



# WIRELESS GUIDE SYSTEM

**Ideal, easy-to-use system for on-site tours in noisy environments,  
simultaneous interpretation and  
extended listening coverage in difficult situations.**



safe&sound



# 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-glimpse 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.

## WIRELESS GUIDE SYSTEM



**WM-2100**  
Portable  
Transmitter  
•5-channel



**YP-M101**  
Tie-clip Microphone



**YP-M201**  
Close-Talking Microphone



**YP-M301**  
Headset Microphone



**WT-2100**  
Portable  
Receiver  
•5-channel



**YP-E401**  
Ear-Suspension  
Earphone



**PM-660**  
Paging Microphone

**WM-2110**  
Desk-Top  
Transmitter  
•5-channel



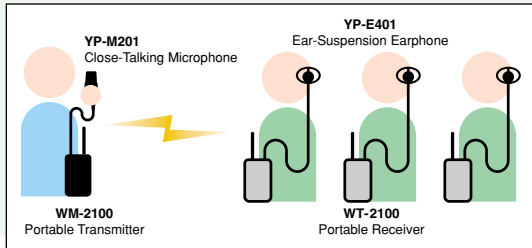
# System Applications

## 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.

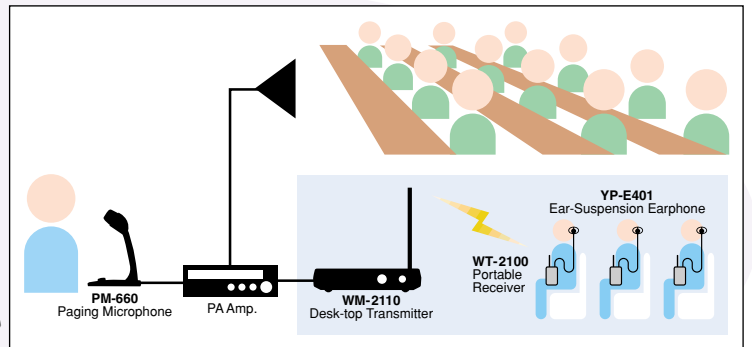
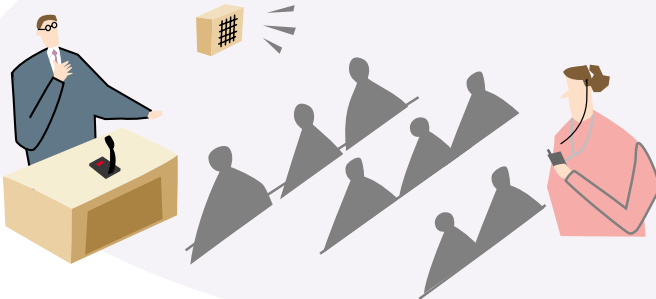


**Guide × 1/ Listener × 10**  
 Portable Transmitter WM-2100 × 1  
 Close-Talking Microphone YP-M201 × 1  
 Portable Receiver WT-2100 × 10  
 Ear-Suspension Earphone YP-E401 × 10



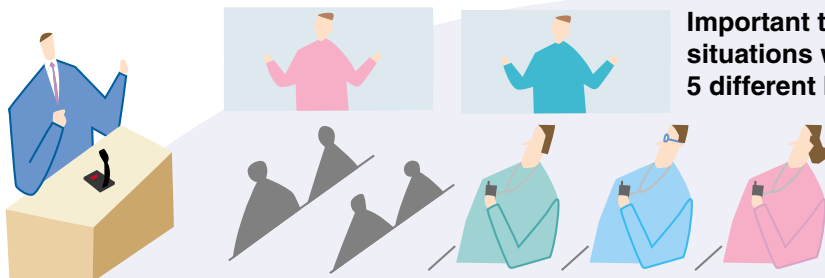
## Listening-assistance

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.



