Introducing the new DWZ Series from Sony.

DWZ-M70  DWZ-B70HL
Digital wireless microphone package
www.pro.sony.eu/dwz

to the wireless,
power to your performance
Introducing the new DWZ Series from Sony

Experience stable and reliable sound from Sony

The DWZ-M70 package with a handheld microphone, and the DWZ-B70HL package with a headset and lavalier microphone provide clear voices for your audience by eliminating unwanted acoustic feedback noise, using Sony’s advanced integration of DSP functions. With 24-bit linear PCM digital transmission, you get high sound quality with high reliability, utilizing unique transmission technology also developed by Sony. With the support of two RF modes, your audio signal can be captured and transmitted reliably and easily.

great performances for presenters and vocalists
Introducing the new DWZ Series from Sony

**Features**

**Intelligent Feedback Reducer**
The Sony Intelligent Feedback Reducer can suppress unwanted feedback (howling) with high-performance DSP and Sony’s unique algorithms designed to eliminate feedback before it becomes unbearable. Also, the equivalent of maximum 1024-band suppression filters are continuously tuned automatically in real time, eliminating feedback and avoiding deteriorating the original signal; this delivers the highest quality sound that can be enjoyed by presenters, vocalists, and audiences. You can freely select the audio outputs to which you want this feedback reduction filter to apply – for example, you can output original audio to the main PA system, while processed audio is delivered to your monitor speakers.

**Superb Digital Sound Quality**
High-quality 24-bit linear PCM digital transmission offers a pristine audio experience, and a wide frequency range of 10 Hz to 22 kHz. With these high-quality digital sound packages, you can experience professional performances by presenters and vocalists. The audio performance degradation that’s typical with conventional analogue wireless systems is avoided, because these digital wireless packages are designed without the need for a compander.

**Stable Transmission**
Interruptions in reception (signal dropout) can be a problem with wireless microphone transmission systems. With the DWZ Series, however, the occurrence of signal dropout can be reduced to a minimum. Utilizing a space diversity reception system, this series achieves stable reception by using dual antenna inputs/reception circuits. These receive signals over two different paths and automatically select the stronger RF signal for output.

**Highly Secure Transmission**
These two DWZ Series packages both offer 128-bit standard encryption technology to secure transmitted signals and avoid being intercepted by others. By using this encryption feature, users can reduce the worry that confidential information could be intercepted.

**Two RF Modes for Reliable Transmission**
The DWZ-M70 package and DWZ-B70HL package provide two selectable RF modes. Simply choose the one that makes best use of your actual 2.4-GHz RF environment.

- **Wide Band Hopping Mode**
  This mode reduces interference with other wireless equipment used in the same environment, such as Wi-Fi devices. It doesn’t require you to have technical knowledge about radio frequencies. Wide Band Hopping Mode also supports additional error correction for more secure transmission*. Latency of approximately 6 ms.

- **Narrow Band Hopping Mode**
  This mode helps you to avoid interference from other devices – for example, 2.4-GHz wireless remote controllers that are commonly used for lighting control. This enables you to coordinate frequencies when using multiple wireless systems simultaneously**. Latency of approximately 3 ms.

**Interchangeable Capsules**
With the handheld transmitter, you can use the supplied high-quality dynamic cardioids microphone capsule. Alternatively, you can select any optional mic capsule from Sony’s DWX Series capsules (the thread pitch is 1.25"/28; 31.3 mm/pitch 1.0 mm threading)*.

* Use of third-party capsules may cause RFI or EMI noise.

**Robust Metal Body**
The ZTX-M02RC handheld microphone (supplied with the DWZ-M70 package) and the ZTX-B02RC bodypack transmitter (supplied with the DWZ-B70HL package) are made of strong durable metal. Metal construction supports reliable use in rough operating conditions.

