

# WIRELESS GUIDE SYSTEM



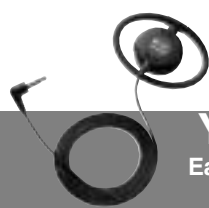
**WM-2100**  
Portable  
Transmitter



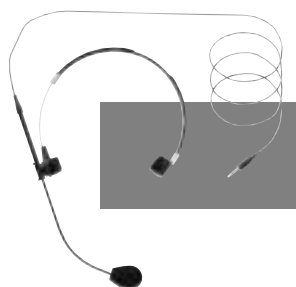
**YP-M101**  
Tie-clip  
Microphone



**YP-M201**  
Close-Talking  
Microphone



**YP-E401**  
Ear-Suspension  
Earphone

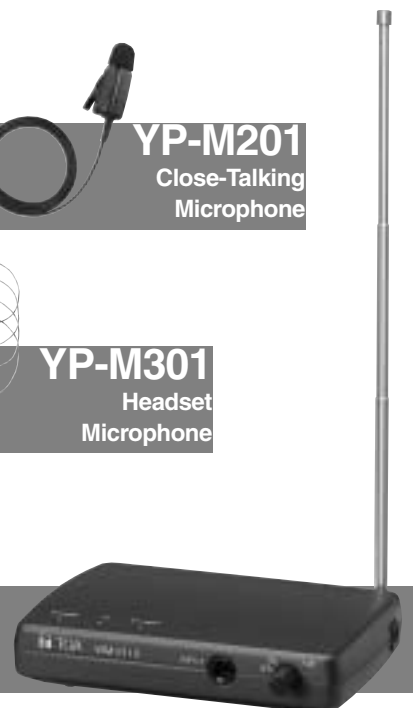


**YP-M301**  
Headset  
Microphone



**WT-2100**  
Portable  
Receiver

**WM-2110**  
Desk-top Transmitter



## SYSTEM FEATURES

- Transmits and receives on five channels on the 470MHz frequency band.
- The portable transmitter provides clear coverage over a 30 meter distance while the desk-top transmitter extends the distance to 70 meters.
- Input sensitivity control with six settings on the desk-top transmitter and two-step mic input sensitivity control on the portable transmitter for ideal transmission without any signal degradation.
- Desk-top transmitter transmit on/off operation controllable with external equipment.
- Battery indicator provides at-a-glance battery level status.
- Four different microphone options — paging, tie-clip, close-talking, and headset microphones to meet specific requirements.
- Paging microphone and close-talking microphone equipped with press-to-talk feature to reject ambient noise.
- Desk-top transmitter can be connected to external PA equipment for extending coverage area.

## APPLICATION EXAMPLES

### On-site Tours

Allows on-the-spot guidance and explanation to be easily provided. Ideal when touring noisy environments such as factories, plants and other industrial sites. Also useful for guided tours of museums and other quieter environments.

