

r.f. Systems
Ltd.

Model CS-6 Application Notes

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PROPRIETARY NOTICE

The CS-6 design and information hereby attached are the property of RF Systems Ltd. RF Systems Ltd reserves all proprietary design, manufacturing, reproduction use, and sales rights of the CS-6.

This forgoing shall not apply to vendor proprietary parts.

LIMITED WARRANTY

RF Systems Ltd. CS-6 Commentator Station is warranted to be free from defect in materials or workmanship for a period of one year from the date of sale to the original purchaser.

During said warranty period RF Systems will provided only, parts and labor at no charge to repair defective units. Negligent operation, abuse, use with improper other equipment or repair not authorized by RF Systems shall cause warranty to be void.

Purchaser shall indemnify and hold harmless RF Systems Ltd. its proprietor(s), agents, or hires against, and release from any and all claims , actions, proceedings, expenses, damages, and liabilities, including any loss or damages or cost caused by the failure or breakdown of any CS-6 Commentator Station

All shipments to RF Systems for what ever reason must have a RMA number affixed to the shipping label and be shipped prepaid.

DESIGN OBJECTIVES

To design a alternative Commentator Station. 1) Address some of the most common complaints heard from the field. 2) To provide quick and easy set up. 3) To use thru hole PC boards for ease of field or shop service or modification.

PHANTOM POWER

A rear panel switch is provided to turn the Phantom Power on. What is important to note is that it is not P48 but is P12. The Sennheiser HME 26 headset (5 to 15 vdc) cable part # 502-459 will not work with the CS-6 as it is unbalanced and would require voltage in the form of T Power (power + & - on pins 2 & 3).

Cable part # 502-460 is for P-48 which RF Systems has found also will work with P24 and P12. The voltage at the headset end of the cable connector at Pin 1 and pin 2 or 3 is 7.75 volts with P48, P24, P12. There are now CS-6s on a major truck using the Sennheiser HME 26 / CS-6 combination and both are work fine . For P12 a 680Ω series is use rather than the 6.8K for P48 per DIN 45-596.

MICROPHONE OUTPUTS

Standard units are supplied only with a Direct Microphone Output. Although two simultaneously microphone XLR outputs are available with the addition of the optional + 20db XLR output. The Cough and Talkback switches work simultaneously for both outputs.

TALKBACK

The Talkback in the CS-6 is different than any used in similar boxes. It uses a Bi-Lateral Current Source as developed by RTS. The circuit allows stations or beltacks to be added with no change in level. One fact that some Engineers and most A-2 don't understand is that RTS P/L channels must be terminated. The problem is that no one sees the termination as they are part of the Power Supplies as in the PS-31, PS-15 etc. Since the Talkback does not connect to a P/L channel it none the less needs to be terminated. Each CS-6 has a termination switch and as in video if the CS-6s are looped together **ONLY ONE** termination switch needs to be turned on. If each were to be plugged into a separate channel of a sub mixer then each CS-6 terminate switch would need to be turned on. The output level is approx. -10 db. With one box terminated it is a very close match to other talkback boxes.

AUX INPUT

A balanced differential input is provided for the Aux Input. Nominal input level is +4dbm

MORE TECHNICAL INFORMATION

If you require schematics of the CS-6 or parts information, please contact Richard Schumaker at RF Systems Ltd.