TS-900 Series Infrared Conference Systems

The portable conference system shall be compact and lightweight. The system shall provide clear sound and reliable operation. The system shall be comprised of four main components: Central Unit, Infrared Transmitter / Receiver Unit, Chairperson Unit and Delegate Unit. The Chairperson and Delegate Unit shall connect via wireless Infrared signal to the Central Unit via the Infrared Transmitter / Receiver Unit. The system capacity shall be a maximum combined total of 96 Chairperson / Delegate Units using a single Central Unit. The Central Unit shall include a wired microphone input, auxiliary input, recording output and infrared transmitter / receiver input /output.

The Central Unit shall include the following functionality: "Speaker Restriction Function" which prevents interruptions. The number of conference units can be preset for the authorized number of speakers at a time. One, two or four persons can be allowed to talk at any one time to prevent the confusion that could result from several participants all speaking at once. "Speech system selection function" sets speech when Talk keys on the conference units are activated exceeding the set number of authorized speakers, microphone ON/OFF operation can be set to any of the following: first-in-first-out, last-in-first-out, or last-in-first-out after 2nd unit (the microphone stays ON for the unit whose Talk key was first pressed). "Auto Mic-Off function" prevents inadvertently leaving the microphone on. With this function ON, the microphone will automatically switch itself off after a 30-second period of silence after the Talk key was pressed. "Installation status checkup function" for the at-a-glance confirmation of communication. If activated on the Central unit, the microphone indicators in the Chairperson / Delegate units light up. Voting function that computes and displays the voting result. Since two speech outputs are provided (Main and Sub channels), it is ideal for use in simultaneous interpreting conference. With the use of an optional rack mounting bracket, it can be mouted in an EIA standard equipment rack (4 unit size). The Central Unit shall provide: (2) external microphone input (600 ohms, -60 dBV, unbalanced, phone jack). (3) auxiliary input (10k ohms, -20 dBV, unbalanced, phone jack). Auxiliary outputs: (1) Line (10k ohms, -20 dBV, unbalanced, phone jack). (1) Record (10k ohms, -20 dBV, unbalanced, phone jack, RCA jack). (1) Headphone mini jack and (4) Infrated Transmitter / Receiver I/O Terminal, BNC jacks. (1) External Control Terminal (D-sub connector 9P, male). Speech volume control adjusts the microphone volume of the Chairperson unit and Delegate unit shall be located on the front panel. Priority chime volume control adjusts the output volume of the chime tone that sounds when the Priority Speech key on the Central Unit is pressed which shall be located on the rear panel. Power requirement shall be 100-240 VAC, 50/60 Hz, maximum 72 W power consumption (using the provided AC Power Supply) and the operating temperature range shall be 32° F (0° C) to 104° F (40° C). The Central Unit shall weigh 6 lbs. (2.7 kg) and be constructed of surface-treated steel plate with gray metallic paint, semi-gloss finish with dimensions (W x H x D) of 14.13" x 4.68" x 7.08" (359 x 118.8 x 179.8 mm).