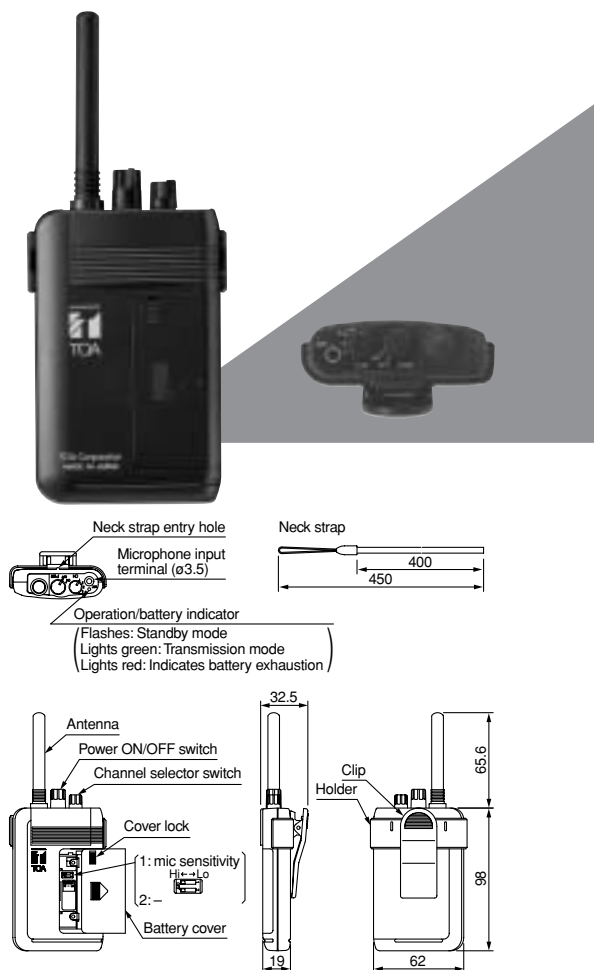
### Listening-assistance

Useful when circumstances require listeners to be seated away from an area covered by sound reinforcement such as a PA. Also effective for helping hard-of-hearing listeners.

### Simultaneous Interpretation

Important tool for use in simultaneous interpreting situations with 5-channel capabilities allowing 5 different languages to be handled simultaneously.

# WM-2100 Portable Transmitter



## GENERAL DESCRIPTION

TOA's WM-2100 is a Portable Transmitter designed to use 470 MHz band radio signals. An optional microphone (not supplied with the unit) is required.

## FEATURES

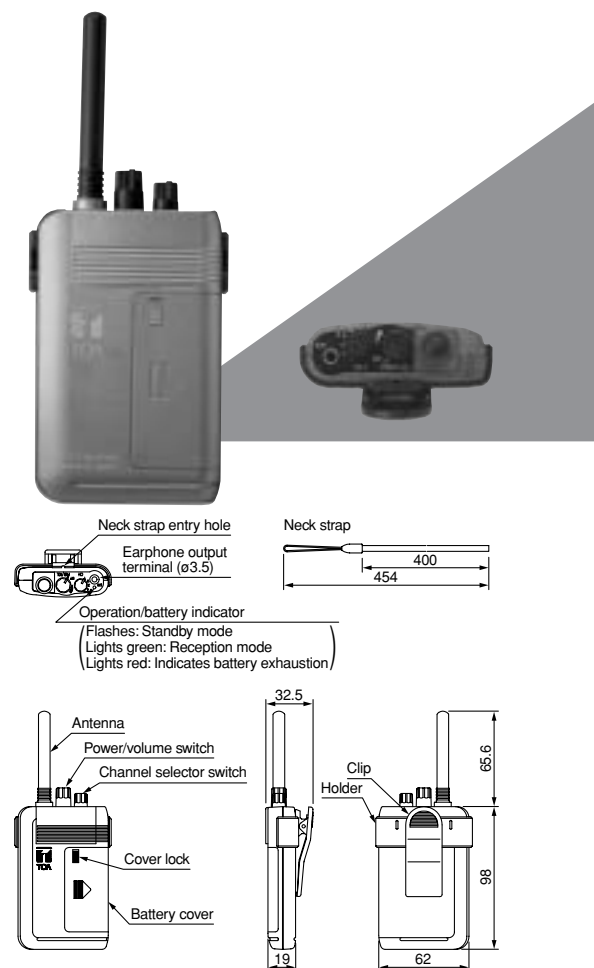
- Microphone sensitivity can be changed.
- The transmission switch (press-to-talk) function is made available. (An optional microphone with the transmission switch is required.)
- A maximum of 5 different channels can be simultaneously used in the same location.
- The battery indicator indicates the state of battery consumption to avoid the unit's failure due to battery exhaustion.
- Compact size and high reliability.
- Optional microphones can be selected from 3 different types.

