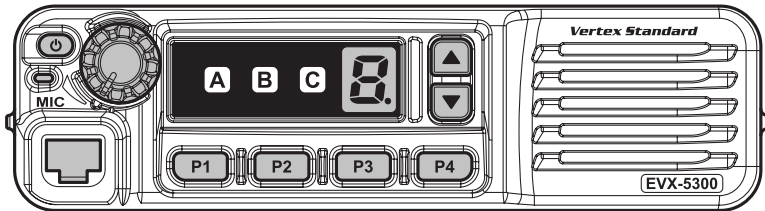


Vertex Standard

EVX-5300

OPERATING MANUAL



PROGRAMMABLE FUNCTIONS/FEATURES

- 6 Programmable Function Keys
 - 2-Tone Encode/Decode*
 - 5-Tone Encode/Decode*
 - MDC-1200® Encode/Decode*
 - Horn Alert
 - PA (Public Address)
 - Scan
 - Dual Watch
 - FM-Scan (Follow-Me Scan)
 - TA Scan
 - Privacy
 - Encryption*
 - VOX
 - Talk Around
 - Emergency
 - Lone Worker
 - TX Save Disable
 - ARTS™/ARTSII™ (Auto Range Transpond System)
- *: Analog mode only

Congratulations!

You now have at your fingertips a valuable communications tool: a Vertex Standard two-way radio! Rugged, reliable and easy to use, your Vertex Standard radio will keep you in constant touch with your colleagues for years to come, with negligible maintenance downtime.

Please take a few minutes to read this manual carefully. The information presented here will allow you to derive maximum performance from your radio.

We're glad you joined the Vertex Standard team. Call on us anytime, because communications is our business. Let us help you get your message across.

NOTICE !

There are no owner-serviceable parts inside the transceiver. All service jobs must be referred to an authorized Vertex Standard Service Representative. Consult your Authorized Vertex Standard dealer for installation of optional accessories.

SAFETY/WARNING INFORMATION

WARNING - DO NOT operate the **EVX-5300** radio when any person(s) (bystanders) outside the vehicle are within the distances shown in the chart at the bottom of this section.

Safety Training information:

Antennas used for this transmitter must not exceed an antenna gain of 0 dBi. The radio must be used in vehicle-mount configurations with a maximum operating duty cycle not exceeding 50 %, in typical Push-to-Talk configurations.

This radio is restricted to occupational use, work related operations only where the radio operator must have the knowledge to control the exposure limits of passengers and bystanders by maintaining the minimum separation distance shown below.

Failure to observe these restrictions will result in exceeding the FCC RF exposure limits.

Antenna Installation:

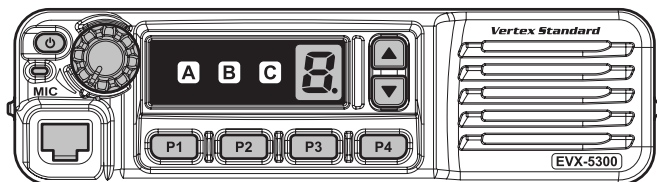
For rear deck trunk installation, the antenna must be located at least the following distance away from rear-seat passengers in order to comply with the FCC RF exposure requirements.

For roof top installations, the antenna must be placed in the center of the roof.

Unsafe Radiation Distance

VHF Model	UHF Model
2.9 Feet (0.89 m)	2.36 Feet (0.72 m)

INTRODUCTION



The **EVX-5300** is full-featured Digital/Analog transceiver designed for flexible mobile and base station business communications in the VHF/UHF Land Mobile bands. This transceiver designed for reliable business communications in a wide variety of applications with a wide range of operating capability provided by their leading-edge design.

The **EVX-5300** operates using the TDMA protocol for spectrum and power efficiency and lower total equipment cost compared to FDMA. Digital eliminates noise and static from voice transmit to only deliver the intended voice message crisply and clearly. The **EVX-5300** feature the AMBE+2™ vocoder for enhanced voice quality.

