Menu structure

Menu

In Box (TMO, DMO, REP, FM)	**Messages** (TMO, DMO, REP, FM)
Out Box (TMO, DMO, FM)	**Change Mode** (TMO, DMO, REP, GTW, FM)
Text Message (TMO, DMO, FM)	**Encryption** (TMO, and DMO only)
Send Status (TMO, DMO, FM)	**Phone Lists**
Char Size (TMO, DMO)	**Settings**
	Monitor (to check radio coverage, FM only)
E2EE Status (enable/disable E2EE)	**GPS**
E2EE Key	**Information**
	Help

Phone Book (user defined TMO and DMO only)

Home TETRA (pre-configured phone book TMO and DMO only)

Non TETRA (pre-configured phone book, TMO only)

Group
(To see the configured groups, FM only)

Group Management (TMO, DMO and GTW)

Calls (TMO and DMO only)

Delivery Options
(to select the kind of messages delivery report, TMO and DMO)

Tx Inhibit
(to disable/enable the transmission, TMO and DMO only)

Preferences

Bluetooth (TMO only)

Speech Monitor
(to enable/disable the functionality; REP and GTW only)

SDS Monitor
(to enable/disable the functionality; REP only)

Auxiliary Microphone
(to configure the kind of auxiliary microphone, TMO, DMO and FM)

Full Duplex
(to set the type of full duplex: real or pseudo full duplex, TMO only)

Pin
(to change/enable/disable it)

Language

Sounds
(to disable and to control the sounds volume)

Display
(to configure display settings)

Presence Signalling
(to enable/disable the presence signal transmission; REP only)

Backlight
(to change the display backlight modality)

Zoom
(to zoom in/zoom out the display)

Key Access
(direct access keys are shown)

Dialling
(dialling digits are shown; TMO and DMO only)

Supplementary String
(supplementary strings are shown; TMO and DMO only)

Symbols
(symbols meaning is shown)

Group Scanning
(to enable/disable it, TMO and DMO only)

WPS Selection (TMO, DMO and GTW)

WPS Update (TMO, DMO and GTW)

WPS Reconfigure (TMO, DMO and GTW)

Active WPS
(to change the configuration of the active WPS)

Extra WPS
(to move the groups assigned by DGNA in the current WPS)

WPS Data
(to modify the current WPS parameters)

Group Data
(to modify the groups parameters)

Late Entry
(to enable/disable the function)

Communication
(with/without ack, DMO only)

Send TPNI
(enable/disable, DMO only)

Group Call
(to select the type of group call, TMO only)

Dial Mode
(to select the dialling modality)

Call Identification
(to choose if send or hide its own radio identifier, TMO only)

Gateway <0>, <9>
(to select the default gateway from the gateway list, TMO only)

