

RDS Encoders



FMB50/FMB80

Audemat are widely considered as leaders in the field of RDS/RBDS with over 12,000 units installed worldwide. The FMB50 and the FMB80 are the key players within the RDS encoding range thanks to their unrivalled reputation for reliability, quality and functionality.

Both units have been designed for professional broadcast use and are fully compliant with the RDS/RBDS standards. The FMB50 has been designed specifically for broadcasters who wish to exploit the interactive functionality offered by RT+ / Song tagging while the top of the range FMB80 offers not only RT+ but also support for Traffic Message Channel, Emergency Alert applications and all other ODAs.

Why is Audemat a World Leader in RDS Encoding?

Experience

Audemat has over 20 years experience in the field having been an active participant in the RDS forum since its inception. We have worked together with many major broadcasters throughout the world to install extensive RDS networks and have an installed base of over 12,000 units.

Versatility

We have a complete range of RDS encoders which means we have a solution to meet your needs and requirements both at the studio and at the transmission site. Whatever your brand of automation software, and no matter what data path you use, one of our RDS encoders will suit your needs and will enable you to achieve your goals.

High Quality and Spectral Purity

All of our RDS encoders use a superbly designed composite/MPX board, which allows us to keep high frequency signal paths very short, and provides inherent shielding. The result is on-air performance that is measurably better than that offered by other types of product architecture. All our encoders construct their data digitally; with no analog pass band filters, there is no possibility of drifting or degradation of the audio signal.

Reliability

Audemat encoders are designed for continuous on-air operation and are known for their reliability. All of our units feature solid state memory, have no moving parts and retain their configuration through power outages. Every parameter is controlled through software: there are no potentiometers or trimmer capacitors that may age or need realignment.

APPLICATIONS:

RDS/RBDS can be used:

- to identify the Radio Station
- to automatically retune between transmitters of the same program
- to display song titles and artist information on receivers
- for interactive radio (RT+ ODA application)
- for traffic Announcements & Traffic Message Channel (TMC)*
- as an emergency alert system*

*FMB80 only

Key Features:

- Fully Compliant with RDS/RBDS standards
- Support for RT+
- ODA support for TMC & Emergency Alert*
- Embedded Scheduler
- Command Triggering on RDS Signal or internal/external events
- Firmware upgrade available from FMB50 to FMB80
- Embedded Webserver
- Multi communication links to connect with automation software
- Support for multiple protocols : ASCII , UECP, ASCII+UECP
- Remote monitoring of external devices via status inputs & control outputs
- RDS Viewer allows Remote Monitoring of broadcasted data
- Full customization of alarms and email alerts

Benefits

- Send timely & relevant information to your listener base
- Offer interactive radio to engage your listeners & improve loyalty
- Change Scrolling PS & RT messages based on time & date
- Access and control the encoder securely from anywhere via the web browser
- Simple configuration with standard UECP protocol or Audemat ASCII commands
- See what your listeners can see with the FMB RDS Viewer

Key Features of the FMB50/FMB80 include:

RT+ : Catapult your FM radio station into the digital age!

Today's listeners can access content via multiple platforms such as the internet, social networks, mobile apps and digital broadcasting.

With RT+ on your Audemat RDS encoder, you can now make exciting interactive content from these new platforms available on your analog FM broadcast. Podcasts, Streaming, Radio on Demand, SMS, MMS and EPG are just some examples of the rich new functionality that can be offered to better engage with your listeners and encourage greater loyalty.

Listeners with suitably equipped receivers will not only know the name of the song they're listening to but also be able to access related web data, a music store or any internet based music search service. They can use an Electronic Program Guide (EPG) to schedule program recording, directly contact the station by phone, email or SMS and gain easy access to additional information on commercials.

The FMB50/FMB80 simply allows radio stations to offer the interactivity today's listeners have come to expect.



SCROLLING PS

Scrolling PS enables you to scroll dynamic messages (song titles, artist information and much more) and mix these messages with the static PS name or call letters.

LABELLING

Song titles and artist information coming from the automation software can now be automatically framed with text stored in the encoder. The text can be customized and configured through embedded web pages in the FMB50 and FMB80. Note that the units can now manage a large number of commands such as the music genre, the type of program, Internet URLs, even contact information for the radio station.

COMMAND INTERPRETER

The FMB50/FMB80 can be configured to interpret whatever labels and commands are coming from the automation software. This is useful for older systems that do not have sufficient flexibility or systems in other languages.



SCHEDULER

The scheduler enables you to execute any command, including changing the scrolling PS and RT messages based on time and date.

TCP/IP

You can control your Audemat RDS encoder through TCP/IP. Simply plug into a local Ethernet network, WAN, or even the internet for secure operation from anywhere in the world!. Its built-in, password-protected server is compatible with FTP, Telnet, SNMP and HTTP and with UECP standard RDS protocols.

The FMB50 / FMB80 includes three independent high-speed serial ports for direct wired local control and data communications.

FMB RDS Viewer

The FMB RDS Viewer, a software tool included with the FMB50/FMB80, simulates a RDS compatible receiver and enables you to check the encoder has been properly set.