This transceiver allows up to 8 memory channels. Important channel frequency data is stored in the flash memory on the CPU, and is easily programmable by a Vertex Standard licensed dealers using a personal computer with Vertex Standard Programming equipment **FIF-12** USB Programming Interface and **CT-104A** Connection Cable for **FIF-12** and **CE142** Software. Or, once programmed, cloning cable **CT-4** can be used to program portable to portable directly.

The pages which follow will detail the many advanced features provided in the **EVX-5300** Series transceiver. After reading this manual, you may wish to consult with your Network Administrator regarding precise details of the configuration of this equipment for use in your application.

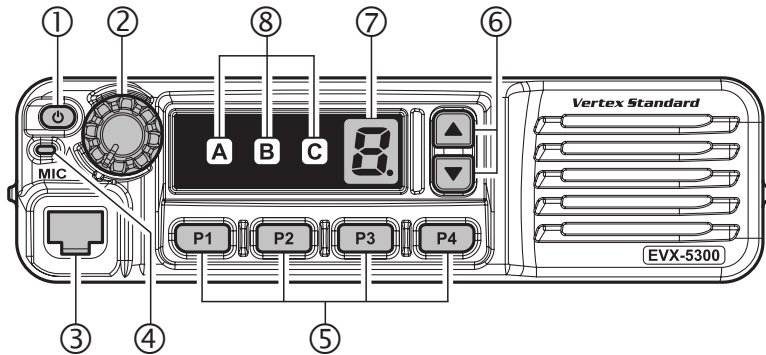
For North American Users Regarding 406 MHz Guard Band

The U.S. Coast Guard and National Oceanographic and Atmospheric Administration have requested the cooperation of the U.S. Federal Communications Commission in preserving the integrity of the protected frequency range 406.0 to 406.1 MHz, which is reserved for use by distress beacons. Do not attempt to program this apparatus, under any circumstances, for operation in the frequency range 406.0 - 406.1 MHz if the apparatus is to be used in or near North America.

CONTROLS & CONNECTORS

Front Panel

Important! - All buttons located on the Front Panel are Programmable Function (PF) keys, configured according to your network requirements and programmed by your Vertex Standard dealer. The instructions below describe a typically-configured radio.



① PWR (⏻) Button

Press and hold in this button for 2 seconds to toggle the transceiver's power "on" and "off".

② VOL Knob

Turn this control clockwise to increase the volume.

③ Microphone Jack

Connect the microphone plug to this jack.

④ TX/BUSY Indicator

Indicates transceiver's Transmit/Receive Status.

⑤ [P1] - [P4] Keys (Programmable Function Keys)

These keys can be set up for special applications, such as High/Low power selection, Monitor, Talk-Around, etc., as determined by your network requirements and programmed by your Vertex Standard dealer.

⑥ [▼]/[▲] Keys (Programmable Function Keys)

In the factory default, pressing either key changes the current channel.

CONTROLS & CONNECTORS

⑦ Channel Number Indicator

Indicates the operating channel.

⑧ Transceiver Status Indicator

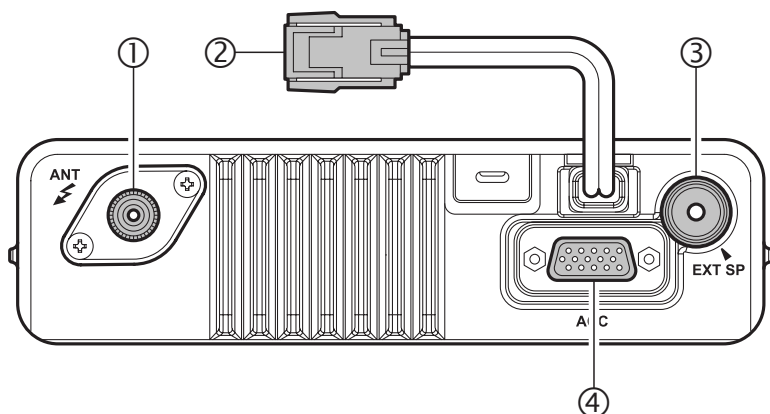
The “**A**”, “**B**”, and “**C**” indicators show current transceiver status, which can be customized via programming by your Vertex Standard dealer to meet your communications/network requirements. The possible these indicators are explained below.

