

*Public Mobile Radio & Low Power Device*

# **UHF-Handy**

**Bedienungsanleitung**  
**Operation Manual**  
**Mode d'emploi**  
**Manuale d'istruzione**



# UHF-DualTalk

## PMR + LPD Radio



- 1.) Antenne
- 2.) Buchse Ohrhörer / Mikrofon
- 3.) LCD-Anzeige
- 4.) Auf- & Abwärts-Taste
- 5.) Bestätigungs- & Ein-/Aus-Taste
- 6.) Lautsprecher
- 7.) Mic: Mikrofon
- 8.) Lautstärketaste
- 9.) PTT-Taste
- 10.) Rufontaste CALL

- 1.) Antenna
- 2.) Jack earphone / microphone
- 3.) LCD Screen
- 4.) Up & Down Key
- 5.) Confirmation & On/Off Key
- 6.) Speaker
- 7.) Mic: Microphone
- 8.) Volume Key
- 9.) PTT Key
- 10.) Call Tone Key CALL

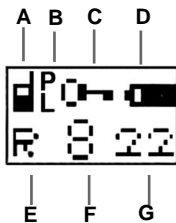
- 1.) Antenne
- 2.) Prise auriculaire / microphone
- 3.) Affichage LCD
- 4.) Touche vers le haut et le bas
- 5.) Touche de confirmation et Marche/Arrêt
- 6.) Haut-parleur
- 7.) Mic: Microphone
- 8.) Touche de volume
- 9.) Touche PTT
- 10.) Touche d'appel CALL









- 1.) Antenna
- 2.) Presa per auricolare / microfono
- 3.) Indicatore LCD
- 4.) Tasto crescente e discendente
- 5.) Tasto di conferma e Marcia/Arresto
- 6.) Altoparlante
- 7.) Mic: Microfono
- 8.) Tasto di volume
- 9.) Tasto PTT
- 10.) Tasto della suoneria CALL

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Specifications are subject to change without any prior notice or obligation.

## Main Screen



- |          |  |   |
|----------|--|---|
| <b>A</b> |  | Appears if normal PMR status is activated or  if Vox is switched on. |
| <b>B</b> |  | Indicates the selected frequency band, i.e. <i>PMR</i> or <i>LPD</i> .  |
| <b>C</b> |  | Appears if key lock function is activated   |
| <b>D</b> |  | Indicates the actual condition of the batteries.  |
| <b>E</b> |  | Indicates receiving signals or <b>T</b> for transmitting mode.  |
| <b>F</b> |  | Indicates the selected PMR or LPD channel.  |
| <b>G</b> |  | Indicates the selected CTCSS Code 1 - 38.   |

## 1) Inserting the batteries

Turn the unit in that way that the rear panel lies in front of you. Rotate the belt clip a quarter turn counter-clockwise, so that the battery compartment lid is accessible now. At the bottom of the battery compartment lid there is a spring catch. To open the lid you have to release the interlock. For this end push it with your thumbnail or fingernail towards the top of the unit. If it is pushed far enough, it is possible to draw it away from the unit. Thus you will lift off the lid also.

Now insert 4 alkaline or rechargeable cells of AAA type ( = Micro ) into the battery compartment according to the polarity signs inside. If you use rechargeable cells we recommend the NiMH type.

To close the battery compartment put the lid onto the compartment in that way that the two guide bolts at the top of the lid grip into the two corresponding guide holes at the top of the battery compartment. Then shut the battery compartment by pressing on the lid at the bottom until it locks in.

Finally rotate the belt clip back into its original position.

## 2) Replacing the front panel


Every unit can be equipped either with a blue or a red front panel. The front panel is fixed at three points on the unit's body. One is located on the top of the unit near the socket for the external earphone-microphone and the other two ones directly above the two charging contacts at the bottom.


