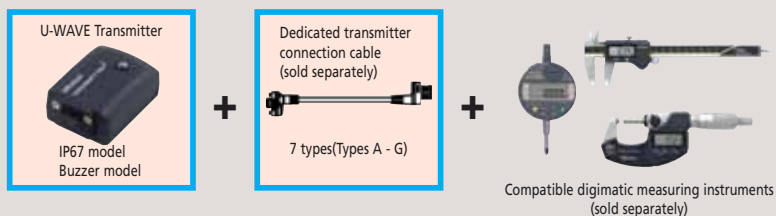# NEW PRODUCT INFORMATION

Measurement Data Wireless Transfer System U-WAVE

- Wireless transfer system used to transfer data from a digimatic measuring instrument to a PC.
- Easy data export to Excel or other applications using the bundled data I/F (interface) software
- Increased operability due to significant functional improvements
- Water-proof and oil-proof (IP67), longer battery life, transmitted data reception confirmation (LED) on the transmitter
- Enhanced system (works with MeasurLink, MeasureReport, and PDA Navi)

■ U-WAVE System Configuration

<Data Transmitter Setup>

Connect the U-WAVE transmitter and digimatic measuring instrument using the dedicated transmitter connection cable that fits your connector type.

U-WAVE Transmitter

IP67 model Buzzer model

+

Dedicated transmitter connection cable (sold separately)

7 types(Types A - G)

+

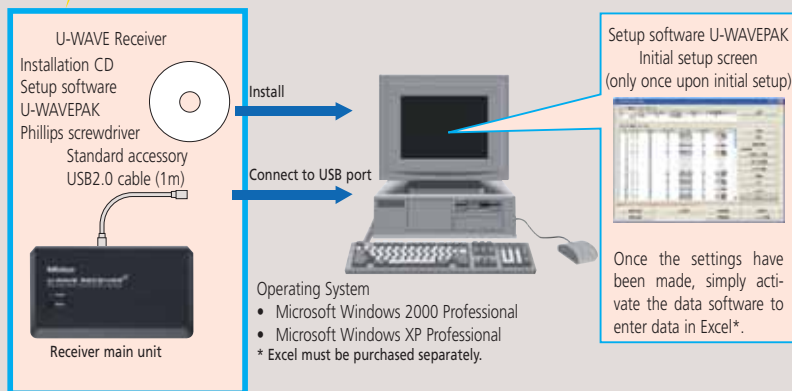Compatible digimatic measuring instruments (sold separately)

For a system used in combination with MDC-MJ in an environment where it might be subject to being splashed with cutting fluid
- Transmitter (IP67 model): 02AZD730C
- Dedicated connection cable type B: 02AZD790B

Press the DATA switch to transmit data

<Data Receiver Setup (Initial Settings)>

(1) Install the setup software U-WAVEPAK from the U-WAVE receiver CD.
(2) Connect the U-WAVE receiver to your PC using the included USB cable.
(3) Install the dedicated USB driver.
(4) Use U-WAVEPAK to set the receiver group ID and transmitter channel, etc.
(5) Press the DATA switch on the transmitter once to register the settings.
* You need only to perform this procedure once. The settings will be stored in the receiver's memory.

U-WAVE Receiver
Installation CD
Setup software
U-WAVEPAK
Phillips screwdriver
Standard accessory
USB2.0 cable (1m)

Receiver main unit

Install

Connect to USB port

Setup software U-WAVEPAK Initial setup screen (only once upon initial setup)

Once the settings have been made, simply activate the data software to enter data in Excel*.

Operating System
- Microsoft Windows 2000 Professional
- Microsoft Windows XP Professional
* Excel must be purchased separately.