TRANSCEIVER STATUS INDICATOR

STATUS	INDICATOR			DESCRIPTION
	A	B	C	
MONI				This indicator is illuminated constantly when the signaling feature is disabled. The indicator blinks while the audio is passing normally.
SCAN CH				Illuminates the indicator when the scan enabled channel is recalled
Low Power				Illuminates the indicator when the radio's transmitter is set to the “Low Power” mode
TA (Talk Around)				Illuminates the indicator when the “Talk Around” function is activated.
Privacy (Digital) Encryption (Analog)				Illuminates the indicator when the “Privacy” (Digital mode) or “Voice Scrambler” (Analog mode) function is enabled.
Emergency				Illuminates the indicator when the “Emergency” feature is activated.
Horn Alert				Illuminates the indicator when the “Horn Alert” feature is activated.
PA (Public Address)				Illuminates the indicator when the radio is turned to a PA amplifier.
Lock				Illuminates the indicator when the “Lock” feature is activated.
ACC2				Illuminates the indicator when the output port “2” on the Accessory Connector is turned to “ON”.
RFC				Illuminates the indicator when the radio is in the “Ready for Communication” condition while operating with the 2-Tone or 5-Tone signaling.

CONTROLS & CONNECTORS

Rear Panel



① Antenna Jack

The 50-Ohm coaxial feedline to the antenna must be connected here, using a mini-UHF plug.

② 13.6V DC Cable Pigtail with Connector

The supplied DC power cable must be connected to this 2-pin connector. Use only the supplied fused cable, extended if necessary, for power connection.

⚠ Replace only with the same or equivalent type fuse.

③ External Speaker Jack

An external loudspeaker may be connected to this 2-contact, 3.5-mm mini-phone jack.

Caution: Do not connect either wire of this line to ground, and be certain that the speaker has adequate capability to handle the audio output (12 W) from the radio.


④ D-Sub 15-Pin Accessory Connector

External TX audio line input, PTT (Push To Talk), Squelch, and external RX audio line output signals may be obtained from this connector for use with accessories such as data transmission/reception modems, and external Channel control input etc.

BASIC OPERATION

Important! - Before turning on the radio the first time, confirm that the power connections have been made correctly and that a proper antenna is connected to the antenna jack.

Switching Power ON/OFF

- ❑ Press and hold in the **PWR**() button for 2 seconds to turn the radio on. The channel number indicator will indicate the operating channel.
- ❑ Press the [**▼**]/[**▲**] key to choose the desired operating channel. The radio announces the channel number, if the Channel Announcement Feature is enabled via the clone editor software.

Setting the Volume

- ❑ Turn the **VOL** knob clockwise to increase the volume, and counterclockwise to decrease it.

Transmitting

- ❑ To transmit, monitor the channel and make sure it is clear.
- ❑ Press the **PF** key which is programmed to the Monitor feature to listen for channel activity.
- ❑ When receiving a call, transmit only after the incoming call ends. The radio cannot receive a call and transmit simultaneously.
- ❑ Press the **PTT** switch.
- ❑ If the channel is clear, the **TX/BUSY** indicator will glow red (on the Analog Channel) or blue (on the Digital Channel). The radio is now transmitting. While holding in the **PTT** switch, speak across the face of the microphone in a clear and normal voice. For best transmission, hold the microphone about 1-1/2 to 2 inches (4 ~ 5 cm) away from your mouth. Release the **PTT** switch to receive.
- ❑ If the BCLO (Busy Channel Lockout) feature has been programmed on an *analog channel*, the radio will not transmit when a carrier is present. Instead, the radio will generate short beep three times. Release the **PTT** switch and wait for the channel to be clear of activity.
- ❑ If the BTLO (Busy Tone Lockout) feature has been programmed on an *analog channel* or CCLO (Color Code Lockout) feature has been programmed on a *digital channel*, the radio can transmit only when there is no carrier being received or when the carrier being received includes the correct tone (CTCSS tone or DCS code) on an *analog channel* or correct code on a *digital channel*.