To detach the actual front panel, release it at first at one of the two lower fixing points. For this reason press your thumbnail at one side into the joint between front panel and the unit's body near the charging contact at the bottom. After having loosened the front panel at this point release it the


same way also at the other side. Use your other thumb to prevent an unintentional lock-in of the front panel at the other side. Now you can lift off the front panel from the unit's body.

Now place the new front panel onto the unit. Then press slightly onto the front panel near the socket for the external earphone-microphone and in the area of the two charging contacts at the bottom until it locks in. The new front panel must lie correctly on the unit's body now.

### 3) Switching On/Off

Depress the confirmation and On/Off key  ( 5 ) for about 1 or 2 seconds to switch the transceiver on. A short receipt tone sounds from the loudspeaker ( 6 ) and the display illumination lights up in blue. In a short self test the graphic display ( 3 ) shows all points. Now the unit is either in PMR reception mode or in LPD reception mode. The display will show the main screen which indicates also the actual band.



To switch the unit off depress the confirmation and On/Off key  ( 5 ) again for about 1 or 2 seconds. The loudspeaker gives a short tone and all symbols disappear from the display. The last settings remain memorised, even if the batteries are removed.


Note: The On/Off operation of the confirmation and On/Off key  ( 5 ) is disabled when it is used for confirmation. This factory setting has been made to avoid an unwanted switching Off of the unit. The disabling of the On/Off function will be cancelled after the key ( 5 ) is released once for a short time.

### 4) LCD illumination

The LC display backlight is switched on at every pressure on any key, and it will be automatically shut off 8 seconds after the last key entry.

### 5) Key lock function



The key lock function is activated from the main screen. The unit can be either in PMR mode or in LPD mode. Depress and hold the confirmation key ( 5 ). While you hold this key, press also the Up key  ( 4 ). Then two short confirmation tones sound from the speaker ( 6 ), and the key symbol  ( position C ) appears in the display. Now all keys except the PTT key ( 9 ) are ignored. The speaker gives two short tones at every pressure on any locked key, except the confirmation key ( 5 ).

To stop the key lock function depress and hold the confirmation key ( 5 ). While you hold this key, press also the Up key  ( 4 ). Then one single short confirmation tone sounds from the speaker, and the key symbol disappears from the display. Now all keys are unlocked again.

### 6) Automatic abortion of functions

If you select a function in the main menu, you have to insert all necessary entries within 5 seconds, otherwise the function will be aborted and not executed. Instead the display returns to the main screen.

### 7) Up and Down keys


If you depress briefly the keys Up  and Down  ( 4 ), the corresponding values ( volume, channel, etc. ) are changed for one step up or down. If you hold these keys for 1 or 2 seconds, the values change quickly into the corresponding direction. Some values run in a ring like system, others remain constantly after they have reached the highest or lowest value. In this case you will hear from the speaker a triple confirmation tone.

### 8) Socket for external earphone-microphone

The socket ( 2 ) (  $\varnothing$  2.5 mm ) on the top side of the unit can be used to connect an external earphone-microphone, i.e.

TEAM ORM-MS. While the socket is used the internal speaker ( 6 ) and the internal microphone Mic ( 7 ) are switched off.

### 9) Battery indication

The battery symbol  appears at the main screen at the position D. In case of completely charged batteries it is completely filled-in. At 4.9 V supply voltage one third of the filling disappears, at 4.6 V one other third, and at 4.1 V there is only the frame remaining. At 3.8 V the frame starts to blink at last. Now it is time to change or charge the batteries or accus, otherwise errors of functions and displayed information may occur. The current consumption in transmit mode amounts to 270 mA ( PMR mode ), 100 mA ( LPD mode ), in reception mode with closed squelch 40 mA and in power save mode 15 mA.

### 10) Power save function

The power save mode is only active in reception mode. If the squelch is not opened by a signal for at least 20 seconds, and if there is no key entry during this time, the unit falls into the power down mode. In this mode the receive section is supplied only periodically for a short time, so that the current consumption goes down from 40 mA to 15 mA. On receiving of a signal or pressing any key the power save mode switches itself off again.





