



OmniWear™ Noise

Personal Noise Dosimeter



Quick Start Guide

PN 5003265 Rev A
March 2025

Thank you for purchasing the TSI® OmniWear™ Noise Dosimeter. We hope that you will be pleased with it and the service that you receive from us and our distributors. If you do have any queries, concerns or problems, please do not hesitate to contact us.

For more information or to find out more about TSI® and our products, please visit our website at: <http://www.tsi.com>

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Disclaimer

DO NOT use the OmniWear™ Noise Dosimeter until you have thoroughly familiarized yourself with this manual or have been instructed by a TSI® engineer.

At the time of writing, this manual was up to date but due to continual improvements the final operating procedures may differ slightly from those in the manual. If there are any questions please contact TSI for clarification.

TSI makes continual advancements in its products and services. TSI therefore reserves the right to make changes and improvements to any information contained within this manual.

While every care is taken to ensure that the information in this manual is correct, TSI assumes no responsibility for loss, damage or injury caused by any errors in, or omissions from, the information given.

What's in the Box (OW-N-5PKG)



Item #	Description	Qty
1	OmniWear™ Noise Personal Noise Monitoring instrument complete with conformity and calibration certificates	5
2	Endplates	2
3	OmniWear™ Noise Charging Station	5
4	Charger Module Link	4
5	Quick Start Guide (QSG)	1
6	PC18 Power Supply Unit (PSU)	1
7	Rubber Boot Lapel Strap	5

Warnings and Cautions (cont.)



CAUTION

The OmniWear™ Noise Dosimeter is a precision instrument. Always handle it with care. **DO NOT** drop it or subject it to mechanical shock.

The OmniWear™ Noise Dosimeter should be worn on the body.

The OmniWear™ Noise Dosimeter contains no user serviceable parts. If a fault is suspected, return the device to Casella or a Casella-approved service center.

Repair of this equipment shall only be carried out by the manufacturer or an authorized representative in accordance with the applicable code of practice.

- **DO NOT** attempt to replace the battery in this device.
- **DO NOT** abuse the battery in any way as the battery may rupture or catch fire.
- **DO NOT** use a substitute or non-rechargeable battery in this device.
- **DO NOT** short-circuit, incinerate, dismantle or mutilate Lithium Polymer batteries.

Safety Information

This is an overview of the safety aspects for the protection of device operators as well as the safe and uninterrupted operation.

Intended Purpose

The OmniWear™ Noise Dosimeter is a device that monitors and records sound pressure levels in the workplace in order to assess whether noise exposure protection is needed. The device is compliant with ANSI S1.25, IEC 61252, and measures workplace noise parameters simultaneously.

Symbols Used

The following symbols may be used in this document:



WARNING

Indicates a hazardous situation which, if not avoided, could result in serious injury to personnel or damage to equipment.



CAUTION

Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury to personnel or damage to equipment.

NOTICE

Indicates an important situation which, if not avoided, may seriously impair operations.

TIP



Indicates additional useful information.

Warnings and Cautions

The OmniWear™ Noise Dosimeter does not present a safety risk when you use it as instructed. However, it is possible that the environment where you use the device may present a safety risk. For this reason, always follow correct, safe working practices.



WARNING

This product is **NOT** Intrinsically Safe. **DO NOT** use the OmniWear™ Noise in a hazardous environment with a flammable atmosphere.

The following conditions of certification and special conditions of safe use apply;

- The OmniWear™ Noise Dosimeter must only be charged when attached to the charging unit, TSI® part number 218024B, which in turn is connected to a PELV/ SELV power adapter that meets the requirements for the rated Um (that is, TSI® part number PC18 or equivalent).



WARNING

- Always be aware of the risks in the environment where you are working.
- Wear approved hearing protection when taking measurements in noisy environments.
- Wear approved protective PPE suitable for the environment where you are taking measurements.
- Always follow local safety regulations and be aware of risks in the area where you are working.

Warnings and Cautions (cont.)



CAUTION

DO NOT use any battery which shows signs of damage, such as bulging, swelling, a swollen plastic wrap, liquid in the plastic wrap, and so on.

DO NOT leave discharged batteries in the OmniWear™ Noise Dosimeter.

After use, charge the OmniWear™ Noise Dosimeter prior to storage for a prolonged period. It is best not to store the OmniWear™ Noise Dosimeter for any period of time in low battery condition. A prolonged period is considered to be two or more months. If the OmniWear Noise Dosimeter is to be stored for an even longer period, it is best to take the OmniWear Noise Dosimeter out of storage and recharge every two to three months.

If the OmniWear Noise Dosimeter has not been used for a prolonged period or was stored in a low battery condition, charge the device before attempting to turn it on.

The OmniWear Noise Dosimeter is IP65 rated, which is shower proof, but not water proof.

DO NOT immerse the device in water.

DO NOT exposure the OmniWear Noise Dosimeter to high temperatures.

Warnings and Cautions (cont.)



CAUTION

The CEL-120/2 acoustic calibrator must only be used to calibrate the OmniWear™ Noise device in a non-hazardous atmosphere.

To protect the microphone from wind noise and dirt ingress it is recommended that the windscreen is always fitted in normal use.

When Bluetooth® is enabled, care must be taken to avoid interference with sensitive equipment such as in medical, aviation or safety critical environments.