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**Frequency Response**

**Dynamic Response**

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*CU-C31

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**F31/ F32**

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power to the wireless, power to your performance
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**Features**

**Battery Recharging System**
The BC-DWZ1 optional battery charger enables you to recharge NiMH batteries in the ZTX-M02RC and the ZTX-B02RC. The BC-DWZ1 is a contactless recharger; this means that you simply place the handheld microphone and/or bodypack transmitter into the charging station to recharge NiMH-type batteries. You do not need to physically remove the rechargeable batteries to recharge them, which saves you time and reduces wear and tear to the transmitters.

**Large Colour LCD**
The ZRX-HR70 half-rack-size receiver (supplied with the DWZ-M70 package and the DWZ-B70HL package) includes a large colour LCD display to provide you with a detailed visual status of your selected channel, feedback reducer, signal, and five-band digital equalizer, along with your audio level, and transmitter battery life.

**Fulfilled Microphone Type**
The DWZ-B70HL package includes two types of microphones. The ECM-HZ1UBMP is a uni-directional electret condenser lightweight headset that keeps you comfortable and stress-free even when wearing it for long periods of time. Its ear-clip style design allows you to wear it on either your left or right ear. The ECM-LZ1UBMP is a uni-directional electret condenser lavalier microphone, ideal for commercial sound applications such as presentations, lectures, and conferences.

**Adjustable Attenuator**
Adjustable transmitter attenuators allow you to select proper audio input levels from the microphone. The bodypack transmitter (included with the DWZ-B70HL package) can also support line level audio input signals, plus it can be used in conjunction with the optional EC-1.5BX XLR input cable when needed.

**Five-band Equalizer**
With a five-band digital equalizer in the half-rack ZRX-HR70 receiver, you can adjust the sound character of your microphone as desired.

**Selectable Muting Output**
The bodypack transmitter muting switch allows you to select specific outputs on the receiver to be muted. You can select to mute all outputs, XLR/Main outputs, or the AUX/Tuner output. This feature provides you with many operational choices – for example, talkback operation.

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**Package Line-up**

**DWZ-M70**
- ZTX-M02RC: Handheld microphone
- AC Adaptor

**DWZ-B70HL**
- ZRX-HR70: Half-rack receiver
- ZTX-M02RC: Handheld microphone
- AC Adaptor

**Optional Accessories**
- BC-DWZ1: Battery charger
- RMM-HRD1: Rack mount kit
- ECM-HZ1UBMP: Headset microphone
- ECM-LZ1UBMP: Lavalier microphone
- SAD-HZ1B: Mic holder clip
- AD-8078: Windscreen pack
- GC-0.7MP: Guitar cable
- EC-1.5BX: XLR input cable

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**Buttons and Interfaces**
- Power Switch
- ATT (attenuator)
- Switch
- Escape Button
- Input Switch
- Audio Input
- Power Button
- Display
- Rotary Encoder
- Channel Display
- Channel Select Button
- Battery Compartment
- Cable Clamp
- DC 12V Input
- Balanced Output
- Mic/Line (audio output level)
- Unbalanced Main Output
- Antenna a/b Connector
- Unbalanced Aux Output

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**Enabling the new DWZ Series from Sony**
Transmitting

<table>
<thead>
<tr>
<th>Type</th>
<th>DWZ-M70</th>
<th>DWZ-B70HL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carrier Frequencies</td>
<td>2402.0-2478.5 MHz</td>
<td>2402.0-2478.5 MHz</td>
</tr>
<tr>
<td>RF Power Output</td>
<td>10mW (e.i.r.p)</td>
<td>10mW (e.i.r.p)</td>
</tr>
</tbody>
</table>

Receiving

<table>
<thead>
<tr>
<th>Type</th>
<th>DWZ-M70</th>
<th>DWZ-B70HL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antenna Type</td>
<td>External whip antenna</td>
<td>External whip antenna</td>
</tr>
<tr>
<td>Receiving Frequencies</td>
<td>2402.0-2478.5 MHz</td>
<td>2402.0-2478.5 MHz</td>
</tr>
<tr>
<td>RF Sensitivity</td>
<td>24 dBμV or less</td>
<td>24 dBμV or less</td>
</tr>
</tbody>
</table>