### 11) Receipt tones

If a signal is found on the actual channel in PMR or LPD operation the receipt tones are switched off. Otherwise every pressure of a key is indicated by a short tone.

## Operation of the TEAM UHF-Handy

The TEAM UHF-Handy offers you the possibility to communicate in a band of your choice out of two radio bands in the 70-cm-band ( UHF ). One band is the PMR band ( 446.00625 MHz – 446.09375 MHz ) and the other one the LPD band ( 433.075 MHz – 434.775 MHz ). The TX output power is automatically matched to the allowed maximum value of the actual selected band. This is 500 mW radiated TX output power in PMR operation and 10 mW radiated TX output power in LPD operation. The actual selected band is indicated by the letter on the upper left corner of the main screen. The **P** means PMR mode and the **L** means LPD mode. If the unit receives an audible signal of a station the symbol **R** ( E ) appears in the lower left corner of the main screen. The following functions have to be selected from the main screen ( main menu ).

### 1) Band and channel selection

To select another radio band depress out of the keys ( 4 ) Down ▼ 7 times or Up ▲ once. The display shows the writing **CH**. Then depress briefly the confirmation and On/Off key  ( 5 ). Then the display shows the writing  On the left side of the writing **CH** you see an arrow, which can be moved with the help of the Up/Down keys ( 4 ) either to the left side of the writing **Band** or back to the left side of the writing **CH**. For the activation of the band selection put the arrow to the left side of the writing **Band** and then depress the confirmation key ( 5 ). Then the display shows the writings  or , depending on which one of the two bands the actual band is. With the help of the keys ( 4 ) you can toggle between both indications. Then, depress the confirmation key ( 5 ) for the final selection of the indicated band. Now the dis-

play shows  $\text{PMR}_8$  or  $\text{LPD}_8$ , depending on which one of the two bands you selected before. The number 8 stands for the number of the actual channel of the actual band. By the help of the Up/Down keys ( 4 ) the channels 1 to 8 of the PMR band or the channels 1 to 69 of the LPD band can be changed in the wanted direction in a ring like system. Press the confirmation key ( 5 ) to select the desired channel, and the display will return to the main screen. Now the channel number appears at the position ( F ) and the frequency band at the position ( B ). The symbol **P** means PMR mode and the **L** means LPD mode.

The channel number of the not selected band remains stored.

## 2) Channel selection within the actual band

To select another channel within the actual band depress out of the keys ( 4 ) Down ▼ 7 times or Up ▲ once. The display shows the writing **CH**. Then depress briefly the confirmation and On/Off key ① ( 5 ). Then the display shows the writings  $\text{CH}_{\text{Band}}$ . On the left side of the writing **CH** you see an arrow, which can be moved with the help of the Up/Down keys ( 4 ) either to the left side of the writing **Band** or back to the left side of the writing **CH**. For the activation of the channel selection put the arrow on the left side of the writing **CH** and then depress the confirmation key ( 5 ). Then the display shows the writings  $\text{PMR}_8$  or  $\text{LPD}_8$ , depending on which one of the two bands the actual band is. The number 8 stands for the number of the actual channel of the actual band. By the help of the Up/Down keys ( 4 ) the channels 1 to 8 of the PMR band or the channels 1 to 69 of the LPD band can be changed in the wanted direction in a ring like system. Press the confirmation key ( 5 ) to select the desired channel, and the display will return to the main screen. The channel num-

ber appears at the position ( F ). The actual frequency band ( Position B ) and the channel number of the not selected band remain unchanged.

## 3) Activating the CTCSS function and selecting a CTCSS tone

The CTCSS function serves to suppress signals of unwanted stations on the actual channel. If this function is active the unit works as follows:




The other station is only audible in the speaker, if it adds to its modulation signal a certain tone in the frequency range from 67 Hz to 250 Hz with low level. In transmit mode the unit adds itself to its modulation signal a tone of the same frequency so that the muting device of the counter station can open also. If the function is inactive you can hear every station on the channel, and in transmit mode no tone is added to the modulation signal.

