

Prodotto o importato da: **CTE INTERNATIONAL srl**
Via. R.Sevardi 7 - 42124 Mancasale, Reggio Emilia - Italia
L'uso di questo apparato può essere soggetto a restrizioni nazionali (per l'uso in Italia è richiesta l'autorizzazione generale come da D.l. 259 del 01/08/03 art. 99 comma 3; All. 25 art. 36). Prima dell'uso leggere attentamente le istruzioni.

Produced or imported by: **CTE INTERNATIONAL srl**
Via. R.Sevardi 7 - 42124 Mancasale
Reggio Emilia - Italy

Imported by: **ALAN UK**
Unit 2, Callenders, Paddington Drive, Churchward Park, Swindon, Wiltshire, SN5 7YW
United Kingdom
The use of this transceiver can be subject to national restrictions. Read the instructions carefully before installation and use.

Importado por: **ALAN COMMUNICATIONS, SA**
C/Cobalt, 48 - 08940 Cornellà de Llobregat, Barcelona - España
Tel: +34 902 384878 Fax: +34 933 779155
Web site: www.midland.es
El uso de este equipo puede estar sujeto a la obtención de la correspondiente autorización administrativa. Antes de utilizar, lea atentamente el manual de uso.

Vertrieb durch: **ALAN ELECTRONICS GmbH**
Daimlerstraße 1K - D-63303 Dreieich - Deutschland
Die Benutzung dieses Funkgerätes ist von den landesspezifischen Bestimmungen abhängig. Vor Benutzung Bedienungsanleitung beachten.

► **PMR446 Transceiver**

G14

► **INSTRUCTION GUIDE**



WWW.MIDLANDRADIO.EU |



MIDLAND | PMR446 TRANSCEIVER





• **INFORMAZIONE AGLI UTENTI**

Ai sensi dell’art. 13 del decreto legislativo 25 luglio 2005, n. 151 “Attuazione delle Direttive 2002/95/CE, 2002/96/CE e 2003/108/CE, relative alla riduzione dell'uso di sostanze pericolose nelle apparecchiature elettriche ed elettroniche, nonché allo smaltimento dei rifiuti”.

- Il simbolo del cassonetto barrato riportato sull'apparecchiatura indica che il prodotto alla fine della propria vita utile deve essere raccolto separatamente dagli altri rifiuti. L’utente dovrà, pertanto, conferire l'apparecchiatura giunta a fine vita agli idonei centri di raccolta differenziata dei rifiuti elettronici ed elettrotecnici, oppure riconsegnarla al rivenditore al momento dell'acquisto di una nuova apparecchiatura di tipo equivalente, in ragione di uno a uno. L’adeguata raccolta differenziata per l'avvio successivo dell'apparecchiatura dismessa al riciclaggio, al trattamento e allo smaltimento ambientalmente compatibile contribuisce ad evitare possibili effetti negativi sull'ambiente e sulla salute e favorisce il riciclo dei materiali di cui è composta l'apparecchiatura. Lo smaltimento abusivo del prodotto da parte dell'utente comporta l'applicazione delle sanzioni amministrative di cui al dlgs. n.22/1997 (articolo 50 e seguenti del dlgs. n.22/1997).

- All articles displaying this symbol on the body, packaging or instruction manual of same, must not be thrown away into normal disposal bins but brought to specialised waste disposal centres. Here, the various materials will be divided by characteristics and recycles, thus making an important contribution to environmental protection.

- Alle Artikel, die auf der Verpackung oder der Gebrauchsanweisung dieses Symbol tragen, dürfen nicht in den normalen Mülltonnen entsorgt werden, sondern müssen an gesonderten Sammelstellen abgegeben werden. Dort werden die Materialien entsprechend ihrer Eigenschaften getrennt und, um einen Beitrag zum Umweltschutz zu liefern, wiederverwertet.

