

EWTS-()R Series

RF Signal Simulator for Electronic Warfare Training

EWTS-()R produces over 900 thousand pulses per second with up to 32 emitters simultaneously.



EWTS-()R provides a revolutionary low-cost method of stimulating Electronic Warfare receivers.

OVERVIEW

With RDSI's EWTS-()R you can now benefit from advanced Electronic Warfare training capabilities without the associated traditional high cost. EWTS-()R is a training solution designed specifically to provide high-fidelity on board training to Electronic Warfare Support operators.

KEY FEATURES

- Low Cost training implementation
- Small (3U, 5.25 x 8.5 x 22 inches)
- Portable and light-weight (17 lbs)
- Sixteen scan types (expandable)
- Over 900 thousand pulses per second
- Up to 32 independent channels
- Remotely controlled
- Runs over Ethernet
- Removable Hard Drive (5 GB)

NEXT GENERATION ELECTRONIC WARFARE TRAINING

RDSI

SCAN TYPES

Circular, Bi-directional, Unidirectional (Horizontal or Vertical), Conical, Steady, Lobe Switching, Bi-directional Raster, Unidirectional Raster, Palmer Raster, Palmer Circular, Spiral, Helical, Circular with Vertical Sector, Phased Array (Agile Beam), Palmer Bi-directional, Palmer

PULSE CHARACTERISTICS

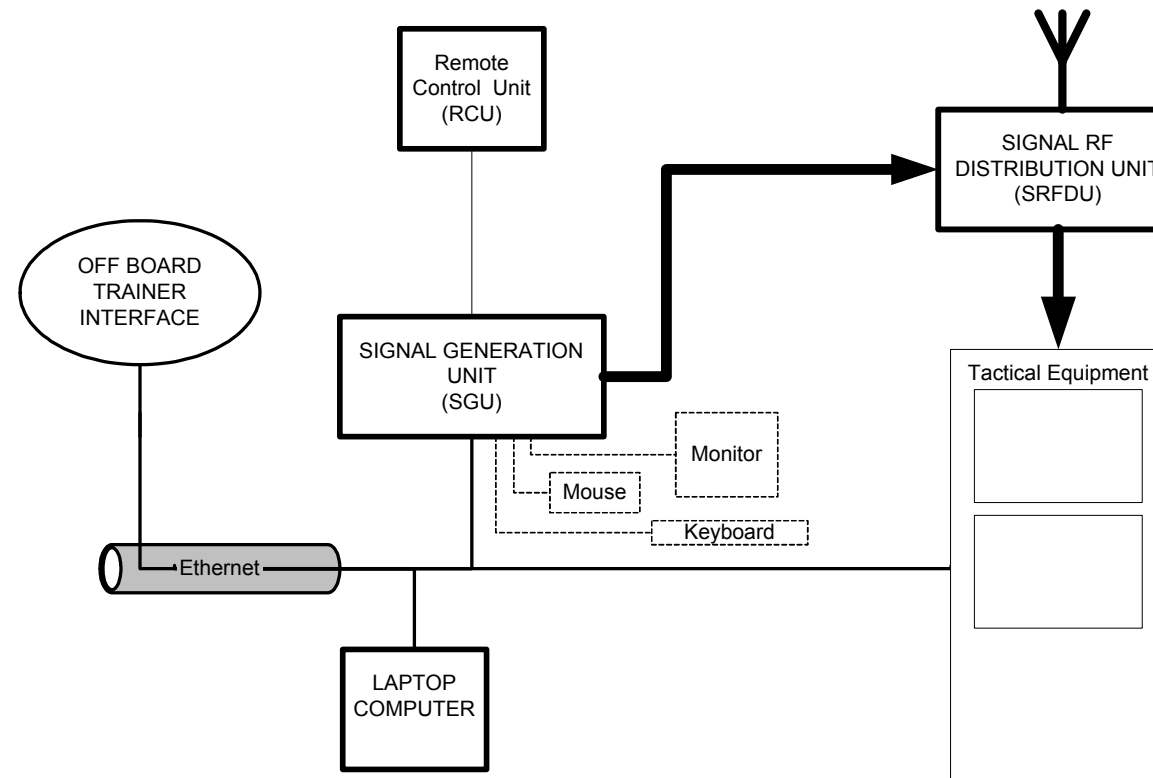
Parameter	Characteristics	Accuracy/Resolution
PRI Range	1.25 μ sec – 50 msec	$1 \times 10^{-3}/50$ nsec
Pulse Width	50 nsec to 3 msec	$1 \times 10^{-3}/50$ nsec
Number of Stagger Levels	1 to 65535	1
PRI Jitter (Peak-to-Peak)/PRIs	Whole Range	
Pulse Frequency Modulation (PFM) Rate	1 – 400 Hz	
PFM Programmable Deviation	100% of PRI Range	NOTE: $1/(PFM(Hz) \times PRI(seconds)) \leq 65535$
Pulse Group Modulation (PGM) PGM Pulses per Group PGM Frame Rate	1 to 65535 50 to 500 Frames/sec	1 PPG

RADIO FREQUENCY CHARACTERISTICS

Parameter	Characteristics	Resolution
Frequency	2 – 18 GHz (Expandable to 0.5 to 36 GHz)	1 of 16 Bits
Frequency Agility	0% to 100% of Band	16 Bit
Number of Frequency Steps	1 to 65535	1 Bit
Programmable Freq Divisions	0 – 100%	16 Bit
Frequency Agile Patterns	Steady, Random, Hopper, Sinusoidal, Sawtooth, Stairstep, Random, Free from	