To select the CTCSS function depress out of the keys ( 4 ) Down ▼ 6 times or Up ▲ 2 times. The display shows the writing **Code**. Then depress briefly the confirmation and On/Off key ( 5 ). Then the display shows the writing  $\text{Code}_{22}$ , where the "22" stands for the actual CTCSS tone code. By the help of the Up/Down keys ( 4 ) the code numbers 0 to 38 can be changed in the wanted direction in a ring like system. Press the confirmation key ( 5 ) to select the desired code number, and the display will return to the main screen. If the code number is different from zero, it will be visible in the main screen at the position ( G ). That means that the CTCSS function has been activated with the CTCSS tone corresponding to the code number.


If the selected code is "00", there will be no code number visible in the lower right corner ( position G ) of the main screen. That means that the CTCSS function is switched off now.

In the table in the annex you find the corresponding CTCSS frequencies to the code numbers.

#### 4) Volume adjustment

To adjust the volume level of the reproduction of incoming signals depress the volume key  ( 8 ). The display shows a loudspeaker symbol with one or several points or bars . The number of those points or bars shows the actual setting of the volume adjustment. By the help of the Up/Down keys ( 4 ) this setting can be changed and watched in the display. The volume level of the tones depends from the actual setting of the volume adjustment. At the highest or lowest value you hear a triple confirmation tone. Press the confirmation key ( 5 ) or the volume key  ( 8 ) to select the desired setting of the volume adjustment, and the display will return to the main screen.




#### 5) Squelch adjustment


To adjust the threshold level of the noise suppression ( squelch ) in reception mode depress out of the keys ( 4 ) Down ▼ 5 times or Up ▲ 3 times. The display shows the writing **SQ**. Then depress briefly the confirmation key ( 5 ). Then the display shows the writing **SQ** with one or several points or bars . The number of those points or bars shows the actual setting of the squelch sensitivity level. The more points or bars appear, the lower the level can be for opening the squelch. By the help of the Up/Down keys ( 4 ) this setting can be changed and watched in the display. At the highest or lowest value you hear a triple confirmation tone. Press the confirmation key ( 5 ) to select the desired setting of the squelch sensitivity level, and the display will return to the main screen.



#### 6) Activating and setting the VOX function




If the VOX function ( = voice activated transmission ) is active, the transmitter is switched on if the sound level at the microphone Mic ( 7 ) exceeds a certain intensity. After a certain

time, within which the sound level at the microphone remains below this intensity value, the radio switches automatically back to receive mode. During reception of an incoming signal the VOX function is inhibited. Thus you can communicate without the necessity of having a hand at the unit.



To activate the VOX function depress out of the keys ( 4 ) Down ▼ 4 times or Up ▲ 4 times. The display shows the writing **VOX**. Then depress briefly the confirmation key ( 5 ). Then the display shows . Below the writing "on" you see a microphone symbol. On the left side of the writing "on" you see an arrow, which can be moved with the help of the Up/Down keys ( 4 ) either to the left side of the microphone symbol or back to the left side of the writing "on". For the final activation of the VOX function put the arrow on the left side of the writing "on" and then depress the confirmation key ( 5 ). After this entry, the display returns to the main screen. On the position of the transceiver symbol  ( A ) you see the microphone symbol  now. This indicates that the VOX function is active now. If you talk loud enough into the microphone Mic ( 7 ), a short tone comes from the speaker and in the display you see at the position ( E ) the symbol **T**, indicating transmit mode. 1 to 2 seconds after you have finished your message the unit switches back to receive mode, which is indicated by two short tones and the disappearance of the symbol **T**.

