

Requisition No. NFR-37138-26-00123 dated 29/01/2026

Specification:-

SN	Item Description	Technical specification
1.	Supply of 3-way active PA speaker with 2000W peak Class-D amplification and 96kHz DSP/FIR-X tuning. Frequency response 31Hz-20kHz with max SPL of 143dB for high power FOH applications. Driver system: 15 .	Supply of 3-way active PA speaker with 2000W peak Class-D amplification and 96kHz DSP/FIR-X tuning. Frequency response 31Hz-20kHz with max SPL of 143dB for high power FOH applications. Driver system: 15 .
2	Supply of 18" subwoofer with 4" voice coil powered by Class-D amplifier (1020W dynamic / 800W continuous). Frequency response 32Hz-120Hz delivering deep, tight sub-bass. Max SPL 136dB suitable for large venues and live sound reinforcement. Yamaha 2 Nos 87620 175240 Sub: Proposal of Live sound System Please find our quotation for Live Audio Solution of your hall below: DSP -D-XSUB- processing with Normal, Boost & Xtended LF modes + selectable LPF (80/100/120Hz). Band-pass plywood cabinet with XLR inputs/through outputs.	Supply of 18" subwoofer with 4" voice coil powered by Class-D amplifier (1020W dynamic / 800W continuous). Frequency response 32Hz-120Hz delivering deep, tight sub-bass. Max SPL 136dB suitable for large venues and live sound reinforcement. Yamaha 2 Nos 87620 175240 Sub: Proposal of Live sound System Please find our quotation for Live Audio Solution of your hall below: DSP -D-XSUB- processing with Normal, Boost & Xtended LF modes + selectable LPF (80/100/120Hz). Band-pass plywood cabinet with XLR inputs/through outputs.
3	Supply of 12" 2-way powered stage monitor with coaxial HF driver and bass-reflex design. 465W continuous (1000W peak) Class-D bi-amp system (400W LF/ 65W HF). Frequency response 55Hz-20kHz with max SPL 129dB. 90° x 90° dispersion, crossover at 1.8kHz with DSP/FIR-X tuning. Plywood cabinet, monitor-angled design, XLR/TRS input and thru output.	Supply of 12" 2-way powered stage monitor with coaxial HF driver and bass-reflex design. 465W continuous (1000W peak) Class-D bi-amp system (400W LF/ 65W HF). Frequency response 55Hz-20kHz with max SPL 129dB. 90° x 90° dispersion, crossover at 1.8kHz with DSP/FIR-X tuning. Plywood cabinet, monitor-angled design, XLR/TRS input and thru output.
4.	Supply of 12" 2-way bi-amped powered speaker with 1.4" HF compression driver, bass-reflex design. 1000W peak / 465W continuous Class-D amplifier (400W LF + 65WHF). Frequency response 48Hz-20kHz with maximum SPL around 130dB. 90° x 60° rotatable horn, crossover at 1.8kHz with DSP/FIR-X tuning. Plywood cabinet with XLR/TRS inputs + RCA, and XLR thru output.	Supply of 12" 2-way bi-amped powered speaker with 1.4" HF compression driver, bass-reflex design. 1000W peak / 465W continuous Class-D amplifier (400W LF + 65WHF). Frequency response 48Hz-20kHz with maximum SPL around 130dB. 90° x 60° rotatable horn, crossover at 1.8kHz with DSP/FIR-X tuning. Plywood cabinet with XLR/TRS inputs + RCA, and XLR thru output. .
5.	Supply of Complete Equalization Loudspeaker Control System 2 in 6 out.	Supply of Complete Equalization Loudspeaker Control System 2 in 6 out. .

