

**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 C15 loudspeaker is a bass-reflex enclosure equipped with coaxial drivers 15" 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.

C15 as default is available in black colour and warnex structure paint coating. All RAL colours for new enclosures are possible upon request.

The C15 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 C15 can be used with 2 or 4 wires speaker cables. In PASSIVE mode connection to the C15 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 C15 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**

C15 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.

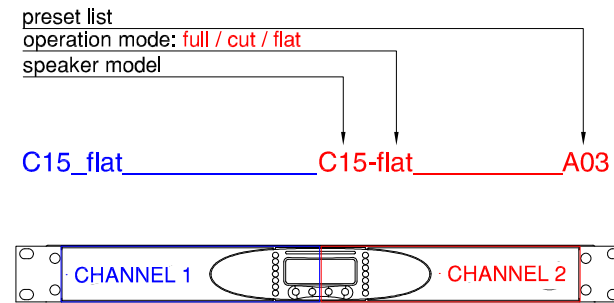
**ACCESSORIES**

C15's enclosure is constructed to work as wedge monitor. In addition, C15 can be flown (SBM12, DHST), or mounted on speaker stand directly using pole mount available on enclosure or using swivel bracket SBM15 combined with HSF.

Air cargo rigging tracks allow to mount SBM15 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	C15-cut A03
BS30	C15-cut A03
C15_flat	C15-flat A03

FIG 2. Dispersion angles

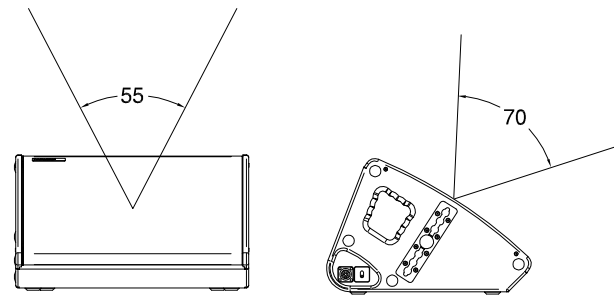
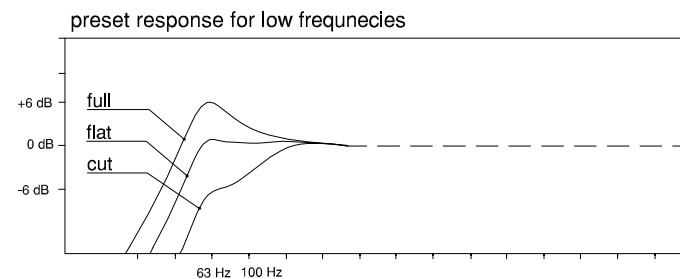
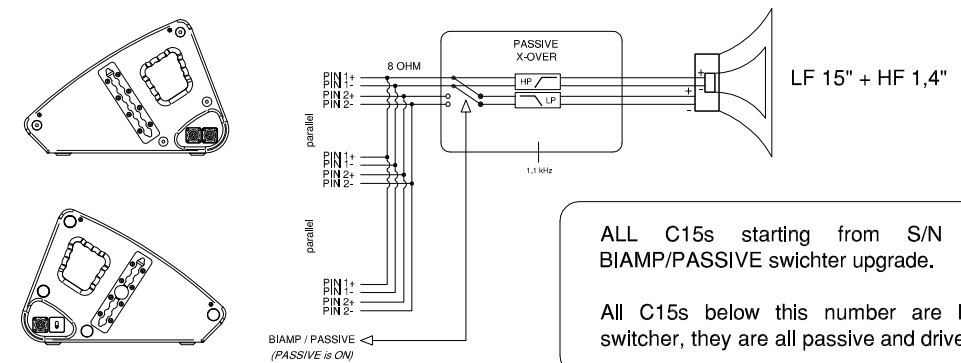


FIG 3. FULL / FLAT / CUT for TW AUDIO C15 preset in use



C15	
Frequency range	[Hz] 55 - 17 000
Power pgm/peak	[W] 800 / 1600
Impedance	[Ohm] 8
Dispersion	55 x 70, rotatable horn
Sensitivity	[dB] 101
max SPL	[dB] 133
Dimensions	[mm] 348 x 605 x 525
Weight	[kg] 23

