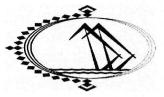
## DEENDAYAL PORT AUTHORITY

(ERSTWHILE DEENDAYAL PORT TRUST)

Telephone (02836) 270209/ (02836) 270342 MOBILE 9825234436 WEBSITE: www.deendayalport.gov.in



Office of the Superintending (Elect.), P&C Building, Ground Floor, New Kandla – Kutch. Pin Code: 370 210. Email : xenedpt@gmail.com

No. EL/AC/EOI/Sound System/

## SAGARMALA

Dated :05.02.2021

STISTIST STORY

(This Notice is issued only to elicit Expression of Interest from the parties interested in the work and does not constitute any binding commitment from the Deendayal Port Authority to proceed with the work or invite any or all the parties in the subsequent bidding process. The Open Tenders will be issued subsequently)

**EXPRESSION OF INTEREST** 

Τo,

## <u>SUB :-</u> <u>EOI FOR UPGRADATION OF AUDIO SYSTEMS OF S.V.P. HALL AT</u> <u>GOPALPURI KACHCHH.</u>

Sir,

You are requested to submit Expression of Interest for "EOI for Upgradation of Audio system of SVP Hall at Gopalpuri – Kachchh".

The Expression of Interest should reach to this office on or before 5-62-24 or soft copy of EOI also acceptable through e-mail id <u>xenedpt@gmail.com</u> & <u>deepak.hazra@deendayalport.gov.in</u>