Activation/Deactivation

Devices

Find New

Devices List

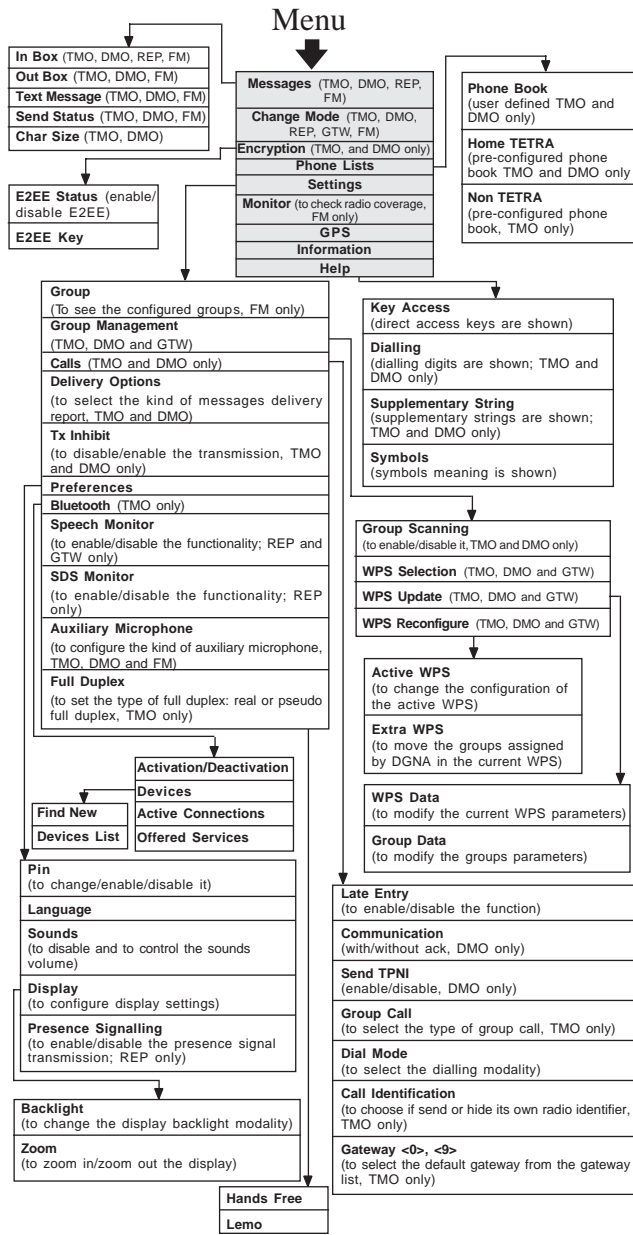**Active Connections**

Offered Services

Hands Free

Lemo

📝 NOTES:
- *Some menus can be or not available according to the configuration of the radio terminal.*
- *Choosing some options of WPS menus can cause the ending of active group calls.*

Displayed symbols

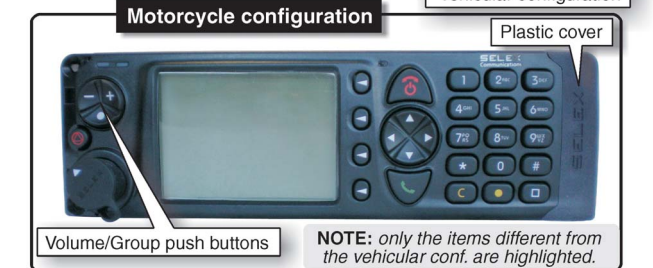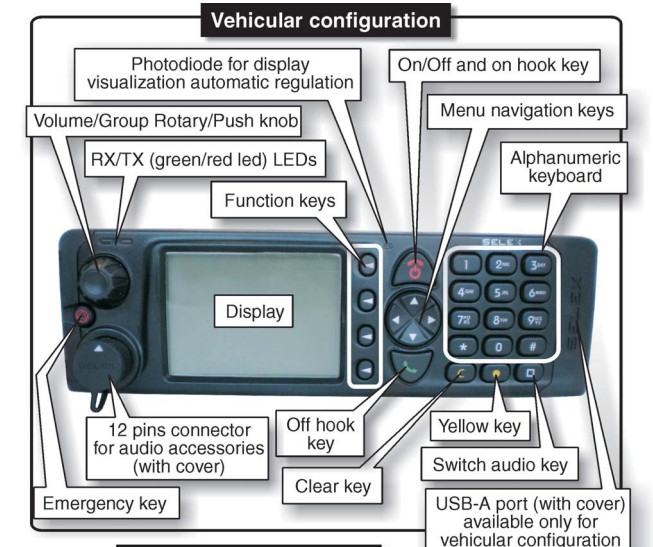| Symbol	Description
📶	Signal level (TMO and GTW mode)
	Network, searching network (flashing)
	Direct Mode with Gateway equipment presence detected
	Fallback Mode
D	Direct Mode
R	Repeater Mode (Repeater only)
G	Gateway Mode (Gateway only)
	Direct Mode with Repeater equipment presence detected
	Packet Data Context
	Packet Data Channel
	E2E Crypto Enable
	Custom E2EE Error
	Custom E2EE Enable
✉	No read Messages, Full queue with at least one message not read (flashing)
✉	Full Queue, each message is read
P	Active Data Call
	Bluetooth Activated
	Earphone Speech Call
	Active Speech Call
	Keypad Volume Off
🔒	Keypad Locked
S	Group scanning Enabled
	Group Attach Failure
	SDS and voice communication monitoring (Repeater only)
M	Voice communication monitoring (Repeater and Gateway only)
M	SDS monitoring (Repeater only)
🎧	Helmet detected
↻	Rotary Knob Enabled
⚡	Tx Active
	UHF Network Channel
	UHF Simplex Channel
L_{D_S}	Loudspeaker Audio Output
E_{A_R}	Earphone Audio Output

