

# UHF Wireless Microphone Systems











Wireless Convenience with Newly Enhanced Versatility, Reliability and Cost Efficiency

# Versatile High-Performance Microphone Systems

Strive to bring you high-performance, mobility and convenience. TOA is proud to introduce the widened range of 5000 Series wireless microphone system. There is definitely one that suits your need.

#### ■ Product Features

- All UHF wireless microphone tuners employs Phase Locked Loop (PLL) synthesis for remarkably stable performance. Reliable wide-area coverage permitting use of up at 16 microphones within a radius of up to 120 meters from the YW-4500 UHF wireless antenna
- Powered by rechargeable batteries which enable up to 13 hours of continous usage before recharging
- Extensive range of microphone selections to support every application need
- A selection of three high-efficiency battery chargers for 2, 6, or 12 batteries and a single-battery microphone add further flexibility to the product line-up
- Up to 64 selectable channels for WT-5800 & WT-5805, Up to 16 selectable channels for WT-5810 & WT-4820 wireless tuner.
- TOA true diversity (WT-5800) and space diversity (WT-5805) circuitry, a usable frequencies scanning and vacant channel search function.



# Wireless Microphone (Press-Talk type) WM-5420



- Dynamic microphone unit: Unidirectional
- · Round shape and handling hook prevents being dropped
- Shock absordent structure
- Hands-free clip allows clipping onto chest pocket
- Lock of Talk switch available for extended broadcasting
- Pocket microphone mode and remote mode
- Built-in chime

# Handheld Speech Wireless Microphone 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

# Omnidirectional Lavalier Microphone YP-M5310



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

#### Ear-Hook Microphone

YP-M5000E



- Omnidirectional electret condenser microphone element
- Maximum input level: 115 dB SPL
- Terminal: φ3.5mm Stereo plug
- Weight: 14g

### **Headset Microphone**

YP-M5000H



- Omnidirectional electret condenser microphone element
- Maximum input level: 115 dB SPL
- Terminal: Φ3.5mm Stereo plug

• Weight: 21g

# Handheld Vocal Wireless Microphone 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 lightweight body
- Built-in antenna

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

# Headset Microphone WH-4000H



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

#### Wireless Portable Receiver

WT-5100



- Compatible to commercial earphone (φ3.5mm, impedance: over 16Ω)
- Allow 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

# Handheld Vocal Wireless Microphone 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

# Unidirectional Lavalier Microphone YP-M5300



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

# Headset (Aerobics) Microphone WH-4000A



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

### Ear-Suspension Earphone

YP-E401



- Dynamic type
- Frequency response: 300 Hz 15k Hz
- Terminal: φ3.5mm monaural plug (16Ω)
- Suspension ring comes in three different sizes



# Wireless Tuner WT-5800



- 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
- Compander circuitry for minimizing ambient noise
- Antenna distribution output
- Whip antenna x 2
- Low-battery indicator (wireless microphone's battery voltage becomes low)

# Wireless Tuner WT-5810



- 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)

#### Wireless Tuner WT-5805



- 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
- Compander circuitry for minimizing ambient noise
- Whip antenna x 2
- Low-battery indicator (wireless microphone's battery voltage becomes low)

# 2-Channel Wireless Tuner WT-4820





- 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)
- Mix output/tuner 1 output (selectable); tuner 2 has 2 outputs
- Whip antenna x 2
- Compact half-rack size body
- External antenna input

# Power/Antenna Distributor WD-5800



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

# UHF Wireless Tuner Unit WTU-4800



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

# Rechargeable Battery WB-2000-2



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

# Battery Charger BC-5000-12



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

# Battery Charger BC-5000-6



- Number of wireless microphones to be charged simultaneously: 6
- Fully charges within 3 hours

#### Battery Charger BC-5000-2



- Number of wireless microphones to be charged simultaneously: 2
- Fully charges within 3 hours

### AC Adapter

AD-5000-6 / AD-5000-2



- AD-5000-6: For BC-5000-12 and BC-5000-6 battery chargers
- AD-5000-2: For BC-5000-2 battery charger

### UHF Wireless Antenna YW-4500



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

### **Options**

Waist Pouch
WH-4000P



#### Windscreen WH-4000S



• Contains 10 pieces

#### Earphone Pad YP-E401PAD01



• Contains 100 pieces

### Rack Mount Bracket Kit MB-WT3



• For rack mounting one WT-5800, WT-5805 and/or WT-4820 unit

# Rack Mount Bracket Kit MB-WT4



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

### Rack Mount Bracket MB-15B





• For rack mounting one WD-5800

# **Specifications**

### Wireless Microphones & Microphones









	WM-5420	WM-5270	WM-5265	WM-5225
Microphone Element	Dynamic microphone: Cardioid	Dynamic microphone: Unidirectional	Dynamic microphone: Cardioid	Electret condenser microphone: Unidirectional
Frequency Range	636 - 806 MHz, UHF		576 - 865 MHz*1, UHF	
Channel Selectable		64 channels*1		
Maximum Input Level	132 dB SPL	142 dB SPL	132 dB SPL	126 dB SPL
Battery	LR6 (AA)	LR6 (AA)	LR6 (AA) or WB-2000 (Ni-MH battery	(AA) or WB-2000 (Ni-MH battery)
Finish	ABS Resin, coating	Metal, Dark Grey	Resin, coating	Resin, coating
Dimensions	74 (W) x 184 (H) x 20 (D) mm	Ф 48 x 244 mm	Ф 50 x 229 mm	Ф 43.6 x 231.5 mm
Weight	105 g (with battery)	340 g (with battery)	205 g (with battery)	180 g (with battery)
Accessories	Clip, Neck strap, Screw driver	Microphone holder (with stand adapter) Storage case, Rolling stopper	, Microphone holder (with stand adapter) Storage case. Screw driver	, Microphone holder (with stand adapter), Storage case, Screw driver