Audio

<table>
<thead>
<tr>
<th>Capsule Type</th>
<th>Dynamic</th>
<th>Electret condenser</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directivity</td>
<td>Uni-directional</td>
<td>Uni-directional</td>
</tr>
<tr>
<td>Minimum Input Level</td>
<td>142 dB SPL (with 12 dB attenuation)</td>
<td>142 dB SPL (with 12 dB attenuation)</td>
</tr>
<tr>
<td>Maximum Input Level</td>
<td>142 dB SPL (with 12 dB attenuation)</td>
<td>142 dB SPL (with 12 dB attenuation)</td>
</tr>
<tr>
<td>Dynamic Range</td>
<td>100 dB (A-weighted)</td>
<td>100 dB (A-weighted)</td>
</tr>
<tr>
<td>Audio Delay</td>
<td>Narrow band mode: Approx. 3 ms / Wide band mode: Approx. 6 ms (transmitter + receiver)</td>
<td>Narrow band mode: Approx. 3 ms / Wide band mode: Approx. 6 ms (transmitter + receiver)</td>
</tr>
<tr>
<td>Distortion</td>
<td>0.03% or less</td>
<td>0.03% or less</td>
</tr>
</tbody>
</table>

Other Equipment

<table>
<thead>
<tr>
<th>Encryption</th>
<th>AES 128-bit</th>
<th>AES 128-bit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display</td>
<td>LCD</td>
<td>LCD</td>
</tr>
<tr>
<td>USB Port</td>
<td>TX x1 / RX x1</td>
<td>TX x1 / RX x1</td>
</tr>
</tbody>
</table>

General

<table>
<thead>
<tr>
<th>Power Requirements</th>
<th>ZTX-M02RC: 1.0 V DC (two LR6 (size AA) alkaline dry cell batteries)</th>
<th>ZTX-802RC: 3.0 V DC (two LR6 (size AA) alkaline dry cell batteries)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Battery Operating Time</td>
<td>Approx. 10 hours of continuous use (in 1/1/1 ambient temperature, Sony LR6 (size AA) alkaline dry cell batteries)</td>
<td>Approx. 10 hours of continuous use (in 1/1/1 ambient temperature, Sony LR6 (size AA) alkaline dry cell batteries)</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>0°C to 50°C / 32°F to 122°F</td>
<td>0°C to 50°C / 32°F to 122°F</td>
</tr>
<tr>
<td>Dimensions</td>
<td>ZTX-M02RC: 48 x 256 mm (1 15/16 x 10 1/4 inches) (diameter/length)</td>
<td>ZTX-802RC: 63 x 87 x 25 mm (2 1/2 x 3 1/8 x 1 1/4 inches) (diameter/length)</td>
</tr>
<tr>
<td></td>
<td>ZRX-H70: External DC input: 12 V DC</td>
<td>ZRX-H70: External DC input: 12 V DC</td>
</tr>
<tr>
<td></td>
<td>ZTX-M02RC: approx. 170 g (3 lb. 10 oz. (including batteries))</td>
<td>ZTX-802RC: approx. 200 g (4 lb. 14 oz. (including batteries))</td>
</tr>
<tr>
<td>Mass</td>
<td>ZRX-H70: approx. 150 g (lb. 3 oz. (including batteries))</td>
<td>ZRX-H70: approx. 150 g (lb. 3 oz. (including batteries))</td>
</tr>
<tr>
<td>Supplied Accessories</td>
<td>ZTX-M02RC (1), ZRX-H70 (1), Mic holder (1), Antenna (2), AC adapter (1), Quick Start Guide (1), Before Use (1), CD-ROM (1)</td>
<td>ZTX-802RC (1), ZRX-H70 (1), Uni-directional Lavalier Microphone (1), Uni-directional Headset Microphone (1), Mic holder clip (1), Card Clip (1), Wind Screen (1), Belt Clip (1), Belt Clip Screw (1), Antenna (2), AC adapter (1), Quick Start Guide (1), Before Use (1), CD-ROM (1)</td>
</tr>
</tbody>
</table>

Specifications

For full features visit www.pro.sony.eu/dwz

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