BASIC OPERATION

Transmit Time-Out Timer

If the selected channel has been programmed for automatic time-out, you must limit the length of each transmission. While transmitting, a beep will sound 10 seconds before time-out. Another beep will sound just before the deadline; the red “**TX**” indicator will disappear and transmission will cease soon thereafter. To resume transmitting, you must release the **PTT** switch and wait for the “penalty timer” to expire (if you press the **PTT** switch before this timer expires, the timer restarts, and you will have to wait another “penalty” period).

Key Lock

In order to prevent accidental operating function/feature change or inadvertent transmission, various aspects of the front panel’s keys may be locked out.

To activate the Locking feature, press and hold in the [**P1**] key while turning the radio on. To disable the Locking feature, repeat this power-on procedure.



ADVANCED OPERATION

Programmable Function (PF) Keys

The **EVX-5300** Series includes six Programmable Function (**PF**) keys. These **PF** keys can be customized, via programming by your Vertex Standard dealer, to meet your communications/network requirements.

The possible **PF** key programming features are illustrated on the next page, and these functions are explained beginning after page 8. For further details, contact your Vertex Standard dealer.

In this chapter, the following icons are used to indicate features supported in either the “Analog” mode or “Digital” mode:

-  Indicates a “Analog” mode only feature.
-  Indicates a “Digital” mode only feature.

For features that are available in both “Analog” and “Digital” modes, no icon is shown.

For future reference, check the box next to each function that has been assigned to the **PF** key on your particular radio, and keep it handy.

ADVANCED OPERATION

FUNCTION	PROGRAMMABLE KEY (PRESS KEY/PRESS & HOLD KEY)						MICROPHONE KEY (PRESS KEY/PRESS & HOLD KEY)					
	P1	P2	P3	P4	▲	▼	A	B	C	D	*	#
None	/	/	/	/	/	/	/	/	/	/	/	/
Monitor	/	/	/	/	/	/	/	/	/	/	/	/
Monitor -Momentarily-	/-	/-	/-	/-	/-	/-	/-	/-	/-	/-	/-	/-
Lamp	/	/	/	/	/	/	/	/	/	/	/	/
Low Power	/	/	/	/	/	/	/	/	/	/	/	/
Privacy / Encryption	/	/	/	/	/	/	/	/	/	/	/	/
SQL OFF	/	/	/	/	/	/	/	/	/	/	/	/
SQL OFF -Momentarily-	/-	/-	/-	/-	/-	/-	/-	/-	/-	/-	/-	/-
Beep Off	/	/	/	/	/	/	/	/	/	/	/	/
AF Minimum Volume	/	/	/	/	/	/	/	/	/	/	/	/
CH Announcement	/	/	/	/	/	/	/	/	/	/	/	/
Whisper	/	/	/	/	/	/	/	/	/	/	/	/
VOX	/	/	/	/	/	/	/	/	/	/	/	/
VOX Anti-Trip	/	/	/	/	/	/	/	/	/	/	/	/
Horn Alert	/	/	/	/	/	/	/	/	/	/	/	/
PA (Public Address)	/	/	/	/	/	/	/	/	/	/	/	/
EXT ACC 1	/-	/-	/-	/-	/-	/-	/-	/-	/-	/-	/-	/-
EXT ACC 2	/	/	/	/	/	/	/	/	/	/	/	/
Emergency	/-	/-	/-	/-	/-	/-	/-	/-	/-	/-	/-	/-
Lone Worker	/	/	/	/	/	/	/	/	/	/	/	/
CH Up	/	/	/	/	/	/	/	/	/	/	/	/
CH Down	/	/	/	/	/	/	/	/	/	/	/	/
PRI-2 Set	/	/	/	/	/	/	/	/	/	/	/	/
PRI-2 Disable	/	/	/	/	/	/	/	/	/	/	/	/
PRI-2	/	/	/	/	/	/	/	/	/	/	/	/
Direct CH 1	/	/	/	/	/	/	/	/	/	/	/	/
Direct CH 2	/	/	/	/	/	/	/	/	/	/	/	/
Direct CH 3	/	/	/	/	/	/	/	/	/	/	/	/
Direct CH 4	/	/	/	/	/	/	/	/	/	/	/	/
Scan	/	/	/	/	/	/	/	/	/	/	/	/
Dual Watch	/	/	/	/	/	/	/	/	/	/	/	/
FM Scan (Follow-Me Scan)	/	/	/	/	/	/	/	/	/	/	/	/
SCAN Set	/	/	/	/	/	/	/	/	/	/	/	/
TA Scan	/	/	/	/	/	/	/	/	/	/	/	/
Talk Around (TA)	/	/	/	/	/	/	/	/	/	/	/	/
RESET	/	/	/	/	/	/	/	/	/	/	/	/
Call 1	/	/	/	/	/	/	/	/	/	/	/	/
Call 2	/	/	/	/	/	/	/	/	/	/	/	/
Call 3	/	/	/	/	/	/	/	/	/	/	/	/
Call 4	/	/	/	/	/	/	/	/	/	/	/	/
Call 5	/	/	/	/	/	/	/	/	/	/	/	/
Speed Dial	/	/	/	/	/	/	/	/	/	/	/	/
Call	/	/	/	/	/	/	/	/	/	/	/	/
Duty	/	/	/	/	/	/	/	/	/	/	/	/
TX Save Disable	/	/	/	/	/	/	/	/	/	/	/	/
Lock	/	/	/	/	/	/	/	/	/	/	/	/

