

Army Public School

Near Military Hospital
Jalandhar Cantt - 144005

101/PAE/APS

May 2022

**INVITATION OF BIDS FOR “PROCUREMENT OF PA EQUIPMENT)
FOR ARMY PUBLIC SCHOOL, JALANDHAR CANTT**

Tender Enquiry (TE) No : 101/PAE/APS dated __ May 2022.

1. The offline bids under Advertised Tender Enquiry are invited by the Chairman, Army Public School, Jalandhar Cantt for supply of items listed in Part II. The tender reference number is 101/PAE/APS can be viewed at www.apsjalandhar.cantt.com under “News & Event” Head.

2. The address and contact number for sending physical documents or seeking clarification are given below :-

- | | | |
|-----|---|--|
| (a) | Bids/queries to be addressed to | Chairman
Army Public School |
| (b) | Postal address for sending the bids | Principal
Army Public School
Jalandhar Cantt |
| (c) | Tele No of the contact personnel | 0181-2630776 |
| (d) | Details of Contract Officer for Technical Queries | |

Army Public School
Jalandhar Cantt
Tele No - 01812330776

3. This tender is being issued with no financial commitment and the Buyer reserves the right to change or vary any part thereof at any state. Buyer also reserves the right to withdraw the tender, should it become necessary at any stage.

(Presiding Officer)

PART I - GENERAL INFORMATION

1. **Manner of Depositing the Bids** Quotations alongwith photocopy of supporting document (self attested) shall be submitted physically in the sealed tender box prior to last date for submission of quotation in sealed envelope duly marked with Tender ID alongwith a covering letter under company letter head.
2. The following documents will also be submitted alongwith quotations :-
 - (a) Registration certificate of the firm.
 - (b) Vintage of product.
 - (c) Dealership certificate.
 - (d) ISO compliance of OEM and the Bidding Firm.
 - (e) Technical brochure of equipment / software being offered giving complete technical specification.
 - (f) Certificate of firm's registration for VAT, sale tax, service tax, excise and TIN.
 - (g) PAN No (Enclosed copy of PAN card duly stamped).
 - (h) Vendor to quote only one make / model for each item.
 - (i) Technical specification compliance chart.
 - (j) Additional charges / discounts.
3. **Time and date for opening of quotations.** **23 May 2022 at 1300 hrs.** (If due to any exigency, the due date for opening of the Bids is declared a closed holiday, the quotations will be opened on the next working day at the same time or on any other day / time, as intimated by the Buyer).
4. **Location of Quotations box.** The quotation box will be kept at entrance gate of Senior Wing, Army Public School, Jalandhar Cantt. No commercial repeat no commercial bid will be dropped in the Quotation box. Following guidelines may be followed while submitting the quotations :-
 - (a) Only those document specified in the tender document and are found in the tender box will be opened.
 - (b) Bids dropped in the wrong quotation box will be rendered invalid.
 - (c) No post bid clarification on the initiative of the bidder will be entertained.
5. **Opening of the quotations** The physical verification of tender document will be done at Army Public School, Jalandhar Cantt. The bidders may depute their representatives, duly authorized in writing to attend the opening on the due date and time.

6. **Validity of Bids.** The bids should remain valid for a period of **06 months** from the last date of submission of the bids.

PART II – ESSENTIAL DETAILS OF ITEMS / SERVICES REQUIRED

1. **Schedule of Requirements.** List of items / services required as as follows :-

Ser No	Name of Items	A/U	Qty
(a)	PA Power Amplifier with 2 Kilo Watt capacity	Nos	02
(b)	Public Addressing mixer 16 channel capacity	Nos	01
(c)	Passive two way stage utility speaker with 300 Wattage	Nos	04
(d)	Passive two way sound reinforcement speaker with 250 Wattage	Nos	02
(e)	Passive two way stage monitor speaker with 250 Wattage	Nos	01
(f)	Professional duet UHF wireless microphone system	Nos	02
(g)	Condenser goose neck microphone with base	Nos	04
(h)	Cardioid Dynamic vocal microphone	Nos	06
(j)	Rubber shielded speaker cable (Copper cable)	Roll	03
(k)	Microphone cable shielded	Roll	02
(l)	Microphone stand	Nos	02
(m)	Mono/XLR, Speaker connectors	Nos	20

2. **Technical Details.**

(a) **Specifications/drawings, as applicable.** Yes.

(b) **Technical details with technical parameters.** Technical specification of items as mentioned above.

