

# CrankSense

## WIRELESS CRANKSHAFT DEFLECTION TEST KIT

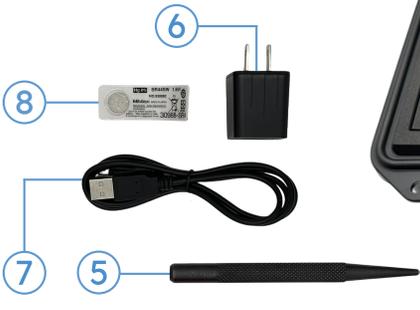


### ! IMPORTANT NOTES

- Turn on both Bluetooth transmitter **AND** digital indicator before pairing.
- Turn off both Bluetooth transmitter and digital indicator after each use. **They will NOT turn off automatically.**
- Do **NOT** open the Gauge. Opening causes permanent damage and voids the warranty.
- CrankSense Wireless Crankshaft Gauge operates on two separate batteries:
  - 1) Rechargeable built-in Li-Po battery for the Bluetooth transmitter.
  - 2) Coin SR44 or LR44 battery for the digital dial.
- Use the punch included in this kit or other 60° punches to create blunt points on crankshaft webs to create sitting spots for the gauge tips.
- Adjust the adjustable probe to keep the gauge travel around the middle of its measurement range.

### 📦 WHAT'S IN THE BOX

- 1 Wireless CrankSense Gauge
- 2 BLE USB Dongle
- 3 Extension Rod Set
- 4 Protective CrankSense Case
- 5 60° punch
- 6 USB Power Adapter
- 7 USB Charging Cable
- 8 CrankSense Coin Battery
- 9 Documents behind lid foam



### ↓ SOFTWARE DOWNLOAD

CrankSense app/ software is available for free on iPad and Windows devices.

For direct download, click the link below or scan the QR code.

#### CrankSense for iPad

<https://apps.apple.com/us/app/cranksense/id1009483905>

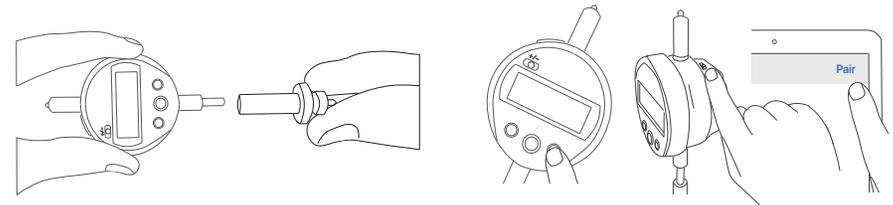
#### CrankSense for Windows:

<https://motionics.com/downloads/crankshaft-windows/setup.exe>

CrankSense for iPad

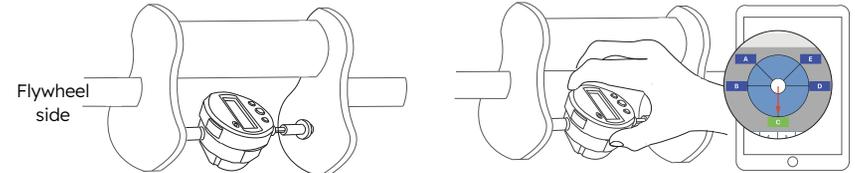


### 📱 QUICK START FOR IPAD USERS



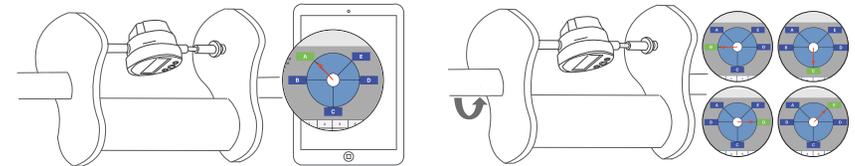
1. Connect the wireless gauge to the adjustable probe. Add extension rods based on the crankshaft web gap.

2. Turn on **BOTH** the digital indicator and the Bluetooth transmitter on the gauge. Pair the gauge in the iPad app.



3. Create 60° blunt points on the crankshaft webs using the punch in the kit. Install the wireless gauge between two blunt points.

4. Rotate the crankshaft pin to the top vertical position. Adjust the orientation of the wireless gauge until the C button turns green in the iPad app.



5. Rotate the crankshaft pin to near the bottom position. Once the A button turns green, tap on it and start data collection.