- Todos los artículos que exhiban este símbolo en el cuerpo del producto, en el embalaje o en el manual de instrucciones del mismo, no deben ser desechados junto a los residuos urbanos normales sino que deben ser depositados en los centros de recogida especializados. En estos centros, los materiales se dividirán en base a sus características y serán reciclados, para así poder contribuir de manera importante a la protección y conservación del medio ambiente.

- Tous les articles présentant ce symbole sur le corps, l'emballage ou le manuel d'utilisation de celui-ci ne doivent pas être jetés dans des poubelles normales mais être amenés dans des centres de traitement spécialisés. Là, les différents matériaux seront séparés par caractéristiques et recyclés, permettant ainsi de contribuer à la protection de l'environnement.

- Todos os artigos que apresentem este símbolo no seu corpo, embalagem ou manual de instruções, não devem ser eliminados juntamente com o lixo normal mas sim conduzidos para contentores de eliminação de resíduos especializados. Aqui, os diversos materiais serão divididos por características e reciclados, realizando assim uma importante contribuição para a protecção ambiental.

- Όλα τα προϊόντα στα οποία εμφανίζεται το ακόλουθο σύμβολο στο σώμα, τη συσκευασία ή το εγχειρίδιο χρήσης τους, δεν πρέπει να εναποθέτονται στους κοινούς κάδους απορριμάτων αλλά να προσκομίζονται στα ειδικά κέντρα αποκομιδής. Εκεί, τα διάφορα υλικά θα πρέπει να διαχωρίζονται ανάλογα με τα χαρακτηριστικά και τα ανακυκλούμενα υλικά, συμμετέχοντας έτσι ουσιαστικά στην προστασία του περιβάλλοντος.

- Alle artikels die dit symbool weergeven op de behuizing, verpakking of instructiehandleiding ervan, mogen niet weggegooid worden in normale vuilnisemmers maar moeten naar speciale afvalverwerkingscentra gebracht worden. Hier worden de verschillende materialen verdeeld volgens eigenschappen en recyclage waardoor een belangrijke bijdrage aan de milieubescherming wordt geleverd.

G14

PMR446 Transceiver

Thanks for choosing Midland! **G14** is a portable transceiver that is free use in almost all European countries. For further informations, we suggest you look at the "Restrictions on the use" chart.

*Combining the latest technology in radio communication along with a sturdy mechanical frame, **G14** is the ideal and effective solution for the professionals who need to stay in touch with colleagues (construction sites, buildings, hotels, trade fairs, shows) or with leisure users that just want to keep up with friends and family. Its robust frame, ease of use and simple design mean that it is ideal for use in any activity.*

Thanks to Midland Programming software, specifically design for **G14**, it is possible to extend the flexibility and features of your radio:

- You can enable the channel scanning facility (either in normal and priority mode) and so, define one of the available channels as priority channel for the priority scanning mode.
- If necessary, you can make the use of the radio very basic and simple by disabling some of the default features.

Main characteristics

- PMR446 Transceiver
- Output power: 500mW
- Channel spacing: 12.5KHz
- Built-in VOX function (vocal-activated communication)
- 2 SCAN mode: all channels SCAN and PRIORITY CHANNEL SCAN
- Scrambler
- Backlit LCD display adjustable in 3 different colours.
- 50 CTCSS and 105 DCS Normal/ Inverter selectable codes
- Time-out Timer function
- Busy Lock Out function
- Emergency alarm