ADVANCED OPERATION

Description of Operating Functions

MONITOR

Press (or press and hold) the assigned **PF** key to cancel any signaling features.

MONITOR -MOMENTARILY-

Cancel any signaling features while pressing the assigned **PF** key.

LAMP

Press (or press and hold) the assigned **PF** key to toggle the back light of the keypad “On” and “Off”.

LOW POWER

Press (or press and hold) the assigned **PF** key to set the radio’s transmitter to the “Low Power” mode. Press (or press and hold) the **PF** key again to return to “High Power” operation when in difficult terrain.

When the radio’s transmitter is set to “Low Power” mode, the Transceiver Status Indicator (“**A**”, “**B**” or “**C**”) will illuminate, if the “**Low Power**” status is assigned to one of the Transceiver Status Indicator.

PRIVACY

Press (or press and hold) the assigned **PF** key to toggle the Privacy feature “On” and “Off”. The Privacy feature initiates an encryption algorithm that will protect your communication from unauthorized eavesdropping.

When the Privacy feature is activated, the Transceiver Status Indicator (“**A**”, “**B**” or “**C**”) will illuminate, if the “**Privacy**” status is assigned to one of the Transceiver Status Indicator.

ENCRYPTION

When the Voice Scrambler feature is enabled, press (or press and hold) the assigned **PF** key to toggle the voice encryption “On” and “Off”.

When the Voice Scrambler feature is activated, the Transceiver Status Indicator (“**A**”, “**B**” or “**C**”) will illuminate, if the “**Encryption**” status is assigned to one of the Transceiver Status Indicator.

SQL OFF

Press (or press and hold) the assigned **PF** key to open the SQL to hear background noise (unmute the audio).

ADVANCED OPERATION

SQL OFF -MOMENTARILY-

Opens the SQL to hear background noise (unmute the audio) while pressing the assigned **PF** key.

BEEP OFF

Press (or press and hold) the assigned **PF** key to disable the radio beeps and the channel announcement (if activated) temporarily. Again press (or press and hold) the assigned **PF** key to enable the radio beeps and the channel announcement.

AF MINIMUM VOLUME

Press (or press and hold) the assigned **PF** key to reduce the audio output to the (lower) level programmed by your Vertex Standard dealer.

CH ANNOUNCEMENT

Press (or press and hold) the assigned **PF** key to select the channel change confirmation between “beep” and “announcement”.