6.	Supply of 20-channel analog mixer: 12 mono + 4 stereo inputs, with 4 group buses, 1 stereo bus, and 4 AUX/FX sends. D-PRE mic preamps with +48 V phantom power, input PAD, and 1-knob compressors on selected channels. Built-in USB audio interface (24-bit/192 kHz, 2 in / 2 out) and onboard FX with 24 SPX algorithms. Per-channel 3-band EQ + 80 Hz high-pass filter on mic input; stereo outputs, group/aux sends, monitor and headphone out. Frequency response -20 Hz - 48 kHz, THD -0.03%, compact build(-7.1 kg) for studio/live use.	Supply of 20-channel analog mixer: 12 mono + 4 stereo inputs, with 4 group buses, 1 stereo bus, and 4 AUX/FX sends. D-PRE mic preamps with +48 V phantom power, input PAD, and 1-knob compressors on selected channels. Built-in USB audio interface (24-bit/192 kHz, 2 in / 2 out) and onboard FX with 24 SPX algorithms. Per-channel 3-band EQ + 80 Hz high-pass filter on mic input; stereo outputs, group/aux sends, monitor and headphone out. Frequency response -20 Hz - 48 kHz, THD -0.03%, compact build(-7.1 kg) for studio/live use.
7	Podium MIC Supply of pre-polarized condenser gooseneck microphone with overall length of 450mm or better, with XLR3M-type connector, shall offer radio frequency interference (RFI) shielding against intermodulation from wireless equipment or devices, cardioid microphone capsule with uniform 120° angle of acceptance (-3dB) or better, frequency response of 50 Hz to 20,000 Hz or better and sound input levels handling capability of minimum 130 dB spl or better, nominal equivalent noise level of 26 DbA or better and output shall be low impedance balanced (<100 ohms) with current.	Podium MIC Supply of pre-polarized condenser gooseneck microphone with overall length of 450mm or better, with XLR3M-type connector, shall offer radio frequency interference (RFI) shielding against intermodulation from wireless equipment or devices, cardioid microphone capsule with uniform 120° angle of acceptance (-3dB) or better, frequency response of 50 Hz to 20,000 Hz or better and sound input levels handling capability of minimum 130 dB spl or better, nominal equivalent noise level of 26 DbA or better and output shall be low impedance balanced (<100 ohms) with current. .
8	Supply of Floor-type microphone stand, adjustable height from 920 mm to 1500 mm. Stable base with 230 mm diameter and sturdy metal build (approx. 4.60 kg weight).	Supply of Floor-type microphone stand, adjustable height from 920 mm to 1500 mm. Stable base with 230 mm diameter and sturdy metal build (approx. 4.60 kg weight). .
9	Supply of table stand with Microphone modes Toggle on / off, Push to mute, Push to talk, permanent on for connecting and operating XLR gooseneck microphones with XLR-3F microphone input and an XLR-3M microphone output operating on 48 V phantom power and current consumption of 3.7 mA or better.	Supply of table stand with Microphone modes Toggle on / off, Push to mute, Push to talk, permanent on for connecting and operating XLR gooseneck microphones with XLR-3F microphone input and an XLR-3M microphone output operating on 48 V phantom power and current consumption of 3.7 mA or better.
10	Supply of Dynamic cardioid handheld microphone with silent ON/OFF switch. Frequency response: 40 Hz-16 kHz; sensitivity: 2.7 mV/Pa. Output impedance: 350 Ω (min. load 1 k Ω). Rugged metal body with shock-mounted capsule & hum-compensating coil. 3-pin XLR connector; weight approx. 330 g.	Supply of Dynamic cardioid handheld microphone with silent ON/OFF switch. Frequency response: 40 Hz-16 kHz; sensitivity: 2.7 mV/Pa. Output impedance: 350 Ω (min. load 1 k Ω). Rugged metal body with shock-mounted capsule & hum-compensating coil. 3-pin XLR connector; weight approx. 330 g.

