



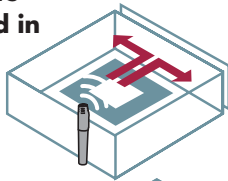
INFRARED WIRELESS MICROPHONE SYSTEM



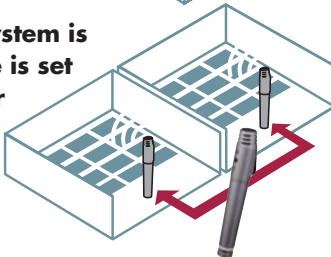
***Introducing an infrared wireless microphone system
that meets the need for secure and
interference-free communication***

Offering secure and interference-free communication

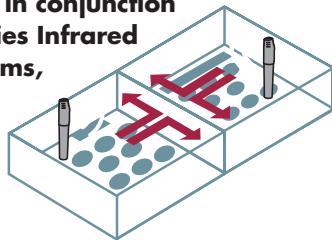
TOA's latest Infrared Wireless Microphone System incorporates a range of conference and communication enhancing features that will appeal to users who want confidentiality as well as interference-free communication. Because the microphones use infrared signals that are blocked by barriers such as walls, 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.



The TOA Infrared 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. Interference-free communication reduces classroom stress for both teachers and students.



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 be used in conjunction with TOA TS-800/900 Series Infrared Wireless Conference Systems, offering an added convenience.



IR-200M Hand-held Infrared Wireless Microphone



- 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 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).



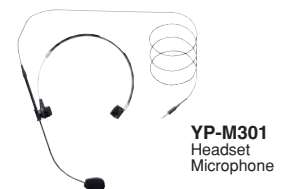
IR-300M Hand-free Infrared Wireless Microphone



- 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



Application 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.



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.



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 coverage 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.
- Reception coverage has a radius of up to 8m.
- Reception angle is 150 degrees.



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 coverage is up to approx. 15m line of sight.



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	870 nm (AM: Brightness modulation) Frequency modulation	
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 3.5mm (or 1/8" 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 alkaline batteries) 185g (with dedicated rechargeable batteries)	130g (with alkaline batteries & strap) 140g (with dedicated rechargeable batteries & strap)
Accessories	Screw driver (for setting) × 1, Color label (6 colors) × 1	

Model No.	IR-500R Infrared Wireless Receiver	IR-510R Infrared Wireless Receiver	IR-520R Infrared Wireless Receiver
Power Source	24V DC (supplied from the optional IR-702T)		
Current Consumption	Max, 40mA	Max, 60mA	Max, 30mA
Infrared Detector	870nm		
Wavelength	870nm		
Carrier Frequency	Channel A: 3.100MHz/Channel B: 3.350MHz		
Reception Area	Approx. 15m (in the space where no obstacles exist)	Approx. 15m, Practical radius: 8m 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)	150°	—
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 two terminal total)
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

	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 Of 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, BNC plug-tp-BNC plug cord (50cm) × 1, Rubber foot × 4

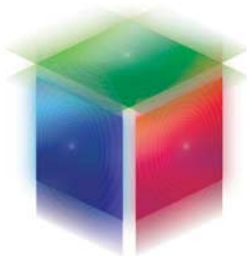
	IR-200BC Battery Charger
Power Source	AC mains 50/60Hz (supplied from the accessory AC adaptor)
Current Consumption	Max, 2 A
Charging Time	Max, 3 hours
Number of Wireless microphone to be charged simultaneously	2 pieces*1
Operating Temperature	0°C to +40°C
Operating Humidity	30% to 85% RH
Finish	Case : ABS resin, metallic gray, 50% gloss,paint, Microphone receptacle section : PPE resin, black
Dimensions	238 (W) × 83 (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

*1 Using the mounting adapter allows one each of the IR-200M and IR-300M to be charged in combination.
*2 Height is 109.5mm when the mounting adapter is installed.

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

www.toa.jp

Specifications are subject to change without notice.
Printed in Japan (0902) 833-61-786-00 u