Content

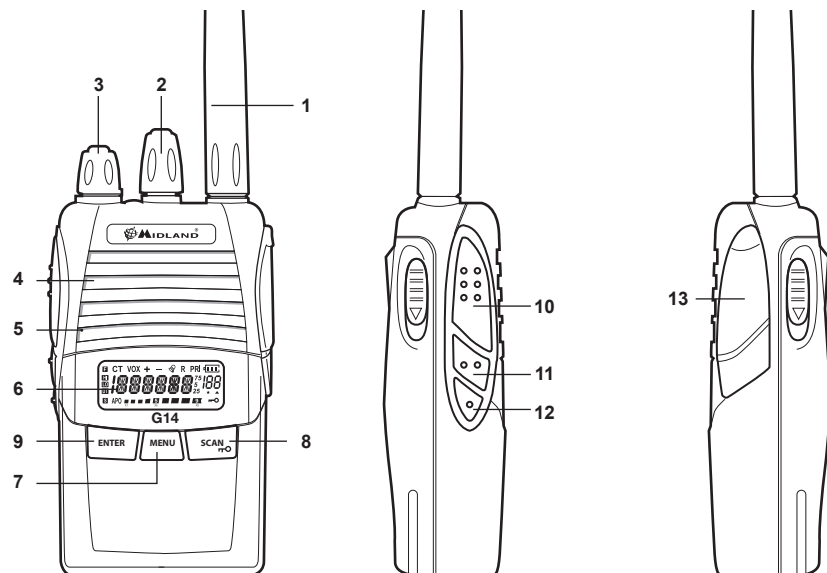
- 1 **G14** transceiver
- 1 belt clip
- 1 wall adaptor
- 1 1200mAh Li-ion rechargeable battery pack
- 1 desktop charger

Coverage/range

The maximum range depends on terrain condition and is obtained during use in an open space.

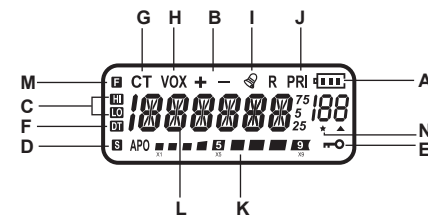
The only limitation to maximum possible range are environmental factors such as blockage caused by trees, buildings, or other obstructions. Inside a car or a metallic constructions, the range can be reduced. Normally the coverage in the city, with buildings or other obstructions is about 1 or 2 Km. In open space but with obstructions like trees, leaves or houses the maximum possible range is about 4-6 Km. In open space, without obstructions and in sight, like for example in mountain, the coverage can be more than 12 Km.

MAIN CONTROLS



1. **Antenna**
2. **Encoder**: rotate clockwise or counter-clockwise to choose among the several settings.
3. **Power/volume knob**- turn clockwise to power on and increase the volume level. Turn counter-clockwise to decrease the volume level and power off.
4. **Speaker**- G14 has a built-in speaker.
5. **Built-in microphone** - Here is where sound is picked up by the microphone.
6. **Display LCD**
7. **MENU**: press this button to enter the radio menu
8. **SCAN/PTT**: press this button to enable the **SCAN** function or to exit the current setting. Keep pressed this button for about 5 seconds to activate the Lock function.
9. **ENTER**: press this button to confirm the setting.
10. **PTT**: push this button to transmit, release it to receive.
11. **MONITOR**: in reception mode, keep pressed this button to monitor the channel/frequency in use.
12. **CALL**: to send a call on the selected channel (received only by another **G14**):
 - **CALL + MONITOR**: press these two buttons to activate the Emergency function.
 - **CALL + PTT**: press these two buttons to activate the 1750 Hz sound note.
13. **EXTERNAL SPEAKER/MIC JACK**- allows the connection with external devices such as headsets, microphones...

LCD display



1. **Battery level**: indicates the battery level
2. **+/-**: indicates the TX/RX "OFFSET" shift direction
3. **HI/LO**: indicates the output power level (HI = high / LO = low)
4. **S**: appears while the radio is scanning the channels
5. **Key lock**: keypad lock
6. **DT**: DCS turned on
7. **CT**: CTCSS turned on
8. **VOX**: VOX function on
9. **CALL**: appears when you send a **CALL**
10. **PRI**: Priority Scan activated
11. **Signal strength and TX power**: received signal strength and TX power.
12. **Frequency in use**: frequency in use
13. **F**: MENU functions
14. *****: appears when the Scan finds a signal. (open Squelch)

OPERATIONS

Power on/off and volume

Rotate the **power/volume knob** clockwise to turn the radio on and to increase the volume level. Rotate the control counter-clockwise to reduce the volume level and to turn the radio off. During Power on, the LCD display will show all icons for 1 second and the LCD display will indicate the last channel/frequency selected.