External Interface

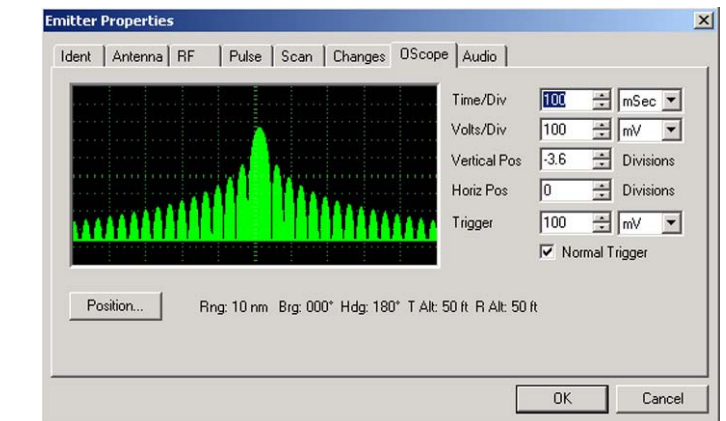
The EWTS-()R series interfaces to shipboard Tactical Equipment through a Simulator Radio Frequency Distribution Unit (SRFDU) unique to each Tactical Equipment Suite. The SRFDU provides a means to combine real off-board emissions with simulated emitters if desired.



EWPro™ Control Software

The EWTS-()R is controlled by RDSI's EWPro™ Scenario Generation and Control Software

- Run's in Microsoft Windows™ 95, 98, NT, 2000, ...
- Single, easy to use, integrated application
- Scenario editing during authoring and playback
- Signal generation through either hardware or software
- Unlimited number of platforms and emitters in the scenario
- World Vector Shoreline Map Overlays
- On-line library engines



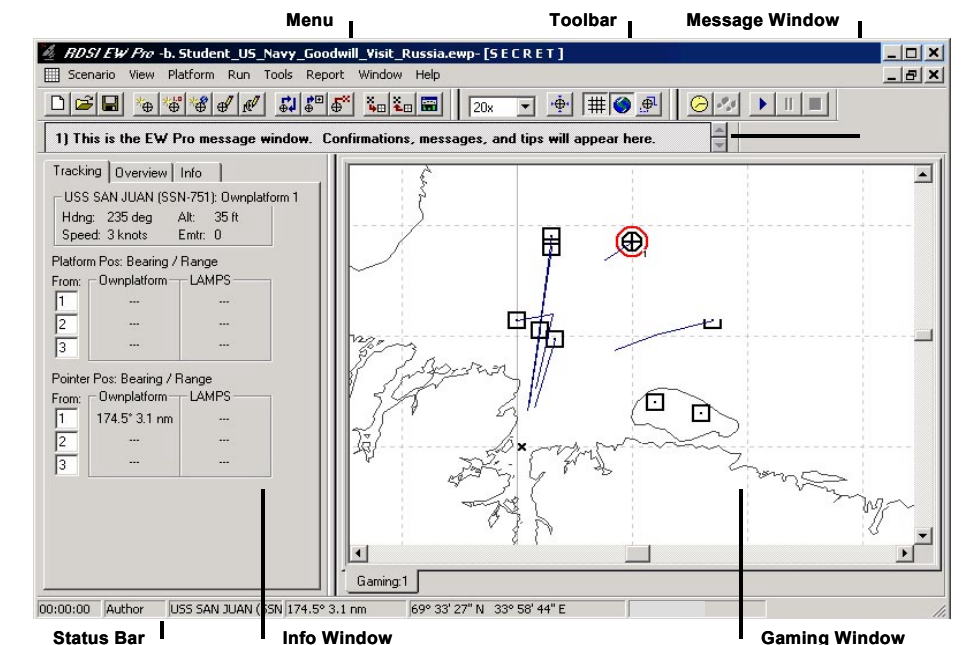
Emitter Properties - OScope

Digital

The turn-key EWTS-()R series is controlled remotely over an Ethernet using a laptop. The system can also be controlled locally using a standard monitor, keyboard, and mouse or via unique interfaces with off board trainers and tactical systems.

Power

The EWTS-()R requires only 115vac receptacle power. The main unit Signal Generation Unit (SGU) is powered up locally or remotely using the Remote Control Unit (RCU). Remote control of the SGU provides the capability to combine real-world and simulated signals.



Main Window

EWTS-()R TURN-KEY SYSTEM

- Signal Generation Unit (SGU)
- Laptop with EWPro™
- Interface Cable Kit

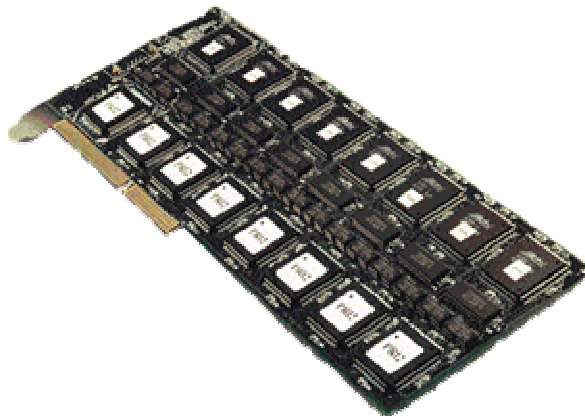
SYSTEM OPTIONS

- LCD/Keyboard/Touchpad Interface Unit
- Remote Control Unit (RCU)
- Simulator RF Distribution Unit (SRFDU)
- Unique software interfaces



FOR MORE INFORMATION

- For more information call 703-893-9533 or email info@rdsi.com



EWTS-()R – Based on RDSI's M/Pulse™ Technology

RDSI

Research and Development Solutions Inc. 7921 Jones Branch Drive, Suite 518 McLean, VA 22102
© 1997 Research and Development Solutions, Inc. All rights reserved. Printed in the USA. EWPro™ is a registered trademark of RDSI. All other trademarks are the property of their respective owners.