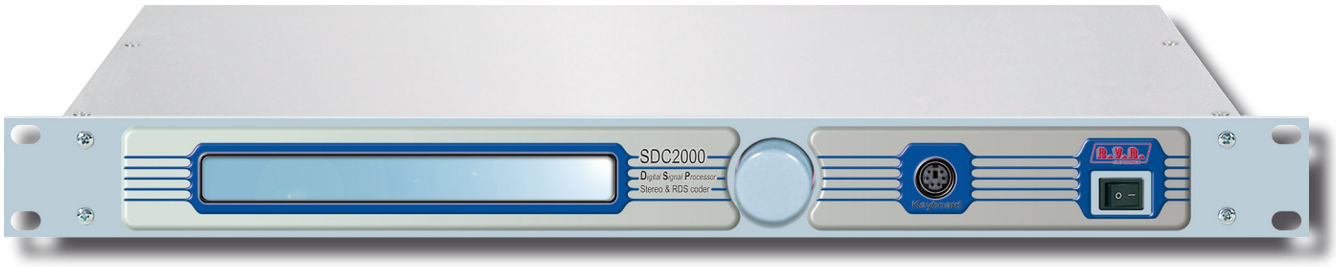
Audio & RDS Equipments

> stereo & RDS coder systems

SDC2000



SDC2000 front view

Features

- **PRIMARY APPLICATION:** the **SDC2000** is a high-performance digital stereo encoder that incorporates all technical features offered by more expensive coders without compromising on quality in this economical device; it combines high DSP-based Digital Stereo performance with an RDS coder.
- **TECHNICAL FEATURES:** The **SDC2000** generates an "MPX" (composite stereo) signal that is processed digitally through an internal DSP (Digital Signal Processing) using the Right and Left digital inputs; this ensures:
  – High signal-to-noise ratio (S/N, higher than 80 dB) and high fidelity of stereophonic signal.
  – High stereophonic separation throughout the frequency range (higher than 65 dB).
- **INPUT/OUTPUT INTERFACE:** the digital input/output section supports S/PDIF, AES/EBU (sampling frequencies from 32 to 96 KHz) and EIAJ CP340/1201 data format.
  The analogue input/output section supports two buffered MPX outputs, each with independent levels, maintain best stereo separation even when load is as low as 50 Ohm.
- **INTERFACE CONTROL:** total control thanks to microprocessor easily programmed from menu with all key parameters displayed on LCD.
- **AUDIO FEATURE:** optionally enables isofrequency operation (SFN, Single Frequency Networks).
  It implements a supplemental technology that uses a delay on all inputs (Left, Right, MPX and AES/ EBU) to provide optimised frequency planning as well as an integrated GPS (that enables 1 ppm synchronisation on pilot frequency and delays).
- **HARDWARE FEATURES:** the system housed in lightweight and rugged stainless steel rack cases having the dimension of 1 HE.

Caratteristiche

- ***PRIMARY APPLICATION:*** *il* ***SDC2000*** *è un codificatore stereo digitale ad alte prestazioni che integra in un sistema economico tutte le caratteristiche tecniche di coder più costosi, senza compromettere la qualità; unisce alte prestazioni Stereo Digitali basate su DSP con un coder RDS.*
- ***TECHNICAL FEATURES:*** *Il* ***SDC2000*** *genera un segnale "MPX" (Stereo Composito) direttamente in formato digitale attraverso un circuito DSP "Digital Signal Processing" (elaborazione digitale di segnale) utilizzando gli ingressi digitali Destro e Sinistro; questo garantisce:*
  – Massimo rapporto tra segnale e rumore S/N (superiore a 80 dB) e fedeltà nel segnale stereofonico.
  – Massima separazione stereofonica in tutta la gamma di frequenze (superiore a 65 dB).
- ***INPUT/OUTPUT INTERFACE:*** *La sezione degli ingressi/uscite digitali comprende il supporto di S/PDIF, AES/EBU (frequenze di campionamento da 32 a 96 KHz) e formato dei dati EIAJ CP340/ 1201.*
  La sezione degli ingressi/uscite analogiche presenta due uscite MPX bufferizzate, ciascuno con livelli indipendenti, che permettono di tenere una separazione stereofonica ottimale anche con carichi bassi quanto 50 Ohm.
- ***INTERFACE CONTROL:*** *controllo completo basato su microprocessore e da menu con lettura su display LCD di tutti i parametri principali.*
- ***AUDIO FEATURE:*** *opzionalmente consente di lavorare in isofrequenza (reti SFN, cioè Single Frequency Network).*
  implementa tecnologia supplementare che permette di ottimizzare la pianificazione delle frequenze grazie agli adattatori dinamici di ritardo su tutte le entrate (Sinistro, Destro, MPX ed AES/ EBU) ed il GPS integrato (che permette 1ppm di sincronizzazione sulla portante).
- ***HARDWARE FEATURES:*** *il sistema è realizzato in un contenitore rack in acciaio inox incredibilmente leggero e robusto in dimensioni di 1 HE.*