Follow these instructions to safely and securely operate the device. Failure to do so can result in injury and/or damage to the device.

The owner of the device must make sure that:

- The device is operated within its intended use.
- Operators follow all operational recommendations.
- Operators never attempt to service parts of the device. All system components are not user-serviceable.
- Operators fully understand and comply with the safety information in this manual, as well as with all applicable safety regulations, and occupational safety regulations.

Disposal

At the end of the device's life please **DO NOT** throw away with the unsorted municipal waste. Please recycle with a registered WEEE handler.

Step 1. Download the app



1. First off, grab your mobile device and download the OmniWear™ Noise app now!
2. Don't forget to turn on Bluetooth® on your mobile device. If you don't, you won't be able to communicate with your sensor.
3. Get ready, your OmniWear™ Noise measuring experience is about to begin.

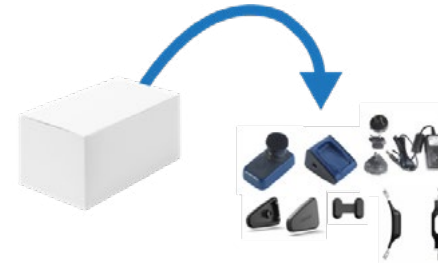


Step 2. Create an admin user account



1. On your mobile device, open the OmniWear™ Noise app. You'll be prompted to add an administrator.
2. Tap **Add Administrator**.
3. Read the End User License Agreement (EULA) statement and tap **Accept**.
4. In the Create Administrator screen, fill in your details making sure you check the **Administrator** box. When done, tap **Accept**.
5. On the sensor graphic, tap the button on image of device to login.

Step 3. Unpack



NOTICE

The contents inside should be as shown in "What's in the box" overpage.

1. Open the box and carefully remove the contents.
 - Anything missing? Anything damaged?**
2. If anything is missing or appears damaged, don't hesitate, contact TSI® straight away.
3. Lay out the OmniWear™ Noise components on a clean flat surface to prepare for the next step.

TIP



Your equipment is packed and shipped to the highest standard. If anything is missing, or if anything appears damaged, get in touch.

Step 4. Charge up (single sensors)



Your equipment is shipped to you partially charged. During transit however, some discharge may occur and your sensor may be feeling a little flat. So, let's give your equipment a lift before you use it for the first time.

1. Connect the Power Supply Unit (PSU) to your charging station. The light on the front will be solid green.
2. Place your sensor into the drop-in bay.
 - The light on the front turns blue to show that charging is in progress. The light on top of your sensor flashes red.
 - When your sensor is fully charged, the light on the front of the charging station turns solid green.



Step 5. Charge up (multiple sensors)

If you have multiple sensors, you will also have multiple charging stations which you can connect together allowing you to charge each of your sensors simultaneously. Up to 10 charging stations can be connected to and powered from one PC18 (PSU).

1. Place the sides of each charging station together to connect them in parallel.
2. Secure them underneath with the rubber charger module links.
3. Attach the endplates to protect the exposed connection points.
4. Then repeat the steps from the single sensors.

The lights on the front of the charging station and the top of each sensor indicate the battery status as for the single sensor charging procedure.

You can now pair each of your sensors to your mobile device.



Step 6. Switch on and pair up

NOTICE

On your mobile device, make sure Bluetooth® is enabled.

1. Press the top button on your sensor or sensors. The light on the top briefly lights up solid green, then flashes blue to show it is available.
2. In the OmniWear™ Noise app Home screen, tap the **Scan** button. When the sensor is detected, a tile appears on the screen as a new device item. Press plus icon on the tile to claim device.



3. Tap on the tile and **Confirm** connection.
 - The sensor details appear on the app screen and the light on top of the sensor becomes solid blue.

Good news, you have now paired your Omniwear™ to your mobile device.

4. To assign the sensor to a user, tap on the three dots icon on the top right of the screen, select **Assign**, and choose the person to assign it to.
5. Confirm your choice.
 - The tile is now in the **Home** screen **Assigned** list.

Step 7. Calibrate

NOTICE

It is not mandatory to calibrate your device, but it is recommended to do so to ensure accurate data.

1. If the sensor windscreen is in place, carefully remove it by pulling it off to expose the microphone.
2. On a CEL-120 calibrator (not supplied) press the power button to turn it on and select calibration level **114dB**.
3. Attach the CEL-120 calibrator to the sensor microphone (the calibrator light will be solid blue).
4. On your mobile app, the sensor attached to the calibrator, it's tile on the app with turn green. Tap to connect.
5. When connected the bottom menu will show **Calibration Detected**, tap **Start**.
6. When calibration has finished, carefully remove the CEL-120 calibrator and replace the sensor windscreen.



TIP



REMEMBER! At the end of the day or when you have finished taking measurements, calibrate again. Any drift during measurement is calculated and shown in the reports created from the App.

Step 8. Attach your device and start a run

1. Insert the sensor into the rubber boot lapel strap.
2. When in place, clip it in the hearing zone (for example, your collar or shoulder).



You're now ready to collect data. You can start your measurements from the device or from the app.

Start a run from the device: Press and hold the top button until the LED turns green.

Start run from the app: Select the device from the **Home** screen and connect to device then on the bottom menu, tap the play button.

Once the run has started the LED flashes green.

See the *User Manual* for detailed instructions.

