

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

VM-5225 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

- YP-M5300 Unidirectional Lavalier Microphone Unidirectional electret condenser microphone element
- 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 g





Bottom View

WM-5265

- Handheld Vocal Wireless Microphone 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

M-5325 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

VH-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



WM-4300 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 Ω) • 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

*When employed with the YP-E5000 Assist Earphone, improves audibility for hearing impaired users by raising the frequency response above the standard level.

1010

L

....





YP-E401 Ear-suspension Earphone

- Dynamic type
- Frequency response: 300Hz 15k Hz
- Terminal: ø3.5 mm 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.





Bottom View



TDA



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
- Audio 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
- Audio 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
- Audio 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
- Audio 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 x 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 x 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 Rod antenna x 2
- Balanced output (XLR connector) and phone jack output
- Low-battery indicator (Wireless microphone's battery voltage becomes low).

• Mixing/Channel 1 (selectable) output and Channel 2 output.

- Antenna distribution output allows system
- expansion up to 4 channels without extra antenna.
- Whip antenna x 2

Compact half-rack size body





WD-4800

- Power/Antenna Distributor •2 antenna inputs and 4 distributed
- outputs
- 2 inputs per antenna which are mixed for output (when 2 antennas are set up
- in a large room).

BC-5000-2

Battery Charger

• Number of wireless microphone to be

charged simultaneously: 2

*Must be used with WB-2000-2

• Fully charged within 3 hours

6

1

40

6

- Supplies power to the antenna
- Compact 19" rack-mount design.



WTU-4800 **UHF 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



WB-2000-2 **Rechargeable Battery**

- AA nickel-metal hydride (Ni-MH) rechargeable battery
- For Wireless Microphones, Wireless Transmitter, and Portable Receiver *Use dedicated battery charger, BC-5000-12/6/2.

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.



BC-5000-12 Battery Charger Number of wireless microphone to be charged simultaneously: 12 • Fully charged within 3 hours *Must be used with WB-2000-2.



-2222 BC-5000-6 **Battery Charger** • Number of wireless microphone to be

charged simultaneously: 6 • Fully charged within 3 hours *Must be used with WB-2000-2.

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

WIRELESS MICROPHONES & MICROPHONES

	WM-5265		WM-5270		WM-5225	
Microphone Element	Dynamic microphone: Unidirectional		Dynamic microphone: Cardioi	d	Electret condens	er 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 co	ating
Dimensions	ø50 x 229 mm		ø48 x 244 mm		ø43 x 231.5 mm	
Weight	205 g (with battery)		340 g (with battery)		180 g (with batte	ery)
Accessories	Microphone holder (with stand adapter), Sc Storage case	rew driver,	Microphone holder (with stand Rolling stopper	l adapter), Storage case,	Microphone hol	der (with stand adapter), Storage case
	YP-M5300	YP-M531	10	WH-4000A		WH-4000H
Microphone Element	Electret condenser microphone: Unidirectional	Electret cor Omnidirect	idenser microphone: ional	Electret condenser microp Unidirectional	hone:	Electret condenser microphone: Unidirectional
Sensitivity	-63 dB ±3 dB (0 dB = 1 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 dB ±3 dB (0 dB = 1 V/0.1 pa. 1k Hz)
Frequency Response	100 — 12,000 Hz	100 10	000 11-			
	100 — 12,000 112	100 — 15,	000 HZ	—		—
Maximum Input Level	120 dB SPL	100 — 15, 110 dB SPI		 120 dB SPL		 120 dB SPL
Maximum Input Level Cord Length	,					 120 dB SPL 1.3 m
•	120 dB SPL	110 dB SPI	-			
Cord Length	120 dB SPL 1.3 m	110 dB SPI 1.3 m	-	1.3 m		1.3 m

WIRELESS MICROPHONE & TRANSMITTER

WM-4300 <u>WM-5325</u> Microphone Element Electret condenser microphone: Cardioid 690-865 MHz*1, UHF Frequency Range 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 x 1) LR6 (AA) or WB-2000 (Ni-MH battery) Finish Resin, coating Resin, coating (change other's) 62 (W) x 142 (H) x 32 (D) mm Dimensions 62 (W) x 102.5 (H) x 23 (D) mm Weight 135 g (with battery) 90 g (with battery) Screw driver, Storage case, Neck strap Accessories Storage case Option Ni-MH battery: WB-2000

PORTABLE RECEIVER

	WT-5100
Receiving Frequencies	UHF band (16 ch)
Receiving System	Double super-heterodyne
Receiving Sensitivity	Better than 60 dB Signal to Noise ratio (20 dBV 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)
Accessory	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 ma	ins (AC adapter must be used)			
Frequency Range	576 – 865 MHz*1, UHF	* [*] , UHF 576 – 865 MHz ^{*1} , UHF (WTU-4800)				
Channel Selectable		64 Selectable frequencies	16 cha	16 channels		
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	MIC: -60 dB* ² , 600Ω, balanced, XLR-3-31 type connector — LINE: -20 dB* ² , 600Ω, unbalanced, phone jack"					
Mixing Input	-20 dB^{*2} , 10 k Ω , 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	75 Ω, BNC (Gain 0dB)	—	—	75 Ω, BNC (Gain 0dB)		
Receiving Sensitivity		90 dB or more	80 dB or more (WTU-4800)			
Squelch Sensitivity		18 – 40 dBµ V variable		18 dBµ V (WTU-4800)		
Tone Frequency	32.768 kHz —					
S/N Ratio	110dB	or more (A-weight, unbalanced output)	104dB or more (A-weight, unbalanced output)	102dB or more (A-weight, balanced output)		
Harmonic Distortion	1% or less (typical)					
Frequency Response	100 – 15,000 Hz, ±3 dB 50 – 18,000 Hz, ±3 dB					
Finish	Resin, black					
Dimensions	210(W) x 44(H) x 205.1(D) mm	210(W) x 44(H) x 205.1(D) mm	206(W) x 40.6(H) x 152.7(D) mm	210(W) x 44.2(H) x 181(D) mm		
Weight	700 g	700 g	590 g	770 g (without tuner module)		
+1 The sumplies of changes in	and the former and the former and					

 $^{\star 1}$ The number of channels may differ from country to country. $^{\star 2}$ 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		Max. 3 h	
Number of Wireless Microphone to Be Charged Simultaneously	12	6	2
Finish	Case: Steel pla Microphone receptacle s		Case: ABS resin, gray 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 (w/ mounting adapters)	2 kg (w/ mounting adapters)	500 g (w/ mounting adapters)
Accessories	Mounting adapter x 12	Mounting adapter x 6	Mounting adapter x 2

EARPHONES

	YP-E401	YP-E5000
Туре	Dynamic type	
Impedance	16	
Frequency Response	300 Hz – 15 kHz	
Input	Max. 50 mW	
Terminal	ø3.5mm mini plug (3-pole)	ø3.5mm monaural plug
Finish	Black	
Weight	17 g	
Accessories	Ear-pad x 1, Suspension	ring x 2

*Using the mounting adapter allows one each of the WM-5225, WM-5265, WM-5325, WT-5100 to be charged in combination.





Human Society with Sound & Communication TOA Corporation www.toa.jp

Specifications are subject to change without notice. Printed in Japan (1308) 833-61-776-3G u