KLING & FREITAG has developed a system controller for passive speaker systems without a compromise. This controller serves the increasing demands for performance reliability, easy handling and highest fidelity of sound reproduction.

The C2 system controller extends the K&F speaker systems’ application spectrum and provides the greatest possible flexibility in the combination of fullrange and subwoofer systems for the reason of its modular concepts.

**C2 Features**

- 2-way stereo cross-over with speaker-specific phase alignment for top-cabinet and subwoofer.
- Preassembled filter cards for optimized feedback protection and frequency response.
- Peak and RMS Limiter with sense technology for maximum reliability of speaker and power amplifier.
- Switchable HI - boost filter compensates absorption of high frequencies in farfield applications.
- Low cut filter reduces pop noise in speech reproduction, switchable frequency response alignment for monitor applications.
- Remote control of output levels as an option.
- Remote display of all status indicators as an option.
- Modular design with system cards (2), easy configuration of any top-cabinet/subwoofer combination.
- Plug & play connector panel at the front panel. Additional connectors for fixed installation on the rear panel.
Controls and Connectors

Front panel

1. Speakon Connector CH 1 SUB OUT
   sub out channel 1, pinning 1+/1-.

2. Speakon connector CH 1 TOP OUT
   mid/high out channel 1, pinning 1+/1-.

3. Speakon connector CH 2 SUB OUT
   sub out channel 2, pinning 1+/1-.

4. Speakon connector CH 2 TOP OUT
   mid/high out channel 2, pinning 1+/1-.

5. XLR connector CHANNEL 1 IN
   electronically balanced LF-input channel 1, pinning: 1 ground / 2 + / 3 -.

6. XLR connector CHANNEL 1 LINK
   Linking output for LF-signal.

7. XLR connector CHANNEL 2 IN
   Electronically balanced LF-input channel 2, pinning: 1 ground / 2 + / 3 -.

8. XLR connector CHANNEL 2 LINK
   Linking output for LF-signal.

9. Level control INPUT GAIN
   Potentiometer for input level adjustment. Boost +6 dB, attenuation -40 dB.

10. Level control SUB GAIN
    Potentiometer for sub level adjustment. Boost +6 dB, attenuation -6 dB.

11. HI BOOST switch
    Switch for hi-signal boost. Compensates the absorption of high frequencies in farfield applications.

12. TOP LOW CUT switch
    Switch for attenuation of low frequencies in the TOP-way. Adjustment of frequency response for monitor operation and reduction of pop-noise for speech-operation.

13. FULLRANGE MODE switch
    Sunk-in switch for mode selection: FULLRANGE MODE - full frequency range is transmitted by the top-speaker (switch pushed) or 2-WAY ACTIVE MODE - for operation with additional subwoofers. Here extra all-pass filters are activated, in order to optimize *** and phase between subwoofer and mid/high speaker.

14. FULLRANGE MODE indicator
    This LED indicates the FULLRANGE mode (switch pushed).

15. SUB MONO Switch
    Sunk-in switch, selects between the modes SUB MONO and SUB STEREO.

16. SUB MONO indicator
    This LED indicates the SUB MONO mode (switch pushed).

17. 19. 21. and 23. SIGNAL indicator
    These LEDs indicate a signal at the output of the corresponding channel.

18. 20. 22. 24. LIMIT indicator
    These LEDs indicate when the output level of the corresponding channel is limited by the controller.

25. POWER indicator
    This LED indicates when the unit is connected to the line.

26. Labelling area
    An exchangeable label informs about the inserted filter card configuration.
27. Line connector
Power plug 230V 50Hz

28. Remote control mini D-type connector
Connector for remote display of: „signal present”, „limit”, „power on” and for remote control of all output levels.

29. XLR connector CH 2 SUB AMP
Electronically balanced LF-sub out channel 2, pinning: 1 ground / 2 + / 3 -.

30. XLR connector CH 2 TOP AMP
Electronically balanced LF-mid/high out channel 2, pinning: 1 ground / 2 + / 3 -.

31. XLR connector CH 1 SUB AMP
Electronically balanced LF-sub out channel 1, pinning: 1 ground / 2 + / 3 -.

32. XLR connector CH 1 TOP AMP
Electronically balanced LF-mid/high out channel 1, pinning: 1 ground / 2 + / 3 -.

33. GND LIFT switch
For prevention of system hum, disconnects system ground from power supply ground.

34. XLR connector CH 2 INPUT
Additional, electronically balanced LF-input channel 2, pinning: 1 ground / 2 + / 3 -.

35. XLR connector CH 1 INPUT
Additional, electronically balanced LF-input channel 1, pinning: 1 ground / 2 + / 3 -.

36. Terminal block AMP RETURN CH 2
Power input channel 2. Connected with power amplifier output of channel 2.

37. Terminal block AMP RETURN CH 1
Power input channel 2. Connected with power amplifier output of channel 1.

Connection diagram: 2-way active mode

Connection diagram: fullrange mode
Block Diagram Channel 1 with TOP/SUB System card (example)