■ U-WAVE Wireless Transfer Specifications

- Applicable standards: ARIB STD-T66
- Modulation method: DS-SS (direct sequence spread spectrum)
  This method protects against interfering waves and noise.
- Communication distance: Approximately 15m (50') (clear view)
- Transmission speed: 250kbps
- Transmission frequency: 2.4GHz bandwidth (ISM bandwidth: universal frequency)
  If there is interference on this bandwidth from another wireless device, switch to another bandwidth using the software settings.
  16 bandwidths are available in the range from 2.405 to 2.480GHz at intervals of 5MHz.

Note: This system can not be used in combination with the conventional model Mu-Wave, due to different wireless transfer specifications.

■ U-WAVE Transmitter Specifications

To connect to the digimatic measuring instrument, a dedicated transmitter connection cable (sold separately) is required.

Order No.	Reception confirmation	Water and oil-proof
02AZD730C	LED	IP67

- Power supply: One CR2032 (lithium battery)
- Battery life: approx. 400,000 continuous transmissions
- External dimensions: 44.0x29.6x18.5mm (1.73"x1.17"x.73")
- Weight: 23g (.811oz) (excluding cable)
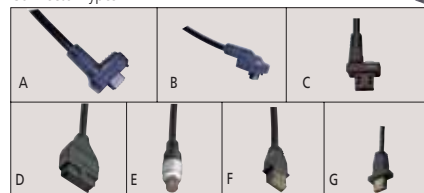- Accessories: User's manual, Warranty certificate, One CR2032 (lithium battery)

■ U-WAVE Dedicated Transmitter Connection Cable

7 types of dedicated cables are available to fit the specific connector type of your digimatic measuring instrument.

	Part No.	Applicable measuring instrument
A	02AZD790A	Water-proof CD
B	02AZD790B	Water-proof MDC
C	02AZD790C	CD-CX
D	02AZD790D	10 pin flat type
E	02AZD790E	6 pin round type
F	02AZD790F	Straight flat type
G	02AZD790G	ID-N/B

- Cable length: 160mm (6.3")
- Accessories: Clip (for securing cable), Phillips screwdriver

Connector Types

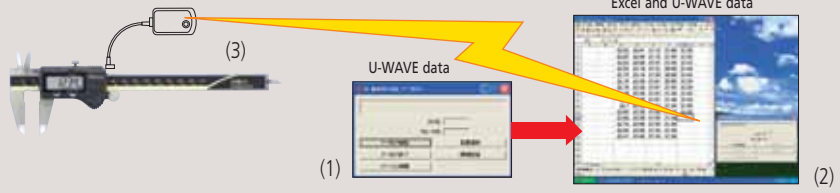| A	B	C
D	E	F	G

■ U-WAVE Receiver

- Order No.: 02AZD810C
- Connection to PC: USB2.0 Full Speed
- Compatible PCs: PCs with a USB port
- Power supply: Supplied from PC USB port
- External dimensions: 140x80x31.6mm (5.51"x3.15"x1.25")
- Weight: 130g (4.59oz)
- Accessories: Setup software U-WAVEPAK, USB2.0 cable (1m), User's manual, Warranty certificate, Wall mount attachment board, Two screws

Note: This system cannot be connected to the DP-1VR or IT-012U because it does not have the digimatic output of the conventional Mu Wave receiver model.

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■ Example of Exporting Data to a PC using Off-the-shelf Software (such as Excel)
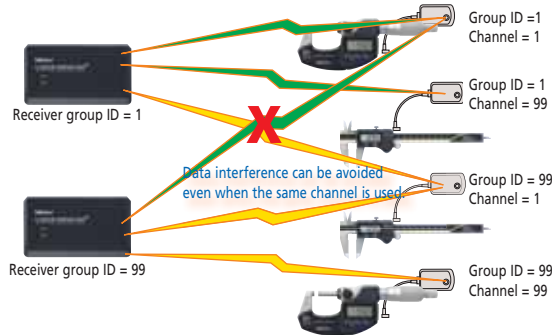
<Exporting Data to Excel>
(1) Run the data software.
(2) Run Excel and select the cell into which data is to be input.
(3) When the transmitter sends data, the data is displayed in the active cell.