Yours faithfully,

on

Executive Engineer (Elect.) Deendayal Port Authority

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Audio Splitter				
Addio Oplittei	01	No.		
<ul> <li>10 balanced Inputs &amp; Outputs.</li> <li>4 modes of operation:</li> </ul>				
Stereo Mix - 2 X (4 IN / Mix Out + 4 Individual Channel out).				
<ul> <li>Mono Mix - 8 IN / 2 Mix Out + 8 Individual Channel out.</li> <li>Stereo Split - 2 IN / 10 Out.</li> </ul>				
• Mono Split - 1 IN / 10 Out.				
• ¼" Stereo jack inputs on each channel with level control.				
• 15dB gain on each channel.				
Self illuminated mute switches on each channel.				
Clip LED for all inputs.				
• Individual Outputs: Four ¼" Stereo Jacks & Four XLR.				
Balanced inputs/ outputs & master control for MIX A & B				
• Individual Outputs: Four ¼" Stereo Jacks & Four XLR.				
Balanced inputs/ outputs & master control for MIX A & B				
Audio Crossover	01	No.		
Input Impedance - Unbalance 10K $\Omega$ /Balance 20K $\Omega$ Output level/Impedence -				
Crossover frequency range - 44 Hz -9.3KHz				
THD - 0.05%				
Low Cut - 25Hz, -3 dB				
			- Sec. 1	
	<ul> <li>4 modes of operation: Stereo Mix - 2 X (4 IN / Mix Out + 4 Individual Channel out).</li> <li>Mono Mix - 8 IN / 2 Mix Out + 8 Individual Channel out.</li> <li>Stereo Split - 2 IN / 10 Out.</li> <li>Mono Split - 1 IN / 10 Out.</li> <li>¼" Stereo jack inputs on each channel with level control.</li> <li>15dB gain on each channel.</li> <li>Self illuminated mute switches on each channel.</li> <li>Clip LED for all inputs.</li> <li>Individual Outputs: Four ¼" Stereo Jacks &amp; Four XLR.</li> <li>Balanced inputs/ outputs &amp; master control for MIX A &amp; B</li> <li>Individual Outputs: Four ¼" Stereo Jacks &amp; Four XLR.</li> <li>Balanced inputs/ outputs &amp; master control for MIX A &amp; B</li> <li>Individual Outputs: Four ¼" Stereo Jacks &amp; Four XLR.</li> <li>Balanced inputs/ outputs &amp; master control for MIX A &amp; B</li> <li>Individual Outputs: Four ¼" Stereo Jacks &amp; Four XLR.</li> <li>Balanced inputs/ outputs &amp; master control for MIX A &amp; B</li> <li>Individual Outputs: Four ¼" Stereo Jacks &amp; Four XLR.</li> <li>Balanced inputs/ outputs &amp; master control for MIX A &amp; B</li> <li>Audio Crossover</li> <li>Input Impedance - Unbalance 10K Ω /Balance 20K Ω</li> <li>Output level/Impedence - Unbalance : 30 Ω / Balance 60 Ω</li> <li>S/N ratio - &gt;100 dB</li> <li>Crossover frequency range - 44</li> <li>Hz -9.3KHz</li> <li>THD - 0.05%</li> </ul>	<ul> <li>4 modes of operation: Stereo Mix - 2 X (4 IN / Mix Out + 4 Individual Channel out).</li> <li>Mono Mix - 8 IN / 2 Mix Out + 8 Individual Channel out.</li> <li>Stereo Split - 2 IN / 10 Out.</li> <li>Mono Split - 1 IN / 10 Out.</li> <li>¼" Stereo jack inputs on each channel with level control.</li> <li>15dB gain on each channel.</li> <li>Self illuminated mute switches on each channel.</li> <li>Clip LED for all inputs.</li> <li>Individual Outputs: Four ¼" Stereo Jacks &amp; Four XLR.</li> <li>Balanced inputs/ outputs &amp; master control for MIX A &amp; B</li> <li>Individual Outputs: Four ¼" Stereo Jacks &amp; Four XLR.</li> <li>Balanced inputs/ outputs &amp; 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S/N	Description	Qty.	Unit	Rate	Amount
8	<ul> <li>Power Amplifier – 3200 watts.</li> <li>Dual Channel direct coupled amplifier</li> </ul>	02	Nos.		
	• 3200 watts rated output (1600+1600 Watts)				
9	<ul> <li>Power Amplifier 6000 Watt</li> <li>Dual Channel power amplifier</li> <li>3000 + 3000 watts</li> </ul>	01	No.		
10	Power Amplifier 2400 Watt Dual Channel PA Power amplifier	01	No.		
11	Dual Channel TA Fower amplified1200 + 1200 wattSupply,Installation,Commissioning of Audio Mixer : 16channel mixing console (with Effect) of	01	No.		
	10 mono inputs & amp; 4 stereo inputs; 24-bit DSP effects for 99 presets ; Frequency response : 20Hz - 20kHz; Total harmonic distortion(THD-N) of 0.03%; 6 single-control dynamic compressors; Phantom power : +48V; Internal power supply; Power consumption : 50W.				
12	Supply, Installation, Testing Commissioning of Wireless Handheld Microphone : Frequency response (TX): 80Hz - 14kHz; Bandwidth: 24MHz; Total harmonic distortion (THD) : < 0.9%; Signal to noise ratio : > 103 dB; Pattern : Cardioid; Microphone type: dynamic, Rack Mountable.	01	No.		
13	Supply, Installation, Testing Commissioning of Wireless Lapel Microphone : Frequency response: 50Hz - 16kHz; Bandwidth: 24MHz; Total	01	No.		
	harmonic distortion (THD) : < 0.9%; Signal to noise ratio : > 103 dB; Pattern : Omni-directional; Microphone type: condenser, Rack Mountable.				
14	Dual UHF Wireless conference microphone system designed for superior vocals & speech reproduction	01	No.		

