



BHARAT HEAVY ELECTRICALS LIMITED

Enquiry No. : _____
Due Date : _____
Supplier Qtn. No.: _____

Date : 13/02/2010

SPECIFICATION CUM COMPLIANCE CERTIFICATION FOR
Audio System at Cultural hall (1Set)

NOTE:-

1. Vendor(OEM) must submit complete information against all clauses. The offer meeting this clause would only be processed.
2. The "Offered" Column and where applicable, the "Deviations" & "Remarks" Column of this format shall be filled in by the Vendor
3. The offer and all documents enclosed with offer should be in English language only.

ADDRESS OF THE SUPPLIER :	ADDRESS OF THE INDIAN AGENTS :
TELEPHONE NOS.:	TELEPHONE NOS.:
FAX NOS.:	FAX NOS.:
E-MAIL ADDRESS :	E-MAIL ADDRESS :

SL NO	SPECIFICATION	MAKE/MODEL TO BE CONFIRMED BY VENDOR	OFFERED	DEVIATIONS	REMARKS
1	Vocal microphone : 4 Nos.				
1.1	Transducer Type: Dynamic				
1.2	Frequency Response: 30Hz-17KHz				
1.3	Polar Pattern: Cardioid				
1.4	Sensitivity (at 1kHz): -49dB $\pm$ 3dB				
1.5	Nominal Impedance: 300-400 Ω				
1.6	Connector: 3-pin XLR male				
1.7	On/Off Switch				
1.8	Accessories Included: 6.5M XLR-F to XLR-M Mic Cable, Leatherette Pouch, Mic Holder, Plastic Case.				

4.3	Crossover Section								
4.3.1	Crossover filter with roll-off characteristics 24 dB/octave or better.								
4.3.2	Dedicated SUB out with frequency selection with 24dB/oct (or better) filter and level control.								
4.4	Delay Section								
4.4.1	Self illuminated Delay on/off switch.								
4.5	Other Features								
4.5.1	Assignable bargraph to input, Sub out, Low & High Out levels.								
4.5.2	Internal switch-mode power supply for maximum voltage variation								
5	Power sequencer: 1 No.								
5.1	Output Current: 6 x 6A AC and 2 x 25 A AC or more								
5.2	Input AC Mains: 240V AC @ 50Hz								
5.3	Weight: Less than 10 KG								
5.4	Size: 1 to 2U								
5.5	Surge and Spike Protection								
6	Amplifier(2000 Watt RMS): 2 Nos.								
6.1	Power output: (all wattage ratings in True RMS)								
6.1.1	2 Ohm, 20 Hz- 20 KHz, 1% THD : 2 x 1000 Watt								
6.1.2	2 Ohm (EIA), 1KHz, 1% THD : 2 x 2250 Watt								
6.1.3	4 Ohm, 20 Hz- 20 KHz, 1% THD : 2 x 800 Watt								
6.1.4	4 Ohm (EIA), 1KHz, 1% THD : 2 x 1380 Watt								
6.1.5	8 Ohm, 20 Hz- 20 KHz, 1% THD : 2 x 500 Watt								
6.1.6	8 Ohm (EIA), 1KHz, 1% THD : 2 x 755 Watt								
6.2	Bridged Mode								
6.2.1	4 Ohm, 20 Hz- 20 KHz, 1% THD : 2000 Watt								
6.2.2	4 Ohm (EIA), 1KHz, 1% THD : 4500 Watt								
6.2.3	8 Ohm, 20 Hz- 20 KHz, 1% THD : 1600 Watt								
6.2.4	8 Ohm (EIA), 1KHz, 1% THD : 2760 Watt								
6.3	Damping Factor: > 200:1 (or better)								
6.4	Frequency Response: 20 Hz - 20 KHz								
	Protection Devices: Overload Protection, Temperature, DC, RFI Short Circuit, Short Start								
6.6	Input Connector (per Ch): XLR, 1/4" TRS jack								
6.7	Output Connector (per Ch): Speakon Connector								



 Authorized Person
 Date: _____
 Location: _____

[illegible]

