NGT™ *SR* TRANSCEIVER

↗ **FEATURES** AT A GLANCE

- **Innovative handset**
- **Easy installation**
- ***Easitalk* ™**
- **Emergency Selcall**
- **Smart monitoring**
- **High dynamic receive range**
- **Computer control**
- **Voice encryption**
- **Fax, Data, Email & Internet**
- **Remote diagnostics**
- **Automatic Link Establishment (ALE)**
- **Built–In Test Equipment (BITE)**
- **Calling facilities**
- **GPS**

The NGT™ *SR* is a comprehensive solution to your communication needs. While incorporating all the usual features of Codan's leading-edge High Frequency (HF) radio technology, this Transceiver also features a user-friendly handset, advanced calling features and Easitalk as standard. Extensive Automated Link Establishment (ALE) capabilities, voice encryption, GPS, fax, data and email transmission are optional.

INNOVATIVE HANDSET

The handset can access all programming procedures and provides an advanced interface, efficient operation and easier network management.

The handset supports varied requirements ranging from traditional manual voice operation, to sophisticated ALE-reliant calling procedures.

Users can program channels, functions and addresses into the handset to meet their own requirements. An address book with up to 100 addresses can be easily retrieved via the menu.

EASY INSTALLATION

Every aspect of the NGT™ *SR* has been developed for easy installation and use in both fixed and mobile environments. The unit is small and convenient to mount in any position that makes viewing easier.

EASITALK™

The NGT™ *SR* uses Digital Signal Processing techniques to process received audio signals to minimise the effect of interference and reduce noise.

EMERGENCY SELCALL

The NGT™ *SR* has a unique optional emergency calling facility. A distress signal can be sent automatically to selected stations.

SMART MONITORING

A variety of channels can be monitored while the radio is muted, and calls can be received on any of the channels being scanned.

HIGH DYNAMIC RECEIVE RANGE

The high dynamic range of the NGT™ receiver provides better reception in difficult conditions.

COMPUTER CONTROL

The NGT™ *SR* can be controlled by a computer through an RS232 port. This assists with paging, GPS tracking and logging, and other automated applications.

VOICE ENCRYPTION

The optional *Voice Encryptor* provides communication security (COMSEC) and enables users to communicate sensitive information in confidence without complicated setup procedures. It also provides visual confirmation that the conversation is secure.

FAX, DATA, EMAIL & INTERNET

The NGT™ *SR* is designed for both voice and data applications. With Codan's optional UUPlus™ email software, a highly efficient email network can be set up using the 3012 HF Data Modem.

REMOTE DIAGNOSTICS

With Remote Diagnostics your radio installation can be tested remotely by another station to measure parameters such as signal strength, battery voltage levels and power. It is also possible to reconfigure most Transceiver parameters and disable the Transceiver.

AUTOMATIC LINK ESTABLISHMENT (ALE)

To automatically select the most suitable channel, ALE is available as an option. CODAN™ ALE provides full interoperability with other equipment compliant with FED-STD-1045 ALE.

In addition, CODAN™ Transceivers outperform many conventional ALE systems through the use of Codan Automated Link Management (CALM™).

CALM™ provides the following additional capabilities:

- Multiple networks can be scanned simultaneously at a scan rate of 8 channels per second. This enables up to 3 times more channels to be scanned in the same time as other ALE systems.

- A profile of channel characteristics is developed over time using a 24 hour based Link Quality Analysis (LQA) database, which has over 7 times more storage capacity and uses a higher data resolution than conventional ALE systems. This significantly reduces sounding activities and enables the Transceiver to select a suitable channel at any time of the day from the moment it is switched on.

- The Listen-Before-Transmit capability detects both voice and ALE activities on the channel before initiating ALE. This avoids interfering on channels that are engaged.

BITE

Built-In Test Equipment (BITE) is a process that can be initiated by the user to test and report on of the system's performance.

CALLING FACILITIES

The NGT™ *SR* has Selcall, Phone call and Message call capabilities. All incoming calls are time-stamped to identify precisely when each call arrived.

Selcall: Enables an operator can call a single Transceiver and only that unit will respond—no more listening to noise while waiting for a call. The called Transceiver will also signal that the call or message has been received.

Phone call: Enables the Transceiver to make telephone calls via suitable bases equipped with a telephone interconnect.

Message call: Enables you to send or receive text messages of up to 64 characters; an external computer is not required. Messages can be encrypted and successful transmissions will be confirmed.

GPS

An optional GPS satellite receiver can be connected to the Transceiver via an RS232 port. This enables a live display of your current GPS position by latitude and longitude, transmission of your position to another unit, and the ability to request another unit's position.

When used with tracking software, the GPS option provides a complete tracking system to enhance safety. In addition, a security PIN can be used to scramble GPS data so that positions are available only to authorised users.

SPECIFICATIONS

Frequency range	Transmit: 1.6 to 30 MHz, Receive: 250 kHz to 30 MHz	
Channel capacity	400 channels	
Operating mode	Single sideband (J3E, USB, LSB, AM, CW)	
Frequency stability	±0.3 ppm (−30 to +60°C)	
Primary voltage	12 V DC nominal, negative earth	
Primary power	Receive (no signal):	0.7 A
	Transmit:	J3E voice: 6 A
		J3E two-tone: 10–14 A
Receiver sensitivity	−125 dBm (10 dB SINAD)	
Transmitting power output	125 watts PEP	
Spurious & harmonic emissions	Better than 65 dB below PEP	
Temperature	−30 to +60°C	
Size & weight	2011 RF Unit:	210 W x 270 D x 65 H mm; 3.3 kg
	2020 Handset:	65 W x 35 D x 130 H mm; 0.3 kg
	2030 Junction Box:	135 W x 117 D x 38 H mm; 0.4 kg
ALE link quality data	24 hours of up to 100 stations and 100 channels using a total of 72675 discrete sets of LQA data	
ALE link quality data resolution	Local:	8 bits SINAD, 8 bits BER
	Remote:	5 bits SINAD, 5 bits BER
Dust, Vibration, Shock	MIL-STD-810F method 510.4, method 514.5, method 516.5	
Computer interface	RS232, 300 to 19200 baud	
GPS interface	NMEA-0183 (4800 baud, RS232)	

OPTIONS / ACCESSORIES

Option	Purpose
CALM™	FED-STD-1045 ALE / CALM™
F	Fan for continuous data transmission
GPS	GPS interface
NBF	Narrow Band Filter (500 Hz)
WBF	Wide Band Filter
COMSEC	*Voice Encryptor*

Values noted are typical. Equipment descriptions and specifications subject to change without notice or obligation.

RADIO COMMUNICATIONS

CODAN