Controls, indicators and connectors

Volume Controller/ Group - channel Selector
In the vehicular configuration: during normal operation the knob has the volume control function, turn it clockwise to turn up the volume (16 levels) of the audio output of the loudspeaker/earphone.
Turn the knob counterclockwise to decrease the volume. If the knob is kept pressed until the alternate symbols [S] and [↻] appear on the display it goes to group-channel selection function. Once in this modality turn the knob to choose among the available groups and select the group-channel by pressing the knob. Once pressed the knob you go back to volume control function. If, in group-channel selection modality, no operation on the knob is performed for a pre-defined time interval, the knob automatically changeovers to volume control function. Each changeover of knob function is signalled to the operator by means of a confirmation beep.
In the Motorcycle configuration: the triple pushbutton allows the same operativity of the knob.
("+" to increase the volume/scroll up the groups;
"-" to decrease the volume/scroll down the groups;
"•" to switch from volume control to group selection/OK).

Green LED — Lit while the radio is receiving.

Red LED — Lit while the radio is transmitting; blinking while the transmission is inhibited (only TETRA).

Function Keys — When a symbol, or a writing, is present on the display near the key, by pressing the key you select the function associated to the relative symbol/writing.

Menu navigation keys — To scroll up/down the menu items, select the option and escape.

Off hook key — The off hook green key is used to accept/make (after having typed in the address) an individual full duplex call and if pressed in idle status accesses the calls list.

On hook key — The on hook red key is used to end the connection. It is also used to switch on/off the radio if kept pressed for a few seconds.

Alphanumeric keypad — Alphanumeric keypad for dialling numbers and/or strings. It is made up of 12 keys (10 digits plus [+] and [•]).

Clear key — Clear/escape key.

Yellow key — Only for TETRA: if a group is selected, by pressing the yellow key the writing "Dispatcher" on the display appears: now, by pressing PTT (if the network allows this function) the first available dispatcher of the selected group is called (not the group). By pressing again the yellow key the name of the selected group appears on the display and by pressing PTT the selected group is called. If no group is selected the yellow key allows to make an (half duplex) individual/group call by pressing PTT (after having typed in the address) even if the PTT default modality is set (by PRP) for group/(half duplex) individual call.

Switch audio key — The key [•] allows to switch the audio from the external loudspeakers to handset accessory and viceversa. (Active only if the external loudspeaker and the handset are connected to the radio).

Emergency key — It lets the user send an emergency alarm.

12 pins connector — To be connected to audio accessories.

USB connector *(only vehicular)* — To be connected to USB-A mass storage device (for FPG3 software download).

PTT *(Not located on the FPG3 front panel)* — Push-To-Talk button, press it to talk during half duplex conversation.
If pressed (in Idle status when a group-channel is selected, or after having typed in a group-channel address) it sends the call to the group-channel. See also the yellow key function description.