6. Rotate the crankshaft counter-clockwise, then tap buttons B to E one by one when they turn green to finish the test for one web.

# CrankSense

## WIRELESS CRANKSHAFT DEFLECTION TEST KIT



### CRANKSENSE FOR WINDOWS

To use CrankSense with our Windows software, you need Bluetooth USB dongle BLED112. This dongle comes with the kit.

- More detailed instructions can be found in the **Help** tab in the software.

### CRANKSENSE WINDOWS INTERFACE

View crankshaft gauges in real time and conduct tests

Add dongles and connect wireless gauges

View saved measurements in this tab

Control test/ gauge settings and engine configuration

Find detailed instructions for operating the software

More information about Motionics and our products

	Web1	Web2	Web3	Web4	Web5
Gage Reading (mm)	0.190	1.071	0.153	2.661	3.732
Angle	224.0	224.0	225.0	226.0	227.0
A	0.964	1.184	0.613	1.280	1.959
B	0.723	0.913	1.660	1.488	1.708
C	0.215	0.552	1.301	3.411	2.036
D	0.520	0.301	2.178	1.203	2.326
E	0.256	0.174	0.667	3.499	3.236
Horizontal	0.202	0.612	0.518	0.284	0.618
Vertical	0.395	0.127	0.661	1.021	0.562

### CRANKSENSE WINDOWS INSTALLATION

- Download the Windows 'setup.exe' installer. Run the installer to install CrankSense software.
- You should have received 1x BLED112 USB dongle. Connect the dongle to your PC.
- Run the software. For first time use, it will ask for permission to install dongle driver. Allow and wait for driver to be installed.
- Go to the **Gages** tab and click the + button next to **Dongles**, if a COM Port with the device name "Bluegiga Bluetooth Low Energy" is found, the driver is automatically installed. No further steps are needed and you can jump to the Quickstart for Windows Users section.



TUTORIAL: INSTALLING THE USB DONGLE

- If the driver is not automatically installed, manually download the driver zip file: [www.motionics.com/downloads/BLED112-Signed-Win-Drv.zip](http://www.motionics.com/downloads/BLED112-Signed-Win-Drv.zip). Then unzip it.
- Go to **Control Panel - System and Security - System - Device Manager**. In **Device Manager**, expand **Ports (COM & LPT)**, find the Bluetooth low energy dongle (usually displayed as USB Serial Device), right click, select **Update Driver Software**.
- Select **Browse my computer for driver software**, select the path where the unzipped driver folder downloaded in previous steps is stored, then click **Next**. If a prompt window appears, click 'allow' to install the driver.

### QUICK START FOR WINDOWS USERS

#### CONNECTING THE GAUGE

- Connect the USB dongle, turn on your wireless crankshaft gauge (dial AND transmitter). Run the software.
- Go to the **Gages** tab and click the + button next to **Dongles**. Select a dongle from the list and press **Select**.
- Each dongle can connect up to 8 devices, and you can add more dongles to connect more devices.
- Press the **Scan** button to begin searching for nearby devices.
- Select devices from the pop-up window and press **Connect**.
- Once connected, each device will be added to the **Gages** list alongside its name, reading, angle reading, battery level, and signal strength.

#### TEST SETTING AND CONFIGURATION

- Go to the **Dashboard** and click **New Test**.
- Enter the engine configuration information in the **Test Configuration** window.
- If you need to change the configuration settings during the test, you can press the button on the bottom of the screen.
- Click the dropdown menu on each web panel to assign a gauge to each web. Live readings will then display on the panel.
- Go to the **Settings** tab to choose continuous or single capture mode.

#### RUNNING THE TEST

- If you're in continuous mode, press the record button to begin the test. Readings will be taken automatically at each test point and the test will stop once each test point has been reached.
- If you're in single capture mode, press the capture button under each web column to capture a reading when the indicator needle is on a test point (the point will change color once reached).
- Press the **Save** button to save readings according to plant and engine.
- To access previously saved readings, go to the **Measurements** tab.
- To add an engine configuration, go to the **Settings** tab, click **Engine Configurations**, and press the + button. You can click on an existing configuration to edit it.
- For more instructions, please go to the **Help** tab.



SCAN THE QR CODE FOR:

PRODUCT INFO • VIDEOS • SUPPORT • DOWNLOADS • WARRANTY • FAQs

Or visit [www.motionics.com/cranksense](http://www.motionics.com/cranksense)