(c) **Requirement of training/on-job training.** Two capsules for 2 days each on configuration and installation of equipment's.

(d) **Requirement of installation/commissioning.** Installation of PA Equipment and accessories at locations as specified by Army Public School to the vendor will be completed within 10 days from the date of signing of contract agreement.

(e) **Requirement of Technical documentation.** Technical literature and Manuals of all the equipments being procured is required to be provided by the vendor.

(f) **Nature of assistance required after completion of warranty.** AMC for 05 Years

(g) **Requirement of pre-site/equipment inspection.**

(i) 100% stores will be subject to physical inspection by a Board of Offrs detailed by the purchaser to ascertain that they conform to the samples / specifications as laid down in the Contract. Authorised representative of the firms will be present during inspection. In case the stores are not found to be conforming to the laid down samples / specifications, the authorized representative of the firm will be intimated by the checking Board of officer in situ. The defective stores will be removed and replaced by the stores of the correct specifications by the supplier at his own expense within a period of 05 days of inspection. In case of any dispute, decision of the purchaser will be final and binding.

(ii) The firm would be required to provide the standard Acceptance Test Procedure (ATP), which the Board of Officers would have the right to modify.

3. **Delivery Period**

(a) Delivery of stores within 10 days of signing of the contract agreement.

(b) Commissioning and Acceptance Testing within 90 days from the date of signing contract agreement.

(c) Please note that contract can be cancelled unilaterally by the Buyer in case items are not received with the contracted delivery period. Extension of contracted delivery period will be at the sole discretion of the Buyer, with applicability of LD clause.

4. **INCOTERMS for Deliver and Transportation**

(a) The vendor shall be responsible for the safe delivery of the stores at the consignee's end and transit damage if any shall be promptly attend by him.

(b) Free delivery at consignee's place.

5. Consignee details
The Principal
Army Public School
Jalandhar Cantt

6. **Paying Authority.** On receipt of bill in duplicate payment will be made through cheque.

7. **Warranty.** Seller will provide free on site comprehensive warranty for all the hardware/components/Accessories/cables and connectors etc for a period of __ Years and __ months from the date of ATP on completion of project. Items supplied under the contract shall be provided free from all types of defects/failures.

8. If within the period of warranty, the goods are reported by the Buyer to have failed to perform as per the specifications, the seller shall either replace or rectify the same free of charge, with a maximum period of 45 days of notification of such defect received by the seller, provided that the goods are used and maintained by the buyer as per instructions contained in the operating manual.

9. **Evaluation Criteria.** The Lowest Bid will be decided upon the lowest price of the items quoted by the particular Bidder as per the Price Format.

**TECHNICAL BID : FOR “PROCUREMENT OF PA EQUIPMENT
FOR ARMY PUBLIC SCHOOL, JALANDHAR CANTT**

The Chairman
Army Public School
Jalandhar Cantt

Dear Sir,

1. Ref your letter No _____ dated _____ 2022.
2. We hereby submit our technical bid in response to your above quoted letter.

Ser No	Nomenclature	Specification of item offered	Compliance to RFP specification – whether Yes/No	In case of noncompliance deviation from RFP to be specified in Unambiguous terms
(a)	PA Power Amplifier with 2 Kilo Watt capacity			
(b)	Public Addressing mixer 16 channel capacity			
(c)	Passive two way stage utility speaker with 300 Watt			
(d)	Passive two way sound reinforcement speaker with 250 Watt			
(e)	Passive two way stage monitor speaker with 250 Watt			
(f)	Professional duet UHF wireless microphone system			
(g)	Condenser goose neck microphone with base			
(h)	Cardioid Dynamic vocal microphone			
(j)	Rubber shielded speaker cable (Copper cable)			
(k)	Microphone cable shielded			
(l)	Microphone stand			
(m)	Mono/XLR, Speaker connectors			

Notes :-

1. Comments must be offered on each QR mentioned above. No QR should be left blank.
2. The above point are not exhaustive. The project includes “Procurement of PA equipment for Army Public School, Jalandhar Cantt” and the integration of the complete system. Any item of work/equipment not specifically mentioned, but considered essential for completion of the work in all respect shall be deemed to be included in the scope of the work of the successful vendor.
3. Technical literature must be included to support the technical compliance.
4. The terms and conditions as mentioned in tender enquiry letter referred to above have been carefully read by me/us and are accepted by the company and we will abide by them.
5. All certificates be duly stamped, sealed and signed, name and designation of signatories to be mentioned.