TETRA & FM

VS3000-FPG3
TETRA - Mobile Radio Terminal
Quick Reference Guide

Two versions are available:
- VS3000-FPG3 Vehicular configuration
- VS3000-FPG3 Motorcycle configuration

Vehicular configuration

- Photodiode for display visualization automatic regulation
- On/Off and on hook key
- Volume/Group Rotary/Push knob
- Menu navigation keys
- RX/TX (green/red led) LEDs
- Alphanumeric keyboard
- Function keys
- Display
- 12 pins connector for audio accessories (with cover)
- Off hook key
- Yellow key
- Emergency key
- Clear key
- Switch audio key
- USB-A port (with cover) available only for vehicular configuration

Motorcycle configuration

- Volume/Group push buttons
- Plastic cover
- **NOTE:** *only the items different from the vehicular conf. are highlighted.*

⚠ **WARNING** *Before using the equipment, read all the instructions contained in the manual and, with special care, those relative to safety.*

See the Safety Recommendation guide for FCC Approval.

SELEX
Communications

How to...

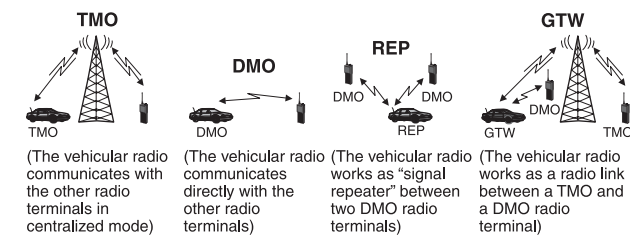|		TMO	DMO	REP	GTW	FM
Change accessories configuration	See the relative accessories user's guide.	*	*	*	*	*
Switch on/switch off the radio	Keep pressed the key 🔴 for a few seconds.	*	*	*	*	*
Manage the PIN (Personal Identification Number)	PIN insertion at power on, can be: • Enable/disabled from menu • Always enabled • Always disabled If PIN insertion is enabled, at power on the user must insert the current PIN. In case of insertion of 3 consecutive wrong pin, the current PUK must be inserted to unlock the radio. In case of 3 consecutive wrong PUK insertion the radio must be reprogrammed to be unlocked.	*	*	*	*	*
Adjust the Volume	To adjust the volume of the various sounds access from main menu to **Settings → Preferences → Sounds.** **In the vehicular configuration:** to adjust the speech volume, use the volume knob; turn it clockwise to increase the volume and counterclockwise to decrease it. **In the Motorcycle configuration:** the triple pushbutton allows the same operativity of the knob. ("+" and "-" to increase/decrease the volume; "•" to switch from volume control to group selection function).	*	*			*
Change group - channel	**In the Vehicular configuration:** keep pressed the knob until the alternate symbols Ⓢ and 👤 appear on the display. The radio is in group selection mode. Once in this modality turn the knob to choose among the available groups-channel and select the group by pressing the knob. **In the Motorcycle configuration:** the triple pushbutton allows the same operativity of the knob. ("+" and "-" to scroll the groups list; "•" to switch from volume control to group selection and to confirm the choose).	*	*	*	*	*
Lock/unlock keypad	Press 🔲 and then 🔲 (associated to menu) keys to lock the keypad; to unlock it press any key and follow the instructions shown on the display.	*	*	*	*	*
Change modality TMO/DMO/REP/ GTW/FM (*)	Keep pressed key 🔴 for a few seconds. Otherwise select **Change mode** from main menu and select the modality.	*	*	*	*	*
Change Working Profile Subset (WPS)	Each WPS is composed of a set of different groups related to the group selector knob positions. Changing WPS you change the groups that can be selected by means of the knob. To change WPS, keep pressed key 🔲 for a few seconds. Otherwise select **Settings → Group Management → WPS Select.**	*	*			*
Call a group / Channel	Select the group by means of the relevant knob (in the vehicular configuration) or the triple push button (in the motorcycle configuration), then press PTT to talk; otherwise type in the group address and press PTT (if the PTT default modality is set (by PRP) for individual call, press the key 🔲 before pressing the PTT).	*	*			*
Call the dispatcher of the selected group (if the network allows this function)	Select the group by means of the relevant knob and press the key 🔲. Now by pressing PTT the first available dispatcher of the selected group is called (not the group). By pressing again the key 🔲 and then the PTT the selected group is called.	*				
Call the OPEN GROUP	Keep pressed key 🔲 for a few seconds, then press PTT to talk.	*				
Make an individual full duplex speech call	Type in the address or select a subscriber from phone book then press key 🔴.	*				
Make an individual half duplex speech call	Type in the address or select a subscriber from phone book then press PTT (if the PTT default modality is set (by PRP) for group call, press the key 🔲 before pressing the PTT).	*	*			
Send an emergency alarm	Keep pressed the emergency key at least for 2 seconds. In TETRA mode the radio can be programmed to: send a call request, send an SDS, send a call request and an SDS, at the emergency key pressing. In FM mode, the radio sends an alarm until another radio gives the received alarm signal throught the key 🔴.	*	*			*

