BluetoothBOX   DTW-DG02   Instruction Manual

Thank you for purchasing BluetoothBOX, DTW-DG01.

Please read this document thoroughly for proper operation and in order to get the greatest benefit from the product.

■OVERVIEW

Wireless adapter for GD series Calipers.

Bluetooth communication using an external USB Bluetooth adapter (Bluetooth 4.0 or higher) with support for USBHID class.

※ **This adapter requires a standard USB Bluetooth Adapter (Bluetooth 4.0 or higher,) purchased separately.**

※ **When connecting multiple devices, use Bluetooth adapters with different device addresses. Only one TP-Link Bluetooth adapter can be connected.**

■FEATURES

● Can communicate with wide range of Bluetooth capable devices.

● Accepts a standard USB Bluetooth adapter, available worldwide.

● Measurement data can be transferred to software such as Excel, etc.
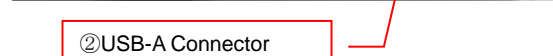
■ART IDENTIFICATION

① Power ON/OFF Button

・ Short press of button will turn device ON (Status LED = Red).

・ When ON, a short press will turn the device OFF
  (Status LED = off).

・Hold down the Send Button and press the Power Button at same
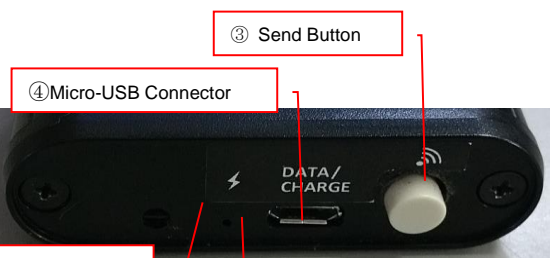 time to enter pairing (discovery) mode
  (Status LED = Blinking Green).

②USB-A Connector

  Customer supplied USB Bluetooth adapter plugs in here.
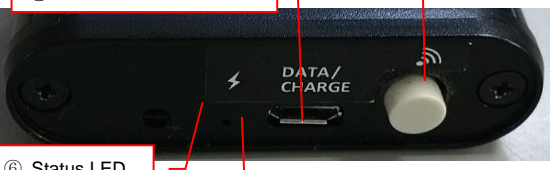   Do not use to connect other USB devices.

③Send Button

・ When device is communicating (Status LED = Blue), pressing
  this button will transmit the measurement to the PC.

・Hold down the Send Button and press the Power Button at same
  time to enter pairing (discovery) mode
  (Status LED = Blinking Green).

④Micro-USB Connector

・ Connects to the Caliper using the included Communication
  Cable (Micro-USB to Mini-USB) to send the measurement data to the wireless adapter.

・ Connect to the included AC-USB charger and Charging Cable, or connect to PC to charge the device.

※ Do not use to connect other USB devices.

⑤Charging LED

  LED on when charging; goes off when complete.

⑥Status LED

Power ON	:LED=Red
Communicating	:LED=Blue
Pairing	:LED=Green
Transmitting data	:LED=Blinking Green
SLEEP	:LED=Purple
Voltage low	:LED=Blinking Red

⑦~⑩

  Metal clamp for mounting adapter on to Calipers.

①Power ON/OFF Button

②USB-A Connector

③ Send Button

④Micro-USB Connector

⑥ Status LED

⑤ Charging LED
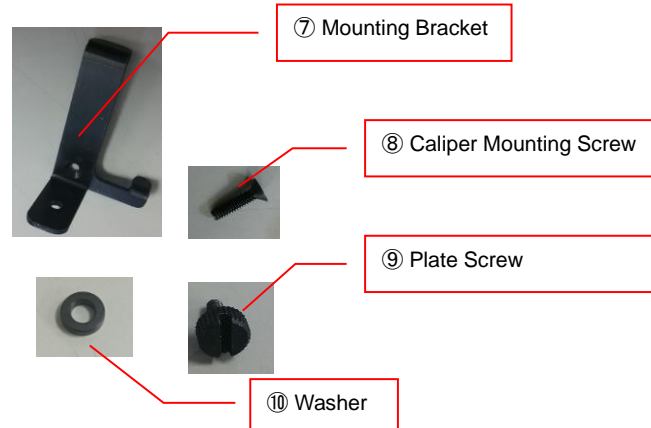
⑦ Mounting Bracket

⑧ Caliper Mounting Screw

⑨ Plate Screw
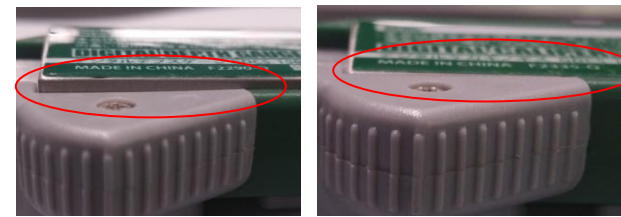
⑩ Washer

Communication Cable

Charging Cable

SK-LOG software CD

■MOUNTING

1.Install a standard USB Bluetooth adapter by plugging it into the USB-A connector of the
  adapter.