Annexure-A

11	Supply of Digital wireless handheld Microphone with UHF transmission greatly enhances range, reliability and scalability of 56 MHz Bandwidth will allow for up to 90 channels Up to 2,200 or more selectable frequencies with Mobile App integration setup 134 dB or more transmitter dynamic range Lithium Ion battery pack delivers up to 10 hours of operation (up to 6 hours of operation with AA batteries) Transducer principle dynamic with Pick-up pattern cardioid, Sound pressure level 154 dB SPL.	Supply of Digital wireless handheld Microphone with UHF transmission greatly enhances range, reliability and scalability of 56 MHz Bandwidth will allow for up to 90 channels Up to 2,200 or more selectable frequencies with Mobile App integration setup 134 dB or more transmitter dynamic range Lithium Ion battery pack delivers up to 10 hours of operation (up to 6 hours of operation with AA batteries) Transducer principle dynamic with Pick-up pattern cardioid, Sound pressure level 154 dB SPL.
12	Supply of Mounting Brackets.	Supply of Mounting Brackets.
13	Supply of Connectors and patching cable	Supply of Connectors and patching cable
14	Supply of Microphone Cable	Supply of Microphone Cable
15	Installation and programming	Installation and programming
16	Supply and Installation of Bass Module Make; Bose 700 or Similar.	Supply and Installation of Bass Module Make; Bose 700 or Similar.
17	Supply & Installation of Smart ultra Soundbar.	Supply & Installation of Smart ultra Soundbar.
18	Supply and installation of Surround speaker Make: Bose or Similar.	Supply and installation of Surround speaker Make: Bose or Similar.
19	Supply of party Speaker Make: Sony ULT Tower or similar.	Supply of party Speaker Make: Sony ULT Tower or similar.
20	Supply and installation of LED TV 55" (Sony or similar) with mounting arrangement as per specification.	Supply and installation of LED TV 55" (Sony or similar) with mounting arrangement as per specification.
21	Supply and installation of 163.9cm (65 inch) Ultra HD (4K) LED smart TV with mounting arrangement as per TS	Supply and installation of 163.9cm (65 inch) Ultra HD (4K) LED smart TV with mounting arrangement as per TS
22	Supply and installation of fiber distribution management system- as per TS. includes supply all pigtail patch cords.	Supply and installation of fiber distribution management system- as per TS. includes supply all pigtail patch cords.
23	Supply of 6 U rack for switches with all accessories	Supply of 6 U rack for switches with all accessories
24	Supply of UTP CAT-6e cable make Siemen/Systemax/Panduit/Tyco/Kroae/AMP or similar.	Supply of UTP CAT-6e cable make Siemen/Systemax/Panduit/Tyco/Kroae/AMP or similar.

Annexure-A

25	Supply of (Cable nails) 12mm dia wire fastener circle cable clips with metal nail, set of 100 Nos. Make:- Hi-Plast/Similar.	Supply of (Cable nails) 12mm dia wire fastener circle cable clips with metal nail, set of 100 Nos. Make:- Hi-Plast/Similar.
26	Supply of round PVC passive networking Flexible pipe, 01- inch Dia, Zig Zag outer surface pattern, Round Shape, Make: TMT Plus/Similar.	Supply of round PVC passive networking Flexible pipe, 01- inch Dia, Zig Zag outer surface pattern, Round Shape, Make: TMT Plus/Similar.
27	Supply and installation of Casing capping 1" with accessories for fixing including , screws washers, galvanised, wooden (teak) pegs etc are to be supplied by the contractor.	Supply and installation of Casing capping 1" with accessories for fixing including , screws washers, galvanised, wooden (teak) pegs etc are to be supplied by the contractor.
28	Supply of LAN Extender Nomus Gateway e/ES/ER/2W G.SHDL bis to support upto 3.5 Km. Make: Nomus Gateway e/ES/ER/2W or similar.	Supply of LAN Extender Nomus Gateway e/ES/ER/2W G.SHDL bis to support upto 3.5 Km. Make: Nomus Gateway e/ES/ER/2W or similar.
29	Supply of smart dual-brand wireless router design with full Gigabit WAN and LAN ports . Strong dual-band Wi-Fi signal for multi-wall penetration , innovative MU-MIMO technology 4x5 dBi Omnidirectional Antenna 1x Wan+ 3x Lan full gigabit ports.	Supply of smart dual-brand wireless router design with full Gigabit WAN and LAN ports . Strong dual-band Wi-Fi signal for multi-wall penetration , innovative MU-MIMO technology 4x5 dBi Omnidirectional Antenna 1x Wan+ 3x Lan full gigabit ports.
30	Supply of 8 port unmanaged PoE Layer 2 access switch as per technical specification.	Supply of 8 port unmanaged PoE Layer 2 access switch as per technical specification.
31	Supply installation testing and commissioning of layer 3, 24 port managed switch with 24 nos of 10/100/1000 ethernet ports with redundant AC power supplies , dedicated stacking module , 4x 1GE SPF ports for uplink including 4 nos of 1Ge SPF modules , Mounting kit, with all necessary accessories	Supply installation testing and commissioning of layer 3, 24 port managed switch with 24 nos of 10/100/1000 ethernet ports with redundant AC power supplies , dedicated stacking module , 4x 1GE SPF ports for uplink including 4 nos of 1Ge SPF modules , Mounting kit, with all necessary accessories
32	Supply of Caller ID telephone system with speaker and hands free conversation . Make:- Panasonic/Motorola or Similar.	Supply of Caller ID telephone system with speaker and hands free conversation . Make:- Panasonic/Motorola or Similar.
33	Supply, Fixing and wiring of 20 pairs Krone type D.P Box as per Tech spec. make Hensel or Similar.	Supply, Fixing and wiring of 20 pairs Krone type D.P Box as per Tech spec. make Hensel or Similar.
34	Installation of Krone CT box as per technical specification.	Installation of Krone CT box as per technical specification.
35	Supply and installation of Video cable (Co-axial Cable).	Supply and installation of Video cable (Co-axial Cable).