SELEX
Communications

How to...

		TMO	DMO	REP	GTW	FM
Send a status message	Access the send status menu, pressing the key associated with Ⓢ when the radio is in idle status or selecting from main menu: **Messages → Send Status.** Select the status to be sent, then select a user by means of the key associated with 🔲 or a group by means of the key associated with 👥. To send the message use the key 🔴 or select the **Send** option.	*	*			*
Send a text message	Access the text messages selecting from main menu **Messages → Text Message.** Create a new message or select a predefined message then select **OPT→ Send.** Select an user (🔲) or a group (👥) and send the message by means of key 🔴 or selecting the option **Send.** During the editing of a message it is possible to change from uppercase to lowercase pressing the key 🔲.	*	*			*
Read a received message (Inbox)	Access the received messages list from main menu selecting **Messages → Inbox.** Use the keys ▲, ▼ to scroll the list of messages. The received messages can be status Ⓢ or text ✉ messages. Select the message to be read (VIEW) and then OPT to choose among **Delete-Reply-Reply+History.**	*	*			*
Access last calls list	From idle status press key 🔴 to display the list of the last 20 received/made individual calls. Scroll them by means of keys ▲, ▼. It is possible to recall the subscriber pressing the key 🔴 followed by the PTT (Half-Duplex call) or followed by the pressing of the key 🔴 (Full-Duplex call, TMO only).	*	*			*
Go back in a group call	It is possible to go back in a group call which is still active and from which you have disconnected: in TMO by pressing the PTT and in DMO by keeping pressed the key 🔲.	*	*			
Enable/Disable the speech monitoring function	From main menu select **Settings → Speech monitor,** to change the function status. If the speech monitor is active the user will be asked to deactivate it and vice versa. By pressing the key corresponding to YES the change is confirmed; by pressing the key corresponding to NO or the key 🔲 the user can exit the menu without modification.			*	*	
Enable/Disable the SDS monitoring function	From main menu select **Settings → SDS monitor,** to change the function status. If the SDS monitor is active the user will be asked to deactivate it and vice versa. By pressing the key corresponding to YES the change is confirmed; by pressing the key corresponding to NO or the key 🔲 the user can exit the menu without modification.			*		
Enable/Disable the presence signal	From main menu select **Settings → Preferences → Presence Signalling** To enable the transmission of presence signal select **PsOn;** select **PsOff** to disable it.			*		
Visualize GPS data	From main menu select **GPS.** The data relative to vehicle position will be shown on the display.	*	*	*	*	*
Activate Bluetooth (*)	Activate Bluetooth functionality selecting **Settings → Bluetooth → Activation.** Once Bluetooth is active the symbol Ⓑ appears on the radio display. *Note: If the radio is turned off with the Bluetooth active, at the successive switch on the Bluetooth is deactivated.*	*				
Connect with Bluetooth device (*)	With Bluetooth functionality active select the menu item **Find New** from **Settings → Bluetooth → Devices.** Once the device has been found check if it is "Trusted" or "Untrusted" through the menu item **Devices List** from menu **Settings → Bluetooth → Devices,** showing the device information. If the device is "Untrusted" select OPT from the display showing the device information, and then select **Service Search.**	*				

SELEX
Communications

How to...