Transmission

To communicate, all radios in your group must be set to the same band (PMR) and to the same channel.

Hold down briefly the **MON** button to make sure that the frequency is not busy and then press the **PTT** button.

For a maximum clarity, hold the device at a distance of about 4/10 cm.

Release the **PTT** key to receive.

Only one user at a time can talk during radio communications. Therefore, it is important not to transmit when you are receiving a communication and use the transmission mode sparingly to allow other users to use the feature. Transmission consumes a significant amount of energy and should therefore be used sparingly to prolong the battery life.

Alternatively, it is also possible to select a low transmission power.

If you are unable to contact a station that you have no problems in receiving, the station may be using CTCSS tones or DCS codes

Emergency Alarm

Keep pressed the **CALL** key for 1 second and press **MON**: the radio will switch to emergency alarm.
To disable this function, press the **PTT** button.

PRC - Priority Channel

It is possible to set a priority channel for the Priority **SCAN**. (see the following paragraph).

The priority channel is searched during the **SCAN** mode. You can choose the priority channel among 99 available channels. (If, for example you choose channel 9 as priority one, the Scan will be as following: 1 **9** 2 **9** 3 **9** 4 **9** 5 **9** 6 **9** 7 ...).

To choose the priority channel:

1. Press the **MENU** button;
2. Rotate the **Encoder** knob till "**PRC**" is shown on the display;
3. Press **ENTER**;
4. Rotate the **Encoder** knob and choose the desired priority channel;
5. Confirm your selection with **ENTER** and exit by pressing twice the **SCAN** button.

SCAN and PRI – Priority Scan

The **SCAN** function is very useful to monitor the channels before transmitting.

When the radio is in receiving mode, the Scan function will stop, and will resume scanning 5 seconds after the signal is no longer present. This function is useful to control which channels are free.

All channels SCAN

Press the **SCAN** button: the radio will scan all channels from the channel in use. Whenever any signal is detected, the radio will suspend the Scan for 5 seconds; then continue to Scan unless you press **PTT** or **ENTER**.

PRI – Priority Scan

Press the **MENU** button. With the **Encoder** Knob, select "**PRI**". With the Priority Scan, the priority channel previously set is searched. Whenever any signal is detected, the radio will suspend the Scan for 5 seconds; then continue to Scan unless you press **PTT** or **ENTER**.

Scan mode settings

Press **MENU** and then rotate the **Encoder** knob. The display will visualize "**SCANS**". Press **ENTER** and then rotate the **Encoder** knob to choose the type of Scan (TO/CO/SE). Confirm your selection with **ENTER** and exit by pressing twice the **SCAN** button.

TO - Time-operated Scan

Whenever a signal is detected, the radio will suspend the scan for 5 seconds, and then will continue to scan even if the signal is still present.

CO: Carrier-operated Scan

Whenever a signal is detected, the radio will stop scanning. It will resume to scan once the signal will be no more present.

SE: Search Scan

The radio will stop scanning and exit the Scan mode once detected a signal.

VOX- Selecting the VOX sensitivity level

G14 enables hands free conversations through the **VOX** function: just speak in the direction of the microphone and the communication will be automatically activated.

The **VOX** sensitivity can be adjusted in 3 different levels. The **VOX** function is deactivated by default.

To activate it, follow the steps here below:

1. press the **MENU** button;
2. turn the **Encoder** knob until the display shows '**VOX**';
3. push the **ENTER** key;
4. turn again the **Encoder** knob and select the desired **VOX** level (1: high sensibility 2: medium sensibility 3: low sensibility);

Confirm your selection with **ENTER** and exit by pressing twice the **SCAN** button.

