

Rconnect™ Ultronix™

Wireless ultrasonic and temperature instrument for the Lenz™ Analyzer

BEFORE YOU BEGIN

You will need:

- Rconnect™ Ultronix™ (9V battery installed)
- Rconnect™ Adapter with plastic housing and two 2-56 screws
- Headphones (supplied)
- Lenz™ Analyzer. The serial number is on the back of the Lenz™.
- Phillips screwdriver
- Computer or tablet with Rmonix® installed
- Your Rmonix® username

IMPORTANT

Read the safety and hazardous-area information in the Rconnect™ Ultronix™ User Manual before using the instrument in the field.

Set the headphone volume low before putting the headphones on.

The full manual is at resonance.systems/documentation. Scan the QR code on the last page.

PART 1 INSTALL THE RCONNECT™ ADAPTER

The Rconnect™ Adapter installs on the front USB-C port of the Lenz™ and provides the wireless link to the Rconnect™ Ultronix™.

CAUTION Make sure power to the Lenz™ is off before starting.

1 Remove the USB-C port screws

With the Lenz™ powered off, identify the two Phillips screws on either side of the front USB-C connector and remove them.

Keep these two screws with your Lenz™. You will need to reinstall them whenever the Rconnect™ Adapter is removed.



Figure 1. Front USB-C port with screws installed (left) and removed (right).

2 Plug in the Rconnect™ Adapter

Carefully plug the Rconnect™ Adapter into the USB-C port. Handle the adapter by the PCB, and make sure the wireless module is on the bottom.



Figure 2. Rconnect™ Adapter plugged into the USB-C port.

3 Position the housing

Slide the plastic housing up into place, aligning the holes in the housing with the screw holes in the Lenz™.



Figure 3. Housing in position with holes aligned; 2-56 screws shown below.

4 Install the screws

Insert the two 2-56 screws through the plastic housing and tighten until snug. **Do not overtighten;** excessive force can damage the plastic housing.



Figure 4. Completed installation.

PART 2 UPDATE THE LENZ™ FIRMWARE

The Rconnect™ Adapter requires **Lenz™ firmware version 2.0 or later**. RSI Support grants access to the firmware.

- 5** **Request Lenz™ firmware access.** Scan the QR code to open a pre-filled email to RSI Support, or email support@resonance.systems and include your Rmonix® username.



Scan to email RSI Support. Opens a pre-filled firmware request. Add your Rmonix® username and send.

- 6** After RSI Support confirms that your firmware access is granted, go to Rmonix® and wait for all downloads to complete.
- 7** Connect Rmonix® to the Lenz™, and answer **Yes** to the prompt to install the new firmware.
- 8** Reboot the Lenz™ after the firmware install is complete.

PART 3 PAIR THE RCONNECT™ ULTRONIX™ WITH THE LENZ™

- 9** **On your Rconnect™ Ultronix™**, hold the **OK** button until a menu appears. Use the arrows to navigate down to “Setup,” then set “Pulse Channel” and “Lenz SN” to match your kit. The instrument only connects to the Lenz™ whose serial number it carries.
- 10** The Rconnect™ Ultronix™ will reboot after changing the Lenz SN.
- 11** **Open the Lenz™ Setup page.** On a device connected to the Lenz™, go to <http://192.168.8.1/setup.html>, or choose **Connect via Browser** in Rmonix®. Open the **Wireless** tab.
- 12** **Check the access point.** At the top of the **Wireless** tab, **Service** must read **Enabled**. If it reads **Disabled**, the instrument cannot connect. Contact RSI Support.
- 13** **Pair the instrument.** Under **Unknown sensors**, find the Sensor ID printed on your Rconnect™ Ultronix™ and press **Adopt**. It moves to **Adopted sensors**. Check that **Link** reads Yes, **Signal** is near -40 dBm (-90 is weak), and **Packets** keeps climbing. A just-restarted instrument can take a few moments to appear.
- 14** **Restart Rmonix® completely.** Close the app and reopen it; a page refresh is not enough. Rmonix® only reads the list of paired instruments when it starts.
- 15** **Verify the connection.** On the instrument, the Lenz signal strength and Lenz server connection icons are no longer crossed out (Figure 5). In Rmonix®, collection points that use the Rconnect™ Ultronix™ show the wireless symbol. If you see the wired symbol, the point is not using the wireless instrument.

- 16** Rmonix® will automatically select the Rconnect™ Ultronix™ for ultrasonic and temperature points. **Make sure the Rconnect™ Ultronix™ is connected to the Lenz™ before opening the Rmonix® route point.** If it is not connected, Rmonix® will default to the wired Ultronix™.

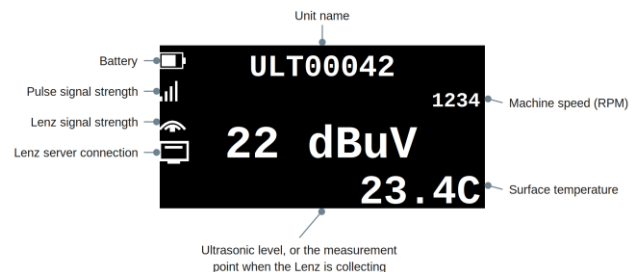


Figure 5. The main screen and its elements.

HELP IF SOMETHING GOES WRONG

WHAT YOU SEE	WHAT IT MEANS	WHAT TO DO
Access Point shows Disabled	The Lenz™ radio is off, so no instrument can connect.	Contact RSI Support. Nothing else will work until it reads Enabled.
Nothing under Unknown sensors	The instrument is not reaching the Lenz™.	On the instrument, confirm “Lenz SN” matches the serial number on the back of the Lenz™, then restart the instrument.
Instrument is listed, but Adopt does nothing	Rare. The Lenz™ has no sensor types defined.	Note the message shown and contact RSI Support.
Paired, but missing in Rmonix®	Rmonix® read its list of instruments before you paired.	Close Rmonix® completely and reopen it (step 14).
Link shows No	Paired, but not currently communicating.	Check that the instrument is switched on and within range.
Signal around -90 dBm	The connection is weak, so data may be patchy.	Move the instrument or the Lenz™ closer, or clear what is between them.
Wrong instrument paired	A different instrument was adopted.	Press Forget on it, then adopt the correct one. A forgotten instrument that is still switched on reappears under Unknown sensors; that is normal.
Wired symbol on the Rmonix® collection point	The point is not using the wireless instrument.	Make sure the Rconnect™ Ultronic™ is connected before opening the route point (steps 15–16).

UNPAIRING AN INSTRUMENT On the Lenz™ Setup page, open the **Wireless** tab and press **Forget** next to the instrument under **Adopted sensors**. This removes the pairing completely.

If the instrument is still switched on, it reappears under **Unknown sensors**. That is normal: the Lenz™ can still hear it but no longer knows it. To pair it again, press **Adopt** and restart Rmonix® (steps 13–14).



Scan for the full User Manual, specifications, and safety information.

NEED HELP?

RSI Support support@resonance.systems

Documentation resonance.systems/documentation

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