WHISPER

Press (or press and hold) the assigned **PF** key to increase the microphone gain; thus you can speak in a low voice (whisper) temporarily. Again press (or press and hold) the assigned **PF** key to resume normal microphone gain.

VOX

Press (or press and hold) the assigned **PF** key to turn the VOX function “On” or “Off”. You may disable the VOX function temporarily by pressing the **PTT** switch.

VOX ANTI-TRIP

Press (or press and hold) the assigned **PF** key to toggle the VOX Anti-Trip feature “On” and “Off”. When the VOX Anti-Trip feature is set to “On”, the transceiver does not activate the transmitter section from the receiver audio and own beep sound.

HORN ALERT

Press (or press and hold) the assigned **PF** key to turn the Horn Alert function “On” or “Off”. If you receive a call from the base station with the signaling, horn alert will be activated and your vehicles horn will sound.

When the Horn Alert function is activated, the Transceiver Status Indicator (“**A**”, “**B**” or “**C**”) will illuminate, if the “**Horn Alert**” status is assigned to one of the Transceiver Status Indicator.

ADVANCED OPERATION

PA (PUBLIC ADDRESS)

Press (or press and hold) the assigned **PF** key to use the transceiver as a PA amplifier. The Public Address can be used even while scanning and receiving a call.

When the Public Address function is activated, the Transceiver Status Indicator (“**A**”, “**B**” or “**C**”) will illuminate, if the “**Public Address**” status is assigned to one of the Transceiver Status Indicator.

EXT ACC 1

Activates the output port “1” of the D-Sub 15-pin Accessory Connector while pressing the assigned **PF** key.

EXT ACC 2

Press (or press and hold) the assigned **PF** key to toggle the output port “2” of the D-Sub 15-pin Accessory Connector “On” and “Off”.

EMERGENCY

The **EVX-5300** series includes an “Emergency” feature in either analog or digital modes, which may be useful for alerting another party monitoring on the same frequency as your transceiver’s channel.

Press the assigned **PF** key to initiate an emergency call on the pre-defined channel. For further details contact your Vertex Standard dealer.

When the Emergency feature is activated, the Transceiver Status Indicator (“**A**”, “**B**” or “**C**”) will illuminate, if the “**Emergency**” status is assigned to one of the Transceiver Status Indicator.

LONE WORKER

Press (or press and hold) the assigned **PF** key to toggle the Lone Worker feature “On” and “Off”.

The Lone Worker feature is designed to emit an alarm for 30 seconds when the Lone Worker Timer (programmed by your Vertex Standard dealer) has expired. If the user does not reset the timer by pressing the **PTT** switch, the radio switches to the Emergency mode.

CH UP/DOWN

Press (or press and hold) the assigned **PF** key (generally the [▲]/[▼] key) to select a different channel.

ADVANCED OPERATION

PRI-2 SET

Press (or press and hold) the assigned **PF** key to toggle the current channel to the priority channel 2 “enable” and “disable”.

PRI-2 DISABLE

Press (or press and hold) the assigned **PF** key to disable the priority channel 2 of the group temporarily.

PRI-2

Press (or press and hold) the assigned **PF** key to recall the pre-programmed PRI-2 (Priority-2) Channel directly. This is pre-programmed by your Vertex Standard dealer.

DIRECT CH 1 TO DIRECT CH 4

Press (or press and hold) the assigned **PF** key to recall the pre-programmed channel directly. This is pre-programmed by your Vertex Standard dealer.

SCAN

The Scanning feature is used to monitor multiple channels programmed into the transceiver. While scanning, the transceiver will check each channel for the presence of a signal, and will stop on a channel if a signal is present. **EVX-5300** series can scan both digital and analog frequency programmed channels simultaneously.

To activate scanning:

- Press (or press and hold) the assigned **PF** key to activate scanning.
- The scanner will search the channels of each channel, looking for active ones; it will pause each time it finds a channel on which someone is speaking.
- Press (or press and hold) the assigned **PF** key again to disable scanning. Operation will revert to the programmed revert channel.