To disable the **VOX** function, follow the previous steps and choose "**Off**".

POW - Setting the transmission power

G14 has 2 selectable transmission power:

To select the desired power level:

1. press the **MENU** button;
2. turn the **Encoder** knob until '**POW**' is displayed;
3. press the **ENTER** button ;
4. turn the **Encoder** knob and select the desired power level (there are 2 available power levels: '**H**'=~500mWERP and '**L**'= ~10mWERP)
5. confirm the selection with **ENTER**. The display will show "**HI**" or "**LO**" depending on the power selected;
6. press twice the **SCAN** to exit.

If your radio has to operate within a short range, you can select the low power and therefore extend the battery life.

SQUELCH

With the Squelch function noises can be suppressed on the free channels.

To select the Squelch level:

Press the **MENU** button;

Turn the **Encoder** knob until "**SQL**" is displayed;

Press the **ENTER** button;

Turn the **Encoder** knob and select the desired Squelch level (there's 9 available levels);

Confirm your selection with **ENTER** and exit by pressing twice the **SCAN** button.

Make sure you do not set an excessively high squelch level because in this case you may not be able to receive weaker signals. On the other hand an excessively low Squelch value could enable the Squelch even when no signals are present.

Squelch must always be adjusted when no signals are present.

SCRAMBLER

The scrambler is designed to protect communications.

This feature prevents parties from other networks from hearing and understanding voice communications.

To enable/disable the scrambler:

1. Press the **MENU** button;

2. Turn the **Encoder** knob until **"SCRM"** is displayed;
3. Push **ENTER** to enter the function;
4. Turn the **Encoder** knob to activate/deactivate the SCRAMBLER: **"ON"** (to activate it), or **"OFF"** (to deactivate it);
5. Confirm your selection with **ENTER** and exit by pressing twice the **SCAN** button. The display will show **"S"**
When the scrambler is enabled, it is not possible to clearly receive communications. Therefore, before enabling it, it is necessary to make sure that all the radios you wish to communicate with have enabled this feature, otherwise you will not be able to communicate with them.
The scrambler of the transceiver does not fully guarantee the safety of communications.

LED - Backlight on/off

To enable/disable the LCD backlight:

1. Press the **MENU** button;
2. Turn the **Encoder** knob until **"LED"** is displayed;
3. Push **ENTER** to enter the function;
4. Turn the **Encoder** knob to activate/deactivate the Backlight. There are 3 available options: **"ON"**, **"OFF"** and **"AUTO"**.
5. Confirm your selection with **ENTER** and exit by pressing twice the **SCAN** button.

LIGHT - Select the Backlight color

To select the Backlight color, follow these steps:

1. Press the **MENU** button;
2. Turn the **Encoder** knob until **"LIGHT"** is displayed;
3. Push **ENTER** to enter the function;
4. Turn the **Encoder** knob to choose between three different colors.
5. Confirm your selection with **ENTER** and exit by pressing twice the **SCAN** button.

KEYPAD BEEP on/off

Every time a button is pressed, you will hear a Beep tone. The keypad beep tone is activated by default.

To disable the beeps, follow this procedure:

1. Press the **MENU** button;
2. Turn the **Encoder** knob until **"BEEP"** is displayed;
3. Push **ENTER** to enter the function;
4. Turn the **Encoder** knob to activate/deactivate the Beep tones: **"ON"** (to activate it), or **"OFF"** (to deactivate it);
5. Confirm your selection with **ENTER** and exit by pressing twice the **SCAN** button.

CTCSS e DCS

The CTCSS tones can be added to the channels for creating new private channels. They are similar to access codes and enable the radio to communicate only with the users that are turned on the same channel and have set the same code. For each channel you can set up to 50 CTCSS tones and 105 DCS codes.