	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 dB ±3 dB (0 dB=1V/0.1 pa. 1kHz)	-64 dB ±3 dB (0 dB=1V/0.1 pa. 1kHz)	-66 dB ±3 dB (0 dB=1V/0.1 pa. 1kHz)	-66 dB ±3 dB (0 dB=1V/0.1 pa. 1kHz)
Frequency Response	100 Hz - 12,000 Hz	100 Hz - 15,000 Hz	-	-
Maximum Input Level	120 dB SPL	110 dB SPL	120 dB SPL	120 dB SPL
Cord Length	1.3 m			
Connector	Φ 3.5 mm 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	20 g (cable included)		50 g (cab	le included)





YP-M5000E	YP-M5000

Electret condenser microphone: Omnidirectional			
20 Hz - 20,000 Hz			
	-67 dB ±3 dB (0 dB=1V/0.1 pa. 1kHz)		
115 dB SPL, 1 kHz at 1%			
1.3 m			
Φ 3.5 mm stereo plug			
Beige color			
14 g (cable included)	21 g (cable included)		
	14 g (cable included)		

### Wireless Transmitter



### Portable Receiver



### WM-5325

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Microphone Element	-
Frequency Range	576 - 865 MHz*1, UHF
Channel Selectable	64 channels*1
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
Weight	90 g (with battery)
Accessories	Screw driver, Storage case, Neck Strap
Option Ni-MH battery: WB-2000	

### WT-5100

Receiving Frequencies	UHF band (16 ch)	
Receiving System	Double super-heterodyne	
Receiving Sensitivity	Better than 60 dB Signal to Noise ratio (20 dBµV input, ±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	
Weight	125 g (with battery)	
Accessories	Neck Strap x 1	
Options	Ni-MH battery: WB-2000, Assist Earphone: YP-E5000, Ear-suspension Earphone: YP-E401	

### 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 - 8			
Channel Selectable	64 s	selectable frequencies	16 c	hannels	
Receiving System		Double super-heterody	ne	Double super-heterodyne (WTU-4800)	
Diversity System	True diversity	Space diversity	Space diversity	Space diversity (WTU-4800)	
Mixing Output	N	MIC: -60 dB*2, 600Ω, balanced, XLR-3-31 type connector LINE: -20 dB*2, 600Ω, unbalanced, phone jack*			
Mixing Input		-20 dB <sup>+2</sup> , 10kΩ, unbalanced, phone jack			
Antenna		Whip antenna	Rod antenna	Whip antenna	
Antenna Input	75Ω, BNC, 9 V DC	75Ω, BNC, 9 V DC	-	75Ω, BNC, 9 V DC	
Antenna Output	75Ω, BNC (Gain 0 dB)	-	-	75Ω, BNC (Gain 0 dB)	
Receiving Sensitivity		90 dB or more			
Squelch Sensitivity		18 - 40 dBµ V variable		18 dBμ V (WTU-4800)	
Tone Frequency		32.768 kHz -			
S/N Ratio	110 dB or mor	110 dB or more (A-weight, unbalanced output)		102 dB or more (A-weight, balanced output)	
Harmonic Distortion		1% or less (typical)			
Frequency Response		100 Hz - 15,000 Hz, ±3 dB		50 Hz - 18,000 Hz, ±3 dB	
Finish		Resin, black			
Dimensions	210 (W)	210 (W) x 44 (H) x 205.1 (D) mm		210 (W) x 44.2 (H) x 181 (D) mm	
Weight	700 g	700 g	590 g	770 g (without tuner module)	

<sup>\*1</sup> 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 Adapter 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	Max. 3h		
Number of Wireless			
Microphone to be Charge	12	6	2
simultaneously			
Finish	Case: Steel plate, black, paint Microphone receptacle section: ABS resin, black		Case: Steel plate, black, paint Microphone receptacle section: PPE resin, black
Dimensions	390 (W) x 118 (H) x 246 (D) mm	390 (W) x 118 (H) x 131 (D) mm	238 (W) x 105 (H) x 98 (D) mm
Weight	3.4 kg (with mounting adapters)	2 kg (with mounting adapters)	500 g (with mounting adapters)
Accessories	Mounting adapter x 12	Mounting adapter x 6	Mounting adapter x 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.

### Earphones



#### YP-E401

Туре	Dynamic type
Impedance	16Ω
Frequency Range	300 Hz - 15 kHz
Input	Max. 50 mW
Terminal	Φ 3.5 mm mini plug (3-pole)
Finish	Black
Weight	17 g
Accessories	Ear-pad x 1, Suspension ring x 2

### **UHF Wireless Microphone Sets**

### WS-5225



### Combination includes:

- WM-5225
- WT-5810

### WS-5265



### Combination includes:

- WM-5265
- WT-5810

### WS-5325H



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#### Combination includes:

- WM-5325
- WH-4000H
- WT-5810

### WS-5325U



### Combination includes:

- WM-5325
- YP-M5300
- WT-5810

### WS-5325M



#### Combination includes:

- WM-5325
- YP-M5310
- WT-5810