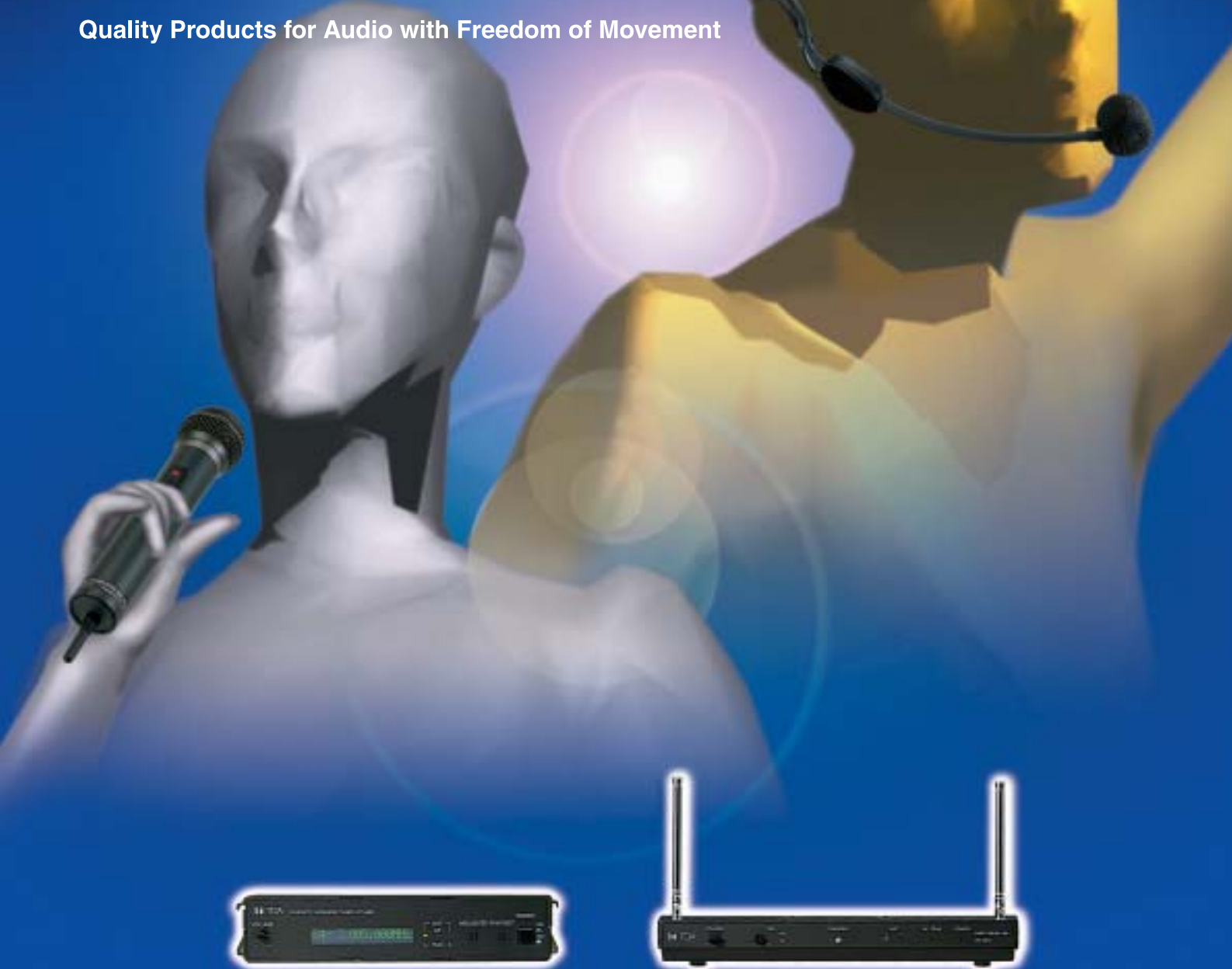




TOA

TOA UHF WIRELESS MICROPHONE SYSTEMS

Quality Products for Audio with Freedom of Movement



- TOA Space Diversity* double superheterodyne wireless UHF systems.
 - 16- or 64-channel (4 x 16) selectable operation.
- Electret cardioid speech and aerobics headset microphones.
 - Dynamic (vocal) hand-held microphones.
- UHF wireless tuner with a high degree of sensitivity.
- UHF antenna/power distributor with 2 inputs and 4 outputs.
 - Wall-mounted UHF wireless antenna.

