



Technical Note TN-603

1. TOP-xx12x Elan Trunked
New V3.03 Firmware
2. TOP-xx22x Excel Trunked
New V3.03 Firmware
3. TOP Trunked
New V1.21 Programming Software

1. TOP-xx12x Elan Trunked V3.03 Firmware

Applicability Software changes to TOP-xx12x Elan Trunked have been made, resulting in the release of a new version of enhanced radio firmware, V3.03. This software will be used in all future productions of TOP Elan Trunked Radios.

Serial Number "G" and "T" band radios not in production as at 30/11/99. All other bands will be after serial number **14041912**.

1.1 New features available V3.03

Feature	Description	Impact on Customer
2 digit Group Select	A fix to allow group select within 2 digit MPT1343 fleet	Significant improvement for users.
LM4	Add MPT feature LM4	Minor for end user
Ready for microphone switching	This firmware is ready for top microphone. Allows user to switch between bottom and top microphone. <i>Radio Hardware Dependant. Wait for separate product announcement.</i>	Future feature 1Q2000

1.2 Compatibility of V3.03

This product is compatible with the following software products:

- Orca Programming Software capable of programming trunk radio software with main database version 1.06
- Orca Calibration Software capable of programming trunk radio software with main database version 1.06 and calibration database 1.00
- Orca DSP software version 1.06
- The recommended PC software products that meet the compatibility criteria are Orca programming software V1.20 or greater and Orca calibration software V2.02

- Tait Orca Elan Users Manual: IPN 409-002200-01

K band UHF	Orca PCB 900 MHz Main Radio Board variant 02:	IPN 220-01610-02
UHF	Orca PCB UHF Main Radio Board variant 06 :	IPN 220-01392-06
	Orca PCB UHF Main Radio Board variant 07 :	IPN 220-01392-07
	Orca PCB UHF Main Radio Board variant 08 :	IPN 220-01392-08
	Orca PCB UHF Main Radio Board variant 09 :	IPN 220-01392-09
	Orca PCB UHF Main Radio Board variant 10 :	IPN 220-01392-10
	Orca PCB UHF Main Radio Board variant 11 :	IPN 220-01392-11
G band UHF	Orca PCB sub-UHF Main Radio Board variant 01:	IPN 220-01503-01
	Orca PCB sub-UHF Main Radio Board variant 02:	IPN 220-01503-02
	Orca PCB sub-UHF Main Radio Board variant 03:	IPN 220-01503-03
	Orca PCB sub-UHF Main Radio Board variant 04:	IPN 220-01503-04
VHF	Orca PCB VHF Main Radio Board variant 04 :	IPN 220-01401-04
	Orca PCB VHF Main Radio Board variant 03 :	IPN 220-01588-03

1.3 Known issues remaining with V3.03

Feature	Description	Impact on Customer
Group clear call	Radio sometimes transmits no clear over the air interface after group call is cleared	Group calls sometimes not cleared by initiator
Cosmetic user interface problems	Sometimes no transmit indicator for the very first Tx.	Minor irritation
L1	Tait feature L1 not yet added	No impact
Battery management	Radio resets cyclically when switched on with low battery	Minor irritation, customer education
Multiple registration flags	Multiple registration flags	Re-registration on busy networks might take longer.

2. TOP-xx22x Excel Trunked V3.03 Firmware

Applicability Software changes to TOP-xx22x Excel Trunked have been made, resulting in the release of a new version of enhanced radio firmware, V3.03. This software will be used in all future productions of TOP Excel Trunked Radios.

Serial Number Production of “G” and “I” band radios between **14034151** and **14035000** will have V3.03. All other bands will be after **14040571**

2.1 New features available V3.03

Feature	Description	Impact on Customer
Background hunt	Fix for radio going into background hunt and staying there	Significant improvement for users.
2 digit Group Select	A fix to allow group select within 2 digit MPT1343 fleet	Significant improvement for users.
Car Kit	Radio will now Tx while in TOVK on conventional channel	Significant improvement for users.
Join Busy Group	Fix to allow radio to join busy group	Significant improvement for users.
Cosmetic user interface fixes	<ul style="list-style-type: none"> Fix monitor indicator appearing while pressing PTT in trunked mode Fix radio clicking when dispatch key pressed Fix DTMF icon flashing while hunting 	Minor improvement for users.
LM4 and L1	Add MPT feature LM4 and Tait feature L1	Minor for end user
Truncated confidence tones	Keypad lock confidence tones and scroll tones will no longer be truncated	Minor improvement
Radio “stunned”	LED will flash red to indicate the radio has been stunned	Minor improvement
Ready for microphone switching	This firmware is ready for top microphone. Allows user to switch between bottom and top microphone. <i>Radio Hardware Dependant. Wait for separate product announcement.</i>	Future feature 1Q2000

