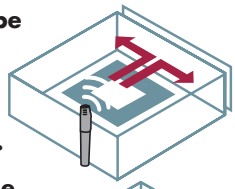
TOA

INFRARED WIRELESS MICROPHONE SYSTEM

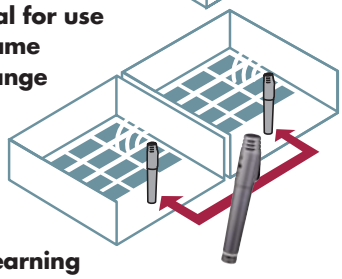
Introducing an infrared wireless microphone system that meets the need for secure and interference-free communication

Offering secure and interference-free communi

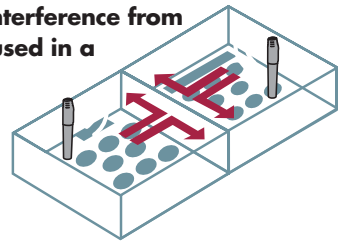
TOA's latest Infrared Wireless Microphone System incorporates a range of conference and communication enhancing features that will appeal to users who want confidentiality as well as interference-free communication. Because the microphones use infrared signals, sensitive matters being discussed in a meeting room won't leave the room, and the wireless microphones can be used in several adjacent classrooms simultaneously without interference. In this way, this infrared microphone system can meet communication needs in educational and business environments perfectly.



The TOA Wireless Microphone System is ideal for use in schools. If the microphone is set for the same channel, there is no need for teachers to change to another one when moving to a different room. This IR system ensures that the teacher's voice reaches all the students in the classroom, and helps the students to better understand what's being taught. Consequently, a stress-free classroom and learning environment for both teachers and students is created.



The microphones are also an excellent solution for secure, efficient and smooth conducting of meetings, free from concern about confidentiality, or about being disturbed by interference from outside. They can even be used in a room where a TOA TS-800/900 Series Infrared Wireless Conference System is also in operation, offering an added convenience.



IR-200M Infrared Wireless Microphone (Hand-held)

- Designed for stable voice transmission, thanks to two infrared emitters carefully located on a microphone body shape that helps prevent the emitters from being accidentally covered by a hand when holding the microphone.
- Lightweight body keeps hands from tiring even during long hours of use (170 g with 2 alkaline batteries).
- Infrared light emission intensity is adjustable at 2 levels.
- Two selectable channel frequencies.
- Antibacterial treatment.
- Employs an electret condenser microphone unit.
- Low-battery indicator.
- Color stickers supplied to distinguish one unit from other wireless microphones.

IR-200BC Battery Charger

- Capable of charging up to 2 microphones (both hand-held and hands-free types) at a time.
- With rapid charging feature, up to 2 infrared microphones can be simultaneously charged in 3 hours (maximum).
- Charge status indicator (charging, charge complete).

IR-300M Infrared Wireless Microphone (Hands-free)

- Easy-to-wear, neck-suspended design means unit can be ready for use quickly.
- Lightweight body can be worn for long periods of time without causing fatigue (130g with 2 alkaline batteries).
- Infrared light emission intensity adjustable at 2 levels.
- 2 selectable channel frequencies.
- Antibacterial treatment.
- Employs an electret condenser microphone unit.
- Low-battery indicator.
- Can be used with a built-in microphone or external microphone.
- An external MIC input level adjustment function allows sensitivity adjustment if the connected external microphone has a different sensitivity.
- Color stickers supplied to distinguish one unit from other wireless microphones.

Optional Microphones

YP-M101
Tie-clip Microphone

YP-M301
Headset Microphone

ication in classrooms, conferences, banquets...