TOA brings free-moving audio enhancement to lectures, vocal recitals, and even aerobics classes!

The latest line of TOA UHF wireless microphone systems continue a more than 60-year-long tradition of cutting-edge audio quality, renowned around the world, both among the professionals who install audio systems, as well as among the professionals and amateurs who rely on TOA to give them an ever-greater freedom of expression. New TOA wireless microphone systems bring enhanced versatility, a greater coverage area and remarkable cost-effectiveness to a wide array of applications. Thanks to its latest technological breakthroughs, TOA makes it possible to extend the versatility of wireless sound reinforcement beyond the lecture, speech or sermon. Now TOA transmission technology and microphone design cover an expanded

range of vocal applications and aerobics classes. As always, TOA-created components and design work together to produce superior performance that is virtually unaffected by the lack of dependability in conventional wireless systems.

These new TOA wireless microphone systems are created and manufactured to the highest standards of technology, performance and reliability. Years of continuous research and development have made possible audio enhancement at or above the level of conventional wired sound reinforcement systems, but with the ease of installation, usable versatility and cost-effectiveness of wireless equipment.

TOA's High-Quality, Ultra-Stable Wireless Microphone System

TOA research and design advances now make it possible to have a top-of-the-line wireless microphone system with high-quality, ultra-stable sound reinforcement. The dynamic cardioid TOA WM-4200 (hand-held) and electret cardioid WM-4300 (lavaliere) microphone head elements ensure top-quality, clearly audible sound, with no danger of clipping, even at high volumes or when the microphone is close to the speaker's or singer's face.

An adjustable input sensitivity feature allows the microphones to be more precisely suited to a particular performer or performance, and well-positioned rubber coating

eliminates handling noise in the WM-4200 hand-held microphone, which also has an On/Off switch designed to prevent accidental activation. The transmitter unit on the lavaliere microphone has a rotatable belt clip, for ease of use and greater reliability, while a sturdy TA-4 (XLR-type) connector equipped with a button lock enhances reliability and allows use of a wider range of available microphones.

The WT-4800 tuner employs TOA Space Diversity technology* and a proprietary algorithm, ensuring constant coverage, with circuitry that is simpler and more reliable than is the case with a conventional diversity

tuner. Four 16-channel banks of circuit frequencies are available, each with an operating range of about 150 meters. A built-in scanner is included to locate available free preset frequencies, and a tone-squelch function ensures optimally clear and constant coverage.

The associated WD-4800 power/antenna distributor, which comes with 2 antenna inputs and 4 antenna and DC power outputs, provides antenna coverage. The antenna outputs are distributed to the WT-4800 tuner, for maximum coverage area and effective clarity.



WM-4200

UHF Hand-held (Vocal) Wireless Microphone

•Dynamic cardioid microphone element designed for vocal use. •Maximum input level: 145 dB SPL. •64 selectable channel frequencies. •Input sensitivity control included. •Rubber coating minimizes handling noise. •On/Off switch designed to prevent accidental activation. •Flashing LED low battery indicator.



WM-4300

UHF Lavaliere Wireless Microphone

•Electret condenser cardioid microphone element. •Maximum input level: 120 dB SPL. •64 selectable channel frequencies. •Input sensitivity control included. •Belt clip rotatable 360 degrees. •Highly reliable TA-4 mini-cannon microphone plug. •Flashing LED low battery indicator.

TOA's Highly Cost-Effective Wireless Microphone System with a Wide Range of Applications

TOA technology now makes possible a powerfully versatile wireless microphone system that is also compact and very affordable. Microphone units come in a vocal, dynamic cardioid (WM-4210) model, electret cardioid models for hand-held speech (WM-4220) applications, plus a lavalier (WM-4310) model that also is

available as a headset unit for speech (WM-4310H) or aerobics (WM-4310A) applications. Both headset models have an adjustable volume feature, a rotatable transmitter unit belt clip, and the WM-4310A also has a sturdy belt & carrying pouch. The WM-4210 and WM-4220 come with a side on-off switch which also serves to

prevent the microphone from rolling when it is put down. The extremely compact WT-4810 tuner is equipped with TOA Space Diversity* circuitry for clear coverage within a range of 150 meters, and two built-in antennas, for quick and compact set-up and easy operation. Sixteen channels are available to ensure a wide choice of frequencies.



