



Technical Note TN-705

Firmware upgrade for the Tait Orca 5000 MPT Trunked radios to v4.12

10 April 2002

Applicability

This Technical Note applies to the Tait Orca 5030, 5035 and 5040 portable MPT 1327 Trunked radios.

1. Introduction

What is in this Technical Note

Orca 5000 MPT Trunked firmware v4.12 has been released into production to replace the current firmware (v4.09) being installed in Orca 5000 MPT trunked product.

Version 4.12 resolves some issues raised on v4.09 and earlier firmware versions, and also documents the new Queued calls menu for the Orca 5035 and Orca 5040.

This Trunked firmware release has been implemented from radio serial number 14149515, job 160854, date 9 April 2002.

What does it work with?

This Firmware is only compatible with Tait Orca Programming Application PGM v3.4.0 or later software.

The full version of software with PGM version 3.4.0, Tait Programming Utilities (**TPU version 2.2**) can be downloaded from the worldwide web at www.taitworld.com/support however, this is a 34MB file, and is also available on CD-ROM from Tait Electronics Ltd.

Important installation issues with v3.4.0

Before the new Tait Programming Utilities (**TPU v2.2**) which includes MPT Trunked PGM v3.4.0, Conventional PGM v3.4.0, Calibration v3.4.0, Download and Configuration v3.4.0, and Manuals, is installed, the older versions of TPU already on the computer **MUST** be removed.

The most effective way to accomplish this is to use the TPU v2.1 CD-ROM to remove the old files, then use the TPU v2.2 CD-ROM to install the new files.

Trouble shooting

If any complications arise with updating the Tait Programming Utilities v2.2, please e-mail support@taitworld.com.

2. Resolved Issues

What is new in this release?

The v4.12 Tait Orca 5000 MPT trunked radio firmware resolves the following issues:

- The sub-audible audio filter can be switched off when in test mode. Raised as TIMS 4038
- Allow both CTCSS Receive and DCS Transmit sub-audible tones to be used together on a conventional channel. Raised as TIMS 4429
- Group dialling restrictions was preventing the use of user selectable groups from the preset selector. Raised as TIMS 4430
- 2.5kHz channel spacing enhancement has been implemented into the Orca TOP-B VHF MPT Trunked model radio. This feature is only valid within the frequency range of 150 to 174 MHz, in either the radio's trunked channel blocks or conventional channel mode. Raised as TIMS 5166
- Orca 5040 receive audio was disappearing during calls, also found on other Orca MPT1327 models. Raised as TIMS 5576
- The sub-audible high pass audio filter will be switched off when using conventional channels that do not have CTCSS programmed. Raised on TIMS 5975
- Correct the use of the terms Firmware and Software in the radio. Firmware vX.XX will be displayed on an Orca 5035 or 5040 rather than Radio Software SWR X.XX when the radio user displays the information from the radio's menu. Raised as TIMS 5738
- Allow the assignment of Queue On/Off feature to a function key, a part of the new queued call changes. Raised as TIMS 6184
- Modification to skip menu access screen when call queue is accessed, a part of the new queued call changes. Raised as TIMS 6187

Upgrading an existing radio?

It is imperative when upgrading an Orca 5000 MPT radio to first launch the Calibration PGM and read the radio's calibration data, save this file. Launch the MPT Trunked PGM and read the radio's personality and save this file.

- Using the PGM top menu TOOLS, launch the Download, click Specifications and Read Radio.
- Click Download, browse for the location that you have saved the new Orca 5000 MPT Trunked firmware v4.12, then click Download.
- Follow the dialog box prompts until completion.
- To put the radio into Bootstrap Mode when prompted:

Switch off the radio, depress and hold function button 1 (uppermost on the PTT side of the radio) switch on the radio, then release the function button. The radio will have powered up with a blank display.

- Press 'OK' on the Programming application.
- Upon completion of the upgrade relaunch the Trunked PGM, open and load the radios existing personality and program this into the radio.
- Relaunch the Calibration software and open and load the radios existing data file, program this into the radio.

Upon completion of the upgrade the radio may power up with a fully black display. This indicates the contrast setting is at maximum, to reset this:

Power off the radio, depress and hold the function button 2 (this is the black button immediately above the PTT button on the side of the radio), switch on the radio, then release the function button.

3. Orca 5035 / 5040 Queue changes

Queued call feature changes to the Orca 5035 and Orca 5040

The featured aspect of the v4.12 MPT firmware is the modification of the Queued calls list and how it is accessed from the menu on the Orca 5035 or Orca 5040.

The major change to the operation is that the radio will display QUEUED CALLS and the list can be accessed with only a single long press of the ✓ key.

The Orca 5035 and Orca 5040 now have the option of setting a one-touch function button assignment as Queue calls On/Off, this saves the user the time of accessing the menu, where it can still be accessed.

- To enable the function button assignment on the radio you must set the Call Queuing field in the Call Options page to **Full**.
- When the assigned function button to queue calls is pressed the top left of the display will indicate QUE.
- All subsequent calls to the portable radio will be queued with the display indicating QUEUED CALLS: Y, where Y is the number of queued calls up to a maximum of 20 members.
- To view the queued calls short press the ✓ key and the menu will display CL X/Y (where X is the location in the queue, and Y is the number of queue members) and below this is the identity of the oldest call.
- Use the ◀ or ▶ keys to scroll through the list.
- To call back a queued identity, key the Press-To-Talk button when idle on the queued call.
- To delete the displayed identity long press the key and the next oldest identity will be displayed.
- To escape from the queued calls list but keep the queued list short press the ✕ key which will take you back 1 menu level at a time.
- To delete all queued calls and return to the main idle display long press the ✕ key when on any queued call of the list, until the last identity is removed.
- The 📞 icon will display whenever the portable has any queued calls in its list.

Compliance Issues None, unless a specific firmware version is required by a network provider.

CSO action Upgrade portable radios with known issues that can be resolved with v4.12 firmware.
Inform dealers of v4.12 firmware release.
Upgrade all computers to TPU v2.2 upon receipt of programming software.

4. Issuing authority

Name and position of issuing officer Graham Brenchley
Customer Support Engineer