

# Model DB7002

### PROFESSIONAL FM/DAB/DAB+ MONITORING RECEIVER

DB7002 is a revolutionary solution that combines in a single, high-precision tool the most important functionalities of two separate types of product. To achieve that, our engineers have equipped this model with two independent tuners - one for FM and one for DAB/DAB+, allowing for the device to perform both FM and DAB/DAB+ monitoring in parallel. It provides detailed and accurate measurement of all of the most important signal parameters and also boasts two loggers with 24 channels apiece for FM and DAB/DAB+. The recorded information is stored in log files on an SD card for easy future analysis and can easily be downloaded via a standard FTP client.

As a product that incorporates DAB/DAB+ monitoring capabilities, DB7002 fully meets the ETSI EN 300 401 DAB standard and offers support for Program Associated Data (PAD), as well as all standard bitrates and VBR, and automatically displays live metadata. It also supports AAC, AAC+, MP3 and RTP, and is fully compatible with the most popular media platforms, including Icecast and Shoutcast.

As an FM monitoring tool, DB7002 also provides powerful signal processing capabilities through sophisticated DSP algorithms and offers a Loudness Meter, which allows for measurements to be shown as defined by ITU BS.1770-4 and EBU R128 recommendations.

To make sure the transmission is not interrupted, there are local alarm options and online notifications via rear-panel alarm GPOs, E-mail and SNMP in case there is audio loss or a change in the signal.

DB7002 can also be managed without effort. It is easy to program via the front-panel menu or remotely through your PC, tablet or smart phone via a standard web browser; iOS and Android devices are also supported. The high-resolution OLED graphical display and the ultra-bright LED bar graph indicators allow for easy reading of the main signal parameters. A user-friendly front panel menu in addition to the set of four soft buttons provides easy navigation and quick access to each function.

DB7002 is definitely a must-have. Its two independent tuners set it apart from any other product, while its effectiveness and precision make it the perfect monitoring tool.



### FEATURES

Up to 100 dBµV direct RF Antenna Input

- RDS and RBDS decoder with BER meter
- Wide angle, easy to read OLED display
- Levels measurement with data history
- Real Time Audio Program Streaming
- Detailed DAB component information
- Apple and Android devices support
- Restore Factory Parameters option
- Built-in 24 channel FM Data logger
- Very Intuitive Navigational Menu
- DAB/DAB+ compliant receiver
- Built-in WEB and FTP server
- Easy Installation and Setup
- Built-in Loudness Analyzer
- Easy to use WEB interface
- Built-in Stereo Decoder
- High-end digital tuner
- Fully DSP-based core

 Protected access to the device settings Selectable wide range IF filter bandwidth Built-in 24 channel DAB/DAB+ Data logger Professional AES/EBU Digital audio output Accurate front-panel metering for local use Wide operating voltage range: 100-240V AC Support for Program Associated Data (PAD) • Selectable De-emphasis - Off, 50µs and 75µs Headphone output with front panel level control • FM Band 65 - 108 MHz Basic Spectrum Analyzer • Alarm dispatch via E-mail, SNMP ver.2C and GPO Firmware updates will ensure improved operation LAN port for full TCP/IP remote control and monitoring SNTP for automatic synchronization of the built-in clock Bright bar graph LED metering of the RF and Audio Levels Adjustable MIN/MAX alarms for RF, Left & Right Audio Levels Adjustable, Balanced Analog Audio Outs on XLR Connectors

Built-in input for external MPX analysis



# 

# Model DB7002

## SPECIFICATIONS

DAB/DAB+ Radio Input	
RF frequency range	168 - 240 MHz
DAB/DAB+	Band III Channels 5A - 13F
Sensitivity	18 dBµV
Input connector	BNC 50Ω
In compliance with	ETSI EN 300 401
Ensemble acquisition Time	940 ms
L&R Audio	1%, +5.0 to -50.0 dB, 0.1 dB

DAB/DAB+ Radio Metering	
Quality indicators	RSSI, SNR, CNR, FIC Quality,
	FIB Errors, FFT Offset
PAD	DLS, MOT
Metadata Displayed	Ensemble Label, Component List & ID,
	Service List & ID, Dynamic Label, PTY,
	Sample Rate, Bit Rate, Gain, Mode,
	Service Mode, Protection Info,
	Current CU & Address, Country,
	Language, Time & Date

	FM Radio Input
Tuning Range	User selectable, 87.1-108 MHz (CCIR),
	65-74 MHz (OIRT), 76-95 MHz (Japan)
Tuning Step	10, 20, 50, 100 kHz
Tuner Sensitivity	30 dBµV
Antenna Ports	BNC Connector, 50Ω
Antenna Ports Isolation > 40 dB	
Dynamic range	100 dB

FM Demod	
IF Filter Bandwindth	15 Increments (27kHz - 157kHz, Auto)
Dynamic range	90 dB

Size and Weight	
Dimensions (W;H;D)	485 x 44 x 180 mm
Shipping Weight	540 x 115 x 300 mm / 2.700 kg

Stereo Decoder	
Freq. Response (L&R)	±0.1 dB, 10 Hz to 15 kHz
SNR (Stereo)	60 dB, 50 µs de-emphasis
THD	0.15% @ 1kHz, 0.4% from 10 Hz to
	15 kHz, 50 μs de-emphasis
Separation	50 dB, 50 Hz to 10 kHz,
	50 µs de-emphasis
Crosstalk	52 dB

#### **RDS Decoder**

Standards	European RDS CENELEC; US RBDS NRSC	
Error Correction & Counting Yes		
AF Decoding,	CT (Time/Date), PI, PTY, DI, MS, TA/TP,	
RT (Radio Text	t), RT+, PS, TMC, ODA	
Group Analyze	r Yes	
BER Analyzer	Yes	
Group Sequen	ce Display Yes	
RDS RAW Data Display Yes		
	FM Radio Metering	
RF Level	±1 dB, 0 to 100 dBµV	
Audio	±1 dB, +10.0 to -55.0 dB, 0.1 dB resolution	
	Outputs	
Audio (L, R)	+12 dBm, 600Ω, balanced XLR Connector	
AES3 (L, R)	5.0 Vp-p, 110Ω, balanced XLR Connector	
Alarms	7 Programmable terminals, optoisolated	
Headphone	6,3mm (1/4") Phone Jack	
Communication Interfaces & Storage		
Ethernet 10/10	0 Base-T RJ45 Connector	
Storage	16GB Build-in Memory Card	
Data format	Text, CSV	

Power	
Voltage	100-240V / 50-60 Hz
Power Consumption	20VA
Connector	IEC320, Fused and EMI-suppressed



#### WE NEVER SPARE EFFORTS AND RESOURCES TO TURN OUR IDEAS INTO SUCCESSFUL PRODUCTS

