



# 5000 Series Wireless Microphone System



Delivering  
Wireless  
Excellence

# 5000 SERIES

## Wireless Tuners



### WT-5810 Space Diversity Tuner

The WT-5810 Wireless Tuner is designed for use on the UHF band, and suitable for vocal or speech reinforcement applications.

It features a compander circuit that minimizes the influence of ambient noise. 16 different operating frequencies ranging from 576 to 698 MHz. Optimized PLL-synthesizer minimizes the oscillation frequency drift resulting from the ambient temperature change.

Compact size and high reliability.

#### Features:

- ✂ Phase Locked Loop (PLL) synthesis operation
- ✂ 16 selectable channel frequencies
- ✂ TOA space diversity technology
- ✂ Double super-heterodyne receiving system
- ✂ Auto mixing input function
- ✂ Squelch function (carrier, noise, tone)
- ✂ Usable frequencies scanning and vacant channel search function
- ✂ Compact portable design
- ✂ Compander circuitry for minimizing ambient noise
- ✂ Rod antenna x 2
- ✂ Balanced output (XLR connector) and phone jack output
- ✂ Low-battery indicator (Wireless microphone's battery voltage becomes low)



### WT-4820 Space Tuner

MODULAR DUAL CHANNEL WIRELESS TUNER combines cutting-edge wireless technology with user benefits such as fast setup, simple operation and reliable performance.

The WT-4820 accepts up to two WTU-4800 Diversity Tuner Modules available in 3 different frequency bands with sixteen user-selectable channels in the UHF band with simultaneous operation of up to sixteen channels.

#### Features:

- ✂ 16 selectable channel frequencies
- ✂ Antenna cascade output function (parallel connection possible for linking two WT-4820 units)
- ✂ TOA space diversity technology
- ✂ Auto mixing input function
- ✂ Tuner unit connections accessible from the front (even if rack mounted the front panel opens easily).
- ✂ Mix output/tuner 1 output (selectable); tuner 2 has 2 outputs.
- ✂ Whip antenna x 2
- ✂ Compact half-rack size body
- ✂ External antenna input



# 5000 SERIES

## Wireless Tuners



### WT-5805 Space Diversity Tuner

Space diversity reduces a fading effect of a received signal and generates a constant output regardless of a variation of a signal-to-noise ratio of the received signal.

The space diversity receiver compares a signal-to-noise ratio of a signal received from a first antenna and a signal-to-noise ratio of a signal received from a second antenna, so as to amplify the received signal having a higher signal-to-noise ratio and attenuate the received signal having a lower signal-to-noise ratio.

The amplified signal is combined with the attenuated signal.

#### Features:

- ✧ Phase Locked Loop (PLL) synthesis operation
- ✧ 64 selectable channels
- ✧ TOA space diversity technology
- ✧ Double super-heterodyne receiving system
- ✧ Two-line LCD display
- ✧ Auto mixing input function
- ✧ Squelch function (carrier, noise, tone)
- ✧ Usable frequencies scanning and vacant channel search function
- ✧ Compact half-rack size body
- ✧ 6 points audio level meter for microphone sensitivity adjustment
- ✧ Compressor circuitry for minimizing ambient noise
- ✧ Whip antenna x 2
- ✧ Low-battery indicator (Wireless microphone's battery voltage becomes low).

### WT-5800 True Diversity Tuner

The 5000 series tuners are designed to deliver outstanding performance, stability and reliability. A wide choice of channels can be obtained by the using PLL-synthesized oscillators enabling the selection of channels freely without interference.

Additionally, the 5000 series provide significantly less potential for noise caused by antenna changeover, by employing true diversity and space diversity methods. Two-line LCD display enables faster meter reading. Remaining battery power indication. PLL synthesis is incorporated to generate highly accurate frequency output signals that help achieve better overall system performance. For further performance enhancement, a TOA diversity system eliminates dead spots and provides more stable signal reception. Noise reduction is improved with a squelch function (carrier, noise, tone), and a compander function minimizing ambient noise. For easier operation, a Channel Check function simplifies channel setting operations on microphones using multiple channels simultaneously.