2.2 Compatibility of V3.03

This product is compatible with the following software products:

- Orca Programming Software capable of programming trunk radio software with main database version 1.06
- Orca Calibration Software capable of programming trunk radio software with main database version 1.06 and calibration database 1.00
- Orca DSP software version 1.06
- The recommended PC software products that meet the compatibility criteria are Orca programming software V1.20 or greater and Orca calibration software V2.02
- Tait Orca Elan Users Manual: IPN 409-002200-01

K band UHF	Orca PCB 900 MHz Main Radio Board variant 02: IPN 220-01610-02
UHF	Orca PCB UHF Main Radio Board variant 06 : IPN 220-01392-06 Orca PCB UHF Main Radio Board variant 07 : IPN 220-01392-07 Orca PCB UHF Main Radio Board variant 08 : IPN 220-01392-08 Orca PCB UHF Main Radio Board variant 09 : IPN 220-01392-09 Orca PCB UHF Main Radio Board variant 10 : IPN 220-01392-10 Orca PCB UHF Main Radio Board variant 11 : IPN 220-01392-11
G band UHF	Orca PCB sub-UHF Main Radio Board variant 01: IPN 220-01503-01 Orca PCB sub-UHF Main Radio Board variant 02: IPN 220-01503-02 Orca PCB sub-UHF Main Radio Board variant 03: IPN 220-01503-03 Orca PCB sub-UHF Main Radio Board variant 04: IPN 220-01503-04
VHF	Orca PCB VHF Main Radio Board variant 04 : IPN 220-01401-04 Orca PCB VHF Main Radio Board variant 03 : IPN 220-01588-03

2.3 Known issues remaining with V3.03

Issue	Description	Impact on Customer
DTMF over dialing in Nokia Networks	After several keys are pressed in DTMF mode, system error 55 occurs	Cannot use DTMF over dial feature in Nokia networks
Database corruption in GANS dynamic regroup	The radio would sometimes go into database error on reception of an AHYI. This AHYI would have to be received a number of times before it happened	Database corruption when AHYI dynamic regrouping is used
Group clear call	Radio sometimes transmits no clear over the air interface after group call is cleared	Group calls sometimes not cleared by initiator
Cosmetic user interface problems	<ul style="list-style-type: none"> • Sometimes no transmit indicator for the very first Tx. • Night use timer does not overwrite backlight timer 	Minor irritation
Battery gauge	Battery indicator very inaccurate, 2 bars indicate between 90% and 10% capacity	Minor irritation, customer education
Battery management	Radio resets cyclically when switched on with low battery	Minor irritation, customer education
Operational	If radio knob has selected a conventional	Minor irritation,

modes	channel, but radio is in trunked mode, then an invalid key entry will change radio mode from trunked to conventional	customer education
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3. TOP Conventional New V1.21 Programming Software

Applicability Software changes to TOP Trunked Programming Software have been made, resulting in the release of a new version of programming software, V1.21. This software is required to program TOP Excel radios with radio firmware V3.03. It is optional for all other conventional TOP radios.

3.1 New features available V1.21

Feature	Description	Impact on Customer
Join busy group	Add a programmable field for join busy group	New feature
Saving of data files to other than "C:"	Resolves a bug with V1.20 where data files saved a location other than default directory were being corrupted	Minor Improvement
LM4 and L1	Add MPT feature LM4 and Tait feature L1	Minor for end user
Site Select	This feature now available on both long and short presses of the function key	Minor improvement
Help Files	The help files now all aligned	Minor improvement
Ready for microphone switching	This firmware is ready for top microphone. Allows user to switch between bottom and top microphone. <i>Radio Hardware Dependant. Wait for separate product announcement</i>	Future feature 1Q2000

3.2 Compatibility of V1.21

Item	Description
User Manuals	The new features are described in the manual : IPN 439-51200-01
Trunked Radio Firmware Database	Versions : 1.01, 1.02, 1.03, 1.04, 1.05, 1.06 V1.21 is backwards compatible.

3.3 Known issues remaining with V1.21

Issue	Description	Impact on Customer
Multiple languages	Multiple languages are not supported	Programmer has to use English

Multiple networks	Software does not support multiple networks	Customer can only have one network programmed
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Note to CSO's This information is primarily of a technical nature. Use this information to fix reported problems. Distribute the firmware and the programming software as required only.

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