To select a CTCSS tone:

1. Press the **MENU** button;
2. Turn the **Encoder** knob till: **"C-CDC"**(CTCSS both on TX and RX); **"R-CDC"**(only on RX) o **"T-CDC"** (only on TX) is visualized on the display.
3. Push **ENTER** to enter the function;
4. Turn the **Encoder** knob and select the desired CTCSS tone

5. To confirm, press the **ENTER** button.

The setting of a CTCSS tone disables all DCS codes, because these functions cannot be used simultaneously.

If you want to use and select a DCS code, instead of a CTCSS tone, follow these steps:

1. Press the **MENU** button;
2. Turn the **Encoder** knob till: **"C-CDC"**(CTCSS both on TX and RX); **"R-CDC"**(only on RX) or **"T-CDC"** (only on TX) is visualized on the display.
3. Push **ENTER** to enter the function;
4. Press the **MENU** button again;
5. Turn the **Encoder** knob and select the desired DCS code
6. Confirm the selection by pressing the **ENTER** button.

The setting of a DCS code disables all CTCSS tones, because these functions cannot be used simultaneously.

VOICE function

With this function, you activate a voice that informs you about any operation/selection you are doing.

To activate it, follow these steps:

1. Press the **MENU** button;
2. Turn the **Encoder** knob until **"VOICE"** is displayed;
3. Push **ENTER** to enter the function;
4. Turn the **Encoder** knob to activate/deactivate the function: **"ON"** (to activate it), or **"OFF"** (to deactivate it);
5. Confirm your selection with **ENTER** and exit by pressing twice the **SCAN** button.

TOT- TX timeout timer function

G14 can be programmed with a transmission timer that temporarily blocks transmissions if the radio has been used beyond the maximum time permitted.

The radio is forced in reception mode if it continues transmitting after the preset timer threshold has been reached.

To restart the transmission, release the **PTT** key.

To enable this function:

1. Press the **MENU** button;
2. Turn the **Encoder** knob until **"TOT"** is displayed;
3. Push **ENTER** to enter the function;
4. Turn the **Encoder** knob and set a timer from 30 to 270 seconds.
5. Confirm your selection with **ENTER** and exit by pressing twice the **SCAN** button.

🔒 – Keypad Lock

It is possible to choose between two types of Lock Mode:

1. Press the **MENU** button;
2. Turn the **Encoder** knob until **"KEYBO"** is displayed;
3. Push **ENTER** to enter the function;
4. Turn the **Encoder** knob and choose between **"MANUAL"** or **"AUTO"**.
5. Confirm your selection with **ENTER** and exit by pressing twice the **SCAN** button.

As previously mentioned, there are two ways to lock the keypad:

"MANUAL": to lock the keypad, simply press and hold down the **SCAN/🔒** button for 3 seconds. **🔒** will be displayed.

"AUTO": the keypad will be automatically lock after some seconds. To unlock the radio, keep pressed the **SCAN/🔒** button for 3 seconds.

Name

It is possible to choose and set a name to display instead of the channel number. It is possible to set the name only by the **G14** programming software. Once set, by the radio is possible to enable or disable it choosing “**on**” or “**off**”.

BATTERY RECHARGE

G14 is equipped for using a 7,4V LI-ion rechargeable battery pack which can be recharged connecting the socket of the AC/DC wall adaptor to a mains power socket and insert the jack of the wall adaptor into the desktop charger plug.

It takes 4-5 hours to fully recharge the radio.

For maximum battery life, we recommend charging the battery pack when the **G14** is off and the low battery icon  comes on.

! Using a different battery charger other than the one specified can cause damage to your device or may even cause explosions and personal injuries.

BATTERY LEVEL INDICATOR

G14 has a BATTERY LEVEL METER  that shows the battery power level.

The greater is the number of bars visible, the stronger will be the battery level. When the battery level is low, the Battery icon  will flash in the display, indicating that your batteries should be recharged.

The battery power saving feature enables a reduction in consumption of up to 50%; power saving comes on automatically when the transceiver does not receive any signal for more than 7 seconds.