WM-4210

UHF Hand-held (Vocal) Wireless Microphone

- Dynamic cardioid microphone element. •Maximum input level: 130 dB SPL. •16 selectable channel frequencies. •On/Off switch also keeps mic from rolling when put down. •Flashing LED low battery indicator.



WM-4220

UHF Hand-held (Speech) Wireless Microphone

- Electret condenser cardioid microphone element. •Maximum input level: 125 dB SPL. •16 selectable channel frequencies. •On/Off switch also keeps mic from rolling when put down. •Flashing LED low battery indicator.



WM-4310

UHF Lavalier Wireless Microphone

- Electret condenser cardioid microphone element. •Maximum input level: 120 dB SPL. •16 selectable channel frequencies. •Input sensitivity control included. •Belt clip rotatable 360 degrees. •Lock-equipped mini-plug microphone jack. •Flashing LED low battery indicator.



WM-4310H

UHF Headset Wireless Microphone

- Electret condenser cardioid microphone element. •Maximum input level: 120 dB SPL. •16 selectable channel frequencies. •Input sensitivity control included. •Belt clip rotatable 360 degrees. •Headset securely and comfortably fits on head. •Lock-equipped mini-plug microphone jack. •Flashing LED low battery indicator.

WM-4310A

UHF Headset (Aerobics) Wireless Microphone

- Electret condenser cardioid microphone element. •Maximum input level: 120 dB SPL. •16 selectable channel frequencies. •Input sensitivity control included. •Sweat-resistant headset microphone. •Belt clip rotatable 360 degrees. •Securely-fitting belt with pouch. •Headset securely and comfortably fits on head. •Lock-equipped mini-plug microphone jack. •Flashing LED low battery indicator.

WT-4810

UHF Wireless Tuner

- Portable tuner. •TOA Space Diversity technology*. •16 selectable channel frequencies. •Simple set-up.



WT-4800

UHF Wireless Tuner

- Tone squelch function. •TOA Space Diversity technology. •64 selectable channel frequencies. •Audio mixing input function. •Antenna cascade output function. •Compact 19" rack-mount design. •Usable frequencies scanning channel check. •1/4 wave antenna x 2.

WD-4800

Power/Antenna Distributor

- Dual two-antenna inputs /four-antenna outputs. •Four DC power supply outputs. •Compact 19" rack-mount design.



YW-4500

UHF Wireless Antenna

- Dipole ratio relative gain: more than 8dB •Wall-mountable.

MB-WT1

Rack Mount Bracket Kit

- Bracket (x 2) with connector and blank box. •For rack-mounting one WT-4800 unit.

MB-WT2

Rack Mount Bracket Kit

- Bracket (x 2) with connector. •For rack-mounting two WT-4800 units.

*Patents pending for TOA Space Diversity Technology.

Specifications

Model No.	WM-4200 UHF Hand-held (Vocal) Wireless Microphone	WM-4210 UHF Hand-held (Vocal) Wireless Microphone	WM-4220 UHF Hand-held (Speech) Wireless Microphone
Microphone Element	Dynamic microphone unit, Cardioid		Electret condenser unit, Cardioid
Emission	F3E		
Frequency Range	690–865 MHz, UHF*1		
Channel Selectable	64 CH	16 CH	
RF Carrier Power	Less than 50 mW		
Tone Frequency	32.768 kHz		
Modulation System	PLL synthesizer		
Maximum Input Level	145 dB SPL	130 dB SPL	125 dB SPL
Maximum Deviation	±40 kHz		
Battery	6LR61 (9 V × 1)		
Battery Life	More than 10 hours (alkaline)		
Indication	Power/Battery indicator		
Antenna	1/4 λ herical antenna	Internal antenna	
Ambient Temperature	–10°C to +50°C		
Finish	Resin, rubber coating	Resin, coating	
Dimensions	ø52.2 × 279.4 mm	ø50 × 235.2 mm	ø45 × 235.2 mm
Weight	300 g (with battery)	250 g (with battery)	
Accessory	Stand adapter, Screw driver, Storage case		