Excel and U-WAVE data

(3)

U-WAVE data

(1) (2)

■ How to Use Multiple Receivers and Transmitters in the Same Transmission Area

● Even when multiple receivers are used in the same transmission area, data interference can be avoided if different group IDs are set.
Note: Do not allocate the same group ID to multiple receivers in the same transmission area.
When data is transmitted frequently or multiple data is sent at the same time, transmission may take longer.

Receiver group ID = 1

Receiver group ID = 99

Data interference can be avoided even when the same channel is used.

Group ID =1
Channel = 1

Group ID = 1
Channel = 99

Group ID = 99
Channel = 1

Group ID = 99
Channel = 99

• Setup Software U-WAVEPAK (standard)
• Registers, changes, and deletes transmitter and receiver data.
• Lists settings information and connection status in the settings screen, which allows batch management.
• Group IDs may be set from 00 to 99.
• Channels may be set from 00 to 99.
• The data I/F software converts the received data into manipulable data, which can be exported to software such as Excel.
• Existing application software that supports RS-232C transmission.

■ Example of Useful Combination with Other Systems

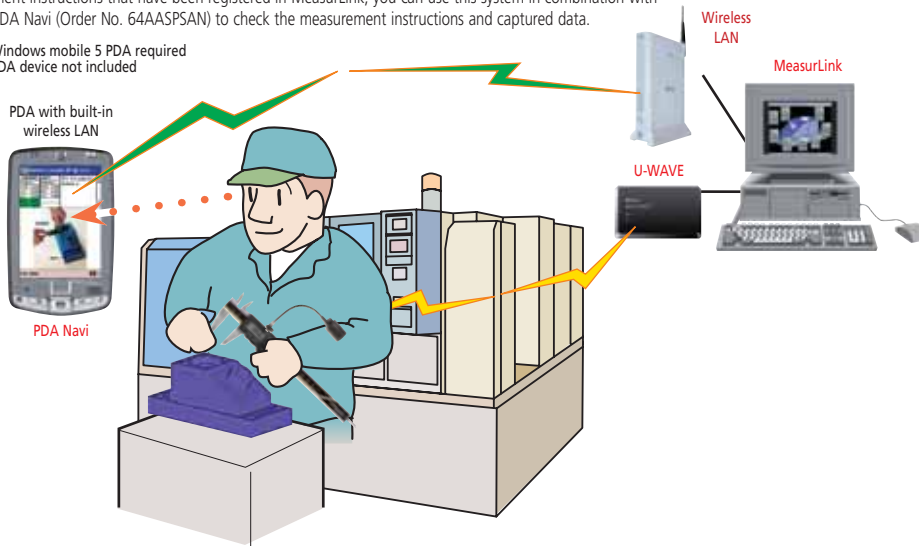### Combination with MeasurLink V6. Real-Time PLUS (sold separately)

● Identifies the channel that is set in the transmitter and can input data into an associated measurement item.
● Pressing and holding down the DATA switch on the transmitter cancels the data. You can cancel data that has been already sent without having to return to the PC.

Data can be canceled by pressing and holding down the DATA switch.

Item allocated by channel set to 1

Transmitter with channel set to 1

U-WAVE + PDA Navi + MeasurLink Real-Time PLUS (sold separately)

When making a measurement at a location where you cannot directly see the screen showing measurement instructions that have been registered in MeasurLink, you can use this system in combination with PDA Navi (Order No. 64AASPSAN) to check the measurement instructions and captured data.

Windows mobile 5 PDA required
PDA device not included

PDA with built-in wireless LAN

PDA Navi

Wireless LAN

MeasurLink

U-WAVE

Coordinate Measuring Machines

Vision Measuring Systems

Form Measurement

Optical Measuring

Sensor Systems

Testing Equipment and Seismometer

Digital Scale and DRO Systems

Small Tool Instruments and Data Management

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