# **Inovonics** 711 A full-featured RDS/RBDS Encoder

## *THIS EASY-TO-USE ENCODER SUPPORTS INTERACTIVE RADIO-DATA FUNCTIONS*

Inovonics' 711 is a feature-packed RDS/RBDS Encoder for FM broadcasting. It is fully compliant with NRSC and CENELEC radiodata standards and incorporates the Universal Encoder Communications Protocol (UECP).

The usual format identifiers, translator frequencies and other 'static' data are quickly programmed into non-volatile memory using any PC. The Encoder's serial interface may then be tied directly to station automation for sending song titles, telephone numbers, contest results and promotion or advertising messages. These will immediately be displayed on the listener's radio.

Another important 711 feature is the "TA Flag." When your station broadcasts an emergency traffic update, RDS radios automatically tune to your frequency. In some receivers your traffic alert even interrupts cassette or CD playback.

-

INDVONICS



COR-D-S



• Easy installation: 'loop-through' with failsafe bypass, or 'sidechain' independent of the signal path. Operates with any exciter/stereo-generator combination.

• Works with popular hard-disk station automation systems. UECP/ASCII standardized RS-232 interface supports song titles, contests, etc.

• Excellent value! Manufactured under license from Aztec Radiomedia, the 711 combines low cost with desired features and an established product track record.

#### STANDARDS SUPPORTED

European CENELEC and Unites States NRSC.

#### **RDS APPLICATIONS SUPPORTED**

**PI (Program Identification)** Your station's "digital signature" based on call letters (U.S.) or assigned identifier (Europe).

**PS (Program Service Name)** Your station's "street name" that will appear on the receiver faceplate display. 8 characters, maximum.

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

**TP (Traffic Program Identification)** A data 'flag' that identifies stations that routinely include traffic bulletins in their normal programming.

**TA (Travel Announcement)** A data 'flag' broadcast only when a critical traffic announcement is being given. This temporarily retunes RDS radios to the station airing the bulletin, and can even interrupt cassette or CD playback.

**AF (Alternative Frequencies)** This supplies the frequency of any translators or networked stations, allowing car radios to seek the best source for the identical program.

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





Rear view

**M/S (Music/Speech Switch)** Indicates whether music or speech-only programming is currently being transmitted.

**RT (Radio Text)** A 64-character block of plain text for visual display on the front panel of RDS radios. This can carry song title and artist, advertising, contests, promos, etc. Automobile receivers may inhibit this display in moving vehicles per current standards, practices and common sense.

**FFG (Free Format Groups)** The 711 Encoder is capable of transmitting hidden data within a legitimate RDS group for proprietary communications or other non-standard applications.

#### **MPX/SYNC INPUT**

The unbalanced, bridging input accepts a composite/MPX stereo-baseband signal (maximum peak level +18dBu) or a dedicated 19kHz TTL SYNC source (maximum level 5V p-p). The Encoder defaults to an internal crystal timebase for monaural transmission.

### **RDS/MPX OUTPUT**

The unbalanced output has a source impedance under 100 ohms. The Encoder may be jumpered internally to provide only the RDS subcarrier (sidechain mode), or the entire composite/MPX baseband (loop-through mode) with unity gain (maximum peak level +18dBu).

#### **RDS INJECTION LEVEL**

Under software command the RDS subcarrier may be set at any level between -60dBu and 0dBu in 1dB steps, and shifted in phase  $\pm 180$  in 6 increments.

#### SERIAL DATA INTERCONNECT

RS-232 port (DB-9 connector) for static ID programming and dynamic messaging. 1200 to 9600 baud (9600 default), 8, N, 1 protocol; plain-text ASCII or standardized UECP data communication.

#### TA SWITCHING

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

#### POWER REQUIREMENTS

105-130VAC or 210-255VAC, 50/60Hz; 15W

#### SIZE AND SHIPPING WEIGHT

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