Place :

Company Seal

Date :

(Authorised Signatory of Company)

PA POWER AMPLIFIER WITH 2KW CAPACITY

Specification:-

Minimum Guaranteed Power, 1kHz

Per channel, both channels driven

Stereo, 2 ohms (per channel) - 1600W

Stereo, 4 ohms (per channel) - 1200W

Stereo, 8 ohms (per channel) - 650W

Sensitivity (volt RMS) for full rated power at 4 ohms : 1.4V

Signal to Noise Ratio (below rated 1 kHz power at 8 ohms) : +0 dB, -1 dB
A-weighted

Crosstalk(below rated power) 20 Hz to 1 kHz : > 70 dB

Input Impedance (normal) : 20 kilohms balanced
10 kilohms unbalanced

AC Line Current (120 VAC amplifier playing 1/8 power:
pink noise into 4 ohms per ch : 10.5A, at idle draws no
more than 30 Watts.

Maximum Input Signal : + 22dBu typical

AC Line Voltage and Frequency Configurations : 100V, 220-240V 50/60 Hz
Available (+ 10%)

Operating Temperature : 0 – 40 degree Centigrade
At 98% relative humidity

PUBLIC ADDRESSING MIXER 16 CHANEL CAPACITY

Specification :-

Operating Conditions	: Temperature Range: 5 – 40 degree Centigrade
Frequency Response	: Mic/ Line in to any Output: +/-1.5dB, 20H-20kHz
Input & Output Levels	: Mic Input: +12.5dBu max Line Input: >+26dBu max Stereo Inputs: >+26dBu max Mix Output: +21.5dBu max Headphones @150 Ohms) : 300mW
Input & Output Impedance	: Mic Input: +1.2 kilohms Hi-Z Input: 968 kilohms Line Input: 10 kilohms Stereo Inputs: 21.5 kilohms Output: 150ohms (balanced) 75 ohms (unbalanced)
Crosstalk (@ 1kHz)	: Channel Mute: >-90dB Fader Cut-off (rel + 10 mark): >-90dB Aux Send Pots Offness: >-82dB
Equalizer (Mono Input)	: HF : 12 kHz, +/- 15dB HMF (swept) : 400Hz- 8 kHz, +/- 15dB LMF (swept) : 80 Hz- 2 kHz, +/- 15dB LF: 60 Hz, +/- 15dB
Equalizer (Stereo Input)	: HF: 12kHz, +/- 15dB MF (swept): 140 Hz – 3kHz, +/- 15dB LF: 60 Hz, +/- 15dB
Power Consumption	<80VA

PASSIVE TWO WAY STAGE UTILITY SPEAKER WITH 300 WATTAGE

Specification :-

4 ohm Frequency Range(-10 dB)	: 50 Hz – 20 kHz
Frequency Response (+ 3 dB)	: 62 Hz – 19kHz
Coverage Pattern	: 90 degree X 50 degree
Crossover Mode	: Passive
Crossover Frequency	: 2.0 kHz
Power Rating	: 300 W/ 600 W/ 1200 W 2 hrs (Continuous/Program/Peak)
Maximum SPL (Sound Pressure Level)	: 120 dB SPL continuous (126 dB SPL peak)
System Sensitivity (1w @ 1m)	: 95 dB SPL
LF Driver	: Woofer
HF Drive	: Polymer diaphragm, Compression driver
Nominal Impedance	: 8 ohms
Finish	: Black Dura Flex finish

PASSIVE TWO WAY SOUND REINFORCEMENT SPEAKER SYSTEM
WITH 250 WATTAGE

Specification :-

4 ohm Frequency Range (-10 dB)	: 53 Hz – 19 kHz
2 ohm Frequency Range (-10 dB)	: 41 Hz – 18 kHz
4 ohm Frequency Response (+3 dB)	: 80 Hz – 14 kHz
2 ohm Frequency Response (+3 dB)	: 59 Hz – 13 kHz
Sensitivity (1w @ 1m)	: 99 dB
Nominal Impedance	: 8 ohms
Power Capacity	: 250 Watts
Peak Power Capacity	: 1000 Watts
Maximum SPL (Sound Pressure Level)	: 129 dB
Nominal Dispersion	: 90 degree X 50 degree
Crossover Frequency	: 2.2 kHz
Input Connectors	: Parallel Speakon NL- 4 (X1), ¼" TS phone Jack

