



## WRX / MRX Receiver Families

Handheld / Pocket-Size Receivers for Drive & Walk Tests



- 00 to 3000 Mhz Bands in a Single Unit
- Conforming to Dr. Lee 40-Lambda Criteria
- Accuracy < 0.5 dB
- Multi-Channel Simultaneous Scanning (Models B, C, and D)
- 30 & 7 Hours Internal Storage (Model B)
- 1 Watt Power Meter Mode (Optional)
- Expert S/W for PC Result Mapping & Processing
- Friendly User Interface
- Rugged, Splash-proof Construction
- Modern Maintenance Concept



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### The Need

Radio Design Teams, and Telecom Service Companies responsible for IBS or Outdoor Radio path Modeling, Measurements, or Performance Enhancement seek a simple but accurate tool to measure the RF signal level at certain frequencies/channels while still have the ability to log, draw, process such measurement along a complete test mission whatever its an In-building Walk-Test or Outdoor Drive-Test. Simplicity here implies a cost effective, small size, concise, easy-to-use, and efficient RF Receiver that's engineered to address that niche need to accomplish the mission faster and in a more physically convenient setup without involving legacy complex and expensive measurement tools.

**Consultix** addressed the above mentioned need and complemented its CW transmitter family (WTX) with two RF receiver families (WRX & MRX) to support stand-alone and PC-based RF measurements in its simplest form while still keeping unified utmost accuracy, superior sampling rate and RF characteristics. The tool is engineered to cope with the company unified vision to deliver a field-proof, user-friendly, small size, modular, and easy-to-maintain products covering every user's field requirements and preferred setup. In addition to its WRX Handheld family, Consultix extended its portfolio with a miniature pocket-size receivers; the MRX family that addresses the need for small field setup constituting just a pocket receiver supporting a broad range of personal computing devices.



WRX Receivers provide user with direct full control on measurement configurations, plus optional internal Logger, and Power meter mode for direct Equipment RF output measurements. The family offers two main categories; the A models which provide a simple receiver that can be used alone for troubleshooting or fast check-ups, beside being used with a PC and the Walk-View S/W to make a complete walk-test, or drive test mission integrating a GPS receiver. The B models provide a complete stand-alone solution that can accomplish several complete walk-tests without a PC. While User uses marker button to mark his movement points, all measurements are saved and correlated to its marked points automatically, and later user can upload the mission to a PC with the walk-view installed to draw, archive or export the missions' files.



The MRX family is engineered for users who are looking for the simplest setup while still have full live view along the measurement mission. The family comes in two main categories; the C models which provides the smallest receivers, powered from external devices through USB, while the D models have its built-in rechargeable battery hence allowing using smaller tablet devices.



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### Walk-View

Walk-view is a comprehensive, efficient, and simple-to-use data acquisition S/W tool that turns the WRX together with a PC or tablet into a fully fledged walk test or a drive test system that draws measurements, provides complete archiving of results, and presents it into different meaningful forms exportable to CSV format for further manipulation or representation in tools such as Map Info or iBwave....etc. The S/W imports almost any format of layouts; BMP, JPG, PNG, ..etc, or Google Maps for outdoor tests. The tool allows a simple archiving and categorization of different projects, divided into different sites, sub-missions, down to sessions.

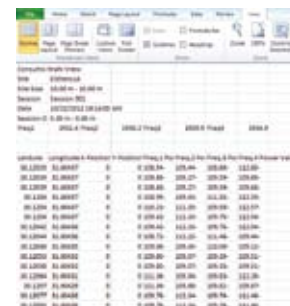


Live & Offline In-Building Walk-Test View

Other features like; drawing 4 simultaneous channels, play-back, and GPS mode are standard. WRX (B models) come with internal loggers, where later, user can upload measurements to the Walk-view for offline processing.



WRX/MRX Drive Test Mission



Multi-channel measurements exported to .CSV file



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### Specifications & Ordering Information

Specifications	WRX Family		MRX Family	
	WRX-33-A	WRX-33-B	MRX-34-C	MRX-34-D
Internal Frequency Accuracy	2ppm			
Frequency Bands (Selected as per ordering information below)	Broad band models: 300 MHz to 3 GHz Single band models : Selection of 2.6 GHz, 2.4 GHz, 2.1 GHz, 1.9 GHz, 1.8 GHz, 900 MHz, 850 MHz, 700MHz, or 350 MHz. Others Available			
Scanned Channels (Instant Frequencies)	1	1 to 4 (selected as per User requirement during the test)		
Frequency Step	100 KHz			
IF Bandwidth	100 KHz. (Optional 25KHz)			
Level Range	-110 to -40 dBm ( 600 MHz to 3GHz ) -100 to -40 dBm ( 300 MHz to 600 MHz)			
Power Meter Mode	Up to 1 Watt		N.A.	
Level measurement Accuracy	±1dB (typ. ±0.5 dB)			
Phase noise	<-50dBc at 10KHz offset			
Adjacent channel Rejection	>40dB			
Measurement speed	800Samples per second			
Internal Logger Capacity (At rate of 1 log/s)	N.A.	>7 hours (4 ch.), 30 hours (1 ch.)	N.A.	
Point Representation Mode (User set)	Logged point is calculated as Peak or Average (Of samples along 1 Second )			
RF interface	50 ohm SMA female			
PC interface	1 x USB		2 x USB	1 x USB
<b>Battery &amp; Power Supply</b>				
Battery	Li-ion, 1900mA-H			Li-ion, 1900mA-H
AC Charger	12 VDC, 100-220 VAC, 50-66 Hz, Power Jack 2.1mm ID 5.5mm OD		N.A	12 VDC, 100-220 VAC, 50-66 Hz
Battery time @ continuous operation	>3 Hours			>3.5 Hours
<b>Physical</b>				
Enclosure	Industrial, Water & Dust tight Aluminum		Extruded Aluminum	
External Dimensions (L x W x H)	179 x 80 x 43 mm		80 x 45 x 19	80 x 64 x 24
Weight (incl. Battery)	<700 gm		<200 gm	<300 gm
Operating Temperature	-10 to +40°C			
Humidity	>95%			
Certifications	CE			
Standard Accessories (Included with the Unit)	Duck Antenna, AC Charger, USB Cable, User Manual & Carrying Bag.		Antenna, 2 x USB cables, & User Manual	Antenna, Charger, USB cable, & User Manual

Ordering Information	
Pocket Receiver; 300 MHz to 3000 MHz, Instantaneous 4 Channel scanning	MRX-34-C4
Pocket Receiver; 300 MHz to 3000 MHz, Instantaneous 4 Channel scanning, Internal Battery	MRX-34-D4
Handheld Receiver; 300 MHz to 3000 MHz, Instantaneous 1 Channel Measurement	WRX-33-A1
Handheld Receiver; 300 MHz to 3000 MHz, Instantaneous 4 Channel scanning, Internal Logger	WRX-33-B4
Handheld Receiver; Single Band, Instantaneous 1 Channel scanning	WRX-33-Axx *
Power Meter Mode for WRX receivers (including miniature Attenuator)	WRX-33-PM
Walk View S/W (WRX/MRX PC result mapping, processing and exporting )	WRX-33-WV
Ruggedized Carrying case (for WRX Receiver and accessories)	WRX-33-RC
Car charger	WRX-33-CC

\*xx= 26, 25, 24, 21, 19, 18, 09, 08, 07, or 03 for the above specified bands respectively. Others available