Model No.	WM-4300 UHF Lavalier Wireless Microphone	WM-4310 UHF Lavalier Wireless Microphone	WM-4310H UHF Headset Wireless Microphone	WM-4310A UHF Headset (Aerobics) Wireless Microphone
Transmitter unit				
Emission	F3E			
Frequency Range	690–865 MHz, UHF*1			
Channel Selectable	64 CH	16 CH		
RF Carrier Power	Less than 50 mW			
Tone Frequency	32.768 kHz			
Modulation System	PLL synthesizer			
Maximum Input Level	120 dB SPL			
Maximum Deviation	±40 kHz			
Battery	6LR61 (9 V × 1)			
Battery Life	More than 10 hours (alkaline)			
Indication	Power/Battery indicator			
Antenna	1/4 λ herical antenna			
Ambient Temperature	–10°C to +50°C			
Finish	Resin, coating			
Dimensions	62(W) × 142(H) × 32(D) mm			
Weight	135 g (with battery)			
Accessory	Screw driver, Storage case		Screw driver	Waist pouch, Screw driver
Microphone unit				
Microphone Element	Electret condenser microphone, cardioid			
Power Requirement	DC (supplied from Transmitter unit)			
Connector	TA-4 (XLR-type)		ø3.6 plug	

Model No.	WT-4800 UHF Wireless Tuner	WT-4810 UHF Wireless Tuner
Power Requirement	AC mains (using AC-DC adapter)	
Power Consumption	250 mA (12 V DC)	130 mA (12 V DC)
Receiving Frequency	690–865 MHz, UHF*1	
Channel Selectable	64CH	16 CH
Receiving System	Double super-heterodyne	
Diversity System	TOA space diversity	
Audio Output	MIC: –60 dB*/LINE: –20 dB*, 600Ω, 1/4" Phone jack (unbalanced), XLR-3-31 type connector (balanced)	
Mixing Input	–20 dB*, 10 kΩ, 1/4" Phone jack (unbalanced)	
Antenna Input	75 Ω, BNC [phantom powering for antenna, 9 V DC, 30 mA (max.)]	Rod antenna
Antenna Output	75 Ω, BNC (Gain 0 dB)	—
Receiving Sensitivity	Better than 80 dB, S/N ratio (20 dBμV input, 40 kHz deviation)	
Squelch Sensitivity	18–40 dBμV variable	
Squelch System	Using together of noise SQ, carrier SQ and tone SQ	Using together of noise SQ and carrier SQ
Tone Frequency	32.768 kHz	—
Indication	Audio (11 steps), RF (11 steps), ANT A/B, Audio (peak)	Power, ANT A/B, Audio (peak)
Channel Check	Usable frequencies scanning	—
Digital Control I/O	Usable frequencies reading, frequencies input	—
S/N Ratio	Better than 110 dB (A-weight, balanced output)	Better than 104 dB (A-weight, balanced output)
Harmonic Distortion	Less than 1%	
Frequency Response	100–12,000 Hz, ±3 dB	
Ambient Temperature	–10°C to +50°C	
Finish	Resin, black	
Dimensions	210(W) × 44.6(H) × 180(D) mm	240(W) × 35(H) × 110(D) mm
Weight	700 g	390 g
Accessory	AC-DC adapter	AC-DC adapter, Screw driver
Option	Mounting bracket kit: MB-WT1 (for rack mounting one WT-4800 unit) MB-WT2 (for rack mounting two WT-4800 units)	—

Model No.	WD-4800 Power/Antenna Distributor
Power Requirement	AC mains
Frequency Range	VHF/UHF
Antenna Input	Dual 2 inputs (front × 1, rear × 1), 75 Ω, BNC (phantom powering for antenna)
Antenna Output	Dual 4 outputs, 75 Ω, BNC
DC Power Supply	4 outputs, (13V DC/250mA)
Indication	Power
Ambient Temperature	–10°C to +50°C
Finish	Steel, coating
Dimensions	420(W) × 44(H) × 305.5(D) mm
Weight	3.50 kg
Accessory	DC cable...4
Option	Rack mounting bracket: MB-15B

Model No.	YW-4500 UHF Wireless Antenna
Power Requirement	7–12 V DC (supplied from Antenna Distributor or Tuner)
Current Consumption	Under 24 mA
Receiving Frequency	680–880 MHz, UHF
Dipole Ratio Relative Gain	More than 8 dB (780 MHz)
V.S.W.R	Less than 3.0
Output Impedance	75 Ω
Mounting Hole Pitch	83.5 mm (dimensions for wiring box)
Ambient Temperature	–10°C to +50°C
Finish	AES resin, off-white
Dimensions	105(W) × 140(H) × 126(D)mm
Weight	270 g

*1Frequency range may vary by area. (between 690 to 865 MHz)

**0dB = 1 V

*Specifications are subject to change without notice.



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