

# UHF WIRELESS MICROPHONE SYSTEMS



Wireless Convenience with Newly Enhanced Versatility, Reliability & Cost Efficiency

#### WM-5270

#### **Handheld Vocal Wireless Microphone**

- 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 lightweight body
- Built-in antenna





#### WM-5265

#### **Handheld Vocal Wireless Microphone**

- Dynamic microphone unit: Omnidirectional
- 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

## Handheld Speech Wireless

#### Microphone · 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

- Maximum input level: 120 dB SPL
- Connector for 3.5 mini-plug
- Weight: 20 g

# WH-4000H Headset Microphone

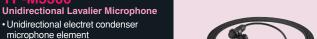
- Unidirectional electret condenser microphone element
- Maximum input level: 120 dB SPL
- · Connector for 3.5 mini-plug
- · Secure and comfortably fitting headset
- Weight: 50 a





## Wireless Transmitter • 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 3.5 mini-plugs
- Built-in antenna









# YP-M5310 Omnidirectional Lavalier Microphone

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

# WH-4000A Headset (Aerobics) Microphone

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



# Wireless (Lavalier) Microphone

- Unidirectional electret condenser microphone element
- 64 selectable channels
- · Input sensitivity control included
- Maximum input level: 120 dB SPL
- Built-in circuitry minimizes ambient noise effects.
- Highly reliable TA-4 (XLR-type) mini-cannon microphone plug
- Belt clip rotatable 360 degrees

#### WT-5100

#### Wireless Portable Receiver

- · Commercial earphones can also be used ( $\emptyset$ 3.5 mm, impedance: over 16 $\Omega$ )
- 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







#### YP-E401

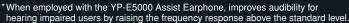
#### Ear-suspension Earphone

- Dynamic type
- Frequency response: 300Hz 15k Hz
- Terminal: ø3.5 Monaural plug (16Ω)
- •Three different sizes are available for the suspension ring.

#### YP-E5000

#### Assist Earphone

- Dynamic type
- Frequency response: 300Hz 15k Hz
- Terminal: ø3.5 mm plug (16Ω)
- •Three different sizes are available for the suspension ring.



# Versatile High-Performance Microphone Systems Now Operating on Rechargeable Batteries

Two new handheld microphones and a portable receiver, all powered by rechargeable batteries, have joined the TOA 5000 Series. Supported by the WM-5325 wireless transmitter, which also operates on rechargeable batteries, the new WM-5265 vocal microphone and WM-5225 speech microphone maintain the Series' high performance standards while lowering operating costs. The ability to use rechargeable batteries, which permit up to 13 hours 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 new high-efficiency battery chargers for 2, 6 or 12 batteries and a single-battery microphone add further flexibility to the product line-up.

The WM-5325 UHF wireless transmitter is now delivered as a stand-alone unit capable of operation with various TOA microphones, including the YP-M5300 unidirectional and YP-M5100 omnidirectional lavaliere microphones. It also operates with the WH-4000H and WH-4000A headset microphones. The newly developed WT-5100 compact portable receiver and YP-E5000 ear-suspension earphone, meanwhile, serve as ideal tools for school, theater, museum, zoo and other narration-assisted applications.

All the UHF wireless microphone tuners in the TOA 5000 Series employs phase locked loop (PLL) synthesis for remarkably stable performance. Their reliable wide-area coverage permits use of up to 16 microphones within a radius of up to 120 meters from the YW-4500 UHF wireless antenna. Other features include TOA true diversity (WT-5800) or space diversity (WT-5805) circuitry, a usable frequencies scanning and vacant channel search function, a double super-heterodyne receiving system and a tone squelch function to mute unwanted noise. Each of the three 5000 Series tuners also offers a separately configured range of additional features to satisfy different users' particular needs. The WT-4820 2-channel wireless tuner, which operates on 12V-18V DC power, rounds out the tuner line-up.



#### WT-5800

#### Wireless Tuner

- 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)

#### WT-5805

#### Wireless Tuner

- 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)

#### WT-5810

#### Wireless Tuner

- 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)

#### WT-4820

#### 2-Channel Wireless Tuner

- 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 is easily opened).









- · Usable frequencies scanning and vacant channel search function
- Compact half-rack size body
- 6 points audio level meter for microphone sensitivity adjustment
- Compander circuitry for minimizing ambient noise
- Antenna distribution output
- Whip antenna  $\times$  2
- Low-battery indicator (wireless microphone's battery voltage becomes low)
- · Usable frequencies scanning and vacant channel search function
- · Compact half-rack size body
- 6 points audio level meter for microphone sensitivity adjustment
- · Compander circuitry for minimizing ambient noise
- Whip antenna × 2
- · Low-battery indicator (Wireless microphone's battery voltage becomes low).
- · Usable frequencies scanning and vacant channel search function
- Compact portable design
- · Compander circuitry for minimizing ambient noise
- · Balanced output (XLR connector) and phone jack
- · Low-battery indicator (Wireless microphone's battery voltage becomes low).
- Mix output/tuner 1 output (selectable); tuner 2 has 2 outputs.
- Whip antenna x 2
- · Compact half-rack size body
- External antenna input

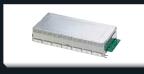




#### WD-4800

#### Power/Antenna Distributor

- 2 antenna inputs and 4 distributed
- 2 inputs per antenna which are mixed for output (when 2 antennas are set up in a large room).
- Supplies power to the antenna
- Compact 19" rack-mount design.



