

PRASAR BHARTI  
BROADCASTING CORPORATION OF INDIA  
DIRECTORATE GENERAL: DOORDARSHAN

**SPECIFICATIONS FOR DIGITAL PHONE-IN-COSOLE**

Specifications No.: SD 15/2010  
Dated: 17.06.2010

**1. SCOPE:**


The specifications lay down the performance of Digital Phone-in Console to be procured for Doordarshan Network for Studio/OB applications.

**2. GENERAL:**

- (a) **The offered equipment should be from an internationally reputed manufacturer and the quoted model should be field proven and in use by leading broadcasters in various continents of the World. The bidder should essentially submit the list of the broadcasters to whom the quoted model has been supplied.**

**The bidder may also be asked to provide the quantity and the year of supply of the offered equipment to the broadcasters at a short notice, if required.**

- (b) The offered Digital Phone-in-Console is to be used as interface between analog/digital audio mixer and PSTN line telephone.
- (c) The offered system should be capable of interfacing two telephone lines independently or in conference mode, as per requirement.
- (d) The offered system should have built in facilities of echo cancellation and reduction of distortion caused by mixing of other desired signal having unwanted signals.
- (e) The offered system should have 16 bit digital signal processing for optimum performance at all times so as to provide crystal clear audio.
- (f) The offered system should have provision for interfacing the dial-up instrument. The dial-up instrument may also be offered.
- (g) The offered system should ensure broadcast quality audio output even with poor quality telephone lines and should not be subjected to signal delay.
- (h) The offered system should have independent gain control with display through LED/VU meter/LCD panel for reception and transmission.
- (i) The offered system should adapt to varying line conditions & should have automatic signal limiting.



- (j) Facility of ringing detector should be available with the offered system.
- (k) The offered system should be capable of being mounted in a standard 19" rack. The plug-in support/mounting hardware should also be offered.
- (l) The bill of material is given in **Appendix-I**.
- (m) The equipment are being procured for various Doordarshan centres as per **Appendix-II**.

### **3. TECHNICAL SPECIFICATIONS:**

1. Frequency Response : 250Hz to 3.4 kHz  $\pm$  3 dB (measured from telephone port to O/P port)
2. Input Impedance : 600 ohms, balanced  
(Telephone Line Port)
3. Input Impedance :  $\geq$  10 k Ohms, balanced  
(Line feed Port)
4. Output impedance :  $\leq$ 200 ohm, balanced
5. Signal to noise Ratio :  $\geq$  45 dB
6. Distortion :  $\leq$ 1.0%
7. Connectors : 3 pin XLR for both output and Line input feed
8. Phone Line Jack : RJ 11
9. Aux Phone jack : RJ 11
10. Power Supply : 230V  $\pm$  5%, 50 Hz

### **4. COMPLIANCE:**

- (a) Any substandard equipment included in the offer may cause the rejection of complete offer with the sole responsibility of the bidder.
- (b) The bidder should provide the offered un-priced bill of material in electronic form also in addition to the hard copy for ease of technical evaluation.
- (c) **A point-by-point compliance statement from the principal manufacturer in respect of all the points laid down in these specifications is to be enclosed along with the offer in the format given below. Mere signature on the copy of the**

*Specifications for Digital Phone-In Console: SD 15/2010 Dt.17.06.2010*

**specifications shall not be accepted as a compliance statement.**

**The figures so mentioned should be supported by record of these in the technical literature enclosed with the tender and reference to the page number of enclosed literature for all features and technical specifications should be mentioned in the relevant column. Offers without the compliance statement or with incomplete compliance statement will liable to be rejected with the sole responsibility of the bidder. Any deviation from the specification detailed in the compliance statement is to be highlighted separately.**

Sr. No of DD specs.	DD specs.	Compliance (Yes/No)	Performance Fig. of equipment Offered.	Reference to the Page Number of enclosed literature	Deviations, in case of non-compliance	Optional items if any reqd. to make the sys. Compliant to DD specs.	Features in the offered Product which exceeds DD specs.