		TMO	DMO	REP	GTW	FM
	Once the device is "Trusted" select OPT from the display showing the device information, and then select **Service List.** Choose the service scrolling the list through the keys ▲ and ▼, select OPT and then **Connect,** to connect to the service.	*				
Remove Bluetooth device (*)	To remove a Bluetooth device it is first necessary to disconnect it closing and removing the relative service: • select **Settings → Bluetooth → Devices → Devices List;** • scroll the device list till the device to be removed and select OPT; • select the item **Service List** and scroll the Service List till the service to be close; • select OPT and then **Disconnect.** Then, from the same menu select **Remove** to remove the service. Now it is possible to remove the device: • select **Settings → Bluetooth → Devices → Devices List;** • scroll the device list till the device to be removed and select OPT; • select the item **Remove Device** • press the key associated with "YES" to confirm the operation.	*				
Deactivate Bluetooth (*)	To deactivate Bluetooth it is first necessary to remove all the Bluetooth accessories, then select **Settings → Bluetooth → Deactivation.**	*				
Check the coverage of other users	Access the monitor menu keeping pressed the key 🔲 for a few seconds from idle status, otherwise select item **Monitor** from main menu. Selecting **Opt** it is possible to choose among: • **Add** (to add an user to be monitored); • **Delete** (to remove an user to be monitored); • **View** (to visualize the details of the last three radio coverage checks of the specific user).					*
Make a call in FM mode (*)	To make a call in FM mode (whether to a user or to a group) dial the user or the group address to be called, or select the address from the **Phone lists** and press the key 🔴. Press PTT to talk.					*

(*) Function not available for U.S. market

TETRA Operating modes

The vehicular radio terminal can work in four different TETRA operating modes, depending on the protocol selected in menu Change Mode: Trunked Mode (TMO), Direct Mode (DMO), Repeater Mode (REP), Gateway Mode (GTW).

TMO
TMO
(The vehicular radio communicates with the other radio terminals in centralized mode)

DMO
DMO
(The vehicular radio communicates directly with the other radio terminals)

REP
DMO ← → DMO
REP
(The vehicular radio works as "signal repeater" between two DMO radio terminals)

GTW
DMO
GTW   TMO
(The vehicular radio works as a radio link between a TMO and a DMO radio terminal)

SELEX
Communications

Menu main items

Messages
By means of this menu it is possible to send text and status messages, and to read received messages and sent messages that have been saved. It is also possible to define the text char size. In Repeater mode with SDS Monitor active it is possible to read the messages monitored by the radio.

Change Mode
By means of this menu item it is possible to select the transmission protocol TMO/DMO/REP/GTW/FM.

Encryption (TETRA only)
By means of this menu it is possible to enable/disable the encryption function.

Phone Lists
In TETRA mode, by means of this menu you can access the phone books (whether user defined or predefined). In FM mode you can directly access the FM users list.

Settings
Through the sub-menus of this item it is possible to configure several options of the radio terminal. For example (in TETRA mode) it is possible to inhibit the transmission (Tx Inhibit), to manage the working profiles WPS (Group Management), to access the Bluetooth functionalities.
Furthermore through the Preferences menu the user can personalize the terminal, setting: language, sounds volume, backlight, zoom in/zoom out. It is also possible in REP mode, to enable or disable the presence signal transmission.
In REP or GTW mode it is also possible to enable or disable the speech monitor function and only in REP mode the SDS monitor function.

Monitor (FM only) (*)
By means of menu Monitor it is possible to check the radio coverage of other FM radio users.

GPS
This menu allows to display the GPS data information.

Information
This menu allows to display the equipment information.

Help
Selecting Help from main menu it is possible to visualize the direct access keys function (direct access keys are available even during calls). Within the Help menu are also shown: the description of the strings to be dialled to define the call priority, the gateways and the address composition method (for TETRA). It is also possible to visualize a brief description of the symbols that can appear on the display.

📝 NOTE:
For what concerns technical characteristics, reference standard, maintenance and troubleshooting, refer to the relevant technical handbook.