#### WTU-4800 **Wireless Tuner Unit**

- PLL synthesis double superheterodyne diversity tuner module
- Squelch function mutes output to reduce noise.
- Includes compander noise reduction to cut ambient RF noise





#### BC-5000-12

#### **Battery Charger**

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



## BC-5000-6

- **Battery Charger**
- Number of wireless microphone to be charged simultaneously: 6
- Fully charged within 3 hours



## BC-5000-2

- **Battery Charger**
- Number of wireless microphone to be charged simultaneously: 2
- Fully charged within 3 hours



#### WB-2000-2 Rechagable Battery

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



#### AD-5000-6

#### AC Adapter

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

#### AD-5000-2

## AC Adapter

• For BC-5000-2 Battery Charger



#### YW-4500 UHF Wireless Antenna

- UHF wireless dipole indoor antenna
- Wall mounted
- Power supplied by tuner unit (WT-5800/ WT-5805/WT-4820) through coaxial cable
- · Built-in RF signal booster
- · Attenuation switch helps minimize noise and any interference.

## **WIRELESS MICROPHONES & MICROPHONES**

	WM-5265	WM-5270	WM-5225
Microphone Element	Dynamic microphone: Unidirectional	Dynamic microphone: Cardioid	Electret condenser microphone: Unidirectional
Frequency Range	576 – 865 MHz*1, UHF	576 – 865 MHz*1, UHF	576 – 865 MHz*1, UHF
Channel Selectable	64 channels*1	64 channels*1	64 channels*1
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	ø1.97" × 9.02"	ø1.89" × 9.61"	ø1.72" × 9.11"
Weight	0.45 lb (with battery)	0.75 lb (with battery)	0.4 lb (with battery)
Accessories	Microphone holder (with stand adapter), Screw driver, Storage case	Microphone holder (with stand adapter), Storage case, Rolling stopper	Microphone holder (with stand adapter), Storage case

	YP-M5300	YP-M5310	WH-4000A	WH-4000H
Microphone Element	Electret condenser microphone: Unidirectional	Electret condenser microphone: Omnidirectional	Electret condenser microphone: Unidirectional	Electret condenser microphone: Unidirectional
Sensitivity	$-63 \text{ dB} \pm 3 \text{ dB} (0 \text{ dB} = 1 \text{ V/0.1 pa. 1k Hz})$	-64 dB ±3 dB (0 dB = 1 V/0.1 pa. 1k Hz)	-66 dB ±3 dB (0 dB = 1 V/0.1 pa. 1k Hz)	$-66 \text{ dB} \pm 3 \text{ dB} (0 \text{ dB} = 1 \text{ V/0.1 pa. 1k Hz})$
Frequency Response	100 — 12,000 Hz	100 — 15,000 Hz	_	_
Maximum Input Level	120 dB SPL	110 dB SPL	120 dB SPL	120 dB SPL
Cord Length	4.27 ft	4.27 ft	4.27 ft	4.27 ft
Connector	ø3.5mm (ø0.14") mini plug	ø3.5mm (ø0.14") mini plug	ø3.5mm (ø0.14") mini plug	ø3.5mm (ø0.14") mini plug
Finish	Dark black	Dark black	Headband: EVA, black Frame: Stainless, black (silicon rubber) Gooseneck: black (shrink tube)	Frame: Stainless, black (silicon rubber) Gooseneck: black (shrink tube)
Weight	0.71 lb (cable included)	0.71 lb (cable included)	0.11 lb (cable included)	0.11 lb (cable included)

### **WIRELESS MICROPHONE & TRANSMITTER**

	WM-4300	WM-5325
Microphone Element	Electret condenser microphone: Cardioid	_
Frequency Range	690 –865 MHz*1, UHF	576 – 865 MHz*1, UHF
Channel Selectable	64 channels*1	64 channels*1
Maximum Input Level	120 dB SPL	-14 dB to -29 dB* (Audio level control: Min. to Max.)
Battery	6LR61 (9V × 1)	LR6 (AA) or WB-2000 (Ni-MH battery)
Finish	Resin, coating	Resin, coating (change other's)
Dimensions	2.44" (W) × 5.59" (H) × 1.26" (D)	2.44" (W) × 4.04" (H) × 0.91" (D)
Weight	0.30 lb (with battery)	0.2 lb (with battery)
Accessories	Storage case	Screw driver, Storage case, Neck strap
Option	_	Ni-MH battery: WB-2000

#### PORTABLE RECEIVER

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	WT-5100
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	2.44" (W) × 6.44" (H) × 1.28" (D)
Weight	0.28 lb (with battery)
Accessory	Neck strap × 1
Options	Ni-MH battery: WB-2000, Assist Earphone: YP-E5000 Far-suspension Farohone: YP-F401