The Infrared Transmitter / Receiver Unit shall include the following functionality: Facilitates wireless communication between the Chairperson Unit and Delegate Unit. The Infrared Transmitter / Receiver Unit connects to the Central Unit using coaxial cable. Compatible coaxial cable types shall include: RG-59/U, RG-6/U and RG-11/U. The Infrared Transmitter / Receiver Unit can be mounted using the following configurations: Ceiling Mounted, Wall Mounted using the supplied mounting bracket or Mounted to an optional Microphone Stand using the supplied stand mounting bracket. The optional Microphone Stand mounting thread size shall be W 5/16. Power requirement shall be 24VDC, maximum 100 mA supplied from the Central Unit via the coaxial cable. The Infrared Transmitter / Receiver Unit shall weigh 0.5 lbs (230 g) and shall be constructed of: Dome shall be PC resin, visible light cut filter. Base: ABS resin, black with dimensions 4.72" diameter (120mm) x 2.8" height (71.3mm). The Chairperson Unit shall be easily installed and removed. The Chairperson Unit shall feature a priority speech key, which allows it to take precedence over the Delegate Unit when speaking. The Chairperson Unit shall provide microphone-input terminal using the combined type of XLR-4-31 connector for the (optional) standard microphone or the (optional) long microphone. The Chairperson Unit shall include a monitor speaker: 8 ohm, 0.2 watt and (2) headphone Mini Jack. The Chairperson Unit shall include an LED indicator, which shall provide a speech indicator, power indicator / low battery indicator and out of communication range indicator. The Chairperson Unit shall have Voting keys, used to start, end and cast voting. The voting status indicator shall be provided above each key. The Chairperson Unit shall be operated on either the AC adapter (optional) or the lithium-ion battery (optional). The Chairperson Unit shall be equipped with a remaining battery indicator. Two types of dedicated microphones shall be available as optional products: the standard type and the long type. Power requirement shall be 7.4VDC (optional) battery, 9VDC (optional) AC adapter. The Chairperson Unit shall weigh 1.39 lbs. (630g) and shall be finished: Top Panel: ABS resin, gray metallic, paint, semi-matte with dimensions (W x H x D) 8.3" x 2.6" x 6" (210 x 65.9 x 152 mm).

The Delegate Unit shall be easily installed and removed. The Delegate Unit shall provide: Microphone Input terminal using the combined type of XLR-4-31 connector for the (optional) standard microphone or the (optional) long microphone. Monitor speaker: 8 ohm, 0.2 watt and (2) headphone Mini Jack. The Delegate Unit shall include an LED indicator, which shall provide a speech indicator, power indicator / low battery indicator and out of communication range indicator. The Delegate Unit shall have Voting keys, used to start, end and cast voting. The voting status indicator shall be provided above each key. The Delegate Unit shall be operated on either the AC adapter (optional) or the lithium-ion battery (optional). Two types of dedicated microphones shall be available as optional products: the standard type and the long type. Power requirement shall be 7.4VDC (optional) battery, 9VDC (optional) AC adapter. The Delegate Unit shall weigh 1.39 lbs. (630g) and shall be finished: Top Panel: ABS resin, gray metallic, paint, semi-matte with dimensions (W x H x D) 8.3" x 2.6" x 6" (210 x 65.9 x 152 mm).

Signal Distributor's (optional) shall be used to expand the number of Infrared Transmitter / Receiver Unit's which shall not exceed 16 Infrared Transmitter / Receiver Units. The Distributor's shall facilitate 1 x 2 or 1 x 4 configurations.

The 1 x 2 Distributor shall work in the frequency range of 1.6 to 1,000 MHz (excluding 50 to 70 MHz), distribution loss 4.5dB +/-3dB (between the Mixing and each Distribution terminals), input / output impedance 75 ohm, BNC coaxial connector, power passing type (under 30VDC, under 2A, and shall have an operating temperature range of -10 degrees C to +50 degrees C, the finish shall be ABS resin, gray, with dimensions (W x H x D) $3" \times 4.8" \times 1.3"$ (75 x 122 x 34 mm), weight shall be 0.23 lbs (105g).

The 1 x 4 Distributor shall work in the frequency range of 1.6 to 1,000 MHz (excluding 50 to 70 MHz), distribution loss 8.5dB +/-3dB (between the Mixing and each Distribution terminals), input / output impedance 75 ohm, BNC coaxial connector, power passing type (under 30VDC, under 2A, and shall have an operating temperature range of -10 degrees C to +50 degrees C, the finish shall be ABS resin, gray, with dimensions (W x H x D) 3" x 4.8" x 1.3" (75 x 122 x 34 mm) weight shall be 0.23 lbs (105g).

The central unit shall be TOA model TS-900. The central unit rack-mount bracket shall be TOA model MB-TS900. The infrared transmitter / receiver shall be TOA model TS-905. The chairperson unit shall be TOA model TS-901. The delegate unit shall be TOA model TS-902. The 1 x 2 distributor shall be TOA model YW-1022. The 1 x 4 distributor shall be TOA model YW-1024. The AC Adapter shall be TOA model AD-0910.

The battery charger shall be TOA model BC-900.

The lithium-ion battery shall be TOA model BP-900.