IR-702T Infrared Wireless Tuner

- Comes with a built-in 2-channel fixed-frequency tuner.
- Enables installation of up to 4 infrared light receivers per unit
- Equipped with signal reception light and knob for microphone volume control.
- Two line outputs, one with a MIX output switch allowing output of mixed voices from channels A and B.
- Rack-mountable with optional brackets (MB-WT3/MB-WT4)

IR-700D Infrared Wireless Distributor

- Equipped with 4 receiver mixing outputs and 2 distribution outputs.
- By using the IR-700D in conjunction with IR-702T and YW-1022/1024, the system with up to 16 infrared receivers can be configurable.
- Rack-mountable with optional brackets (MB-WT3/MB-WT4)

IR-500R Wall-Mount Receiver

- Supplied wall-mounting brackets facilitate installation.
- Can be installed in an electric circuit box.
- Equipped with power indicator LED.
- Reception area is up to approx. 15m line of sight.*
- Infrared light reception angle can be changed.

IR-510R Ceiling-Mount Receiver

- Supplied ceiling-mounting brackets facilitate installation.
- Equipped with power indicator LED.
- It covers a practical radius of approx. 8 m.*

IR-520R Wall-Mount Receiver

- Can be mounted on a wall and on a microphone stand. Supplied stand-mounting brackets facilitate installation.
- Equipped with power indicator LED.
- Reception area is up to approx. 15m line of sight.*

*In a space without any obstacle.

SPECIFICATIONS

Model No.	IR-200M Infrared Wireless Microphone	IR-300M Infrared Wireless Microphone
Battery	IR-200BT-2 rechargeable battery for the infrared wireless microphone (2 pieces) or AA alkaline dry cell battery (2 pieces)	
Current Consumption	typ.250mA (2.4V, Power selector switch: N)/typ.340mA (2.4V, Power selector switch: H)	
Infrared Emitter		
Wavelength	870 nm (AM: Brightness modulation)	
Modulation Method	Frequency modulation	
Carrier Frequency	Channel A: 3.100 MHz/Channel B: 3.350 MHz	
Transmission Distance	Approx. 20 m (Power selector switch: H; In an unobstructed space.)/Approx. 15 m (Power selector switch: N; In an unobstructed space.)	
Tone Signal	32.768kHz	
Modulation Sensitivity	±4.8 kHz (1 kHz, when SPL of 84 dB is input)	
Maximum Input Sound Pressure	120 dB SPL	
Input Sensitivity Adjustment	—	Adjustment range: -9dB to 0dB (factory-preset: 0dB)
Microphone Unit	Unidirectional electret condenser microphone	
Frequency Response	100Hz – 12kHz	
Preemphasis	300µs	
Input	—	External microphone input (ø3.5 monaural mini jack)
Battery Operation Time	Approx. 8 hours (when the IR-200BT-2 rechargeable battery for the infrared wireless microphone is used; Power selector switch: N) Approx. 6 hours (when the alkaline battery is used; Power selector switch: N)	
Operating Temperature	0°C to +40°C	
Operating Humidity	30% to 85% RH	
Finish	Control Section: ABS resin, metallic gray, 50% gloss, paint/Filter Section: Polycarbonate, optical cut filter	
Dimensions	ø37 × 241.8mm	64 (W) × 91.3 (H) × 27.3 (D)mm
Weight	170g (with batteries)	130g (with batteries & strap)
Accessories	Screw driver (for setting) × 1, Color label (6 colors) × 1	

Model No.	IR-500R Infrared Wireless Reciever	IR-510R Infrared Wireless Reciever	IR-520R Infrared Wireless Reciever
Power Source	24V DC (supplied from the optional IR-702T)		
Current Consumption	Max. 40mA	Max. 60mA	Max. 30mA
Infrared Detector			
Wavelength		870nm	
Carrier Frecuency		Channel A: 3.100MHz/Channel B: 3.350MHz	
Reception Area	Approx. 15m (in the space where no obstacles exist)	Practical radius of approx. 8 m in a space without any obstacle	Approx. 15m (in the space where no obstacles exist)
Reception Angle	Vertical: 80° (up to 30° movable downward) Horizontal: 80° (up to 30° movable left or right)	—	—
Connection Terminal	75 Ω, BNC jack		
Operating Temperature	0°C to +40°C		
Operating Humidity	30% to 85% RH		
Finish	Case: Polycarbonate resin, visible light cut filter Base: ABS resin, off-white	Case: Polycarbonate resin, visible light cut filter Base: ABS resin, black	Case: Polycarbonate resin, visible light cut filter
Dimensions	70 (W) × 120 (H) × 72(D)mm	ø120 × 71.3 (H) mm	84.5 (W) × 63.5 (H) × 32(D)mm
Weight	220g (unit only)	205g (unit only)	100g (unit only)