#### Features:

- ✧ Phase Locked Loop (PLL) synthesis operation
- ✧ 64 selectable channels
- ✧ True diversity technology
- ✧ Double super-heterodyne receiving system
- ✧ Two-line LCD display
- ✧ Auto mixing input function
- ✧ Squelch function (carrier, noise, tone)
- ✧ Usable frequencies scanning and vacant channel search function
- ✧ Compact half-rack size body
- ✧ 6 points audio level meter for microphone sensitivity adjustment
- ✧ Compressor circuitry for minimizing ambient noise
- ✧ Antenna distribution output
- ✧ Whip antenna x 2
- ✧ Low-battery indicator (wireless microphone's battery voltage becomes low)



# 5000 SERIES

## Wireless Microphones

### Handhelds

Two handheld microphones are powered by rechargeable batteries.

Supported by the WM-5325 wireless transmitter, which also operates on rechargeable batteries, the WM-5265 vocal microphone and WM-5225 speech microphone maintains the Series' high performance standards while lowering operating costs.

The ability to use rechargeable batteries, which permits up to 13 hours of continuous use before recharging, offers the additional advantage of enhancing equipment reliability by assuring that every activity begins with the batteries fully charged.

A selection of three high-efficiency battery chargers are available for for 2, 6 or 12 batteries.

#### Features:

#### WM-5270

- ✕ Dynamic microphone unit: Unidirectional
- ✕ 64 selectable channels
- ✕ Maximum input level: 142 dB SPL
- ✕ Rolling stopper prevents the microphone from rolling.
- ✕ Single AA battery operation for more compact and light weight body
- ✕ Built-in antenna



WM-5270

#### WM-5265

- ✕ Dynamic microphone unit: Unidirectional
- ✕ 64 selectable channels
- ✕ Maximum input level: 132 dB SPL
- ✕ ON/OFF switch prevents the microphone from rolling
- ✕ WB-2000 rechargeable battery or single AA battery operation for compact and lightweight body
- ✕ Built-in antenna



WM-5265

#### WM-5225

- ✕ Electret condenser microphone unit: Unidirectional
- ✕ 64 selectable channels
- ✕ Maximum input level: 126 dB SPL
- ✕ ON/OFF switch prevents the microphone from rolling.
- ✕ WB-2000 rechargeable battery or single AA battery operation for compact and lightweight body
- ✕ Built-in antenna



WM-5225



# UHF WIRELESS

## System Sets



**WS-5225**  
WM-5225 + WT-5810



**WS-5265**  
WM-5265 + WT-5810



**WS-5325U**  
WM-5325 + YP-M5300 + WT-5810



**WS-5325M**  
WM-5325 + YP-M5310 + WT-5810



**WS-5325H**  
WM-5325 + WH-4000H + WT-5810

# 5000 SERIES

## Beltpack Receivers/Transmitters

### WM-5325

Wireless Transmitter

The WM-5325 wireless transmitter has been manufactured for use with a UHF system. It is for use in speech reinforcement applications. Thanks to the PLL-synthesizer system, 64 different operating frequencies are made available.

A high output power ensures stable radio signal transmission.

#### Features:

### WM-5325

- ✧ 64 selectable channels
- ✧ Maximum input level: -14 dB to -29 dB
- ✧ Built-in circuitry minimizes ambient noise effects
- ✧ WB-2000 rechargeable battery or single AA battery operation for compact and lightweight body
- ✧ Connector for 3.5mm mini-plugs
- ✧ Built-in antenna



### WT-5100

Wireless Receiver

The WT-5100 is a Portable Receiver designed to receive UHF band radio signals. An optional earphone is required.



