TOA

INSTRUCTION MANUAL

CHAIRMAN UNITS TS-821, TS-921
DELEGATE UNITS TS-822, TS-922

Thank you for purchasing TOA's Chairman Units and Delegate Units.
Please carefully follow the instructions in this manual to ensure long, trouble-free use of your equipment.

1. SAFETY PRECAUTIONS

- Before installation or use, be sure to carefully read all the instructions in this section for correct and safe operation.
- Be sure to follow all the precautionary instructions in this section, which contain important warnings and/or cautions regarding safety.
- After reading, keep this manual handy for future reference.

⚠WARNING Indicates a potentially hazardous situation which, if mishandled, could result in death or serious personal injury.

When Installing the Unit

- Do not expose the unit to rain or an environment where it may be splashed by water or other liquids, as doing so may result in fire or electric shock.
- Use the unit only with the voltage specified on the unit. Using a voltage higher than that which is specified may result in fire or electric shock.
- Do not cut, kink, otherwise damage nor modify the power supply cord. In addition, avoid using the power cord in close proximity to heaters, and never place heavy objects -- including the unit itself -- on the power cord, as doing so may result in fire or electric shock.
- Avoid installing or mounting the unit in unstable locations, such as on a rickety table or a slanted surface. Doing so may result in the unit falling down and causing personal injury and/or property damage.

When the Unit is in Use

- Should the following irregularity be found during use, immediately switch off the power, disconnect the power supply plug from the AC outlet and contact your nearest TOA dealer. Make no further attempt to operate the unit in this condition as this may cause fire or electric shock.
  - · If you detect smoke or a strange smell coming from the unit
  - · If water or any metallic object gets into the unit
  - · If the unit falls, or the unit case breaks
  - · If the power supply cord is damaged (exposure of the core, disconnection, etc.)
  - · If it is malfunctioning (no tone sounds.)
- To prevent a fire or electric shock, never open nor remove the unit case as there are high voltage components inside the unit. Refer all servicing to your nearest TOA dealer.

- Do not place cups, bowls, or other containers of liquid or metallic objects on top of the unit. If they accidentally spill into the unit, this may cause a fire or electric shock.
- Do not insert nor drop metallic objects or flammable materials in the ventilation slots of the unit's cover, as this may result in fire or electric shock.
- Do not touch a plug during thunder and lightning, as this may result in electric shock.



- To prevent possible hearing damage, do not listen at high volume levels for long periods.

⚠CAUTION Indicates a potentially hazardous situation which, if mishandled, could result in moderate or minor personal injury, and/or property damage.

When Installing the Unit

- Never plug in nor remove the power supply plug with wet hands, as doing so may cause electric shock.
- When unplugging the power supply cord, be sure to grasp the power supply plug; never pull on the cord itself. Operating the unit with a damaged power supply cord may cause a fire or electric shock.
- When moving the unit, be sure to remove its power supply cord from the wall outlet. Moving the unit with the power cord connected to the outlet may cause damage to the power cord, resulting in fire or electric shock. When removing the power cord, be sure to hold its plug to pull.
- Avoid installing the unit in humid or dusty locations, in locations exposed to the direct sunlight, near the heaters, or in locations generating sooty smoke or steam as doing otherwise may result in fire or electric shock.
- Replace the battery only with the TOA BP-920A or BP-900A. Using a battery other than designated may cause it to explode. When you discard batteries, please contact the local dealer from whom you bought.

When the Unit is in Use

- Do not place heavy objects on the unit as this may cause it to fall or break which may result in personal injury and/or property damage. In addition, the object itself may fall off and cause injury and/or damage.
- Make sure that the volume control is set to minimum position before power is switched on. Loud noise produced at high volume when power is switched on can impair hearing.
- Use the dedicated AC adapter AD-0910 for the unit. Note that the use of other adapter may cause a fire.
- When the unit is not in use for 10 days or more, or when the AC power is used for operating the unit, be sure to take the batteries out of the unit because battery leakage may cause a fire, personal injury, or contamination of environment.
- If dust accumulates on the power supply plug or in the wall AC outlet, a fire may result. Clean it periodically. In addition, insert the plug in the wall outlet securely.
- Switch off the power, and unplug the power supply plug from the AC outlet for safety purposes when cleaning or leaving the unit unused for 10 days or more. Doing otherwise may cause a fire or electric shock.

