Inovonics 712

Dynamic RDS/RBDS Encoder

THIS SECOND-GENERATION ENCODER SUPPORTS THE IMPORTANT RDS GROUPS AND CAN SEND SAFE SCROLLING MESSAGES

Inovonics' 712 is a full-function RadioData encoder supporting both the European CENELEC and the United States NRSC standards for FM datacasting. Format identifiers, translator frequencies and other static data are easily programmed using a PC. The 712 may be connected directly to station automation for transmitting of song titles, contests, advertising, etc.

A special feature of the 712 is a unique 'safe scrolling' messaging mode. This substantially reduces the potential for distraction associated with active displays in automobiles, and may be used in those situations where scrolling text is not expressly forbidden by applicable standards or local restrictions.

During development of the 712, Inovonics worked closely with RDS data management providers to enhance product functionality. Optional features that may become available from third-party vendors might include special programming software and hardware add-ons for Internet connectivity.

Inovonics
1305 Fair Ave. • Santa Cruz, CA 95060
TEL: (831) 458-0552 • FAX: (831) 458-0554
www.inovon.com • e-mail: info@inovon.com

Inovonics 712

Features & Specifications

- The 712 operates with any FM exciter and stereo generator. A dedicated 19kHz sync source is not required. Failsafe bypass is built in.
- The RS-232 serial interface works with a PC and may be connected directly to popular hard-disk radio automation systems.
- Installation is quick and easy with a choice of loop-through or sidechain connection. The 712 incorporates an internal timebase for monaural broadcasts.

STANDARDS SUPPORTED

European CENELEC and United States NRSC.

RDS APPLICATIONS SUPPORTED

PI (Program Identification) A "digital signature" for your station based on call letters (US) or assigned identifier (Europe).

PS (Program Service Name) Your station's "street name" that automatically appears on the receiver faceplate. PS also offers the possibility of a scrolling text message if restrictions permit.

PTY (Program Type) This identifies your station format from a list of pre-defined categories and helps listeners find their programming preference quickly.

TP (Traffic Program) This data flag identifies stations that routinely include traffic bulletins in their everyday programming.

TA (Travel Announcement) A TA data flag is broadcast only during a critical traffic announcement. Some RDS radios automatically retune to a station airing such an announcement, even interrupting cassette or CD playback.

RT (RadioText) This is a 64-character block of plain text messaging that can be scrolled on the faceplate of many RDS receivers. Some automobile radios inhibit this display or require the driver to press a button to receive the message.

AF (Alternative Frequencies) The 712 sends a list of frequencies for networked stations or rebroadcast translators. This allows radios to seek the strongest signal for a specific transmission.

Rear view

DI (Decoder Information) Indicates whether the broadcast is monaural or one of several binaural or stereo options.

M/S (Music/Speech Switch) A data flag to indicate either music or speech-only programming.

FFG (Free Format Groups) The 712 can accept special commands to transmit hidden data within legitimate RDS groups. This may be useful for telemetry or for proprietary communications.

PILOT OR MPX INPUT

An unbalanced, bridging BNC input that accepts either the composite/multiplex (MPX) signal or 19kHz TTL-level pilot sync from the stereo generator.

RDS OR MPX OUTPUT

An unbalanced, low-impedance BNC output to feed a wideband input of the FM exciter.

LOOP-THROUGH MODE

In loop-through operation, the RDS subcarrier is internally mixed with the MPX input. The combined signal appears at the encoder output at unity gain.

SIDECHAIN MODE

In sidechain operation, just the RDS subcarrier appears at the encoder output. The monitored MPX (or TTL sync) is used only to synchronize the 57kHz RDS subcarrier with the 19kHz stereo pilot.

RDS INJECTION LEVEL

Continuously adjustable between zero and 2 volts p-p.

SERIAL DATA PORT

RS-232 port (DB-9) for static programming and dynamic messaging. 2400, 4800, 9600, or 115k baud; 8, N, 1, plain-text ASCII protocol.

TA SWITCHING

The temporary TA flag is set either by a software command or with a momentary contact closure through a rear-panel BNC connector.

POWER REQUIREMENTS

105-130VAC or 210-255VAC, 50/60Hz; 10W

SIZE AND SHIPPING WEIGHT

1-3/4"H x 19"W x 7"D (1U); 7 lbs.

Inovonics
1305 Fair Ave. • Santa Cruz, CA 95060
TEL: (831) 458-0552 • FAX: (831) 458-0554
www.inovon.com • e-mail: info@inovon.com

printed in the USA 04/04