	IR-702T Infrared Wireless Tuner
Power Source	AC mains 50/60Hz (supplied from the accessory AC adaptor)
Power Consumption	15W or less
Receiving Frequency	Channel A: 3.100MHz/Channel B: 3.350MHz
Receiver Sensitivity	S/N ratio over 50dB (40dBµ V input, 1 kHz modulation, ±4.8 kHz deviation)
S/N Ratio	61 dB or more (60dBµ V input, ±4.8 kHz deviation, A-weighted)
Tone Squelch Frequency	32.768kHz
Infrared Receiver Input	75 Ω, BNC jack × 2 (Infrared wireless receiver's power source: 24V DC, max. 220mA in total of 2 terminals)
Output	Channel A and B: –10 dB* (±4.8kHz deviation, at volume level max.), 600 Ω, electronically balanced, 3 pole phone jack Note: Channel A switchable to mixer output
Frequency Response	100Hz – 12kHz
Operating Temperature	-10°C to +50°C
Operating Humidity	30% to 85% RH
Finish	Case: ABS resin, black
Dimensions	210 (W) × 44 (H) × 210.9 (D)mm
Weight	630g (unit only)
Accessories	AC adaptor × 1, Power cord (2 m) × 1, Cord with a phone plug (1m) × 1, Color label (6 colors) × 1, Rubber foot × 4

*0db = 1V

	IR-700D Infrared Wireless Distributor
Power Source	AC mains 50/60Hz (supplied from the accessory AC adaptor)
Power Consumption	25W or less
Input/Output	4 mixing inputs, 2 distribution outputs
Band-Pass Frequency	3.0 – 6.0MHz
Gain	0dB (±3dB)
Infrared Receiver Input	75 Ω, BNC jack × 4 (Infrared wireless receiver's power source: 24V DC, 800mA max. in total 0f 4 terminals)
Distribution Output	75 Ω, BNC jack
Operating Temperature	-10°C to +50°C
Operating Humidity	30% to 85% RH
Finish	Case: ABS resin, black
Dimensions	210 (W) × 44 (H) × 200.9 (D)mm
Weight	640g (unit only)
Accessories	AC adaptor × 1, Power cord (2 m) × 1, BNC plug-tp-BNC plug cord (50cm) × 1, Rubber foot × 4

	IR-200BC Battery Charger
Power Source	AC mains 50/60Hz (supplied from the accessory AC adaptor)
Current Consumption	Max. 2 A
Charging Time	Max. 3 hours
Number of Wireless microphone to be charged simultaneously	2 pieces*
Operating Temperature	0°C to +40°C
Operating Humidity	30% to 85% RH
Finish	Case : ABS resin, metallic gray, 50% gloss,paint, Microphone receptacle section : PPE resin, black
Dimensions	238 (W) × 109.5 (H) × 98 (D)mm
Weight	635 g (charger with the mounting adapters attached)
Accessories	AC adaptor (DC cord length: 1.5m) × 1, Power cord (2 m) × 1, Mounting adapter (pre-installed) × 2

* Using the mounting adapter allows one each of the IR-200M and IR-300M to be charged in combination.

IR-200BT-2 Ni-MH Battery

- Ni-MH AA rechargeable battery (containing 2 pieces) dedicated for use with IR-200M/300M.

Human Society with Sound & Communication

TOA Corporation

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Specifications are subject to change without notice.
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