ODA (Open Data applications)*:

There are many applications that can use the RDS/RBDS technology, bringing more service to your listeners and more revenue to the Radio station/Network. These applications cannot be deployed with just any RDS/RBDS encoder as they require ODA. The FMB80 RDS encoder offers this capability as standard.

TMC: Traffic Message Channel*: TMC delivers up-to-date traffic information and voice messages direct to a user's satellite navigation system.

Emergency Alert System*: The FMB80 is compatible with services that relay data to emergency providers.

FMB50 / FMB80 Network Services

- HTTP with embedded web server for operator control
- SMTP e-mail notification on selected events
- F T P (server and client) for firmware, configuration, data and log file.
- Telnet command line interface
- UECP encapsulation in UDP
- SNMP V1, MIB II, MIB IP2 system
- Optional Specific Service Operator MIBs
- Operating system: Audemat IP2 Communication protocols
- ASCII: For standard computer terminal
- UECP: Universal encoder protocol

*FMB80 only

Which RDS Encoder is for you?

RDS Encoder Comparison Chart

RDS Encoder Silver

FMB50

FMB80

Full Basic

	RDS Encoder Silver	FMB50	FMB80	Full	Basic	
RDS Features	Group supported	0A, 2A and FFG	From 0A to 15A except 14A & 14B	From 0A to 15A	0A to 15A	
	Group sequence	Fixed	Configurable	Configurable	Configurable	
	EON			8 PSN	9 PSN	
	PS	PS1/PS2	4 DSN	6 DSN	10 DSN	2 DSN
	PI	PI1/PI2	4 DSN	6 DSN	10 DSN	2 DSN
	PTY	RDS/RBDS	RDS/RBDS	RDS/RBDS	RDS/RBDS	
	AF	25 AF No method B	method A and B	method A and B	method A and B	
	TP / TA	with software	by command or contact closure	by command or contact closure	by command or contact closure	
	PTYN	with software	✓	✓	✓	
	CT		✓	✓	✓	
Scrolling PS	ODA: TMC, EWS, EPP PAGING, RT+...		RT+ only	✓		
	Dynamic PS	✓	✓	✓	✓	
	Sequencing speed	Adjustable in sec	Adjustable in sec	Adjustable in sec	Adjustable in sec	
	Scrolling by character	from 1 up to 8	from 1 up to 8	from 1 up to 8	from 1 up to 8	
	Scrolling by word, 8 character block, Automatic centering, Truncate long words	✓	✓	✓	✓	
Radiotext	Repetition, Labeling, Delay before display		✓	✓	✓	
	Radiotext	1 message	10 messages	10 messages	10 messages	
	RT Rate Adjustment	✓	Group Sequence	Group Sequence	Group Sequence	
	Formatted Radiotext		✓	✓	✓	
Communication	RT+		✓	✓	✓	
	Scheduler		✓	✓	ScriptEasy	
	Configuration Software	✓	Embedded web server	Embedded web server	✓	
	Password protection	✓	✓	✓	✓	
	History Log		✓	✓	✓	
	Connection with automation software	with RS232	with RS232 or TCP/IP	with RS232 or TCP/IP	with RS232 or TCP/IP	
	Command translator		✓	✓	✓	
	Remote Display	Simulation	Real time	Real time	Real time	
	ASCII protocol	for messages	for configuration and messages	for configuration and messages	for messages	
	TCP/IP port - HTTP - FTP - TELNET - SNMP- SMTP- UDP- TCP		✓	✓	✓	
RDS Hardware	UECP standard	Partially compliant	Compliant	Fully compliant	Compliant	
	Inputs/Outputs		8 inputs + 4 relays	8 inputs + 4 relays	16 in / 8 out Option	
	Communication port	1 RS232 (RS232-USB cable) - 1200 to 9600 baud	3 RS232 (two RS - 2 3 2 75 to 115,200 baud, one 9600 baud) + 1 RS485 + 1 TPC/IP	3 RS232 (two RS - 2 3 2 75 to 115,200 baud, one 9600 baud) + 1 RS485 + 1 TPC/IP	3 RS232 + 2 ethernet + 1 USB	
	Synchro. Monitoring		with command	with command	with command	
	Side Chain Mode, Loop through mode, Bypass feature		✓	✓	✓	
Integrated RDS Decoder		✓	✓	✓		

In addition to the FMB80 and FMB50, Audemat offers several other RDS encoders to suit the requirements and budgets of a wide variety of customers:

RDS Encoder Silver



RDS Encoder Silver is the most affordable encoder in our product line. It can be connected to your automation software and supports Radio Text messages, Alternative Frequencies, Traffic Announcements and scrolling PS* by word or characters. The compact and reasonably-priced RDS Encoder Silver comes with a user-friendly configuration wizard and a simulation mode.

* Subject to applicable regulations

Digiplexer

Audemat's Digiplexer includes RDS



encoding functionality in addition to sound processing, audio backup, remote control, FM transmitter etc.

See pages 26 for more information on this product.

See our Deliver catalog for more details