YP-E401

YP-E5000

### WT-5100

- ✧ Commercial earphones can also be used (ø3.5 mm, impedance: over 16Ω)
- ✧ Allows up to 16 different frequencies to be received by selection
- ✧ An optimized PLL-synthesizer minimizes the oscillation frequency drift resulting from the ambient temperature or voltage fluctuation.
- ✧ WB-2000 rechargeable battery or single AA battery operation for compact and lightweight body
- ✧ Built-in antenna



	<b>WM-5265</b>	<b>WM-5270</b>	<b>WM-5225</b>
Microphone Element	Dynamic microphone: Unidirectional	Dynamic microphone: Cardioid	Electret condenser microphone: Unidirectional
Frequency Range	576 – 698 MHz, UHF	576 – 698 MHz, UHF	576 – 698 MHz, UHF
Channel Selectable	64 channels	64 channels	64 channels
Maximum Input Level	132 dB SPL	142 dB SPL	126 dB SPL
Battery	LR6 (AA) or WB-2000 (Ni-MH battery)	LR6 (AA)	LR6 (AA) or WB-2000 (Ni-MH battery)
Finish	Resin coating	Metal, dark gray	Resin, rubber coating
Dimensions	ø50 x 229 mm (ø1.97" x 9.02")	ø48 x 244 mm (ø1.89" x 9.61")	ø43 x 231.5 mm (ø1.72" x 9.11")
Weight	205 g (0.45lb) (with battery)	340 g (0.75lb) (with battery)	180 g (0.4lb) (with battery)
Accessories	Microphone holder (with stand adapter), Screw driver, Storage case	Microphone holder (with standadapter), Screw driver, Storage case, Rolling Stopper	Microphone holder (with stand adapter), Storage case
<b>WM-5265, WM-5270, WM-5225 Wireless Handheld Microphones</b>			

<b>WM-5325</b>	
Frequency Range	576 – 698 MHz, UHF
Channel Selectable	64 channels
Maximum Input Level	-14 dB to -29 dB* (Audio level control: Min. to Max.)
Battery	LR6 (AA) or WB-2000 (Ni-MH battery)
Finish	Resin, coating (change other's)
Dimensions	62 (W) x 102.5 (H) x 23 (D) mm (2.44" x 4.04" x 0.91")
Weight	90 g (0.2lb) (with battery)
Accessories	Screw driver, Storage case, Neckstrap
Option	Ni-MH battery: WB-2000
<b>WM-5325 Wireless Beltpack Transmitter</b>	

<b>WT-5100</b>	
Receiving Frequencies	UHF band (16 ch)
Receiving System	Double super-heterodyne
Receiving Sensitivity	Better than 60 dB Signal to Noise ratio (20 dB $\mu$ V input, $\pm$ 40 kHz deviation)
Frequency Response	200 Hz – 5 kHz (Portable transmitter to Portable receiver)
Battery	LR6 (AA) or WB-2000 (Ni-MH battery)
Finish	Resin, dark silver
Dimensions	62 (W) x 163.6 (H) x 32.5 (D) mm (2.44" x 6.44" x 1.28")
Weight	125 g (0.28lb) (with battery)
Accessory	Neck strap x 1
Options	Ni-MH battery: WB-2000, Assist Earphone: YP-E5000 Ear-suspension Earphone: YP-E401
<b>WT-5100 Wireless Receiver</b>	

