NGT™ *AR VOICE* TRANSCEIVER

↗ **FEATURES** AT A GLANCE

- **Innovative handset**
- **Easy installation**
- **Easitalk ™**
- **RFDS Emergency Tone call**
- **Smart monitoring**
- **High dynamic receive range**
- **Voice encryption**
- **Remote diagnostics**
- **Testing & protection**
- **Automatic Link Establishment (ALE)**
- **Built–In Test Equipment (BITE)**
- **Calling facilities**
- **GPS**

The NGT™ *AR Voice* provides reliable High Frequency (HF) communication and is specially designed for easy installation and mobile use in vehicles. While incorporating Codan's leading-edge HF radio technology, this Transceiver also features a user-friendly handset, advanced calling features and *Easitalk™* as standard. Extensive Codan Automated Link Establishment (ALE) capabilities (where permitted) and GPS are optional.

INNOVATIVE HANDSET

The handset can access all programming procedures in a convenient and consistent manner. It provides an advanced interface, more 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™ *AR Voice* 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™ *AR Voice* uses Digital Signal Processing techniques to process received audio signals to minimise the effect of interference and reduce noise. *Easitalk™* is simple to operate and extensive testing has shown that its performance is not affected by the language or dialect of the user.

RFDS EMERGENCY TONE CALL

The NGT™ *AR Voice* has an 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.

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.

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.

TESTING AND PROTECTION

All CODAN™ Transceivers are fully protected from faults such as antenna damage, overvoltage and reverse polarity, which can destroy other transceivers. A three year warranty is available to every registered user.

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 and is compliant with Chinese ALE implementations.

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™ *AR Voice* has Selcall, Emergency 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.

Emergency Selcall: The NGT™ *AR Voice* has a unique optional emergency calling facility that enables a distress signal to be sent automatically to selected stations.

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)
Transmitting power output	100 watts PEP
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
Temperature	−30 to +60°C
Size and weight	**2011 RF Unit:** 210 mm W x 270 mm D x 65 mm H; 3.3 kg **2020 Handset:** 65 mm W x 35 mm D x 130 mm H; 0.3 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
GPS interface	NMEA-0183 (4800 baud, RS232)

OPTIONS / ACCESSORIES

Option	Purpose
CALM™	FED-STD-1045 ALE / CALM™
E	Emergency call
COMSEC	*Voice Encryptor*
GPS	GPS interface

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

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