## SPECIFICATIONS

<b>Power Requirement</b>	1.5 V DC (Battery)
<b>Modulation</b>	Frequency modulation
<b>Transmitting Frequencies</b>	470 MHz band (5 ch) (470.075, 470.150, 470.375, 470.625, 470.725 MHz)
<b>RF Carrier Power</b>	2 mW
<b>Oscillator</b>	PLL synthesizer
<b>Frequency Response</b>	200 – 5,000 Hz (Portable transmitter to Portable receiver)
<b>Pre-emphasis</b>	50 $\mu$ s
<b>Input Level</b>	–50 dB* (sensitivity Hi)/–44 dB* (sensitivity Low)
<b>Battery Life</b>	18 hours (alkaline)
<b>Battery</b>	LR6 (1.5 V) $\times$ 1
<b>Operation Temperature</b>	–10°C to +40°C
<b>Finish</b>	Resin, dark gray
<b>Dimensions</b>	62 (W) $\times$ 163.6 (H) $\times$ 32.5 (D) mm
<b>Weight</b>	115 g (battery included)
<b>Accessory</b>	Neck strap...1

\*0 dB = 0.775 V

# WT-2100 Portable Receiver



## GENERAL DESCRIPTION

TOA's WT-2100 is a Portable Receiver designed to receive 470 MHz band radio signals. An optional earphone (not supplied with the unit) is required.

## FEATURES

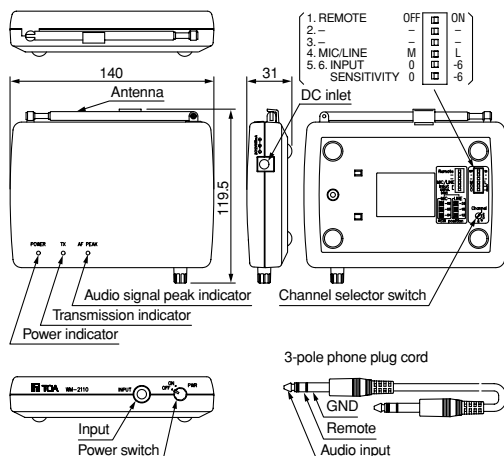
- Commercial earphones can also be used (plug diameter: 3.5 mm, impedance: over 16  $\Omega$ ).
- Up to 5 different channels can be simultaneously used in the same location.
- The battery indicator indicates the state of battery consumption to avoid the unit's failure due to battery exhaustion.
- Compact size and high reliability.

## SPECIFICATIONS

<b>Power Source</b>	1.5 V DC (Battery)
<b>Receiving Frequencies</b>	470 MHz band (5 ch) (470.075, 470.150, 470.375, 470.625, 470.725 MHz)
<b>Receiving System</b>	Double super-heterodyne
<b>Receiving Sensitivity</b>	Better than 25 dB, S/N ratio (7 dB $\mu$ VEMF input, $\pm$ 1.7kHz deviation)
<b>Frequency Response</b>	200 – 5,000 Hz (Portable transmitter to Portable receiver) 150 – 6,000 Hz (Desk-top transmitter to Portable receiver)
<b>De-emphasis</b>	50 $\mu$ s
<b>Output Level</b>	4 mW (16 $\Omega$ load, 10% distortion)
<b>Battery Life</b>	18 hours (alkaline)
<b>Battery</b>	LR6 (1.5 V) $\times$ 1
<b>Operation Temperature</b>	–10°C to +40°C
<b>Finish</b>	Resin, dark silver
<b>Dimensions</b>	62 (W) $\times$ 163.6 (H) $\times$ 32.5 (D) mm
<b>Weight</b>	112 g (battery included)
<b>Accessory</b>	Neck strap...1

\*When using an earphone not made by TOA, use a one with a 3.5mm-diameter plug and impedance of over 16 $\Omega$ .

# WM-2110 Desk-top Transmitter



## GENERAL DESCRIPTION

TOA's WM-2110 is a Desk-top Transmitter designed to use 470 MHz band radio signals.

## FEATURES

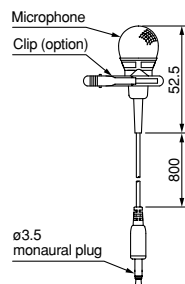
- The remote control function permits the unit's transmission to be controlled from external equipment.
- Input sensitivity can be switched between MIC and LINE signal levels depending on the type of equipment to be connected to the input.
- A maximum of 5 different channels can be simultaneously used in the same location.
- Compact size and high reliability.