PASSIVE TWO WAY STAGE MONITOR SPEAKER
WITH 250 WATTAGE

Specification :-

4 ohm Frequency Range (-10 dB)	: 75 Hz – 20 kHz
2 ohm Frequency Range (-10 dB)	: 60 Hz – 20 kHz
4 ohm Frequency Response (+3 dB)	: 110 Hz – 18 kHz
2 ohm Frequency Response (+3 dB)	: 80 Hz – 18 kHz
Sensitivity (1w @ 1m)	: 98 dB
Nominal Impedance	: 8 ohms
Power Capacity	: 250 Watts
Peak Power Capacity	: 1000 Watts
Maximum SPL (Sound Pressure Level)	: 128 dB
Nominal Dispersion	: 90 degree X 50 degree
Crossover Frequency	: 2.1 kHz
Input Connectors	: Parallel Speakon NL- 4 (X1), ¼" TS phone Jack

PROFESSIONAL DUET UHF WIRELESS MICROPHONE SYSTEM

Specification :-

RECEIVER

Operating Frequency Range	: 583-683 MHz
Receiving Frequency	: Variable
Frequency Response	: 40 Hz – 16 KHz
Nominal deviation / peak error	: + 15 KHz
Total Harmonic Distortion	: <0.02%
Dynamic Range	: 100dB
Power Requirement	: DC 12V
Current Consumption	: 150mA

TRANSMITTER

Carrier Frequency	: 583-683 MHz
Frequency stability	: +0.03%
Frequency Response	: 40 Hz – 16 KHz
Total Harmonic radiation	: <0.02%
Dynamic Range	: 100dB
Use Battery	: 2 X 1.5V (AA)
Current consumption	: 150mA

CONDENSER GOOSE NECK MICROPHONE WITH BASE

Specification :-

GOOSE NECK

Frequency Response	: 20 – 18000 Hz
Impedance	: 1 Kiloohm
Sensitivity	: 7.5 mV/ Pa
Power Source	: 1.5V – 9 V

MICROPHONE BASE

- * To be heavy weight housing with anti skid feet ensures stability.
- * To be provided with LED for indicating ON status.
- * To be built in cell housing for 2xUM-3 pencil cells (2V) for operating the condenser microphone.
- * To be provided with on/off switch and special electronic circuitry require for minimal switch noise.

CARDIOID DYNAMIC VOCAL MICROPHONE

Specification :-

Type	: Super cardioids Dynamic (Moving Coil)
Frequency Response	: 55 to 18,000 Hz
Polar Pattern	: Cardioid
Nominal Impedance	: 300 ohms (at 1khz)
Microphone Sensitivity	: 2.5 mV /Pa
Min. Terminal impedance	: 1 Kilo Ohm
Polarity	: Positive pressure on diaphragm produces Positive voltage on pin 2 with respect to pin 3
Switch	: On/Off Switch
Connector	: Three pin professional audio (CLR), male
Environmental conditions	: Operating Temperature -29 to 74 degree centigrade Relative Humidity : 0 to 95%

RUBBER SHIELDED SPEAKER CABLE (COPPER CABLE)

Specification :-

Product Type	: Bulk Cable
Wiresize	: 2.5 Sq mm (2 x Core) Copper Wire
Shield	: Rubber Shield and thread protection Inside
Length	: 90 – 100 Mtr
Colour	: Black
Line Resistance	: <64 Ohm
Number of internal conductor	: 02

MICROPHONE CABLE SHIELDE

Specification :-

Product Type	: Bulk Cable
Type	: Microphone Cable
Colour	: Black
Overall diameter	: 6mm
Centre conductor cross section	: 0.31mm Sq
Centre conductor material	: Copper, OFC
Centre conductor construction	: 27 X 0.12mm
Number of internal conductor	: 02
Shield Material	: Copper galvanized
Line Resistance	: < 64 Ohm
Capacitance	: <72 pF/m
Jacket material	: PVC

MICROPHONE STAND

Specification :-

Type	: Floor Stand
Height	: Adjustable within 920-1500mm
Base Dia	: Not less than 230mm

SPEAKON CONNECTOR

Specification :-

Contact Resistance	: <2 mili Ohm (After Lifetime)
Dielectric Strength	: 4 kVdc (peak)
Insulation resistance	: 1 Grand Ohm (After Dampheat)
Rated current per contact	: 40 A rms continuous
Rated voltage	: 250 V AC
Cable O.D	: 7 – 14.5mm
Wire size	: 4mm square/6 mm square
Wiring	: Screw type terminals or soldering