5000 Series
Wireless Microphone System

Delivering Wireless Excellence
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 compounder 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
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
- Compander 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 compounder 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
- Compander circuitry for minimizing ambient noise
- Antenna distribution output
- Whip antenna x 2
- Low-battery indicator (wireless microphone’s battery voltage becomes low).
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 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-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-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
## UHF WIRELESS System Sets

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>WS-5225</td>
<td>WS-5225 + WT-5810</td>
</tr>
<tr>
<td>WS-5265</td>
<td>WS-5265 + WT-5810</td>
</tr>
<tr>
<td>WS-5325U</td>
<td>WM-5325 + YP-M5300 + WT-5810</td>
</tr>
<tr>
<td>WS-5325M</td>
<td>WM-5325 + YP-M5310 + WT-5810</td>
</tr>
<tr>
<td>WS-5325H</td>
<td>WM-5325 + WH-4000H + WT-5810</td>
</tr>
</tbody>
</table>
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.

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
<table>
<thead>
<tr>
<th><strong>WM-5265</strong></th>
<th><strong>WM-5270</strong></th>
<th><strong>WM-5225</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Microphone Element</td>
<td>Dynamic microphone: Unidirectional</td>
<td>Dynamic microphone: Cardioid</td>
</tr>
<tr>
<td>Frequency Range</td>
<td>576 – 698 MHz, UHF</td>
<td>576 – 698 MHz, UHF</td>
</tr>
<tr>
<td>Channel Selectable</td>
<td>64 channels</td>
<td>64 channels</td>
</tr>
<tr>
<td>Maximum Input Level</td>
<td>132 dB SPL</td>
<td>142 dB SPL</td>
</tr>
<tr>
<td>Battery</td>
<td>LR6 (AA) or WB-2000 (N-MH battery)</td>
<td>LR6 (AA)</td>
</tr>
<tr>
<td>Finish</td>
<td>Resin coating</td>
<td>Metal, dark gray</td>
</tr>
<tr>
<td>Dimensions</td>
<td>ø50 x 229 mm (ø1.97” x 9.02”)</td>
<td>ø48 x 244 mm (ø1.89” x 9.61”)</td>
</tr>
<tr>
<td>Weight</td>
<td>205 g (0.45lb) (with battery)</td>
<td>340 g (0.75lb) (with battery)</td>
</tr>
<tr>
<td>Accessories</td>
<td>Microphone holder, Screw driver, Storage case</td>
<td>Microphone holder, Screw driver, Storage case</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>WM-5325</strong></th>
<th><strong>WM-5805</strong></th>
<th><strong>WT-5100</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Range</td>
<td>576 – 698 MHz, UHF</td>
<td>576 – 698 MHz, UHF</td>
</tr>
<tr>
<td>Channel Selectable</td>
<td>64 channels</td>
<td>64 Selectable frequencies</td>
</tr>
<tr>
<td>Max. Input Level</td>
<td>-14 dB to -29 dB* (Audio level control: Min. to Max.)</td>
<td>—</td>
</tr>
<tr>
<td>Battery</td>
<td>LR6 (AA) or WB-2000 (N-MH battery)</td>
<td>—</td>
</tr>
<tr>
<td>Finish</td>
<td>Resin, coating</td>
<td>—</td>
</tr>
<tr>
<td>Dimensions</td>
<td>62 (W) x 102.5 (H) x 23 (D) mm (2.44” x 4.04” x 0.91”)</td>
<td>—</td>
</tr>
<tr>
<td>Weight</td>
<td>90 g (0.2lb) (with battery)</td>
<td>—</td>
</tr>
<tr>
<td>Accessories</td>
<td>Screw driver, Storage case, Neck strap</td>
<td>—</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>WM-5325</strong></th>
<th><strong>WT-5805</strong></th>
<th><strong>WT-5810</strong></th>
<th><strong>WT-4820</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Requirement</td>
<td>AC mains (AC adapter must be used)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Frequency Range</td>
<td>576 – 698 MHz, UHF</td>
<td>576 – 698 MHz, UHF</td>
<td>576 – 698 MHz, UHF (WTU-4800)</td>
</tr>
<tr>
<td>Channel Selectable</td>
<td>64 Selectable frequencies</td>
<td>16 channels</td>
<td></td>
</tr>
<tr>
<td>Receiving System</td>
<td>Double Super-heterodyne</td>
<td>Double Super-heterodyne (WTU-4800)</td>
<td>Double Super-heterodyne</td>
</tr>
<tr>
<td>Diversity System</td>
<td>True diversity</td>
<td>Space diversity</td>
<td>Space diversity</td>
</tr>
<tr>
<td>Mixing Output</td>
<td>MIC: -60 dB*, 600Ω, balanced, XLR-3-31 type connector</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Mixing Input</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Antenna</td>
<td>Whip antenna</td>
<td>Rod antenna</td>
<td>Whip antenna</td>
</tr>
<tr>
<td>Antenna Input</td>
<td>75 Ω, BNC, 9 V DC</td>
<td>75 Ω, BNC, 9 V DC</td>
<td>75 Ω, BNC (Gain 0dB)</td>
</tr>
<tr>
<td>Antenna Output</td>
<td>75 Ω, BNC (Gain 0dB)</td>
<td>—</td>
<td>75 Ω, BNC (Gain 0dB)</td>
</tr>
<tr>
<td>Receiving Sensitivity</td>
<td>90 dB or more</td>
<td>80 dB or more (WTU-4800)</td>
<td>104dB or more</td>
</tr>
<tr>
<td>S/N Ratio</td>
<td>32,768 kHz</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>S/N Ratio</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harmonic Distortion</td>
<td>1% or less (typical)</td>
<td>1% or less (typical)</td>
<td>1% or less (typical)</td>
</tr>
<tr>
<td>Frequency Response</td>
<td>100 – 15,000 Hz, ±3 dB</td>
<td>100 – 15,000 Hz, ±3 dB</td>
<td>50 – 18,000 Hz, ±3 dB</td>
</tr>
<tr>
<td>Finish</td>
<td>Resin, black</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Dimensions</td>
<td>210(W) x 44(H) x 205.1(D) mm (8.27” x 1.73” x 8.07”)</td>
<td>210(W) x 44(H) x 205.1(D) mm (8.27” x 1.73” x 8.07”)</td>
<td>210(W) x 44(H) x 205.1(D) mm (8.27” x 1.73” x 8.07”)</td>
</tr>
<tr>
<td>Weight</td>
<td>700 g (1.54lb)</td>
<td>700 g (1.54lb)</td>
<td>770 g (1.70lb) (without tuner module)</td>
</tr>
</tbody>
</table>