Note: Your Vertex Standard dealer may have programmed your radio to stay on one of the following channels if you press the **PTT** switch during the scanning pause:

- “Scan Pause” channel (“Talk Back”)
- “Last Busy” channel
- “Priority-2” channel
- “User Programmed” channel (“Select Channel”)
- “Scan Start” channel

ADVANCED OPERATION

DUAL WATCH

The Dual Watch feature is similar to the SCAN feature, except that only two channels are monitored:

- The current operating channel; and
- The Priority-2 channel.

To activate Dual Watch:

- Press (or press and hold) the assigned **PF** key.
- The scanner will search the two channels; it will pause each time it finds a channel on which someone is speaking.

To stop Dual Watch:

- Press (or press and hold) the assigned **PF** key.
- Operation will revert to the “Dual Watch Start” channel.

FM-SCAN (FOLLOW-ME SCAN)

The FM-Scan feature checks a User-assigned Priority Channel regularly as you scan the other channels. Thus, if only Channels 1, 3, and 5 (of the 8 available channels) are designated for “Scanning,” the user may nonetheless assign Channel 2 as the “User-assigned” Priority Channel via the FM-Scan.

To activate the FM-Scan, first select the channel you want to designate as the “User-Assigned Priority Channel” and press (or press and hold) the assigned **PF** key. Then press (or press and hold) the Channel Up/Down key (generally the [▲]/[▼] key) to recall to the “Scanning Start” channel which has been programmed by your dealer to activate the scanner. When the scanner stops on an “Active” channel, the User-assigned Priority Channel will automatically be checked every few seconds; if activity is found on the User-assigned Priority Channel, the radio will switch between it and the Dealer-Assigned Priority Channel, if any.

SCAN SET

Press (or press and hold) the assigned **PF** key to add/delete the current channel to/from your scanning list.

When you delete channel, the Transceiver Status Indicator (“**A**”, “**B**” or “**C**”) will turn off, if the “**SCAN CH**” status is assigned to one of the Transceiver Status Indicator. To restore a particular channel to your scanning list, press (or press and hold) the assigned **PF** key again; the Transceiver Status Indicator will illuminate, if the “**SCAN CH**” status is assigned to one of the Transceiver Status Indicator.

When the scanner is stopped, you may remove the channel from the scan list temporarily by pressing (or press and holding) this key.

ADVANCED OPERATION

TA SCAN

Press (or press and hold) the assigned **PF** key to toggle the TA (Talk Around) scan feature “On” and “Off.”

While TA scan is enabled, the transceiver will search both the transmit and receive frequencies. When a signal is encountered on the receive frequency, the transceiver will pause until the signal disappears. When a signal is encountered on the transmit frequency, the transceiver will check for activity on the receive frequency every few seconds (interval programmed by your Vertex Standard dealer).

Note: The TA Scan feature does not activate on the Simplex Channel.

TALK AROUND

Press (or press and hold) the assigned **PF** key to activate the Talk Around feature when you are operating on duplex channel systems (separate receive and transmit frequencies, utilizing a “repeater” station). The Talk Around feature allows you to bypass the repeater station and talk directly to a station that is nearby. This feature has no effect when you are operating on “simplex” channels, where the receive and transmit frequencies are already the same.

When the Talk Around feature is activated, the Transceiver Status Indicator (“**A**”, “**B**” or “**C**”) will illuminate, if the “**Talk Around**” status is assigned to one of the Transceiver Status Indicator.

Note that your Vertex Standard may have made provision for “Talk Around” channels by programming “repeater” and “Talk Around” frequencies on two adjacent channels. If so, the key may be used for one of the other Pre-Programmed Functions.

Note: The Talk Around feature does not activate on the Simplex Channel.

RESET

Press (or press and hold) the assigned **PF** key to reset the RFC (Ready for Communication) condition.

CALL 1 TO CALL 5

Press (or press and hold) the assigned **PF** key to send a pre-programmed call signal of the 2-Tone, 5-Tone, MDC1200®, or Digital Call.

ADVANCED OPERATION

SPEED DIAL

Press (or press and hold) the assigned **PF** key to prepare the “Speed Dial” function. Press the **PTT** switch within pre-defined period time of releasing the key to send a pre-defined DTMF tone.