## **WIRELESS TUNERS**

	WT-5800	WT-5805	WT-5810	WT-4820
Power Requirement		AC mains (AC adapter must be used)		
Frequency Range		576 – 865 MHz*1, UHF		576 - 865 MHz*1, UHF (WTU-4800)
Channel Selectable	64	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 $^{*2}$ , 600 $\Omega$ , balanced, XLR-3-31 type connector — LINE: -20 dB $^{*2}$ , 600 $\Omega$ , unbalanced, phone jack"		
Mixing Input		-20 dB $^{*2}$ , 10 k $\Omega$ , unbalanced, phone jack		
Antenna		Whip antenna	Rod antenna	Whip antenna
Antenna Input	75 Ω, BNC, 9 V DC	75 Ω, BNC, 9 V DC	_	75 Ω, BNC, 9 V DC
Antenna Output	75Ω, BNC (Gain 0dB)	_	—	75Ω, BNC (Gain 0dB)
Receiving Sensitivity		90 dB or more		80 dB or more (WTU-4800)
Squelch Sensitivity		$18-40~\text{dB}\mu~\text{V}$ variable		18 dBμ V (WTU-4800)
Tone Frequency		32.768 kHz —		
S/N Ratio	110dB or r	110dB or more (A-weight, unbalanced output) 104dB or more (A-weight, unbalanced output)		102dB or more (A-weight, balanced output)
<b>Harmonic Distortion</b>		1% or less (typical)		
Frequency Response		100 – 15,000 Hz, ±3 dB		50 – 18,000 Hz, ±3 dB
Finish		Resin, black		
Dimensions	8.27" (W) × 1.73" (H) × 8.07"(D)	8.27" (W) × 1.73" (H) × 8.07" (D)	8.11" (W) × 1.60" (H) × 6.01" (D)	8.27" (W) × 1.73" (H) × 7.13" (D)
Weight	1.54 lb		1.30 lb	1.70 lb (without tuner module)
*1 The number of channels	may differ from country to country.	$*^{2} 0 dB = 1V$		

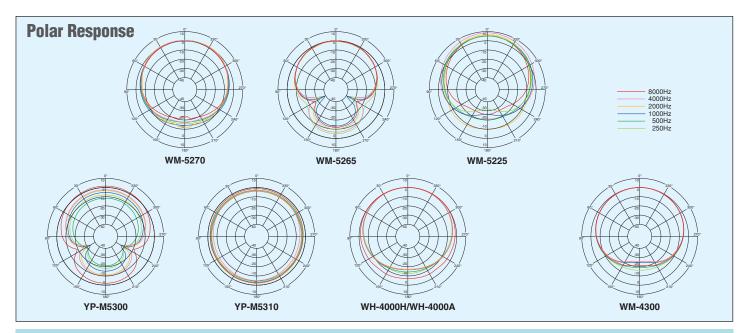
#### **BATTERY CHARGERS**

	BC-5000-12	BC-5000-6	BC-5000-2
Power Requirement	12 V DC (optional AC adapt	er AD-5000-6 must be used)	12 V DC (optional AC adapter AD-5000-2 must be used)
Power Consumption	4.4 A	2.2 A	700 mA
Charging Time			
Number of Wireless Microphone to Be Charged Simultaneously	12	6	2
Finish	Microphone receptacle section: ABS resin, black		Case: ABS resin, gray Microphone receptacle section: PPE resin, black
Dimensions	15.35" (W) × 4.65" (H) × 9.69" (D)	15.35" (W) × 4.65" (H) × 5.16" (D)	9.37" (W) × 4.13" (H) × 3.86" (D)
Weight	7.5 lb (w/ mounting adapters)	4.41 lb (w/ mounting adapters)	1.1 lb (w/ mounting adapters)
Accessories	Mounting adapter × 12	Mounting adapter × 6	Mounting adapter × 2

#### **EARPHONES**

	YP-E401	YP-E5000	
Туре	Dynamic type		
Impedance	16Ω		
Frequency R	Response 300 Hz – 15 kHz		
Input	Max. 50 mW		
Terminal	ø3.5mm (ø0.14") mini plug (3-pole)	ø3.5mm (ø0.14") monaural plug	
Finish	Black		
Weight	0.6 oz		
Accessories	Ear-pad $\times$ 1, Suspension ring $\times$ 2		

 $<sup>^{*}</sup>$ Using the mounting adapter allows one each of the WM-5225, WM-5265, WM-5325, WT-5100 to be charged in combination.















· Contains 10 pieces

MB-WT3
Rack Mount Bracket Kit



 For rack-mounting one WT-5800, WT-580 and/or WT-4820 unit

MB-WT4
Rack Mount Bracket Kit



 For rack-mounting two WT-5800, WT-5805 and/or WT-4820 units

MB-15B Rack Mount Bracket



• For rack-mounting one WD-4800 unit

## **UHF Wireless Microphone Sets**













## **TOA Corporation**