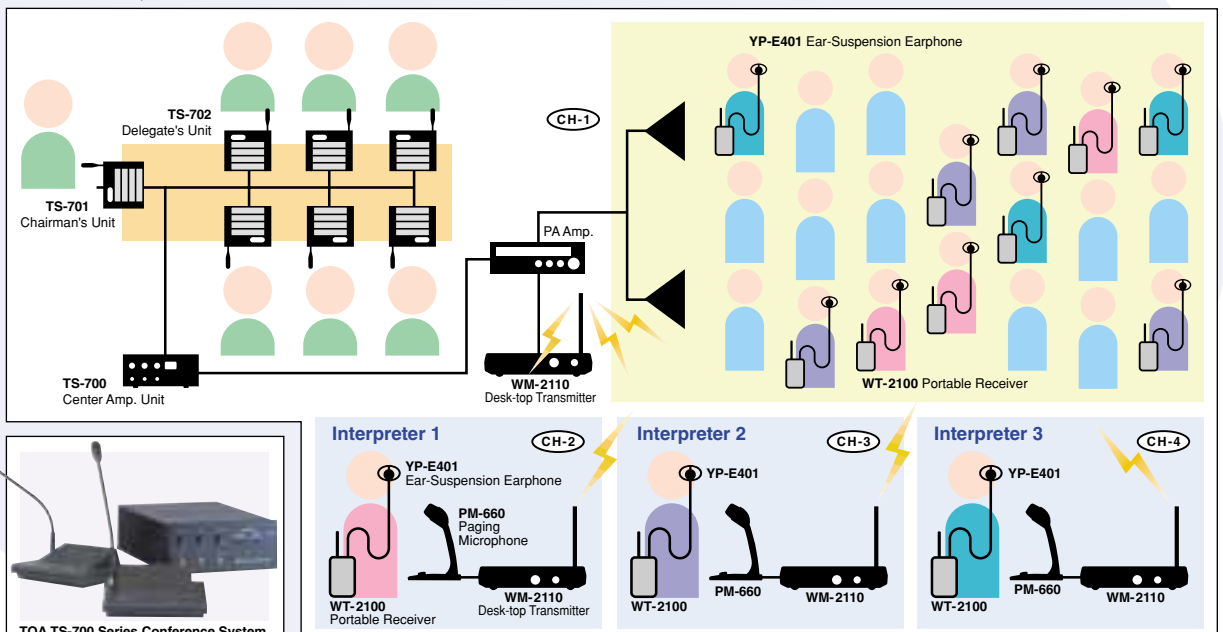
**Presenter × 1/ Listener × 10**  
 Portable Transmitter WM-2110 × 1  
 Paging Microphone PM-660 × 1  
 Portable Receiver WT-2100 × 10  
 Ear-Suspension Earphone YP-E401 × 10

## Simultaneous Interpretation



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

**Interpreter × 3/ Listener × 30**  
 Desk-top Transmitter WM-2110 × 4  
 Paging Microphone PM-660 × 3  
 Portable Receiver WT-2100 × 33  
 Ear-Suspension Earphone YP-E401 × 33



## SPECIFICATIONS

### WM-2100 Portable Transmitter

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

\*0 dB = 0.775 V

### WM-2110 Desk-Top Transmitter

Power Requirement	230 V AC, 50 Hz
Power Consumption	3 W
Modulation	Frequency modulation
Transmitting Frequencies	470 MHz band (5 ch) (470.075, 470.150, 470.375, 470.625, 470.725 MHz)
RF Carrier Power	5 mW
Oscillator	PLL synthesizer
Frequency Response	150 – 6,000 Hz (Desk-top transmitter to Portable receiver)
Pre-emphasis	50 $\mu$ s
Input Level (selectable)	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
Remote Input	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
Operation Temperature	-10°C to +40°C
Finish	ABS resin, dark gray
Dimensions	140 (W) $\times$ 31 (H) $\times$ 119.5 (D) mm
Weight	270 g
Accessory	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

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

### YP-M201 Close-talking Microphone

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

### YP-M301 Headset Microphone

Type	Electret condenser type
Directivity	Unidirectional
Sensitivity	-41 dB (0 dB = 1 V/Pa, 1 kHz, load: 2 k $\Omega$ )
Maximum Input Level	117 dB SPL
Terminal	$\phi$ 3.5 mm monaural plug
Finish	Headband: ABS resin, black
Weight	45 g
Accessory	Storage case...1, Windscreen...2

### WT-2100 Portable Receiver

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

### YP-E401 Ear-Suspension Earphone

Type	Dynamic type
Impedance	16 $\Omega$
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	$\phi$ 3.5 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  $\times$  47 mm  
M: 64  $\times$  45 mm  
S: 60  $\times$  43 mm

### PM-660 Paging Microphone

Type	Dynamic (moving coil)
Polar Pattern	Cardioid
Rate Impedance	600 $\Omega$ , unbalanced
Output Level	-58 dB (1 kHz, 0 dB = 1 V/Pa)
Frequency Response	100 Hz – 10,000 Hz
Output	$\phi$ 4.5, 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) $\times$ 215 (H) $\times$ 150 (D) mm
Weight	440 g (cord excluded)

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