WEL Wireless Digital Calipers - Instructions
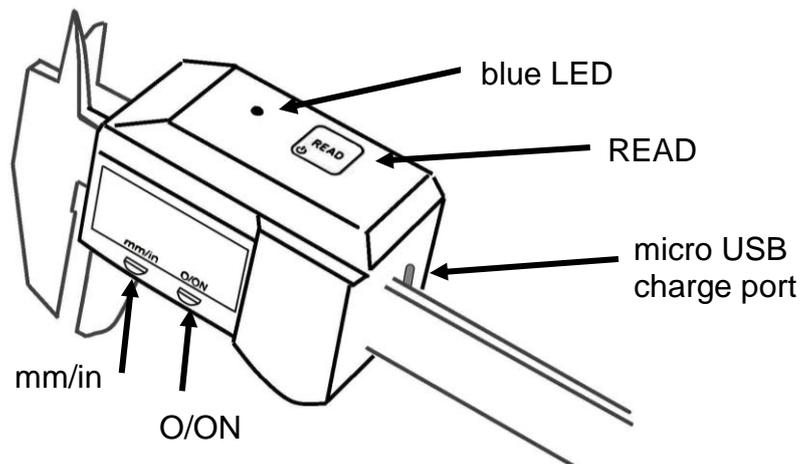
Introduction
These calipers have been designed to withstand real world industrial use and perform consistently even when exposed to dust, coolant, water and oil. Ensure that the calipers receive a full charge BEFORE first use to ensure maximum battery performance. PC software is included with the calipers, various Android Bluetooth Apps are available at the Google Play Store from your phone.

Features
- Inductive absolute position encoder - infinite setting speed, no speed error.
- Wireless sending of individual measurements via Bluetooth direct to Android phones or Excel and other PC desktop applications (see below for software options).
- Metric millimetre measurements sent direct to PC or Android phone.
- Auto power off / USB rechargeable
- Water proof IP64+
- Select - Absolute and Incremental modes / metric (millimetres) and imperial (inches)
- Low-voltage alarm and calculation error alarm.

Technical Data

• Measuring range 0-150mm, 0-200mm	• Storage Temperature: -10ºC ~ 60ºC
• LCD display mm / inches	• Relative humidity: 100%
• Resolution: 0.01mm/0.0005in	• Protective level: IP64 (IEC 60529)
• Repeatability: 0.01mm/0.0005in	• 30+ hours continuous use
• Operating Temperature: 0ºC ~ 40ºC	• Bluetooth 2.0

Quick Start

1. *CHARGE* - Connect calipers to a live USB port via the supplied USB cable and charge calipers for at least 6 hours before first time use.

2. *PC Setup -* If the calipers are to send data direct to your PC, then plug in the supplied USB memory stick and follow the instructions. See the accompanying *PC SOFTWARE INSTALL* document.

3. *Android Phone* - If the calipers are to send data to an Android phone ensure the phone has Bluetooth 2.0 and above with Serial Port Protocol support.

    - From the Google Play store, install the WEL Data Scribe app or the Agfirst Caliper app.

    - Ensure Bluetooth is activated in your phone settings

    - For more instructions on setup and operation, activate the app, click the Menu button on your phone, select Help and each app will download a pdf operation manual that will explain operation and setup.

4. *Press the* **READ** *button* - Once the calipers are paired to your PC or Android phone simply pressing the **READ** button on top of the calipers will transfer the metric measurement directly to your device.

Note: The calipers can only hold 16 Bluetooth pairings. Above this number the calipers will fail to pair. If this is suspected, connect the calipers to a USB port via the USB cable, the calipers will start to charge, hold the READ button down for approxiamtely 7 seconds, the LED will give a small double flash when the calipers reset its pairings. When you again pair the calipers with your phone or PC you may be asked for the devices PIN, enter 1419 .

Turning On The Calipers

The **READ** button on top of the calipers supplies power to the Bluetooth module and the LCD panel.

To turn on the device simply press the **READ** button. If the calipers fail to turn on, press the **O/ON** button. If this fails check the device has been charged.

Power Off is automatic. The calipers will power down 15 minutes after the last press of the **READ** button.

Units Selection (mm/in)

Press the **mm/in** button to select millimetres or inch display mode.
Note : Only millimetres is sent to the PC or Android phone even though inches may be displayed..

Absolute (ABS) and Incremental (INC) modes

Holding down the **O/ON** button will cycle the display between ABS, INC and OFF. Release the **O/ON** button for the function desired.

ABS - All measurements are referenced to the 0.00 - absolute zero set point, as displayed when the jaws are closed.

INC - "*INC"* is displayed and measurements are referenced to the position the jaws were at when INC was selected. Incremental mode is a relative measurement of distance and hence can read positive or negative.

OFF - The instrument will power down and will not power up until the **O/ON** and **READ** buttons are pressed - Not Recommended.

Absolute (ABS) - Zero Set

With the jaws closed, if the display does not read 0.00mm or 0.0000in then it needs to be zeroed.

With the jaw surfaces clean and clear of debris, close them, hold the **mm/in** button down until
"*SEt 0*" is displayed and release. Absolute true zero reading is restored.

READ button blue LED - Display Modes

The blue LED near the **READ** button can show various states of the calipers.

BATTERY STATE - Press the **READ** button before it is linked to a Bluetooth device and the LED will flash to indicate the state of battery charge.

> 1 ~ 4 flashes indicate up to 25, 50, 75, 100% charge.

CHARGING - When charging the LED will continuously flash on for 0.5 second, off for 0.5 second while charging.

CONNECTED to Bluetooth - When the calipers have connected to a Bluetooth PC or Android phone the LED will give a very short flash every second.

READ - When the **READ** button is pressed the calipers send the data and the LED shows a solid blue light for about a second before returning to the CONNECTED flash mode.

Charging, Long Term Storage and Disposal

To recharge the battery, connect the calipers to a USB port via the USB to Micro USB cable. Full recharge requires 7 hours and will provide in excess of 30 hours continuous use. The calipers may be used while charging.

If the calipers are to be stored for more than a few months, ensure the battery is fully charged before storing. As with any lithium battery powered device, for long term storage ensure that the calipers are recharged after each year of storage to avoid the lithium battery loosing capacity.

Please dispose of the calipers by a method appropriate for electronic, lithium powered devices. Do not incinerate or dispose of in household waste.

Additional Notes	Warranty

Please ensure that the calipers are not exposed to chemical solvents.

The micro USB port is IP64 rated for pure water. Please ensure its dry before connecting USB cable.

Low Batt - is played on the LCD, please recharge immediately.

If *Err-F* is displayed then immediately return operating temperature to 0 ~ 40ºC . Outside this temperature range components can be damaged.