MAINTENANCE

Your **G14** was designed to fulfill any warranty obligations and to enjoy this product for many years.

- Do not attempt to open the unit. Non-expert handling of the unit may damage it.
- When using regulated power supply, take notice of power voltage, that must be between 6V and 8V to avoid damages.
- High temperatures can shorten the life of electronic devices, and warp or melt certain plastics.
- Do not store the radio in dusty or dirty areas.
- Keep the Radio dry. Rainwater or damp will corrode electronic circuits.
- If it appears that the Radio diffuses peculiar smell or smoke, please shut off its power immediately and take off the charger or battery from the Radio.
- Do not transmit without antenna.

SPECIFICHE TECNICHE

General	
Frequency range	446.00625- 446.09375 MHz (PMR)
Working temperature	-20° +50°
Operating voltage	7.4V
Operate mode	Simplex
Dimensions	100mm×58mm×33mm (Antenna excluded)
Weight	203g (battery included)
Antenna impedance	50Ω
Duty cycle	5/5/90%

Transmitter	
Frequency stability	±2.5PPM
Output power	≤500mWERD
Max frequency deviation	≤ 2,5KHz
Audio distortion	≤ 3%
Adjacent channel power	< 60 dB
Spurious radiation	Within European legal terms
Occupied bandwidth	Within European legal terms

Receiver	
RF sensibility	≤ 0.2UV@20 dB SINAD
Audio distortion	≤ 3%
Audio response	300Hz ÷ 3KHz
Adjacent channel selectivity	Within European legal terms
Intermodulation rejection	Within European legal terms
Spurious response	Within European legal terms
Blocking	Within European legal terms

PROBLEM SOLVING

Problem	Possible cause	Solution
The radio doesn't switch on	The battery pack is discharged and/or has not been installed correctly.	Verify that the battery pack is charged and that it has been correctly installed.
The radio switches off shortly after it has been switched on	Discharged battery pack.	Recharge the battery pack.
The battery pack does not recharge	The battery-charger has not been connected or installed correctly.	Inspect the connections of the battery-charger and the installation of the batteries.
The radio switches on but is unable to receive signals	The site of installation is too shielded.	Move to an another area.
	The volume is too low	Adjust the volume.
	Incorrect CTCSS or DCS	Check that the CTCSS tone or DCS code corresponds to the one set by the parties you are communicating with.
Noise is always present in reception mode	The monitoring function is enabled.	Disable the monitoring function.
It is not possible to communicate with other parties	An incorrect radio channel has been selected.	Select the same radio channel used by the parties you are communicating with.
	The radio is installed in a shielded area or is too far from the party you are communicating with	Move to another area.
	Incorrect CTCSS or DCS	Check that the CTCSS tone or DCS code corresponds to the one set by the parties you are communicating with.
Reception is fragmented and/or disturbed	The signal is very weak.	Try temporarily disabling the squelch by means of the Monitoring feature.
	The transmission distance is excessive and/or there are obstacles in the transmission path	Move closer to the party you are communicating with or to another area.
	Other parties are using the same channel	Check the traffic on the radio channel by means of the Monitoring feature and select another channel if required.
	The radio has been installed too close to equipment that causes interference (televisions, computers, etc.)	Increase the distance between the radio and this equipment.

Transmission is not always possible	The channel is used by an excessive number of parties or the transmission has been barred due to a busy channel.	Select another channel. Ask the radio link provider to disable the block due to busy channel.
VOX causes the radio to accidentally enable transmission	The sensitivity and/or environmental noise is too high.	Reduce the VOX sensitivity.
The VOX feature requires speaking in a loud voice	The sensitivity is too low.	If the environmental noise is not high, increase the sensitivity or use an optional microphone.
The autonomy of the battery pack is limited	Commission time is too high.	Try reducing the transmission time and/or using a low power.
Logic related faults (unreadable displayed symbols, functions blocked, etc.)	Incorrect setting caused by a problem with the power supply.	Recharge the battery pack