## SPECIFICATIONS

<b>Power Requirement</b>	230 V AC, 50 Hz
<b>Power Consumption</b>	3 W
<b>Modulation</b>	Frequency modulation
<b>Transmitting Frequencies</b>	470 MHz band (5 ch) (470.075, 470.150, 470.375, 470.625, 470.725 MHz)
<b>RF Carrier Power</b>	5 mW
<b>Oscillator</b>	PLL synthesizer
<b>Frequency Response</b>	150 – 6,000 Hz (Desk-top transmitter to Portable receiver)
<b>Pre-emphasis</b>	50 $\mu$ s
<b>Input Level (selectable)</b>	Standard input: -54 dB*/-60 dB*/-66 dB* (Mic) -12 dB*/-18 dB*/-24 dB* (Line) Maximum input: -30 dB*/-36 dB*/-42 dB* (Mic) +12 dB*/+6 dB*/0 dB* (Line) Mic/Line selection, 600 $\Omega$ , unbalanced, phone jack
<b>Remote Input</b>	Make contact input: Release voltage: 2 V DC short-circuit current: 0.2 mA loop resistance: under 100 $\Omega$ Remote control mode: Transmit radio signal when at make
<b>Operation Temperature</b>	-10°C to +40°C
<b>Finish</b>	ABS resin, dark gray
<b>Dimensions</b>	140 (W) x 31 (H) x 119.5 (D) mm
<b>Weight</b>	270 g
<b>Accessory</b>	AC-DC adapter (1.8 m)···1, Screw driver···1, 3-pole phone plug cord (2 m)···1

\*0 dB = 1 V

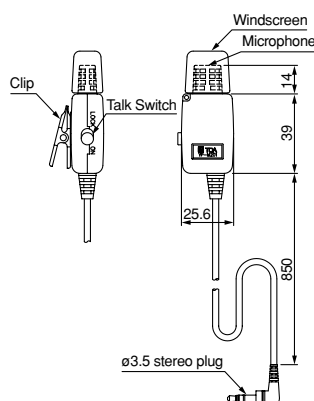
# YP-M101 Tie-clip Microphone



## SPECIFICATIONS

<b>Type</b>	Electret condenser type
<b>Directivity</b>	Unidirectional
<b>Sensitivity</b>	-46 dB (0 dB = 1 V/Pa, 1 kHz, load: 2 k $\Omega$ )
<b>Maximum Input Level</b>	115 dB SPL
<b>Terminal</b>	$\phi$ 3.5 mm monaural plug
<b>Finish</b>	Dark gray
<b>Weight</b>	20 g (cable included)
<b>Accessory</b>	Clip···1