S/N	Description	Qty.	Unit	Rate	Amount
15	8 KVA Servo Controller	01	No.		
16	<b>VOCAL MICROPHONE :</b>	06	Nos.		
	Professional dynamic Corded microphone for lead & backing vocals on stage. Polar Pattern : Cardioid. Frequency Response: 40-16000 Hz Nominal Impedance: 350 Ohms				
17	MICROPHONE STANDS:	06	Nos.		
	Microphone stand with boom. Loaded nylon tripod base. Height : 202 cm.Spread : 64 cm.				
18	TABLE MICROPHONE STANDS (small mic stand):Table/floor stand. Height: 350-530mm.	04	Nos.		
	Base dia : 150 mm .				
19	Mic cable with XLR (screened 10 Mtr.)	10	Nos.		
20	Speakon Connector	50	Nos.		
21	Shilded system Cable (Screened 1.5 mtr.)	25	Nos.		
22	Digital Snack cable with connector drum box for stage solution (18 core)	01	No.		
23	Speaker cable for above system (4 core 99.9 tinned coper screened round cable 2.5 sq.mm.	200	Mtrs.		
24	Speaker cable for above system (2 core 99.9 tinned copper screened cable 2.5 sq.mm.)	100	Mtrs.		
25	Wall Mount Bracket	02	Nos.		
26	Chain Pulley Block (1 T, 12 Mtr.) for speaker	03	Nos.		
27	Powder cotted cold roled MS Floor mount rack with 4 caster wheels and inbuilt power strip and cooling fan, front glass door with lock and key and back metal door for PA system.	01	No.		
28	Complete installation material	01	No.		
29	Installation, Testing and commissioning of PA system including laying of audio and speaker cable charges with 6 months annual maintenance contract	01	No.		

Seal & Signature Contractor Executive Engineer (E) Deendayal Port Authority

#### Installation of new Sound System in SVP Hall, Gopalpuri.

#### **GENERAL INSTRUCTIONs**

The system is required for SVP Hall, Gopalpuri:

**Seating capacity** = 1394 (Ground (624)+ Balcony (770)) **Use** = Stage Lectures, Seminars, cultural functions etc, and for films screening **Layout** = Drawing of auditorium is furnished in the tender documents.

### **SALIENT POINTS :**

- 1. Sound Control adjacent to stage (side) for all stage events.
- 2. All eqpt (viz. Amp's, Mixers etc.) to be in 2 nos. portable trolley cabinet with lockand wheels.

3. Suitable Speakers networks needed - separate for Stage Programmes and Film.

4. Live (Audio) Recording Facility required (For Stage events).

## **INSPECTION - ACCEPTANCE CRITERIA :**

## **REPORT TO BE SUBMITTED AFTER INSTALLATION.**

- 1. Speech Transmission Index (STI/RaSTI) Analysis will be required using CAD mapping of auditorium–showing coverage of sound in entire auditorium.
- 2. STI (Speech Transmission Index) Spectrogram graph considering noise level of 55 dB.
- 3. SPL uniform (Sound Pressure Level) Spectogram @ +/- 3 dB at 95 dB. of sound in entire auditorium.
- 4. D/R (direct filled and reverb filled) Ratio coverage Map –showing coverage of sound in entire auditorium.

# SPECIFICATION FOR MODERNIZATION OF AUDIO SYSTEMS OF SVP HALL, GOPALPURI

#### **PRE-QUALIFICATION CRITERIA**

#### Initial Screening

The Bidder should have past experience in implementing similar work. The OEM and Authorized Integrator must possess the requisite experience, organizational strength and capabilities in providing the services necessary to meet the requirements as described in the document. Keeping in view the complexity & volume of the work involved, the following criteria are prescribed as pre-qualification criteria for bidder interested in undertaking the project. The OEM and Authorized Integrator must possess the technical knowhow and the financial strength that would be required for successful implementation of the project and support services sought by Department for the entire period of the contract.

#### For this purpose, bidder should qualify the following Eligibility Criteria:

- The Bidder should be reputed OEM of Sound Reinforcement Systems components like Speakers, Power Amplifiers, Audio processor, Wireless Microphones, Mixers, Corded Microphones, Video Projector, etc having well established infrastructure in India withtheir own sales and service center in India or their such Authorized System Integrator duly authorized by the OEM for the exclusive purpose of participation in this tender. Proof of being manufacturer for each individual of the following items below to be submitted with Technical bid.
  - a. Speakers
  - b. Amplifiers
  - c. Audio Processor
  - d. Wireless Microphone
  - e. Mixer
  - f. Corded Microphones
  - g. Video Projector
- 2. If the bidder is not an OEM for each of the items listed below, then the Bidders should have specific Authorization from OEM of
  - a. Speakers
  - b. Amplifiers
  - c. Audio Processor
  - d. Wireless Microphone
  - e. Mixer
  - f. Corded Microphones
  - g. Video Projector

for exclusive purpose of Participation in this tender. Proof for each individual items mentioned above to be submitted with Technical bid.