2.Remove the Caliper screw shown in the photo. Keep screw from being lost for future use.

3. Prepare a vernier caliper mounting plate and mounting screws. If the vernier caliper is thick
  (see left image), prepare a washer.If the thickness of the vernier caliper is thin (see image),
  no washer is required.

Caliper

①Washer

②Mounting Bracket

③Caliper Mounting Screw
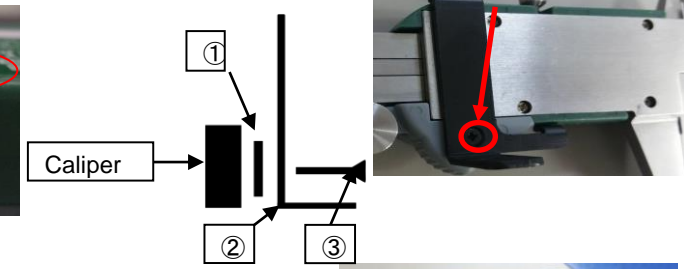
  Attach to the Caliper as shown and secure using a Phillips screwdriver.

4.Mount the Adapter to the Bracket and secure with the Plate Screw.

  ※ A standard screwdriver can be used to tighten the Plate Screw.

5.Connect the Adapter to the Calipers using the Mini-USB to Mico-USB connection cable.

※When connecting with a caliper with a USB cable, the caliper setting value is initialized.After connecting the cable, please set the calipers.

■Connection method

・Turn on the power of devices such as PCs and tablets to enable Bluetooth.

* Only for Windows 10. Do not perform pairing operation on the Windows PC side. You can connect only with SK-LOG.

-Start SK-LOG and select "GDC caliper (BluetoothBOX) for Win10".

-Select the relevant measuring instrument on the SK-LOG measuring instrument setting screen and select "BLE search" to start the search.

-Select the displayed device address and set it on the measuring instrument setting screen, and you are ready to go.

-When you press the connect button on SK-LOG and the LED of this unit lights up in blue, the connection is complete.

* It may take up to 10 seconds from pressing the connection button to completing the connection.

■Data transmission method (real-time mode)

-This unit operates in real-time mode when the power is turned on with only the power ON / OFF button at startup.

In real-time mode, the measured value is always sent to the PC, so if you want to record it, you need to specify the recording
  timing with software.

If you want to send / record data on the measuring instrument side, please use the sleep mode described later.

When the connection with SK-LOG is completed and the numbers of this unit and the measuring instrument are displayed and
  connected with a communication cable, the status LED turns green. When it turns green, the communication data of the
  measuring instrument is being analyzed. When the LED green goes out, the analysis is completed and the data is sent.If
  you move the caliper slider or disconnect the communication cable while the status LED is green, the LED may remain
  green. Even in this state, if the analysis is completed again, the communication will be completed without any problem, so
  stabilize the caliper and review the communication cable connection.

■Sleep mode

This unit operates in sleep mode when the power is turned on while pressing the send button at startup.

Real Thai when the power is turned on with only the power ON / OFF button Operates as a mode.

-Real-time mode: Measured values are always sent. It cannot be recorded with the submit button.

-Sleep mode: The measured value is sent only when the send button is pressed. The unit then goes into sleep mode.

If you want to record with the send button, or if you want to save battery, use sleep mode. * Disconnection from the software
  does not work during sleep mode. If you disconnect with software Use the power ON / OFF button on the unit to turn the
 power off and then on again, and then use the software to connect.

■ AUTO OFF

  If inactive for 20 minutes, the power will turn OFF. Please press the Power Button to turn back ON. If battery voltage drops
  below a certain level, the Status LED will blink Red. As voltage continues to drop the adapter will automatically turn OFF.

■LOW BATTERY LEVEL

If battery voltage drops below a certain level, the Status LED will blink Red. As voltage continues to drop the adapter will turn OFF automatically in order to protect the Lithium Polymer Battery.

