RWC2010M

ETI/MDI Player
3xFM RDS/AM Generator
Audio Analyzer



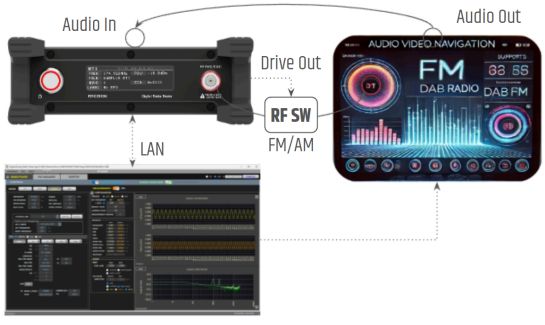
GENERAL DESCRIPTION

ETI (or MDI) files describe the characteristics of a signal suitable for transporting a full DAB Ensemble (or DRM Multiplex), where the ETI comprises a number of subchannels and a formatted Fast Information Channel (FIC) between a DAB Ensemble provider and a transmission network provider, and the MDI comprises a number of streams and a formatted Service Description Channel (SDC) between a DRM Multiplex provider and a transmission network provider. It means that if a specific broadcasting station's T-DMB/DAB (or DRM) signal is recorded as an ETI (or MDI) file, the recorded file contains all the information about the station. Using the RWC2010M's ETI/MDI player function with these files, specific broadcasting stations' T-DMB/DAB signals or DRM signals can be easily regenerated in labs.

The RWC2010M also provides analog functions as 3xFMRDS, 1xAM transmission and audio analyzer. It also provides RDS functionality as a way to play pre-encoded RDS files.

It can be operated stand-alone, and also can be controlled and played with the RWC2010M PC application. The RWC2010M PC application provides various control and measurement functions such as file handling, AM and 3xFMRDS setting, remote controlling and gathering audio measurement data from RWC2010M. Audio measurement data includes SINAD, SNR, THD, waveform and spectrum.

Each transmission function can be operated exclusively, one at a time, while the audio analyzer can be operated simultaneously with any transmission function.



KEY FEATURES

ETI/MDI

- Supports ETI(ETSI ETS 300 799) file player
- Supports MDI(ETSI TS 102 820/821) file player
- Provides tone ETI/MDI files

FM RDS/AM Signal Generator

- Supports up to three FMRDS transmission or one AM transmission
- Supports various Audio Modes: MONO, STEREO, WAV File, SWEEP, External Audio Input

RDS Encoder

- RDS/RBDS compatible
- Full parameters editable
- Radio Text Editor: RT, RT+, eRT, eRT+
- AF, RT, TMC, TP/TA, EON
- RDS File Playable

Audio Analyzer

- Make it possible to test receiver sensitivity
- Audio measurement: SINAD, SNR, THDN, Frequency, Level
- Audio waveform and spectrum
- Balanced/Unbalanced input with RCA (L-/L+/R-/R+)
- Supports simultaneous operation with the FM or AM signal generator.



Stand-Alone Mode

- Stand alone playable without PC application
- 'Boot By' function with one of the saved files

Remote Control
- Via LAN/RS232
- SCPI remote controllable
- Audio Measurable while transmitting RF signal
- Drive Out for power(DC 5V, 100mA) supplying and controlling

SPECIFICATION

RF Frequency
- LF/MF/HF Band: 149 kHz to 30 MHz
- BAND I/II/III: 47 to 68 MHz, 76 to 108 MHz, 174 to 250MHz
- Resolution: 1 kHz
- Accuracy: ±1.5ppm/yr @ operating temperature

RF Output Level
- -10 to -110dBm (OFDM: -20 to -120 dBm) for LF/MF/HF BAND
- 0 to -110dBm (OFDM: -10 to -120 dBm) for BAND I/II/III
- Resolution: 0.1 dB
- Accuracy: ±1.0 dB

RF Output Level with RWC9500B (optional)
- +15 to -55dBm (CW/OFDM)
- Resolution: 0.1 dB
- Accuracy: ±1.0 dB

VSWR
- Better than 1:1.5

RF Frequency Reference
- Internal Reference & Stability: 10 MHz, ±1.5ppm/yr @ operating temperature
- External Reference Input: 10 MHz, 0 to +20 dBm

Audio Analyzer Characteristics
- Input Frequency: 0.1 to 20 kHz
- Max Input Level: 4 Vrms
- Bandwidth: 20 kHz
- Low Pass fIlter: Off, 1kHz to 30 kHz in 1kHz Step
- Weighting Filter: Off, A, C, CCIR
- Connection Type: RCA (L-/L+/R-/R+) input
- Flatness: < ±0.005dB
- Crosstalk: < -80dB
- SNR: > 85dB (@ 1Vrms)
- SINAD: > 75 dB (@ 1Vrms)
- THD: < 0.01% (@ 1Vrms)

Data IO Port
- Remote: RJ45, DSUB9 (RS232)
- Drive Out: BNC, DC 5V, 100mA

Miscellaneous
- Operating temperature: 5 to 40℃
- DC Power: 12V/3A VDC
- Dimension: 200(W) x 70(H) x 220(D) mm
- Weight: 2.2 kg
- Display: 2.8” gray OLED
- Internal storage: 256GB

ORDERING INFORMATION

C2010M-00	Digital Radio Tester - Full Option ETI/MDI Player, RDS/FM/AM Generator
C2010M-01	Digital Radio Tester - ETI+MDI ETI/MDI Player
C2010M-02	Digital Radio Tester - ETI+Analog ETI Player, RDS/FM/AM Generator
C2010M-03	Digital Radio Tester - MDI+Analog MDI Player, RDS/FM/AM Generator
C2010M-04	Digital Radio Tester - ETI Only ETI Player
C2010M-05	Digital Radio Tester - MDI Only MDI Player
C2010M-06	Digital Radio Tester - Analog Only RDS/FM/AM Generator
O2010M-01	Digital Radio Tester – Adding MDI
O2010M-02	Digital Radio Tester – Adding ETI
O2010M-03	Digital Radio Tester – Adding Analog
O2010M-04	Digital Radio Tester – Adding Audio Analyzer
O2010M-95	Extended Hardware Warranty
O2010M-98	Calibration



CONTACT

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The specifications are subject to change without notice.