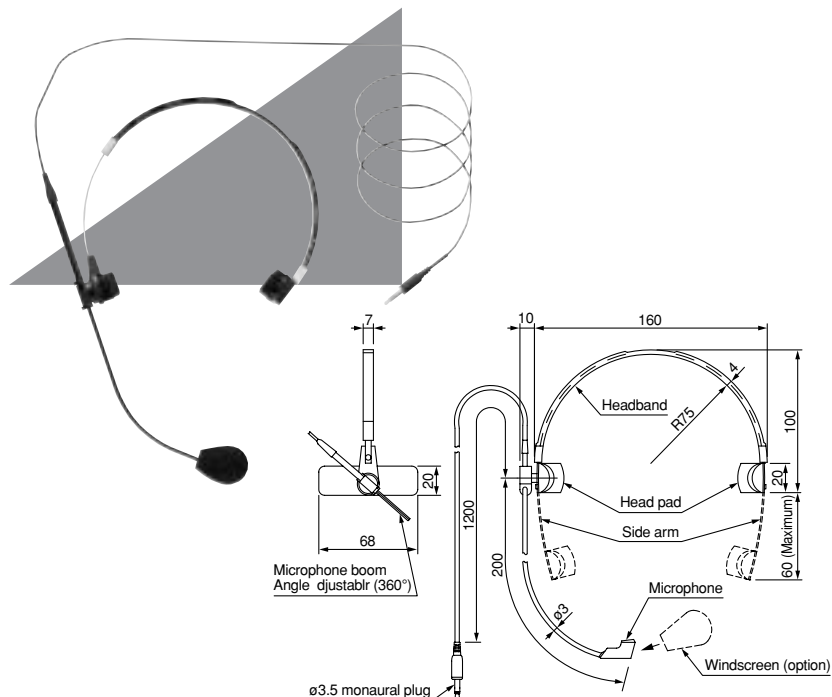
# YP-M201 Close-Talking Microphone



## SPECIFICATIONS

<b>Type</b>	Electret condenser type
<b>Directivity</b>	Unidirectional
<b>Sensitivity</b>	-57 dB (0 dB = 1 V/Pa, 1 kHz, load: 2 k $\Omega$ )
<b>Maximum Input Level</b>	115 dB SPL
<b>Switch</b>	Press to talk switch (can be locked)
<b>Terminal</b>	$\phi$ 3.5 mm stereo plug
<b>Finish</b>	Black
<b>Weight</b>	20 g (cable included)

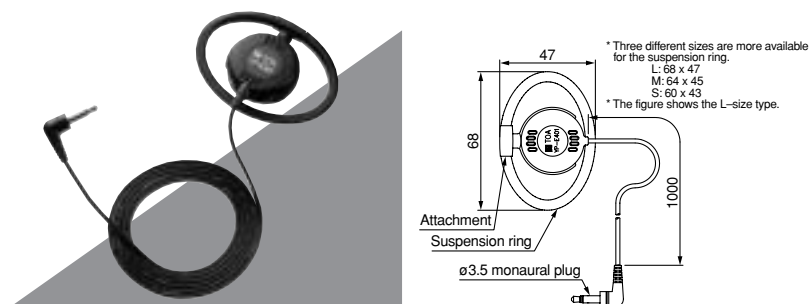
# YP-M301 Headset Microphone



## SPECIFICATIONS

Type	Electret condenser type
Directivity	Unidirectional
Sensitivity	-41 dB (0 dB = 1 V/Pa, 1 kHz, load: 2 kΩ)
Maximum Input Level	117 dB SPL
Terminal	ø3.5 mm monaural plug
Finish	Headband: ABS resin, black
Weight	45 g
Accessory	Storage case...1, Windscreen...2

# YP-E401 Ear-Suspension Earphone



## SPECIFICATIONS

Type	Dynamic type
Impedance	16 Ω
Frequency Response	300 – 15,000 Hz
Rated Sensitivity	88 dB (0 dB = 2 X 10 <sup>-5</sup> Pa, 1 kHz, 10mW)
Input	Max. 50 mW
Terminal	ø3.5 mm monaural plug
Finish	Black
Weight	17 g
Accessory	Ear-pad...1, Suspension ring*...2

\*Three different sizes are available for the suspension ring.  
L: 68 x 47 mm M: 64 x 45 mm S: 60 x 43 mm  
\*The figure shows the L-size type.

## RELATED PRODUCT (for WM-2110)

### PM-660 Paging Microphone



## SPECIFICATIONS

Type	Dynamic (moving coil)
Polar Pattern	Cardioid
Rate Impedance	600 Ω, unbalanced
Output Level	-58 dB (1 kHz, 0 dB = 1 V/Pa)
Frequency Response	100 Hz – 10,000 Hz
Output	ø4.5, 2-conductor shielded cable (2.5 m) with phone plug
Switch	1 push-to-talk switch, 1 locking lever, Short-off type
Remote Control	Less than 500 mA at 30 V DC
Finish	Microphone head: Zinc plated steel wire, Baked paint, Gray Main unit: ABS resin, Gray
Dimensions	100 (W) x 215 (H) x 150 (D) mm
Weight	440 g (cord excluded)