

Know the Past...
Predict the future.

WAVE RIDER®
NL 2



The wave soldering process is one of the most challenging procedures to set up. The ECD WaveRIDER® NL 2 greatly simplifies wave solder set up and ensures perfect repeatability, time after time. Board recipe preheat temperatures, conveyor speed, wave height, contact times and parallelism are all measured and monitored using the WaveRIDER® NL 2 process pallet.

Your company may have lost thru-hole soldering expertise over time through attrition. A WaveRIDER kit has much of this intelligence built-in and will help you exceed quality demands and reduce rework headaches the first week you begin using it. Start now by downloading the Expert's Guide to Wave Soldering and begin troubleshooting your Wave Soldering process with Expert Guidance...then take the next step to Quality Assurance with your own WaveRIDER® NL 2.

Features:

- Tune your Wave Solder Machine and keep it production worthy
- Quantifies Machine parameters so that you can control them
- Helps reduce rework to a minimum to improve your bottom line
- Provides Go/No-Go data to operators as a First-Off tool
- Eliminates guessing and tightens maintenance protocol too
- Use as a tool for selling your manufacturing expertise to new accounts
- SPC tells you when a parameter gets out of Spec before it's out of control
- Key Parameters: Preheat Ramp, Delta T at Wave, Solder Temperature, Top & Bottom side Board Temperature, Immersion Depth, Wave Parallelism, Conveyor Speed
- Add a Fluxometer® to tune the Spray Fluxer for proper top side fillet formation

Benefits:

- Helps maximize yields to improve your bottom line
- Provides proof to customers that Thru-Hole soldering is in control
- Profiles the machine w/o attaching thermocouples - saves time and effort
- Control machine stability with a stable test fixture instead of a Golden Board
- Replaceable polyimide Test Coupon extends the life of the product
- Solder wave dwell times and conveyor speed are watched, not just temperatures
- It's like an electronic Glass Plate - with memory... and it predicts the future!

System Includes:

- WaveRIDER® NL 2 Pallet
- Lead-Free Polyimide Test Coupon
- WaveRIDER® SPC Software
- Quick Reference & Expert Guides
- Carrying Box

Order ECD P/N: E36-9285-02
(12" Model)



North & South America, Europe
ECD World Headquarters
4287-B SE International Way
Milwaukie, Oregon 97222-8825 U.S.A.
Tel: +1 503 659 6100 | +1 800 323 4548
Fax: +1 503 659 4422
E-Mail: sales@ecd.com | Web: www.ecd.com



Home of the M.O.L.E.® Thermal Profiler

ECD Asia/Pacific
Singapore
Mobile: +65 9692 6822
Fax: +65 6241 9890
E-Mail: ecd.asia@ecd.com

• Top rated customer support • No-cost ECD University Training • Award winning free software •

SPECIFICATIONS

WAVE RIDER[®] NL2



PALLET SENSORS

6 - Distance/Time & Coupon

DATA ACQUISITION: SuperM.O.L.E.[®] Gold

Data Capacity 9 minutes 6 seconds
Temp Accuracy: $\pm 1^{\circ}\text{C}$ (1.8°F)
Temp Resolution: 0.056°C (0.1°F)
Time Accuracy: ± 10 milliseconds
Time Resolution: 0.1 second
Measurement range: -129°C to $+1250^{\circ}\text{C}$ (200°F to $+2282^{\circ}\text{F}$)

REPLACEABLE TEST COUPON

Polyimide 3-thermocouple circuit board

PHYSICAL

Dimensions:

- Standard Widths: 6.6" (167 mm), 12" (305 mm), 18" (458 mm)
- Custom Widths: >6.6" (>167 mm)
- Height: 1 in. (25 mm)
- Length: 17.8 in. (452 mm)

Weight:

- 9": 3.0 lbs (1352 grams)
- 12": 3.8 lbs (1633 grams)
- 15": 4.1 lbs (1787 grams)
- 18": 5.5 lbs (2495 grams)

WARRANTY

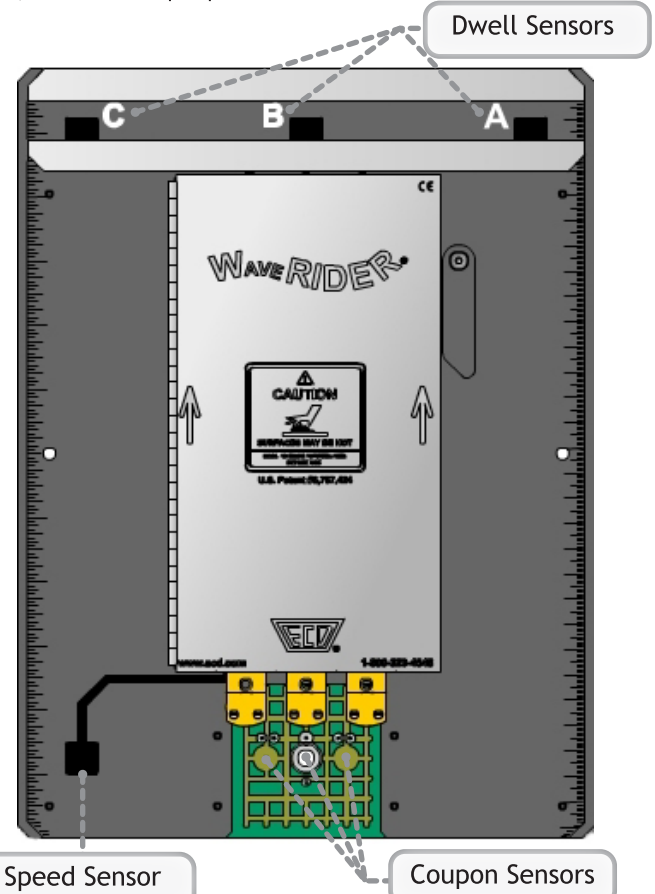
2 years parts and labor

WEBSITE

www.ecd.com

PALLET SENSOR DEFINITIONS

Dwell Sensors: Time spent in immersion across the solder pot also provides critical Contact Length, Immersion Depth and Parallelism data. Manage (SPC) optimum and repeatable board-to-wave orientation, icicles mitigation, conveyor finger maintenance, adequate pot replenishment, auto-start and pump maintenance.



Coupon Sensors: Three thermocouples are aligned with the Speed Sensor. Coupon Top, Bottom and Solder record board temperatures, Preheat Max Temp (top side), Preheat Max Slope, Wave surface temperature and Delta T at Wave. Provide key wave soldering measurements to verify machine readiness for production (SPC).

Speed Sensor: Time delay between the "C" and Speed Sensors striking the main wave is used to calculate conveyor speed for every run to verify consistency (SPC) and catch an incorrect recipe setting. Creates event triggers for Coupon Sensors too.

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