

Audio Processing
RDS Encoding
Radio All in One
Signal Monitoring
Test & Measurement



NAVIGATOR CMMB

OVERVIEW

Audemat's Navigator CMMB is a new state-of-the-art mobile measurement system that enables wide scale coverage analysis for CMMB networks.

In contrast to propagation models which can only predict the reception quality, the Navigator CMMB measures and reports on actual coverage quality throughout the area under test.

Designed for use by broadcasters, mobile operators and service providers, the Navigator CMMB ensures high quality content is received by the target audience and validates compliance with key parameters established in the CMMB standard.

FEATURES

- Real-time Display & Automatic Logging of CMMB parameters
- All measurements recorded with GPS data
- Comprehensive UHF analysis
- Touch Screen for use without attached PC
- Mobile measurement campaigns with GPS Positioning
- Live video decode & streaming for H.264 video and AAC audio
- Easy export of data to mapping tools
- Optional Battery Pack (3 hours of operation)
- Lightweight Carrying Case

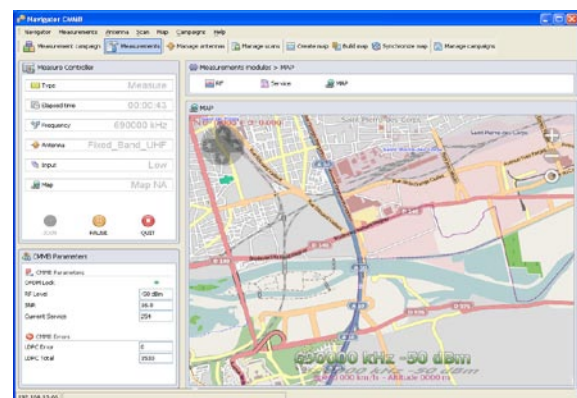
BENEFITS

- Ensures perfect knowledge of your actual CMMB coverage
- Fully portable for easy use throughout area under test
- Flexibility allows deployment at transmitter site for source signal analysis
- Enables savings on maintenance costs

APPLICATIONS

The Navigator CMMB can be utilised by Broadcasters, Operators, Content Providers and Regulation Authorities for many purposes:

- Drive tests
- Outdoor coverage analysis
- Indoor coverage analysis
- Data Analysis
- Quality Analysis
- Research and development
- Maintenance Surveys



Map view of real time measurement

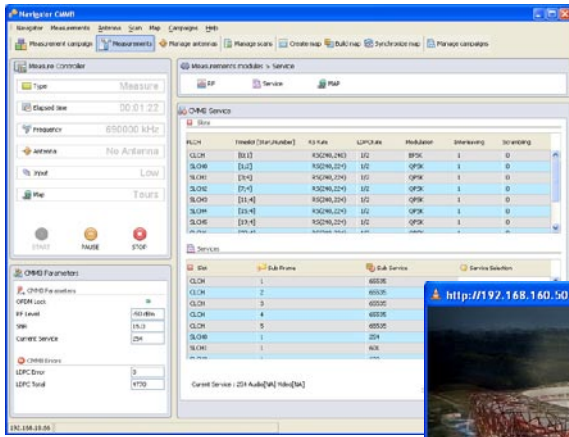
Truly Mobile

CMMB channels can be viewed by people on the go, in trains, cars, pedestrians etc so it is essential that any reception test equipment is portable to enable complete measurements throughout the coverage area. The Navigator CMMB is supplied in a lightweight travel case and comes complete with a GPS receiver, antenna and optional battery pack. Measurement campaigns can be conducted on foot, in a vehicle or deployed in stationary locations.

Key Measurements of the Navigator CMMB

- Real time measurements and display of
 - RF Levels
 - OFDM lock
 - S/N
 - Current service
 - LDPC Error & Total
- Automatic logging of measurement data with corresponding GPS position on internal hard disk
- Real-time decoding & streaming of video & audio for quality analysis
- Map-based display of measurement data
- In-depth post processing with filtering and data export (Google Earth, MapPoint...)

NAVIGATOR CMMB



Realtime streaming can be launched from the remote application or from the front panel application

Easy Analysis of Results

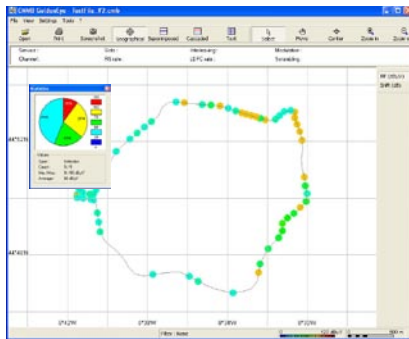
The recorded measurement data can be exported as a CSV file (Excel compatible) or as binary file to be read with **GoldenEye**, Audemat's campaign analysis software application.

GoldenEye software creates a geographical representation of the campaign with a different color for each level value (or field strength).

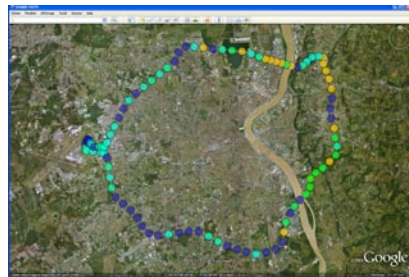
If the campaign contains data from several multiplexes, the curves can be superimposed for easy comparison.

Statistics can also be run on parts of or the whole campaign to show distribution of RF levels.

Campaign data can be exported to map software (Google Earth, MapPoint...) in order to compare the predicted coverage with measured data obtained in a real world environment.



Campaign geographical view in GoldenEye



Google Earth representation

TECHNICAL SPECIFICATIONS

Physical characteristics	
Dimensions (WxDxH) on its own	48 cm x 28 cm x 2 U
with carrying bag	48,4 cm x 33 cm x 20 cm
Weight	± 4.3 kg / 9.5 lbs
Humidity	While in use: < 70% In storage: < 95%
Temperature	0° to 45°C, 32°F to 113°F
Power supply	12 V (110 - 220 V)
Power consumption	60 W
Low Level Band IV input connectors	SMA type
RF characteristics	
RF Input impedance	50 Ω
Band IV	470 MHz - 800 MHz
Bandwidth measurement	8 MHz
Input range Low Level Input (Band IV)	from -90 dBm to -10 dBm
Adjacent channel selectivity	typically 30 dB (measurement to EN50248)
Input Signal Strength Accuracy	± 3 dB
SNR Range	up to 16 dB
Other	
Standards	GY/T220.1-2006 GY/T220.2-2006

ORDER INFORMATION

Standard version	
TF00312	Navigator CMMB with Low Level UHF input

Ref: Navigator CMMB - Datasheet 03/2010
Technical specifications are subject to change without prior notice



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