FIG 4. INTERNAL WIRING DIAGRAM

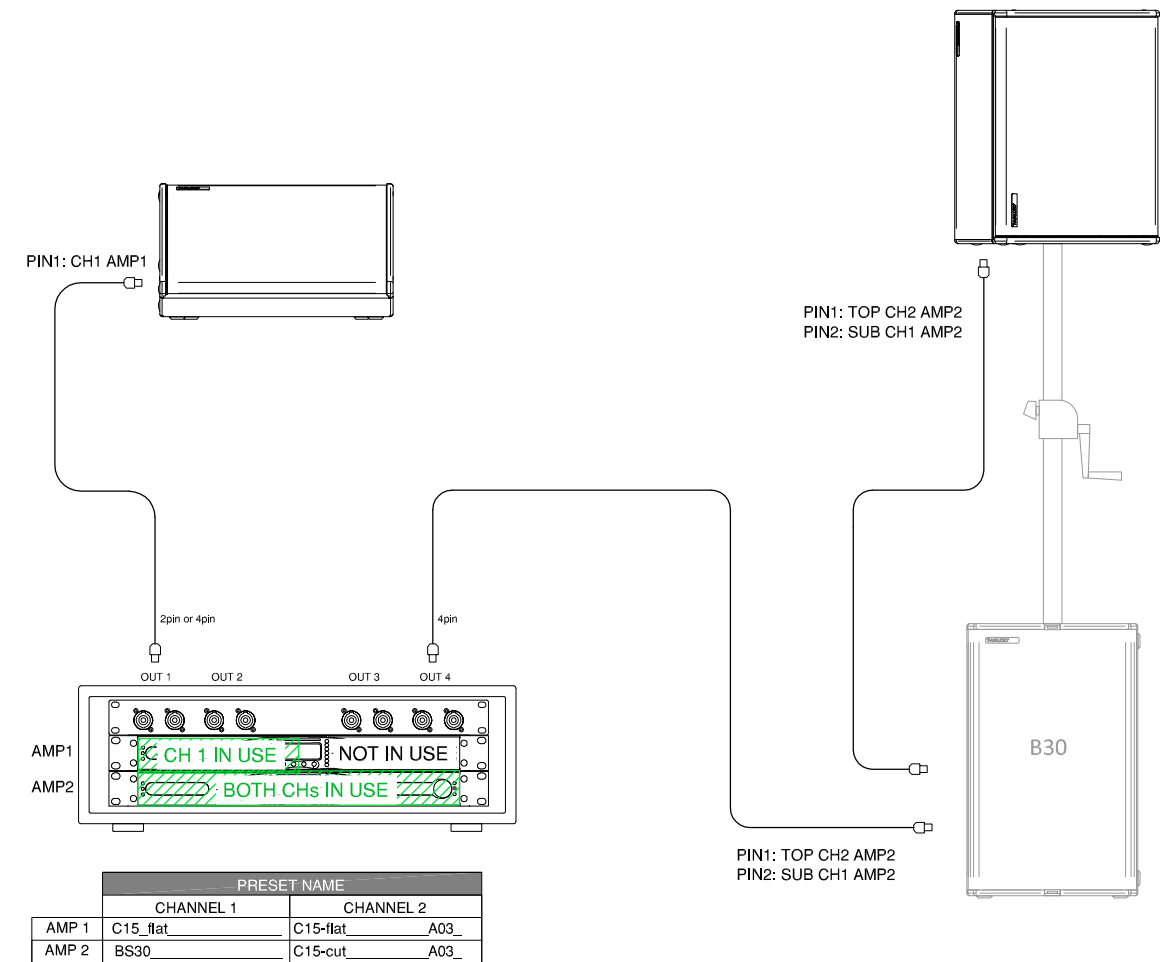


ALL C15s starting from S/N 14040654 include BIAMP/PASSIVE switche upgrade.  
All C15s below this number are NOT equipped with switche, they are all passive and driven from PIN1.

**\*NOTE:**

X-over is always in use whether passive or biamp mode is on. C15 can be driven by any professional amplifier available on the market, in both, passive and biamp mode, without processing (presets).

FIG 5. C12 - CONNECTION TO THE AMPLIFER



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 C15 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)