This is a class A product.
In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

2. GENERAL DESCRIPTION

The TS-821 and TS-921 Chairman units, and the TS-822 and TS-922 Delegate units are designed for use in the TOA infrared conference systems.
These units provide wireless communication via the Infrared Transmitter/Receiver unit connected to the Central unit.
Two types of dedicated microphones are made available for the Chairman and Delegate units as optional products: the TS-923 or TS-903 standard type and the TS-924 or TS-904 long type.

3. FEATURES

- Since the Chairman units and the Delegate units require no wiring, they permit easy installation based on a free layout.
- Up to 192 TS-821/822/921/922 units connectable to the TS-920RC.
- Up to 64 TS-821 and TS-822 units connectable to the TS-820/820RC.
- Both TS-921 and TS-922 units equipped with Voting and base/translation language selection functions and TS-821 and TS-822 units designed primarily for speaking and monitoring can be freely used. In the case of the TS-821 and TS-822 units, they can monitor the base language only.
- Priority Speech key to take precedence over Delegate units.
- Status after priority speech, Priority Chime ON/OFF function, and priority speech key operation mode settable by a DIP switch.
- The TS-921 is equipped with a voting function enabled by the DIP switch setting.
- Chairman and Delegate units microphones are attached via XLR connectors that permit easy detachment for more space-saving convenience in storage.
- Two types of Chairman and Delegate units microphones are made available and freely interchangeable: Standard type and Long type.

4. SPECIFICATION

Model No.		TS-821	TS-822	TS-921	TS-922
Power Source		Supplied from optional lithium-ion battery or AC adapter			
Current Consumption		Max. 390 mA			
Infrared Emitter/Detector	Wavelength	870 nm (AM: Brightness modulation)			
	Modulation Method	Frequency modulation			
	Carrier Frequency	Transmission: Audio channel 1: 7.35 MHz Audio channel 2: 8.10 MHz Audio channel 3: 8.55 MHz Audio channel 4: 9.15 MHz Control channel: 6.45 MHz Reception: Audio channel: 1.95 MHz		Transmission: Audio channel 1: 7.35 MHz Audio channel 2: 8.10 MHz Audio channel 3: 8.55 MHz Audio channel 4: 9.15 MHz Control channel: 6.45 MHz Reception: Base language channel: 1.95 MHz Translation language channel: 2.25 MHz	
	Covering Range	7 m or 22.97 ft (radius)			
Input		Microphone terminal: XLR-4-31 type			
Output		Monitor speaker: 8 Ω, 0.2 W Headphones: ø3.5 mm mini jack (3P: monaural) x 2			
LED Indicator		Speech indicator, Power indicator		Speech indicator, Power indicator, Voting status indicators 1 – 3	
Function		Monitor volume control, Headphone volume control			
		Priority speech function	—	Priority speech function	—
		—		Voting function Monitor selector switch (MAIN/SUB)	
Battery Life		Approx. 10 hours (when the fully-charged BP-920A or BP-900A battery is used with "During speech" to "Standby" ratio of 1:2)			
Operating Temperature		0 to 40 ºC (32 to 104 ºF)			
Operating Humidity		90 %RH or less (no condensation) (when used with BP-920A: 25 to 85 %RH, no condensation)			
Finish		Case: PC resin, black Speaker net: Steel plate, black, mat finish, paint			
Dimensions		205.7 (w) x 70.3 (h) x 164.2 (d) mm (8.1" x 2.77" x 6.46")			
Weight		525 g (1.16 lb)			

Note: The design and specifications are subject to change without notice for improvement.

• **Optional products**
Microphone: TS-923, TS-903, TS-924, TS-904
Lithium-ion battery: BP-920A, BP-900A
AC adapter: AD-0910

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