3. Based upon the auditorium's detailed drawing furnished along-with the tender, the bidder shall submit 3D Mapping design of his offered Auditorium Sound Systems using generic Electro-Acoustic simulation software – containing :

a.) Speech Transmission Index(STI/RaSTI) Analysis using CAD Mapping of the room.

- b.) Articulation Loss.
- c.) Total SPL Spectrogram... dB (+-3 dB)
- d.) Loudspeaker Overlap coverage pattern
- e.) D/R (direct filed and reverb field) Ratio

to confirm the technical performance of the systems proposed.

This report shall be on OEM/bidder's letterhead and shall be submitted in technical BID.

- 4. The bidder must have executed minimum one work of Audio and Video Projection System in Auditorium in last 3 years. Proof (PO/WO + Work Completion Cert) to be submitted with Technical bid.
- 5. If the intending bidder is Authorized System Integrator then he shall submit undertaking from the Manufacturer in original to ensure that they will provide required technical as well as sales & service support for warranty and subsequent annual maintenance period of 1 year.

Seal & Signature of Contractor

Herr Executive Engineer (Elect.) Deendayal Port Authority

S/N	Description	Recommended Makes		
1	LINE ARRAY SPEAKER SYSTEM	JBL / L Acuostics/Renkus Heinz /Bose/Ahuja		
2	ARRAY FRAME	JBL / L Acuostics/Renkus Heinz /Bose/Ahuja		
3	SUBWOOFER SPEAKER SYSTEM	JBL / L Acuostics/Renkus Heinz /Bose/Ahuja		
4	STAGE MONITOR SPEAKER SYSTEM	JBL / L Acuostics/Renkus Heinz /Bose/Ahuja		
6	Audio Splitter	JBL / L Acuostics/Renkus Heinz Bose/Ahuja/Sennheiser/AKG/shure		
7	Audio Crossover	JBL / L Acuostics/Renkus Heinz /Bose/Ahuja		
8	Power Amplifier – 3200 watts.	Crown / Bose /Lap Gruppen /L Acuostics/ Ahuja		
9	Power Amplifier 6000 Watt	Crown / Bose /Lap Gruppen /L Acuostics/ Ahuja		
10	Power Amplifier 2400 Watt	Crown / Bose /Lap Gruppen /L Acuostics/ Ahuj		
11	Audio Mixer	Soundcraft/Allen & Heath/Midas/Ahuja		
12	Wireless Handheld Microphone	Sennheiser/ AKG / Shure/ Studio-master		
13	Wireless Lapel Microphone	Sennheiser/ AKG / Shure/ Studio-master		
14	Dual UHF Wireless conference microphone system	Sennheiser/ AKG / Shure/ Studio-master		
15	8 KVA Servo Controller	Servokon/Servomate/Servomax/Bluebird		
16	VOCAL MICROPHONE	Sennheiser/ AKG / Shure/ Studio-master		
17	MICROPHONE STANDS	Bespco/K&M/Ahuja		
18	TABLE MICROPHONE STANDS (small mic stand):	Bespco/K&M/Ahuja		
19	Mic cable with XLR (screened 10 Mtr.)	Falcon/Klotz/Beldon		
20	Speakon Connector	Falcon/Klotz/Beldon /Nutrik		
21	Shilded system Cable (Screened 1.5 mtr.)	Falcon/Klotz/Beldon		
22	Digital Snack cable with connector drum box for stage solution (18 core)	Falcon/Klotz/Beldon		
23	Speaker cable for above system (4 core 99.9 tinned coper screened round cable 2.5 sq.mm.	Chrod/QED//Audio Quest Rocket		
24	Speaker cable for above system (2 core 99.9 tinned copper screened cable 2.5 sq.mm.)	Chrod/QED//Audio Quest Rocket		
25	Wall Mount Bracket	Hari/Engg/Coral/Custom		
26	Chain Pulley Block (1 T, 12 Mtr.) for speaker			
27	Powder cotted cold roled MS Floor mount rack with 4 caster wheels.	Hari/Engg/Coral/Custom		

Seal & Signature Contractor

Executive Engineer (E) **Deendayal Port Authority**