TESSONICS
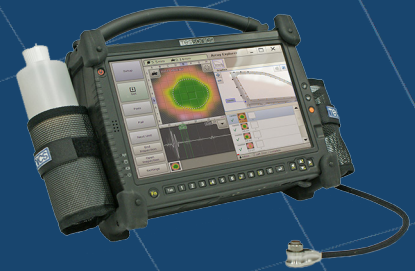
GETTING STARTED GUIDE

RSWA F1

Tessonics Inc.
597 Ouellette Ave., Windsor, Ontario
N9A 4J3, Canada

INCLUDED ITEMS

1
2
3   4   5   6   7   8   9

1. RSWA F1 with Transducer
2. Two Lithium-Ion Batteries
3. Ultrasonic Gel - Imagel
4. AC Power Adapter
5. AC Plug (North American or European)
6. Pack of Delay Lines
7. Shoulder Strap
8. Reference Coupon
9. Calibration Certificate

NOTE: contents may differ depending on purchase order

STARTING UP

CONNECTING POWER AND CHARGING:

Insert batteries into RSWA battery trays. While it might not be necessary, it is recommended to fully charge the RSWA batteries before use. To do so, insert the AC power adapter into the power plug located at the bottom of the unit (Figure 2.1), followed by connecting the AC power adapter to the AC plug. Then, plug the AC plug into a 110 AC or 220 AC power outlet. Both batteries will begin charging, even with the system turned off. The RSWA can be charged during use.

Figure 2.1

In order to turn on the RSWA, one or both of the batteries must be installed or powered from the AC power adapter. Then, press the power button to turn on the RSWA.

Wireless LAN/Bluetooth
HDD access
Battery status
Power

INDICATOR LIGHTS

The indicator lights are located on the front of the RSWA (Figure 2.2).
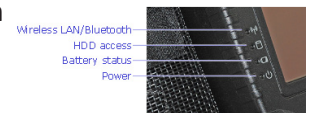
Figure 2.2

Icon	LED State	Remarks
Wireless	Blue	Wireless LAN/Bluetooth is in use
HDD	Green	RSWA is reading from, or writing to the built-in hard disk
Battery	Green	Battery fully charged
	Orange	Battery charging
	Flashing red	Battery power critically low
Power	Blue	Power is on and the battery is in use
	Flashing blue	Power is in suspend mode

Preparing the Transducer

Ultrasonic Gel - Imagel
In order for the RSWA to take accurate readings, Imagel must be applied to the surface of the weld for acoustic transmission.

Cleaning
- Clean the front face and the thread of the transducer. If possible, use isopropyl alcohol. Use a soft cloth or non-abrasive cloth only.
- Clean the face of the delay line which will be in contact with the front face of the transducer and the knurled fastening nut using the same technique.
- Ensure there are no foreign particles between the delay line and the transducer face.

⚠️ Delay Line
Caution: Transducers labeled "Use Only R04/13-DL Delay Line" must use Part No. R04/13-DL only (shown in Figure 3.1). The R04/13-DL delay lines are coloured blue. A thin layer of Imagel must be applied between the transducer's front face and the delay line to provide sufficient acoustical contact.

Figure 3.1

Proper installation of the delay line is illustrated here (Figure 3.2).

⚠️ Caution: Ensure that the delay line is not inverted. Improper installation will damage the transducer.

← Knurled Nut
← Delay Line
← Thin layer of Imagel
Transducer
Figure 3.2

Pairing the Remote

Why is pairing needed?
In the event that the remote battery dies, or the battery is taken out for more than 60 seconds, the remote may not be synchronized to the receiver. Replacement remotes require pairing.

Procedure:

1 Open the rubber cover on top of the RSWA covering the CF card slot. Make sure the RSWA is turned on, and the Array Explorer is running.

2 To synchronize the remote, first, remove the battery for a minimum of 60 seconds by removing the battery tray located on the bottom of the remote. Then, re-insert battery as shown in Figure 4.1.

Figure 4.1

3 Place the tip of the remote into the CF card slot (Figure 4.2). The goal is to get the remote close to the receiver board. Synchronization requires close proximity.

4 Hold the "Setup" button for five seconds. If the Array Explorer is running, it will run a Setup scan immediately. Repeat procedure if necessary.
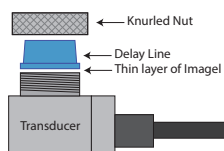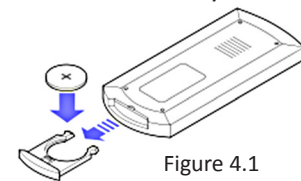

Figure 4.2

Misc.

Shoulder Strap
To make carrying the RSWA easier, attach the provided shoulder strap to the rings on the handle (Figure 5.1).

Figure 5.1

Battery Levels
The battery levels are shown in the software on the lower right-hand corner of the screen (Figure 5.2), or if the battery is removed, it can be shown through the LEDs on the battery, activated by pressing the test button (Figure 5.3). The RSWA batteries have a combined battery life of 8 hours (under normal usage conditions).

Figure 5.2

Figure 5.3

External Dual Battery Charger
The optional external dual battery charger (Figure 5.4) is available for purchase. For information please contact Tessonics.
Part number: R04-AC-CH-F-1

Figure 5.4

Additional Help

Manuals:
Full RSWA hardware and software manuals can be found at: tessonics.com/products-rswa.html

Software Updates:
RSWA software updates can be found at: tessonics.com/downloads.html

Delay Line Chart:
To insure proper delay line installation, the delay line chart can be found in the downloads section, under the "Other Documents" heading at: tessonics.com/downloads.html

Locating RSWA Serial Number:
The serial number can be found in two places:
1. On an identification sticker located inside battery tray #1 (Figure 6.1).
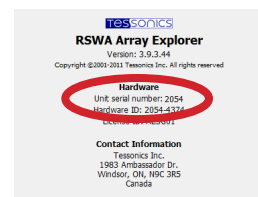2. In the software by going to the "Info" panel (Figure 6.2).

Figure 6.1

Figure 6.2