CALL

Press (or press and hold) the assigned **PF** key to send a 2-tone or 5-tone sequential tone.

DUTY

Press (or press and hold) the assigned **PF** key to toggle the Duty function of the 2-tone, 5-tone, MDC1200®, or Digital Call decoder “On” and “Off”.

When the Duty function is set to “On”, the user will always hear (depending on the sub-audio signaling) all traffic on the paging channel. The radio will sound the paging alert when it receives the programmed 2-tone, 5-tone, MDC1200®, or Digital Call code.

When the Duty function is set to “Off”, the user will NOT hear normal radio traffic on the paging channel. The radio will sound the paging alert and unmute only when it receives the programmed 2-tone, 5-tone, MDC1200®, or Digital Call code.

TX SAVE DISABLE

Press (or press and hold) the assigned **PF** key to disable the Transmit Saver, if you are operating in a location where high power is almost always needed.

The Transmit Saver reduces the transmit power when a very strong signal from an apparently nearby station is being received.

LOCK

Press (or press and hold) the assigned **PF** key to lock the various aspects of the front panel’s keys. The precise lockout configuration must be programmed by your Vertex Standard dealer.

ARTS™ (AUTO RANGE TRANSPOND SYSTEM)

This system is designed to inform you when you and another ARTS™-equipped station are within communication range.

During ARTS™ operation, when the radio receives an incoming ARTS™ signal, a short beep will sound. If you move out of range for more than two minutes, your radio senses that no signal has been received; a short triple-beep will sound. If you subsequently move back into communication range, as soon as the other station transmits, a short beep will sound again.

ARTSII™ (AUTO RANGE TRANSPOND SYSTEM)

The ARTSII™ system is enhanced feature of the ARTSII™ which can be finding out the communication range of the radio individually by using the MDC-1200® Encode/Decoder or Digital mode operation.

Note: **EVX-5300** will be able to be decoded by display radios with ARTSII™ enabled, but will not be able to decode the other radios encode signals.

OPTIONAL ACCESSORIES

MH-67A8J	Standard Microphone
MH-75A8J	16-Keypad Microphone
MD-12A8J	Desktop Microphone
MLS-100	External Speaker (12 W Peak Power)
LF-6	Line Filter
CE142	PC Programming Software
CT-4	Programming Cable (Radio to Radio Clone Cable)
FIF-12	USB Programming Interface
CT-104A	Connection Cable for FIF-12 (8-pin DIN ↔ 8-pin Modular)

Availability of accessories may vary; some accessories are supplied standard per local requirements, others may be unavailable in some regions.

Check with your Vertex Standard Dealer for changes to this list.

The AMBE+2™ voice coding Technology embodied in this product is protected by intellectual property rights including patent rights, copyrights and trade secrets of Digital Voice Systems, Inc. This voice coding Technology is licensed solely for use within this Communications Equipment. The user of this Technology is explicitly prohibited from attempting to decompile, reverse engineer, or disassemble the Object Code, or in any other way convert the Object Code into a human-readable form.

U.S. Pat. Nos. #5,870,405, #5,826,222, #5,754,974, #5,701,390, #5,715,365, #5,649,050, #5,630,011, #5,581,656, #5,517,511, #5,491,772, #5,247,579, #5,226,084 and #5,195,166.

DISPOSAL OF YOUR ELECTRONIC AND ELECTRIC EQUIPMENT

Products with the symbol (crossed-out wheeled bin) cannot be disposed as household waste.

Electronic and Electric Equipment should be recycled at a facility capable of handling these items and their waste by products.



In EU countries, please contact your local equipment supplier representative or service center for information about the waste collection system in your country.

NOTICE !

There are no owner-serviceable parts inside the transceiver. All service jobs must be referred to an authorized Vertex Standard Service Representative. Consult your Authorized Vertex Standard Dealer for installation of optional accessories.

Part 15.21: Changes or modifications to this device not expressly approved by Vertex Standard could void the user's authorization to operate this device.



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