* 0dB = 1V
LAVALIER MICS

**YP-M5300**
UNIDIRECTIONAL LAVALIER MICROPHONE
PRODUCT CODE: YP-M5300

- Unidirectional electret condenser microphone element
- Maximum input level: 120 dB SPL
- 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 headset
- Weight: 50 g
ACCESSORIES

**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.

**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.

**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

- **BC-5000-12**
  - **BATTERY CHARGER**
  - Number of wireless microphone to be charged simultaneously: 12
  - Fully charged within 3 hours
  - PRODUCT CODE: BC-5000-12

- **BC-5000-6**
  - **BATTERY CHARGER**
  - Number of wireless microphone to be charged simultaneously: 6
  - Fully charged within 3 hours
  - PRODUCT CODE: BC-5000-6

- **BC-5000-2**
  - **BATTERY CHARGER**
  - Number of wireless microphone to be charged simultaneously: 2
  - Fully charged within 3 hours
  - PRODUCT CODE: BC-5000-2

- **WB-2000-2**
  - **RECHARGEABLE BATTERY**
  - AA nickel-metal hydride (Ni-MH) rechargeable battery
  - For Wireless Microphones, Wireless Transmitter, and Portable Receiver
  - PRODUCT CODE: WB-2000-2

- **AD-5000-6**
  - **AC ADAPTER**
  - For BC-5000-12 and BC-5000-6 Battery Chargers
  - PRODUCT CODE: AD-5000-6

- **AD-5000-2**
  - **AC ADAPTER**
  - For BC-5000-2 Battery Charger
  - PRODUCT CODE: AD-5000-2
Polar Response

WM-5270  WM-5265  WM-5225
YP-M5300  YP-M5310  WH-4000H/WH-4000A