36	Supply of frame , surface box and white cover plates for two modules, this also includes supply of RJ-11 Telephone sockets, with level holder jack type , RJ-45 LAN sockets jack type (Tool less) and blanking plates for one module. Make- Legrand or similar.	Supply of frame , surface box and white cover plates for two modules, this also includes supply of RJ-11 Telephone sockets, with level holder jack type , RJ-45 LAN sockets jack type (Tool less) and blanking plates for one module. Make- Legrand or similar.
37	Fixing of frame, surface box and white cover plates for Two modules. This also includes fixing RJ-11 Telephone sockets with level holder Jack type, RJ-45 LAN sockets Jack Type (Tool less) and blanking plates for one modules. Make: Legrand or Similar.	Fixing of frame, surface box and white cover plates for Two modules. This also includes fixing RJ-11 Telephone sockets with level holder Jack type, RJ-45 LAN sockets Jack Type (Tool less) and blanking plates for one modules. Make: Legrand or Similar.
38	Supply and fixing of TV Socket along with one module size blank off cover.	Supply and fixing of TV Socket along with one module size blank off cover.
39	Supply of 10 pair Switchboard indoor copper cable 0.6 dia as per specification IRS:TC:24:91 or TEC/GR/WIR-06/03. Mar 2002with latest amendment.	Supply of 10 pair Switchboard indoor copper cable 0.6 dia as per specification IRS:TC:24:91 or TEC/GR/WIR-06/03. Mar 2002with latest amendment.
40	Supply of 20 pair switch board cable copper conductor of size 0.5 mm make: Finolex/Delton Padmini/Payel or similar.	Supply of 20 pair switch board cable copper conductor of size 0.5 mm make: Finolex/Delton Padmini/Payel or similar.
41	Supply and configuring of ceiling mount Wi-Fi access point as per TS.	Supply and configuring of ceiling mount Wi-Fi access point as per TS.
42	Supply of HDMI Cable 20 Meters long. Make Honeywell or Similar	Supply of HDMI Cable 20 Meters long. Make Honeywell or Similar
43	Supply of 8:1 ports HDMI Splitter Switch Amplifier V1.4, 1080P 3D Video Audio +STB+HDTV+HDCP+ PS3 (Full HD with 4K series).	Supply of 8:1 ports HDMI Splitter Switch Amplifier V1.4, 1080P 3D Video Audio +STB+HDTV+HDCP+ PS3 (Full HD with 4K series).
44	Laying of power cable/STP/UTP CAT-6/LS cable through flexible PVC conduit Pipe/GI Pipe/HDPE Pipe (Where necessary) as per direction of the Rly. Representative, including any fixing of cables/PVC pipe/PVC Casing on wall/shed with suitable clamps (the clamps and screws should be made of stainless steel). All the fixing materials including collar, bend , junction etc. shall be supplied by the contractor . this also includes transportation of cable , PVC pipe , GI pipe , HDPE pipe etc. to the site.	Laying of power cable/STP/UTP CAT-6/LS cable through flexible PVC conduit Pipe/GI Pipe/HDPE Pipe (Where necessary) as per direction of the Rly. Representative, including any fixing of cables/PVC pipe/PVC Casing on wall/shed with suitable clamps (the clamps and screws should be made of stainless steel). All the fixing materials including collar, bend , junction etc. shall be supplied by the contractor . this also includes transportation of cable , PVC pipe , GI pipe , HDPE pipe etc. to the site.

Annexure-A

45	Concealing wiring through wall and concealing of various cables, wires laid down through PVC conduit supplied in the work.	Concealing wiring through wall and concealing of various cables, wires laid down through PVC conduit supplied in the work.
46	Supply of 24U Rack Enclosures Networking/Server Rack .	Supply of 24U Rack Enclosures Networking/Server Rack .

Conditions:-

1. Make/Brand and specifications must be submitted along with offer.
2. Consignee inspection required.

Sav
02.06.26
ASTE/LMG/W
N.F.Railway
सहायक सग्नलिंग एंड टेलीकॉम इंजीनियर (वर्क्स)
पूर्वी उत्तर रेलवे, लामडिंग
Asstt. Signal & Tele-comm. Engineer (Works)
North East Frontier Railway/ Laming