	<b>WT-5800</b>	<b>WT-5805</b>	<b>WT-5810</b>	<b>WT-4820</b>
Power Requirement	AC mains (AC adapter must be used)			
Frequency Range	576 – 698 MHz, UHF	576 – 698 MHz, UHF	576 – 698 MHz	576 – 698 MHz, UHF (WTU-4800)
Channel Selectable	64 Selectable frequencies		16 channels	
Receiving System	Double Super-heterodyne		Double Super-heterodyne (WTU-4800)	
Diversity System	True diversity	Space diversity	Space diversity	Space diversity (WTU-4800)
Mixing Output	MIC: -60 dB*, 600 $\Omega$ , balanced, XLR-3-31 type connector LINE: -20 dB*, 600 $\Omega$ , unbalanced, phone jack			—
Mixing Input	-20 dB*, 10 k $\Omega$ , unbalanced, phone jack			
Antenna	Whip antenna Rod antenna		Whip antenna	
Antenna Input	75 $\Omega$ , BNC,	9 V DC 75 $\Omega$ , BNC, 9 V DC	—	75 $\Omega$ , BNC, 9 V DC
Antenna Output	75 $\Omega$ , BNC (Gain 0dB)	—	—	75 $\Omega$ , BNC (Gain 0dB)
Receiving Sensitivity	90 dB or more		80 dB or more (WTU-4800)	
Squelch Sensitivity	18 – 40 dB $\mu$ V variable		18 dB $\mu$ V (WTU-4800)	
Tone Frequency	32.768 kHz		—	
S/N Ratio	110dB or more (A-weight, unbalanced output)		104dB or more (A-weight, balanced output)	
Harmonic Distortion	1% or less (typical)			
Frequency Response	100 – 15,000 Hz, $\pm$ 3 dB		50 – 18,000 Hz, $\pm$ 3 dB	
Finish	Resin, black			
Dimensions	210(W) x 44(H) x 205.1(D) mm (8.27" x 1.73" x 8.07")	210(W) x 44(H) x 205.1(D) mm (8.27" x 1.73" x 8.07")	206(W) x 40.6(H) x 152.7(D) mm (8.11" x 1.60" x 6.01")	210(W) x 44.2(H) x 181(D) mm (8.27" x 1.73" x 7.13")
Weight	700 g (1.54lb)	700 g (1.54lb)	590 g (1.30lb)	770 g (1.70lb) (without tuner module)
<b>WT-5800 WT-5805 WT-5810 WT-4820 Wireless Tuners</b>				

\* 0dB = 1V

## LAVALIER MICS



### YP-M5300

UNIDIRECTIONAL LAVALIER MICROPHONE

PRODUCT CODE: YP-M5300

- ✂ Unidirectional electret condenser microphone element
- ✂ Maximum input level: 120 dB SP
- ✂ Connector for 3.5mm mini-plug
- ✂ Weight: 20 g



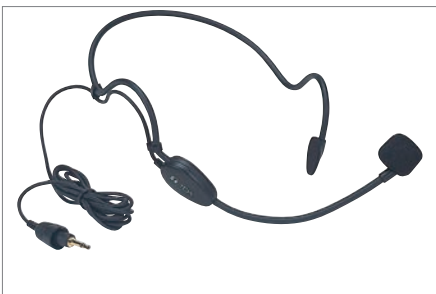
### YP-M5310

OMNIDIRECTIONAL LAVALIER MICROPHONE

PRODUCT CODE: YP-M5310

- ✂ Omnidirectional electret condenser microphone element
- ✂ Maximum input level: 110 dB SPL
- ✂ Connector for 3.5mm mini-plug
- ✂ Weight: 20 g

## HEADWORN MICS



### WH-4000H

HEADSET MICROPHONE

PRODUCT CODE: WH-4000H

- ✂ Unidirectional electret condenser microphone element
- ✂ Maximum input level: 120 dB SPL
- ✂ Connector for 3.5mm mini-plug
- ✂ Secure and comfortably fitting headset
- ✂ Weight: 50 g



### WH-4000A

HEADSET (AEROBIC) MICROPHONE PRODUCT CODE: WH-4000A

- ✂ Unidirectional electret condenser microphone element
- ✂ Maximum input level: 120 dB SPL
- ✂ Connector for 3.5mm mini-plug
- ✂ Extra-secure and comfortably-fitting head set
- ✂ Weight: 50 g



# ACCESSORIES



## WD-4800

### ANTENNA DISTRIBUTOR



Is designed to be used in conjunction with VHF/UHF band systems. It comes with 2 channels, in which 2 input signals are mixed and distributed to 4 outputs. The WD-4800 also has 4 DC power distribution outputs.