To deactivate the VOX function depress out of the keys ( 4 ) Down ▼ 4 times or Up ▲ 4 times. The display shows the writing **VOX**. Then depress briefly the confirmation key ( 5 ). Then the display shows . On the left side of the writing "off" you see an arrow, which can be moved with the help of the Up/Down keys ( 4 ) either to the left side of the microphone symbol or back to the left side of the writing "off". For the deactivation of the VOX function put the arrow on the

left side of the writing "off" and then depress the confirmation key ( 5 ). After this entry the display returns to the main screen. On the position of the microphone symbol  ( A ) you see the transceiver symbol  again. This indicates that the VOX function is no longer active.


The adjustment of the threshold of the sound level at which the transmitter starts to work, can be executed at inactive or active VOX function. To this end depress out of the keys ( 4 ) Down ▼ 4 times or Up ▲ 4 times. The display shows the writing **VOX** . Then, depress briefly the confirmation key ( 5 ). Then, the display shows  or . Now put the arrow on the left side of the microphone symbol below and then depress the confirmation key ( 5 ). Then the display shows , the microphone symbol with one or several points or bars. The number of those points or bars shows the actual setting of the VOX sound level threshold. The more points or bars appear, the louder you have to speak to start the transmission. By the help of the Up/Down keys ( 4 ) this setting can be changed and watched in the display. At the highest or lowest value you hear a triple confirmation tone. Press the confirmation key ( 5 ) to select the desired setting of the sound level threshold, and the display will return to the main screen.

## 7) Selection of the call melody

To select a call melody depress out of the keys ( 4 ) Down ▼ 3 times or Up ▲ 5 times. The display shows the writing **Tone**. Then depress briefly the confirmation and On/Off key ( 5 ). Then the display shows  , a music note symbol and a digit. The digit stands for the number of the actual call melody. By the help of the Up/Down keys ( 4 ) the call melody numbers can be changed from 1 to 8 in the wanted direction in a ring like system. By pressing the confirmation key ( 5 ) you select the desired call melody, and the display will



return to the main screen at once. If you don't press any key for 1 or 2 seconds after a selection the call melody will be played in full length in the speaker and selected also. Then the display will return to the main screen.

## 8) Monitor function

In normal mode the unit is always in reception mode. This would cause a disturbing noise on free channels. Therefore the unit is equipped with a noise suppression circuit ( squelch ) for reception mode. It cuts off the disturbing noise, which the receiver produces on free channels, and lets pass only the speech signals of a counter station to the speaker. While the squelch is open display shows the symbol **R** at the position ( E ). In case of very weak signals it may occur, that the squelch remains closed. If you want to make also these signals audible, you can inhibit the squelch ( monitor function ). To this end depress out of the keys ( 4 ) Down ▼ 2 times or Up ▲ 6 times. The display shows the writing **MON<sub>on?</sub>** . Then, depress briefly the confirmation key ( 5 ). Now the squelch is always open and you can hear a noise on free channels. In the display you can see , where the "8" stands for the actual channel number in the actual band. This is the sub-screen for monitor operation. In this condition you can only adjust the volume level setting ( Para 4 ) or the squelch sensitivity setting ( Para 5 ). To adjust the volume level of the reproduction of incoming signals depress the volume key ( 8 ). See paragraph 4 for the further instructions. To adjust the squelch sensitivity setting for incoming signals depress out of the keys ( 4 ) Down ▼ once or Up ▲ once. See paragraph 5 for the further instructions. To reactivate the squelch, depress in the sub-screen for monitor operation the confirmation key ( 5 ), and the display will return to the normal main screen.

### 9) Activating of the channel scan function

In channel scan mode the unit looks for occupied channels of the actual band, i.e. channels on which the squelch opens. After having found one, it examines also, whether the demodulated reception signal contains a CTCSS tone. In this case it identifies its corresponding code number and shows it in the display at the position ( G ).

