Technical Note TN-1899c-AN

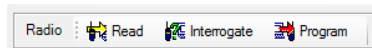# Upgrading TM/TP9300 or TM/TP9400 Radio Firmware

24 August 2016

This Technical Note outlines how to upgrade or downgrade Firmware in the TM/TP9300 DMR or TM/TP9400 APCO P25 platforms. It assumes that the user has the relevant Calibration and Programming applications already installed and have also obtained the required version of Firmware.

Save Configurations

Save the Calibration file

- Open the Common Calibration Application from the Widows Start Menu
- If required select the com port required in TOOLS > OPTIONS
- Read the radio's Calibration information using RADIO > READ or clicking the Yellow 'Read' arrow icon on the toolbar

- Once completed save this file by selecting FILE > SAVE AS

Save the Personality file

- Open the relevant Programming Application from the Start Menu
- If required select the com port required in TOOLS > OPTIONS
- Read the radio's personality datafile using RADIO > READ or clicking the Yellow 'Read' arrow icon on the toolbar

- Once completed save this file by selecting FILE > SAVE AS

Upgrading Firmware

- In the relevant Programming Application click TOOLS > DOWNLOAD
- The Tait Firmware Upgrade Tool window will open
- On this window you can view the currently loaded Firmware version(s) by clicking REPORT CONFIGURATION
- To change the Firmware version click the Upgrade button
- A 'browse' window will open to search for the saved location of the new Firmware
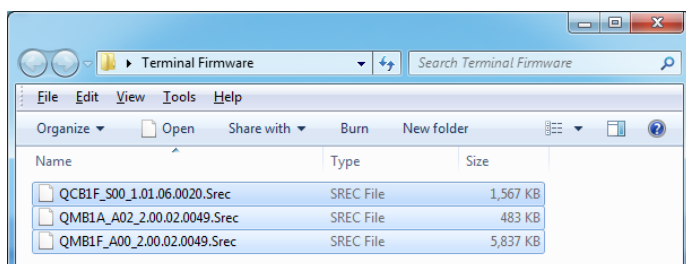
Firmware in [.ttfp] Packages – from DMR-1508 and P25T-1508 onwards

TTFP = Tait Terminal Firmware Package.

- Either double-click the [.ttfp] package or click-and-drag the whole package onto the Download Application and the process will commence
- Each required file will write to the radio body and control head in sequence

Firmware as Individual files Zipped up – prior to DMR-1508 and P25T-1508

- Un-zip the individual files to a folder
- Highlight and select ALL of the required files as suggested below:

- Each file will write to the radio body and control head in sequence.

- If the application pops-up "Power Cycle Radio" then remove and re-attach the input DC on TM9300/TM9400 mobile body or remove and re-attach the battery on TP9300/TP9400 portables.
- The terminal will then display: (i) Upgrade mode

Once the upgrade process is complete the terminal will either reset and power-up on a default channel or will display:

> Prog Mode
> (i) DB
>   TORSO ID 00

NOTE: On completion a pop-up may appear on the application that some files were not installed for either of two reasons:
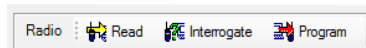- (1) Those files are already installed in the radio either from production or prior upgrades
- (2) The files are for other hardware items, for instance: they are files specific to the HHCH but the fitted Control Head this time is Graphical

This is just advisory information and it is normal to proceed with the next steps.

Write Configurations
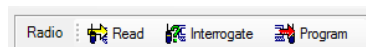
In the relevant DMR or P25 Programming Application:

- Load the radio's previously saved radio datafile. Click FILE > OPEN
- Write this datafile to the radio by selecting either RADIO > PROGRAM or clicking the Red 'Program' arrow icon on the toolbar

  Radio : Read Interrogate Program

- Once completed close the Programming Application

In the Common Calibration Application:

- Load the radio's previously saved calibration datafile. Click FILE > OPEN
- Write this configuration file to the radio by selecting RADIO > PROGRAM or clicking the Red 'Program' arrow icon on the toolbar

  Radio : Read Interrogate Program

- Once completed close the Calibration Application

Encryption Keys

If the radio needs encryption keys these will now need to be reloaded as these are automatically erased with a Firmware upgrade.

The upgrade process is now complete.

Publication Information

Related Documentation	TN-969-AN – TM8000 Firmware Upgrade Process TN-1234-AN – TM8000 and TM/TP9100 Firmware Upgrade Process TN-1283 – TM/TP9100 Upgrade and Downgrade Limitations
Compliance Issues	None.
Compatibility Issues	None.
CSO Instruction	Inform all service staff and dealers of the released information.
Confidentiality	Confidential – This message or document contains proprietary information intended only for the person(s) or organization(s) to whom it is addressed. All recipients are legally obliged to not disclose Tait technological or business information to any persons or organizations without the written permission of Tait.
Distribution Level	Associate.

Document History	Issue	Date	Description	Author
	–	5 April 2013	First release	G Brenchley
	b	1 September 2015	Updated with [.ttfp] Firmware Packages	G Brenchley
	c	24 August 2016	Updated format and 'upgrade pop-up' text	G Brenchley