



**TRDS 4001 Radio Data System Encoder**

AMPLIFIERS  
TRANSMITTERS  
ANTENNAS  
ACCESSORIES



# TRDS 4001

## RDS ENCODER

**AUDIO FREQUENCY**

### TRDS 4001 Features:

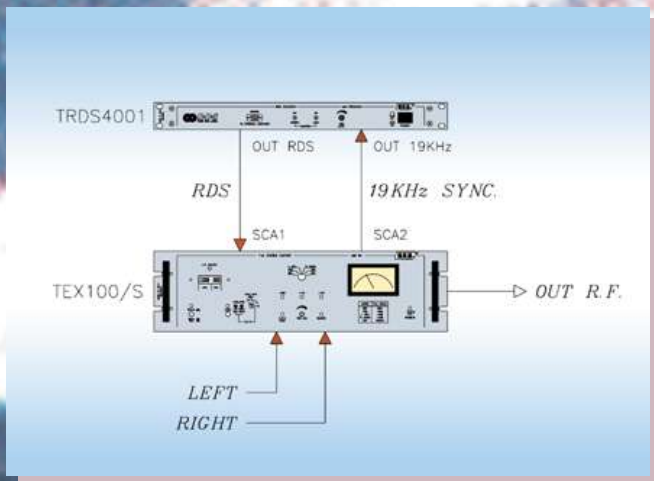
- 1 Easy to program via Personal Computer using a RS232 serial interface
- 2 Selectable programming language: English or Italian
- 3 Standard EBU Services available:  
**PI:** Program Identification  
**PS:** Program Service  
**PTY:** Program Type  
**TP:** Traffic Program Identification  
**TA:** Traffic Announcement  
**AF:** Alternative Frequencies  
**M/S:** Music/Speech  
**PIN:** Program Item Number  
**RT:** Radio Text  
**EON:** Enhanced Other Networks  
**TDC:** Transparent Data Channel  
**IH:** In-house Application
- 4 Ability to transmit 8 messages of 16 words during the day
- 5 Alternative Frequencies features:  
**Method A:** 8 Lists of 25 Frequencies or 10 Lists of 23 Frequencies or 16 Lists of 15 Frequencies or 32 Lists of 7 Frequencies  
**Method B:** 8 Lists of 12 Frequencies or 10 Lists of 11 Frequencies or 16 Lists of 7 Frequencies or 32 Lists of 3 Frequencies (head-list included)
- 6 Date and time function to put messages on air
- 7 Automatic lock in phase with the 19KHz pilot tone of the Stereo Coder
- 8 Prearranged for 24Vdc external power supply
- 9 Available also in the version for SAT signals reception with automatic switching of the signal between the earth station and SAT station

### TRDS 4001 Caratteristiche:

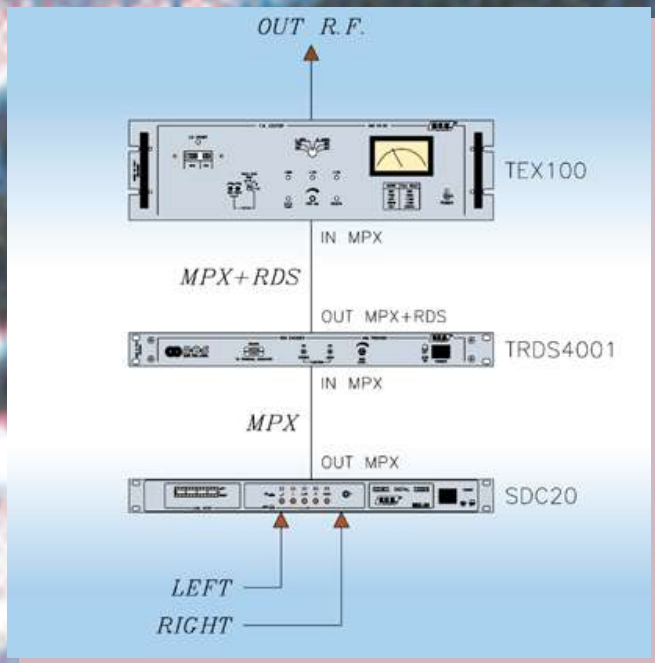
- 1 Facilità di programmazione tramite l'uso di un Personal Computer mediante una porta seriale standard RS232
- 2 Lingua di programmazione selezionabile: Italiano o Inglese
- 3 Servizi standard EBU disponibili:  
**PI:** Program Identification  
**PS:** Program Service  
**PTY:** Program Type  
**TP:** Traffic Program Identification  
**TA:** Traffic Announcement  
**AF:** Alternative Frequencies  
**M/S:** Music/Speech  
**PIN:** Program Item Number  
**RT:** Radio Text  
**EON:** Enhanced Other Networks  
**TDC:** Transparent Data Channel  
**IH:** In-house Application
- 4 Capacità di trasmettere nell'arco della giornata 8 messaggi formati da 16 parole di 8 caratteri ciascuna (comprese data e ora)
- 5 Possibilità di avere le Frequenze Alternative così suddivise:  
**Metodo A:** 8 Liste da 25 Frequenze o 10 Liste da 23 Frequenze o 16 Liste da 15 Frequenze o 32 Liste da 7 Frequenze  
**Metodo B:** 8 Liste da 12 Frequenze o 10 Liste da 11 Frequenze o 16 Liste da 7 Frequenze o 32 Liste da 3 Frequenze (compresa la capolista)
- 6 Funzioni di data, ora, utilizzata per la messa in onda dei diversi messaggi
- 7 Aggancio automatico in fase con il tono pilota 19KHz del coder stereo
- 8 Predisposizione per l'alimentazione esterna 24Vdc
- 9 Disponibile anche nella versione per la ricezione dei segnali via satellite con commutazione automatica del segnale tra la stazione terrestre e la stazione satellitare

