

**PRASAR BHARATI
(BROADCASTING CORPORATION OF INDIA)
DIRECTORATE GENERAL: ALL INDIA RADIO
(P&D UNIT)**

Specification No. SSE-4134/2.

January, 2005.

SPECIFICATION FOR STEREO DISTRIBUTION AMPLIFIER

1. GENERAL

The stereo distribution amplifier will be used for feeding a stereo high quality programme to various destinations. The distribution amplifier should be solid state audio amplifier having one stereo input and 4 separate individually adjustable stereo outputs.

The tenderer must along with the tender documents submit

- (a) Complete printed technical, literature of the equipment being offered.
- (b) A point to point compliance statement highlighting deviations, if any, on all clauses of the specification from the manufacturer of the offered equipment duly signed in original.
- (c) The quote should ' either be from the manufacturer or authorized agent. In case the quote is from the authorized agent, a certificate from the original manufacturer that the tenderer is authorized agent for India should be enclosed with the tender.

Incomplete tenders will be rejected.

The tenderer may be required to submit a sample of equipment with accessories at the time of technical evaluation in New Delhi. Non-compliance of sample submission will disqualify the tender.

2. INPUT IMPEDANCE

Input impedance shall be ≥ 10 k ohm (balanced).

3. INPUT LEVEL

- (a) Nominal : 0 dBu
- (b) Maximum : +20 dBu

4. GAIN

Shall have adjustable gain of ± 5 dB with respect to nominal setting.

5. OUTPUT LEVEL

- (a) Nominal : 0 dBu
- (b) Maximum ; +20 dBu

6. OUTPUT IMPEDANCE

Output impedance shall be ≤ 50 ohm (balanced).

7. FREQUENCY RESPONSE

± 0.5 dB in frequency range of 40 Hz to 20 kHz.

8. TOTAL HARMONIC DISTORTION

Less than 0.3% at nominal level (1 kHz) and less than 0.5% at maximum output level. (Terminated into a load of 600 ohm) throughout the audio frequency range of 40 Hz to 20 kHz.

9. SIGNAL TO NOISE RATIO AT NOMINAL INPUT/OUTPUT, RMS UNWEIGHTED (22 Hz-22kHz)

≥ 90 dB . . -

10. INTER OUTPUT LOADING

- (a) If one of the outputs gets short circuited, the level on the rest of the outputs shall not fall by more than 0.3 dB,
- (b) If two of the outputs got short circuited, the level on each of the remaining outputs shall not fall by more than 0.6 dB.

11. INTER-CHANNEL PHASE DIFFERENCE

Not more than 5 degree in frequency range of 125 Hz to 10 kHz and 10 degree from 40 Hz to 20 kHz.

12. INTER-CHANNEL LEVEL DIFFERENCE

Within ± 0.5 dB, from 40 Hz to 20 kHz.

13. INTER-CHANNEL CROSS TALK

Equal to or better than 60 dB at 20 kHz at nominal level.

14. INPUT/OUTPUT CONNECTORS

Input and all outputs shall be on 3-pin XLR connectors.

15. POWER REQUIREMENT

230 V $\pm 10\%$, 48-52 Hz single phase AC supply.

16. CONTROLS

Following front panel controls shall be provided:

- (a) ON/OFF switch with ON LED indicator and power fuse.
- (b) Screw driver control for level adjustment for each output.

17. MOUNTING

Standard 19" rack mounting shall be provided. The amplifier shall be 1 U in height.

18. ENVIRONMENTAL CONDITIONS .

The equipment shall be capable of performing satisfactorily in the dry temperature range of 0 °C to 45 °C and damp heat conditions up to 40 °C at 90% RH non-condensing. The amplifier shall work on natural cooling without employing cooling fan. A test certificate from an approved test house shall have to be produced with the tender.

19. SPARES

Essential and recommended spares shall be quoted separately. The list should include name and part no. of the parts/components with quantity and unit cost. The tenderer shall ensure availability of spares in India for the quoted equipment for a period of at least ten years from the date of supply of last equipment.

20. ACCESSORIES

Power cord and suitable mating connectors for input/outputs shall be provided along with each unit.

21. MANUALS

One complete set of manuals for operation, maintenance and servicing should be supplied along with each amplifier. One set shall be enclosed with the tender documents.

22. INSPECTION

The inspection of the equipment will be carried out at the manufacturer/ supplier's premises. The inspection charges shall not be added for ranking of bids. All the necessary equipment for carrying out the inspection will be arranged by the manufacturer/supplier.

23. GUARANTEE

The equipment shall be guaranteed for satisfactory performance and against all manufacturing defects for a period of one year from the date of supply. Servicing facility shall exist for servicing of the quoted equipment within India.

(R.K. Budhraj)
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