**5. ACCESSORIES:**

All the essential accessories like remote cable, power cables, software and connector etc. required to complete the system should be offered by the bidder and the bidder should certify the completeness of the system. All the optional items should be quoted separately. The bidder must provide enough details about such optional items to decide its utility.

**6. DOCUMENTATION:**

One set of printed technical and operation & maintenance manuals for all the equipments are to be provided on non-returnable basis along with the tender to facilitate the technical evaluation, otherwise the tender is liable to be ignored. The successful bidder will have to supply one set of printed operation, service and maintenance manuals with respect to each equipment.

**7. GUARANTEE:**

- (a) The system should be guaranteed for two years of trouble free operation from the date of supply. In case of any equipment failure including software and hardware within this period, the same shall be rectified or replaced free of cost to Doordarshan.

- (b) The guarantee should cover all hardware, software and modules of the complete system.

**8. DEMONSTRATION:**

If necessary, the bidder may be asked for demonstration of the offered system as part of the technical evaluation. In such case the bidder will have to make suitable arrangement for the demonstration of the offered system at Doordarshan Bhawan, New Delhi, on notice of 7 days. Accordingly the bidder should be in readiness for demonstration on a notice of 7 days.

**9. INSPECTION:**

The equipment shall be subjected to inspection by Doordarshan officials at New Delhi.

**10. ENCLOSURES:**

The bidder must necessarily submit the following enclosures along with the technical bid:

- (a) Compliance statement with respect to all the points of the specifications duly signed by the OEM.

The reference to the page number of enclosed literature for all features and technical specifications should be essentially mentioned in the relevant column of the compliance statement.

- (b) Technical manuals/Detailed technical literature/catalogues for all the offered products for substantiating the model no. and technical specification.
- (c) **Model specific broadcast user list of the offered product.**
- (d) Any other document mentioned elsewhere in the tender document.

**The tender is liable to be rejected in the absence of the above enclosures with the sole responsibility of the bidder.**

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*Handwritten signatures: "P. Sri" and "G.S."*

**EQUIPMENT ARE BEING PROCURED FOR THE FOLLOWING  
DOORDARSHAN CENTRES**

<b>Sl. No.</b>	<b>Zone</b>	<b>Location of Doordarshan Centre</b>	<b>Qty.</b>
1.	<b>North Zone (NZ)</b>	Janimu	1 set
2.		Chandigarh	1 set
3.		Bareilly	1 set
4.		Shimla	1 set
5.		Allahabad	1 set
6.		Mau	1 set
7.	<b>East Zone (EZ)</b>	Daltonganj	1 set
8.		Mujjafarpur	1 set
9.		Ranchi	1 set
10.		PPC Guwahati	1 set
11.		Siliguri	1 set
12.		shillong	1 set
13.		Tura	1 set
14.		Kohima	1 set
15.		Itanagar	1 set
16.		Imphal	1 set
17.		Silchar	1 set
18.		Dibrughar	1 set
19.		Aizwal	1 set
20.		Agartala	1 set
21.	Sambalpur	1 set	
22.	Gangtok	1 set	
23.	<b>South Zone (SZ)</b>	Gulbarga	1 set
24.		Pondicherry	1 set
25.		Vijayavada	1 set
26.		Portblair	1 set
27.	<b>West Zone (WZ)</b>	Panaji	1 set
28.		Raipur	1 set
29.		Rajkot	1 set
30.		Pune	1 set
31.		Indore	1 set
<b>TOTAL</b>			<b>31 sets</b>

*P. K. S.*

*CPB*

**Bill of Material Required**

<b>Sr. Nos.</b>	<b>Details of Item</b>	<b>Qty.</b>
1.	Digital Phone-in-Console System	31 nos.
2.	Telephone instrument with interconnecting cables	62 nos.
3.	Operation manual/User Guide/ Technical Manual/ Installation Manual etc.	31 sets
4.	Service & Maintenance Manuals	31 sets

*Pj*

*CS*