### TRDS 4001 Caractéristiques:

- 1 Programmation facile par PC à travers la porte sérielle RS232
- 2 Possibilité de sélectionner la langue de programmation: Anglais ou italien
- 3 Services standard EBU disponibles:  
**PI:** Program Identification  
**PS:** Program Service  
**PTY:** Program Type  
**TP:** Traffic Program Identification  
**TA:** Traffic Announcement  
**AF:** Alternative Frequencies  
**M/S:** Music/Speech  
**PIN:** Program Item Number  
**RT:** Radio Text  
**EON:** Enhanced Other Networks  
**TDC:** Transparent Data Channel  
**IH:** In-house Application
- 4 Le système peut transmettre 8 messages composés de 16 mots (8 caractères par mot) par jour (y compris la date et l'heure)
- 5 Méthodes pour avoir des fréquences alternatives:  
**Méthode A:** 8 listes de 25 fréquences, 10 listes de 23 fréquences, 16 listes de 15 fréquences ou 32 listes de 7 fréquences.  
**Méthode B:** 8 listes de 12 fréquences, 10 listes de 11 fréquences, 16 listes de 7 fréquences, ou 32 listes de 3 fréquences (y compris la tête de liste)
- 6 Indication de la date et de l'heure lors de l'émission des messages
- 7 Accrochage automatique de la fréquence en phase avec le ton pilote 19KHz du codeur stéréo
- 8 Predisposition pour Alimentateur externe 24Vdc
- 9 Disponible également dans la version qui permet de recevoir des signaux par satellite avec commutation automatique du signal entre la station terrestre et la station satellitaire



**Example with internal stereo coder**



**Example with external stereo coder**

## TECHNICAL SPECIFICATIONS **TRDS 4001**

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• RDS Signal: meets CENELEC EN 50067 specification</li> <li>• Coding type: Differential at two levels</li> <li>• Modulation type: DSB with suppressed carrier</li> <li>• Frequency: 57 KHz</li> <li>• Band: ± 2.4KHz</li> <li>• MONO/MPX Input: 0/+12 dBu</li> <li>• Outputs: MPX+RDS / RDS</li> <li>• MONO/MPX Output Level: Equal to Input MPX (+ RDS)</li> <li>• RDS Output Level: 500 - 2200 mVpp</li> <li>• Output Impedance: 100 Ohm</li> <li>• RDS Messages: 8 messages of 16 words each (8 characters for each word) activated automatically at established times. Permanence Time of the word on variable from 2 to 60 seconds</li> <li>• Alternative Frequencies: <b>Method A:</b> 8 lists of 20 frequencies or 10 lists of 23 frequencies or 16 lists of 15 frequencies or 32 lists of 7 frequencies. <b>Method B:</b> 8 lists of 12 frequencies or 16 lists of 7 frequencies or 32 lists of 3 frequencies (head-list included)</li> </ul> | <ul style="list-style-type: none"> <li>• Message Setting: With user friendly multi-languages (English or Italian) dedicated Software by PC</li> <li>• ON-AIR Programming: With dedicated Software</li> <li>• Data Port: RS232 Standard</li> <li>• Baud Rate: 1200 Baud</li> <li>• Connector: 9 Pin D-Type Female connector</li> <li>• Message Management: Microprocessor-controlled system</li> <li>• Lifetime: 10 years without mains voltage</li> <li>• Working Temperature: from -10°C to 50°C</li> <li>• Mains voltage: 110-220 Vac, 50-60 Hz or 24Vdc with external battery</li> <li>• Consumption: 15 VA</li> <li>• Rack Dimensions: Rack 19", 1HE (483 x 44 x 280 mm)</li> <li>• Weight: 3.5 Kg.</li> </ul> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Options** or 10 lists of 11 frequencies

- /M Mono Input option
- /03 External 24V Battery option
- /SAT Satellite Input option



RVR Elettronica SpA Via del Fonditore 2/2c  
 Zona Ind.Roveri 40138 Bologna Italy  
 Phone +39 051 6010506  
 FAX +39 051 6011104  
 e-mail: info@rvr.it - Web: http://www.rvr.it

Revision: 04/2001

Printed: 04/2001

## AMPLIFIERS • TRANSMITTERS • ANTENNAS • ACCESSORIES

These specifications are therefore subject to change without notice. Per esigenze tecnico-costruttive ci riserviamo il diritto di apportare varianti ai prodotti, senza preavviso.