To activate the scan function depress out of the keys ( 4 ) Down ▼ once or Up ▲ 7 times. The display shows the writing . Then, depress briefly the confirmation key ( 5 ). Then the display shows . On the left side of the writing "UP" you see an arrow, which can be moved with the help of the Up/Down keys ( 4 ) either to the left side of the writing "DOWN" or back to the left side of the writing "UP". For the final activation of the channel scan function put the arrow to one of the both writings and then depress the confirmation key ( 5 ). The display returns to the main screen, but without an eventually adjusted CTCSS code number. According to the chosen direction the channel scan starts stepping upwards or downwards. The unit stops on every occupied channel for 10 seconds and shows the symbol **R** in this period at the position ( E ). If there is in the demodulated signal also a CTCSS tone, it will show also the corresponding CTCSS code number at the position ( G ). After the 10 seconds have passed by or after the signal has dropped below the squelch threshold the channel scan function continues searching. By pressing the confirmation key ( 5 ) the channel scan function is terminated and the unit remains on the actual channel. The display shows the main screen. If the unit was on an occupied channel where a CTCSS coded station has been making a transmission, the unit will take over this CTCSS code. If the station has been sending without a CTCSS code or the channel has been free, the unit will keep the CTCSS setting which was active before starting the channel scan.

### 10) Transmitting

For speech transmission depress and hold the transmit key PTT ( 9 ) on the left side of the unit. In the display appears the symbol **T** at the position ( E ). If the channel scan function had been active, it would be terminated now. The sensitivity of the built-in microphone Mic ( 7 ) has been set to give good results speaking normally at a distance of 2 inches. Speaking too loudly will cause distortions and make the signal difficult to understand. On completion of the transmission release the transmit key PTT ( 9 ) and the unit will revert to receiving mode and in the display the **T** will disappear.

For call melody transmission on the actual channel depress the call tone key **CALL** ( 10 ) above the PTT key. The unit transmits the actual call melody in full length, no matter how long you press the call tone key CALL ( 10 ). It is only audible at the counter station. In this period the display shows the symbol **T** at the position ( E ). Speech transmission is impossible now. After finishing transmission the unit switches back to receiving mode with a short melody in the speaker ( 6 ) and in the display the symbol **T** will disappear.

### Safety

The unit radiates in transmit mode RF energy. To reduce the exposure at the lowest possible value, and to benefit as much as possible of the features of the unit, you should take into account the following advice:

In transmission mode keep the unit in a vertical position at a distance of 2 to 3 inches from your face. Keep the antenna ( 1 ) at a distance of at least 1 inch away from your head and your body. If you carry the unit on your body and if the unit is in transmit mode, make sure that the antenna ( 1 ) is kept at a distance of at least 1 inch away from your body.

**Service**

The condition of the batteries must be tested from time to time. Worn out batteries must be removed from the unit immediately. They can leak and damage the device. The batteries should always be replaced as a complete set. Worn out batteries do not belong in the waste bin, but must be returned to a suitable collecting depot or to a special dealer, for the sake of the environment. There are no user adjustable or user serviceable parts inside the radio. The casing must not be opened. Independent repairs or adjustments must not be carried out, since each modification or unauthorised intervention will immediately cancel all and any guarantee or repair claims, they are also likely to result in non-conformity to ETS regulations which will render the set to become illegal. In the event a defect becoming apparent, contact a properly equipped and authorised TEAM dealer or TEAM directly.

**Conformity**

The transceiver TEAM UHF-Handy complies with the rules of the European Directive R&TTE and meets the European Telecommunication Standards ETSI EN 300 296-1/-2, ETSI EN 301 489-3/-5, and EN 60950.

This product is meant for distribution and sale in the following European countries:

Austria, France, Germany, Greece, Italy, The Netherlands, Sweden.

## **TEAM UHF-Handy**

**for sale and use in :**

- **Austria • France • Germany • Greece**
- **Italy • Netherlands • Sweden**



Nachdruck oder Vervielfältigung auch Auszugsweise nur mit ausdrücklicher Genehmigung von TEAM Electronic GmbH.



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