Inovonics 720

RDS/RBDS Dynamic RadioData Encoder

AN RDS/RBDS ENCODER WITH MULTIPLE MESSAGE-SCROLLING MODES AND EASY, SELF-GUIDED CONNECTION TO STATION AUTOMATION.

Inovonics' third-generation 720 incorporates a number of important features to make installation and operation simple, straightforward and safe. The 720 automation command set remains compatible with earlier models for seamless integration alongside existing encoders.

The front-panel LCD screen allows the user to scroll through and confirm all setup and operating parameters without the need for a computer on site. Incoming data from station automation can be seen 'on the fly,' and scrolling messages are displayed exactly as they are seen by listeners.

Intuitive software, built-in data diagnostics and transmission safeguards make installation virtually foolproof and help protect against accidental misuse. The 720 supports European CENELEC and United States NRSC standards.





Inovonics 720

Features and Specifications

- Accepts a serial connection for automation data and features a front-panel USB port for convenient local setup.
- A unique 'no-header mode' allows use with unformatted, satellite-streamed song title information.
- Works with any FM exciter and stereo generator.

RDS APPLICATIONS SUPPORTED

PI (Program Identification) A "digital signature" for your station, based on call letters in the US and Canada or on an authority-assigned identifier elsewhere. 720 software automatically calculates PI codes for the US and Canada.

PS (**Program Service Name**) The station's "street name" that automatically appears on the receiver faceplate in static-PS operation. This field scrolls song titles or other messages in the dynamic-PS mode.

PTY (Program Type) An identifier for your station's format based on a list of pre-defined categories. Highend RDS radios can search for listening preferences.

TP (Traffic Program) A data flag identifying stations that routinely include traffic bulletins in their programming.

TA (Travel Announcement) The TA data flag is broadcast only during a critical traffic or other emergency announcement. Some RDS radios automatically retune to a station airing such announcements, and TA broadcasts may even override CD or MP3 entertainment.

RT (RadioText) This is a 64-character block of plain text messaging that can be scrolled on the faceplate of some RDS radios. RadioText is separate from, and in addition to, scrolling-PS messages.

AF (Alternative Frequencies) The 720 sends a list of up to 25 frequencies for networks or stations with rebroadcast 'translators.' This allows RDS radios to seek the strongest signal for a specific transmission.

DI (Decoder Information) An indication of whether the broadcast is monaural or stereo.

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

RAW (Raw Data Entry) The 720 accepts certain Free Format Group commands to transmit hidden data within legitimate RDS groups.

SUPPLIED SOFTWARE

Runs on any Windows® PC for either USB or serial (COM) port operation. The software is intuitive, self-guiding and contains numerous pop-up and other Help files.



Rear view

OPERATING MODES

Loop-Through: The RDS subcarrier is internally mixed with the MPX input and the combined signal appears at the encoder output at unity gain.

Sidechain: In this mode just the RDS subcarrier appears at the encoder output. The monitored MPX or 19kHz sync is only bridged to synchronize the 57kHz RDS subcarrier with the stereo pilot.

PILOT OR MPX INPUT

An unbalanced, bridging (BNC) input accepts either the composite/multiplex (MPX) signal or 19kHz TTL-level pilot sync from the stereo generator. The 720 reverts to an internal crystal timebase for monaural transmissions.

RDS OR MPX OUTPUT

An unbalanced, 75-ohm (BNC) output feeds a wideband input of the FM exciter.

RDS INJECTION LEVEL

Subcarrier level is continuously adjustable from the front panel from zero to 3V p-p. The LCD screen gives both bargraph and voltage readouts.

SERIAL DATA PORT

A rear-panel RS-232 port (DB-9) accepts static encoder programming and dynamic messaging from station automation. The 720 accommodates all common data rates between 1200 and 115,200 baud. 720 software features an automatic port and data rate ID utility to simplify initial connection and setup.

USB PORT

A front-panel USB port gives quick and easy access for encoder setup. All static messaging may be quickly set with a laptop PC.

TA SWITCHING

The temporary TA flag is set either by a software command or with a contact closure through a rear-panel terminal strip. A TA-timeout utility prevents TA flag violations.

POWER REQUIREMENTS

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

SIZE AND SHIPPING WEIGHT

 $1^{3}/_{4}$ "H x 19"W x 8"D (1U); 9 lbs.