※ Since the adapter enters SLEEP mode when not active, to determine if Battery is low, turn the adapter back ON and check the Status LED. If the LED blinks when the Send Button has not been pressed, the power level is low.

Some PC Bluetooth interfaces will display battery status for connected devices. The adapter transmits the status when connection is completed, and does not updated afterward. Please use this value as an indication of battery level.
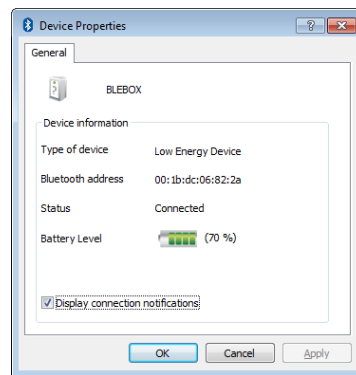
■CHARGING

・Disconnect the Communication Cable from the adapter's Micro-USB Connector, and connect the Charging Cable.
・Connect the USB-A end of the cable to the AC-USB Charger, or to a PC Port for charging
　※ The charging LED will light when charging is started. The LED will go out when complete.

■AFTER USE CARE ・ STORAGE

Storage　　　　When not in use, store away from direct sunlight in moderate temperatures (0°C~40°C).
　　　　　　　　Store with the power OFF. If not used for a long period, please maintain the battery by charging to
　　　　　　　　50% capacity every three months.

■TROUBLESHOOTING

Problem	Cause	Solution
Will not Pair	① A USB Bluetooth adapter is no plugged in.	① Please install a USB Bluetooth adapter compatible with BluetoothLE (GATT profile) into the Wireless Adapter.
	② The settings on the PC and the Wireless adapter may not match	② After restarting your computer, search for the device again.
Device not found	① Pairing Mode did complete.	① Make sure a USB Bluetooth adapter is plugged in. Hold down the Send Button and press the Power Button at same time to enter pairing mode.
	② The settings on the PC and the Wireless adapter may not match.	② Please try the following. ・ Turn off / on the power of this machine. ・ Remove and replace the PC Bluetooth adapter. ・ Reboot the PC
Data does not transmit	① Measuring instrument data does not display.	① Check the measuring instrument and cable, and make sure the instrument is in a measuring mode.
	② Bluetooth connection error.	② Make sure the device is within Bluetooth range, and redo the pairing if necessary.
	③ Software communication error.	③ Close, and then restart the communication software.
	④ Bluetooth status error.	④ Cancel the pairing, remove and reinsert the PC Bluetooth adapter, and pair again.
	⑤ Display reads "ERR1"	⑤ No data is received by adapter, so there is a problem with the measuring instrument or communication cable, please check..
	⑥ Once power is turned OFF, does not reconnect when power is turned back ON.	⑥ If you turn OFF power, and turn ON again before the PC disconnects, the PC will not connect to the device. Please remove and reinsert the PC Bluetooth adapter, reboot, and pair again.

■SPECIFICATION

Model	: DTW-DG02
Wireless Protocol	: Bluetooth LE (GATT profile compatible)
Input	: Caliper proprietary signal
Output	: USBHID class compliant
Power	: Lithium Polymer Battery (350mAh)
Continuous on time	: 17 hours (for send rate of 250 sends/hr)
charge time	: 100 minutes
Dimensions	: 35(L)×57(W)×17.5(H)mm
Weight	: 45g (Including battery)
Package contents	: Main unit (×1), SK-LOG software (×1), Charging Cable(1m) (×1), Communication Cable (20cm, ×1), Mounting Bracket (×1), Plate Screw (M3, ×1), Caliper Mounting Screw (M2, ×1), Washer (×1), Instruction Manual
Compatible OS	: Windows10,11

■NOTES

For best performance, and in order to keep the adapter in good condition for long service, please read and follow these instructions.

● Avoid using where the device will be subject to the following conditions:
　・ Dirty or dusty locations
　・ Exposed to direct sunlight
　・ Exposed to acids, alkali solutions, or organic solvents.
　・ Exposed to oils or water.
　・ Equipment which creates sparks or electric discharge, or other locations which require high electric shielding.
　・ Near equipment which produces strong electromagnetic fields, such as high voltage cables, or broadcasting facilities.
● Clean only with dry cloth slightly moistened with a mild detergent or alcohol. Do not use any organic solvents.
● Do not disassemble or modify.

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