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Technical specifications

Parameter		SDC2000 Value
GENERALS		
Overall Dimensions	L x H x W	483 x 44 x 407 mm
Weight		4 kg
Operating Temperature		From -10 °C to + 50 °C
Operating Humidity		95% non condensing
A/D & D/A conversion		24 bit
DSP elaboration		32 bit, floating point
Sampling Rate		From 32 to 96 KHz
Preemphasis		0/50/75 microsec.
Clipper & AGC		Right and Left channel, composite MPX input
RDS function	EN50067	PTY,PTYN,TA,TP,MS,DI,PI,PS,AF,PIN,EON,RT,TDC,TMC,EWS,IH,CT
	Subcarrier frequency	57 KHz ±0.6 Hz (Internal Reference)
	RDS phase	Adjustable up to 360° in 0.33° increments
/SFN option	Delay	Fixed, adjustable up to 10mS in 50nS increments
	Synchronisation	GPS stability ±200nS
	Pilot tone phase	Adjustable in 0.1-degree increments within a range of ±12 degrees
POWER REQUIREMENTS		
AC Power Input	AC Supply Voltage	115 / 230 VAC ±10%, 50 - 60 z
	Connector	VDE IEC Standard
INPUTS		
Left & Right	Connector	XLR (female)
	Impedance	600 / 10k Ω - software selectable
	Maximum input level	Adjustable from +8 to +20 dBu in 0.1 dB increments
MPX unbalanced	Connector	BNC (female)
	Impedance	50 / 10k Ω - software selectable
	Maximum input level	Adjustable from +8 to +20 dBu in 0.1 dB increments
SCA	Connector	2x BNC (female)
	Impedance	10k Ω
	Maximum input level	Adjustable from +8 to +20 dBu in 0.1 dB increments
AES/EBU	Connector	XLR balanced (female)
	Impedance	110 Ω
TOSLINK	Connector	EIAJ optical
OUTPUTS		
MPX, A & B	Connector	3x BNC balanced (male)
	Pilot Tone	19 KHz ±0.1 Hz
	Pilot level	Adjustable from -8 to -32 dBu in 0.1 dB increments
	Pilot phase	Adjustable within a ± 12° range in 0.1° increments
	Stereo separation	70 dB, 30 Hz to 15 kHz
	MPX output noise	-90 dBu
DIGITAL	Connector	RCA unbalanced (male)
	Data Format	S/PDIF (48 kHz)
CONNECTORS		
RS232 serial port	Connector	DB9 (female) to connect coder to external devices
Keyboard interface	Connector	PS/2 (female), for direct connection to standard keyboard
REMOTE input	Connector	DB9 (male) TP, TA, M/S

All pictures are RVR's property and they are only indicative and not binding. The pictures can be modified without notice.
These are general specifications. They show typical values and are subject to change without notice.

CE 99/5/CE **Revision: 05/15**

Ordering Information

Code -Codice	Description - Descrizione
Options for SDC2000 – Opzioni per SDC2000	
/SFN	Isofrequency option for SDC2000. *Opzione di isofrequenza per SDC2000.*