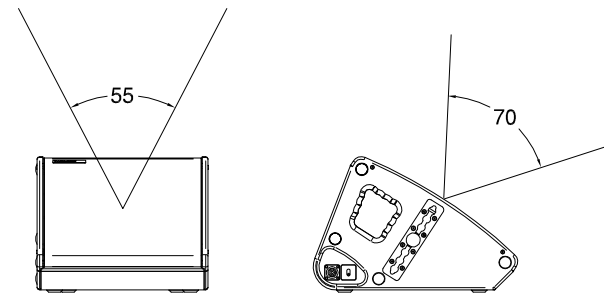
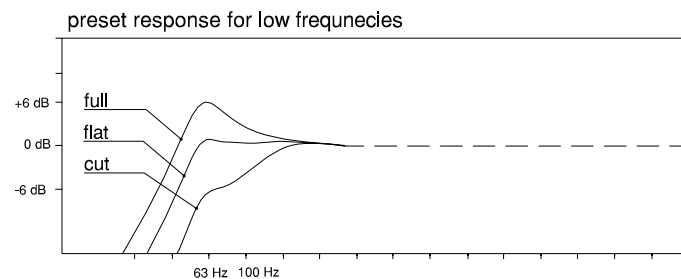
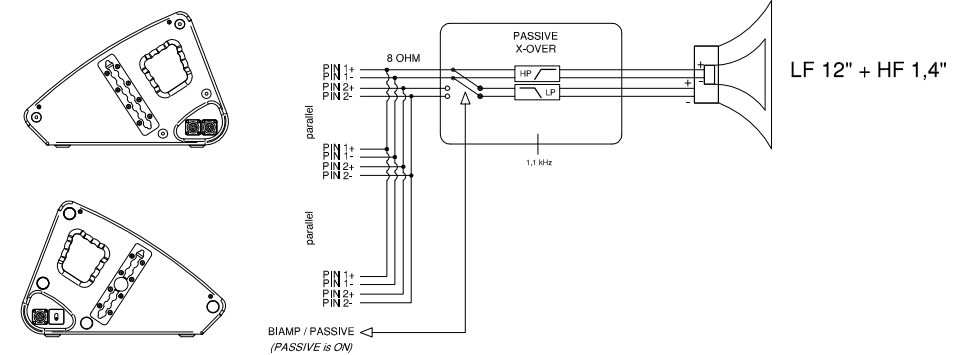


FIG 3. FULL / FLAT / CUT for TW AUDIO C12 preset in use



C12		
Frequency range	[Hz]	62 - 17 000
Power pgm/peak	[W]	700 / 1400
Impedance	[Ohm]	8
Dispersion		55 x 70, rotatable horn
Sensitivity	[dB]	101
max SPL	[dB]	132
Dimensions	[mm]	348 x 445 x 525
Weight	[kg]	21

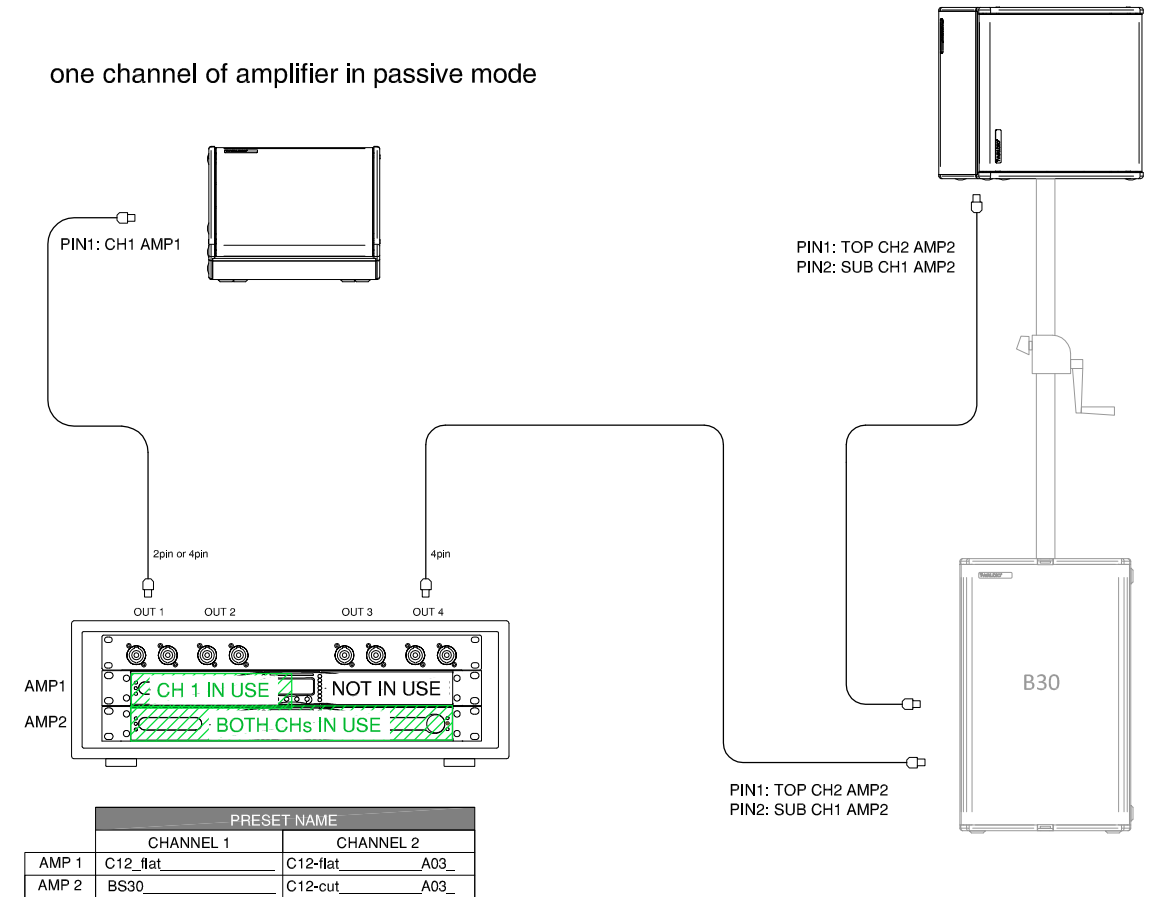
FIG 4. INTERNAL WIRING DIAGRAM



***NOTE:**

X-over is always in use whether passive or biamp mode is on. It makes that C12 can be driven by any professional amplifier available on the market, in both, passive and biamp mode without processing.

FIG 5. C12 - CONNECTION TO THE AMPLIFIER



PRESET NAME	
CHANNEL 1	CHANNEL 2
AMP 1 C12_flat	C12-flat A03
AMP 2 BS30	C12-cut A03

For standalone use:
for first amplifier use OUT 1 or/and OUT 2 depends amplifier channel in use.

For combination with subwoofers
TW AUDIO presets are designed that first channel drives LF loudspeaker/ drivers while second amplifier channel M/HF source. For this combination always use OUT2 for first amplifier and OUT4 for second amplifier.

It is possible to connect more than one C12 to one K3DSP output.
- for long term high SPL requirements drive only 2 boxes on one POWERSOFT K3DSP (4 OHM operation)
- for lower SPL requirements, it is possible to drive up to 3-4 boxes on POWERSOFT K3DSP(2/2,6 OHM operation)