Inovonics 730

Rev. 2

RDS/RBDS Dynamic RadioData Encoder

OUR FULL-FUNCTION, WORLD-CLASS ENCODER WITH USB, SERIAL AND IP-NETWORK CONNECTIVITY

CONFORMS TO AMERICAN NRSC AND EUROPEAN CENELEC STANDARDS – SUPPORTS UECP AND RT+

The Model 730 is Inovonics' flagship RadioData encoder. It features a front-panel LCD screen and jog wheel for convenient on-site setup without the need for a computer, yet the included Windows® software enables fast and intuitive programming through any of the encoder's data ports. The 730 displays incoming data from automation 'on the fly' and shows outgoing scrolling messages exactly as they are seen by listeners.

The 730 connects with virtually any playout system, sending song title and artist information to listeners' radios, with full support for RT+, 'song tagging' and other advanced applications. Static scrolling messages may also be queued with the built-in Scheduler, and a programmable data delay puts messaging in sync with delayed analog audio. An Internet connection assures accurate Clock Time and Date (CT) timekeeping, and optional changeover to Daylight Saving time is automatic.

Internal data diagnostics and transmission safeguards guarantee foolproof installation and operation, and field-upgradeable firmware ensures compatibility with any forthcoming RDS/RBDS applications.
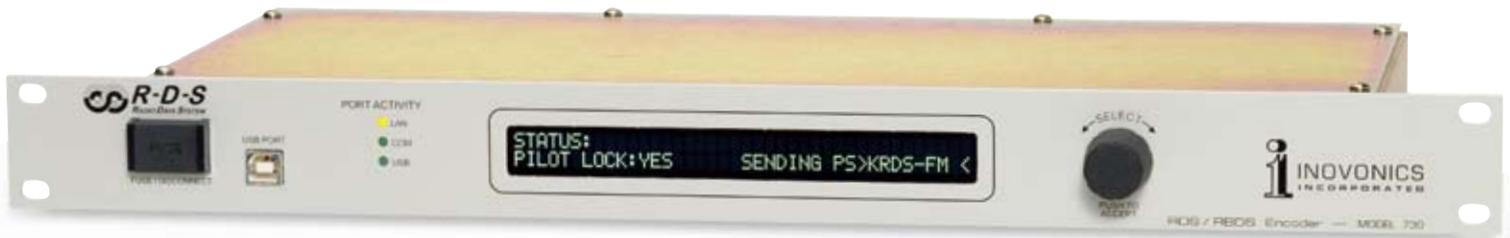
- May be programmed from the front panel without a computer. LCD shows incoming and outgoing data.

- Scrolling-PS messages are parsed and may be set to time-out to a default static message.

- A built-in Scheduler sends messages on specific dates and times.

- USB, serial and IP-Network connectivity; built-in dynamic DNS client service. Clock-Time/Date optionally updated with an Internet connection.

- A unique 'no-headers mode' allows use with unformatted, satellite-streamed song title information.

- Works with any FM exciter and stereo generator. A dedicated 19kHz sync source is not required for pilot lock.

RDS APPLICATIONS SUPPORTED

PS (Program Service Name) An 8-character station 'street name' or 128-character scrolling message (song info, promos, advertising, etc.).

PI (Program Identification) 730 software automatically calculates PI codes for the US and Canada.

PTY (Program Type) Identifies your station's format.

PTYN (Program Type Name) A further refinement of your type or style of programming.

TP / TA (Traffic Program / Traffic Announcement) A utility that calls attention to critical traffic or other emergency situations. Some RDS radios automatically retune to these announcements, even overriding CD or MP3 playback.

AF (Alternative Frequencies) Up to 25 frequency entries for rebroadcast 'translators.'

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

RT+ (RadioText Plus) An updated standard for song info display.

CT (Clock Time and Date) The 730 sends timekeeping data to RDS radios. The feature is set and updated automatically with an Internet connection.

DI (Decoder Information) The mono/stereo data flag.

M/S (Music/Speech Switch) The mixed-music or speech-only data flag.

RAW (Raw Data Entry) The 730 accepts 'Free Format Group' commands to facilitate custom RDS applications.

SCHEDULER
Up to twenty, 128-character scrolling-PS messages may be programmed for transmission at specified times on prearranged dates or recurring days of the week.

RDS DATA DELAY
Scrolling-PS, RT and RT+ message updates may be delayed in 1-second increments up to 60 seconds to match profanity and transmission diversity delays.

MPX OR PILOT INPUT
An unbalanced, bridging (BNC) input accepts either the composite/multiplex (MPX) signal (5V p-p, max.) or 19kHz TTL-level pilot sync from the stereo generator. The 730 reverts to an internal crystal timebase for monaural transmissions.

Rear view

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

OPERATING MODES

Loop-Through (with relay-contact failsafe bypass): 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 only 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.

RDS INJECTION LEVEL
Subcarrier level is adjustable from zero to 3V p-p, either from the front panel or by remote software command. The LCD and software screens show both bargraph and voltage readouts of the subcarrier level.

FRONT-PANEL DATA ENTRY
The front-panel LCD and jog wheel allow on-site setup of all operating parameters and messaging registers when a computer is not available. The LCD is also able to show the values and messages in all registers in addition to displaying incoming data on the fly and the scrolling-PS message exactly as it is being received by RDS radios.

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

SERIAL DATA PORT
A rear-panel RS-232 connector (DB-9) accepts static encoder programming and dynamic messaging from station automation. The 730 accommodates all common data rates between 1200 and 115,200 baud. 730 software features an automatic port and data rate ID utility to simplify initial connection and setup.

LAN (IP-NETWORK) PORT
A rear-panel Network connector (RJ-45) conforms to TCP/IP networking protocols. Two TCP ports and one UDP port are provided.

TA SWITCHING
The temporary TA flag is set either by a software command or with a contact closure through a rear-panel terminal strip. The 730 features a programmable TA-timeout utility to preclude TA flag violations.

SUPPLIED SOFTWARE
Model 730 software runs on any Windows® PC for USB, serial (COM) port and IP-network operation. The software is intuitive, self-guiding and contains numerous pop-up and other Help files.

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

SIZE AND SHIPPING WEIGHT
1³⁄₄"H x 19"W x 8"D (1U); 9 lbs.