## YW-4500

### WALL MOUNT ANTENNA

Cable loss can be compensated for by a built-in RF signal booster. The YW-4500 is a dipole antenna designed to be installed indoors.



## WH-4000S

### WIND SCREEN

Windscreens Contains 10 Pieces

# ACCESSORIES

## Rackmount Kits



### MB-15B

RACK MOUNT BRACKET  
For Rack Mounting 1 WD-4800 unit



### MB-WT3

RACK MOUNT BRACKET KIT  
For Rack Mounting 1 WT-5800,  
WT580 and/or WT-4820 unit



### MB-WT4

RACK MOUNT BRACKET KIT  
For Rack Mounting 2 WT-5800,  
WT5805 and/or WT-4820 units

## Battery Chargers & Power Supplies



PRODUCT CODE: BC-5000-12

### BC-5000-12

BATTERY CHARGER

- ✂ Number of wireless microphone to be charged simultaneously: 12
- ✂ Fully charged within 3 hours



PRODUCT CODE: BC-5000-6

### BC-5000-6

BATTERY CHARGER

- ✂ Number of wireless microphone to be charged simultaneously: 6
- ✂ Fully charged within 3 hours



PRODUCT CODE: BC-5000-2

### BC-5000-2

BATTERY CHARGER

- ✂ Number of wireless microphone to be charged simultaneously: 2
- ✂ Fully charged within 3 hours



PRODUCT CODE: WB-2000-2

### WB-2000-2

RECHARGEABLE BATTERY

- ✂ AA nickel-metal hydride (Ni-MH) rechargeable battery
- ✂ For Wireless Microphones, Wireless Transmitter, and Portable Receiver



### AD-5000-6

AC ADAPTER

PRODUCT CODE: AD-5000-6

- ✂ For BC-5000-12 and BC-5000-6 Battery Chargers



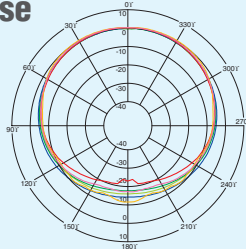
### AD-5000-2

AC ADAPTER

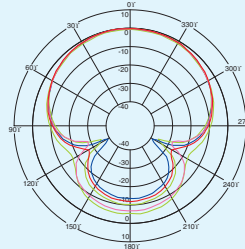
PRODUCT CODE: AD-5000-6

- ✂ For BC-5000-2 Battery Charger

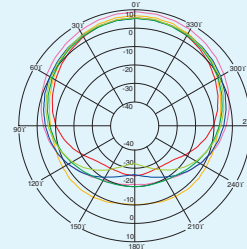
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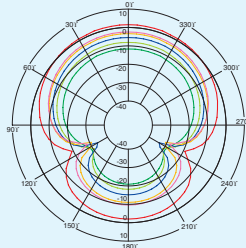
WM-5270



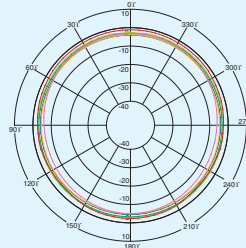
WM-5265



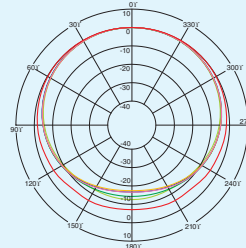
WM-5225



YP-M5300



YP-M5310



WH-4000H/WH-4000A

- 8000Hz
- 4000Hz
- 2000Hz
- 1000Hz
- 500Hz
- 250Hz





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Sound & Communication**

**TOA Electronics, Inc.**  
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Specifications are subject to change without notice.