8.12	Net Weight: 25 kg or Less				
	Accessories (Standard): Rigging and Flying Kit consisting Flybars/ Array Frame & quick release Pins				
8.13					
9	STAGE MONITORS: 4 Nos.				
9.1	Type: 2-Way Active Speaker				
9.2	Power Output (RMS / Peak) Watts: 275/ 550				
9.3	Frequency Response (Hz): 60-18000				
9.4	Sensitivity (1w @1m) dB: 96-100				
9.5	SPL (dB): 125 (or more)				
9.6	LF Driver Size: 12" Woofer, 2" Voice coil				
9.7	HF Driver Size: 1" Exit, 1.35" Voice Coil				
9.8	Input Connector: XLR / Jack combo				
9.9	Net Weight (Kgs.): 20 Kg Or less				
10	ACCESSORIES				
10.1	Microphone Connector Boxes for Stage (4 x FXLR panel type): 4 Nos				
10.2	Monitor Speaker Connector Boxes for Stage (2 x MXLR panel type): 2 Nos				
10.3	Equipment Rack 24U: 1 Nos				
10.4	Speaker cable 48/0.2mm (meters) : 250				
10.5	2-core ABC 19/0.122mm shielded microphone cable (meters) : 200				
10.6	Multipair(8 pair) Cable SR for Stage Box (meters): 100				
	Line Array assembly kit including Fly-bar and locking pins:				
10.7	2 Set				
	Suitable ChainPulley arrangements (1 TON CAPACITY WITH 20 MTRS. LIFT AS PER IS: 3832-2005, HEAVY DUTY CHAIN PULLEY WITH LOAD CHAIN AS PER IS: 6216 ALLOY STEEL GR. 80, HAND CHAIN AS PER IS 2429 GR. 30 AND HOOKS AS PER IS: 15560-2005 ALONG WITH LOAD TEST CERTIFICATE FROM ANY GOVT. APPROVED TEST HOUSE.)				
	: 2 Set				
	Set of cables and patch cords: Wall Mount XLR- 24Nos, XLR- 36No, Jack- 15 No, Speakon-20Nos, Mic Cable 19/40- 300Feet, Mic cable 4 core- 200 Feet				
10.9					
10.10	Servo Stabilizer 8 KVA : 1 No.				
10.11	HDMI Splitter 1 HDMI Input - 4 HDMI output : 1 No				

14/6/2024

10.12 HDMI cable 10 meter,15 Meter and 20 Meter : 1 each

10.13 Headphone for Mixer: 2 Nos

11 Installation, Testing & Commissioning in vendor's scope

11.1 Drawing and laying of speaker and microphone cables

11.2 Installation charges for equipment and accessories

Equalization of sound system for increasing acoustic gain before onset of feedback and enhancing naturalness of

11.3 reinforced sound

11.4 Measurement of Speech Transmission Index

Measurement of Sound Pressure levels by pink noise

11.5 excitation of sound system

12 GENERAL TERMS AND CONDITIONS DETAILS TO BE INCLUDED IN THE OFFER

12.1 Technical literature catalogue of the equipment.

12.2 List of customers alongwith customers full address date of supply to whom identical system have been supplied

12.3 Detailed AMC proposal for period of two years to be quoted alongwith the offer beyond warranty period

13 INSPECTION AND TESTING (IAP)

13.1 Live operational inspection at BHEL works for continuous 5 hrs operation and checking for quality of all types of usage alongwith all accessories.

13.2 Inspection and testing of the equipment, if required, shall be carried out by BHEL , before despatch

14 MISCELLANEOUS

14.1 4 Copies each of test & guarantee certificates, descriptive leaflets operation & service manuals, etc., should be provided alongwith the equipment / supply.

14.2 The complete system shall be guaranteed for minimum period of 36 months from the date of commissioning at site.

Balance bill

BHEL

CM

and signed by the authorized person

for execution

28/04/2011

	Service support should be provided to BHEL on emergency basis on the same day, minor repairs to be completed within 2 to 3 days				
14.3	Valid Authorization certificate issued by Manufacturer or Authorized Distributor in India to be submitted alongwith offer				
14.4	O & M training should be provided free of cost to BHEL Staff.				
14.5					

PQC REQUIREMENT

1	Experience and past performance on similar contracts for last two Years: Proof of copy of Purchase Order & performance proof for Audio System (Line array Speaker, Amplifiers, Mic etc) to be submitted. Cutoff date for Experience shall be 31st August 2019.				
2	Capabilities : In case of Non- OEM vendor, valid Authorization Certificate Issued by Manufacturer or Authorized Distributor to be Submitted along with Offer.				
3	Financial Standing : Bidder must submit Latest ITCC and audited Balance sheet along with Profit & Loss account for the last three years ending 31st March 2019 .				
	Note 1: Financial Standing Requirements will not be applicable for MSME vendors. However Experience and past performance on similar contracts for last two Years and capabilities will be applicable for both MSME and Non- MSME vendor.				