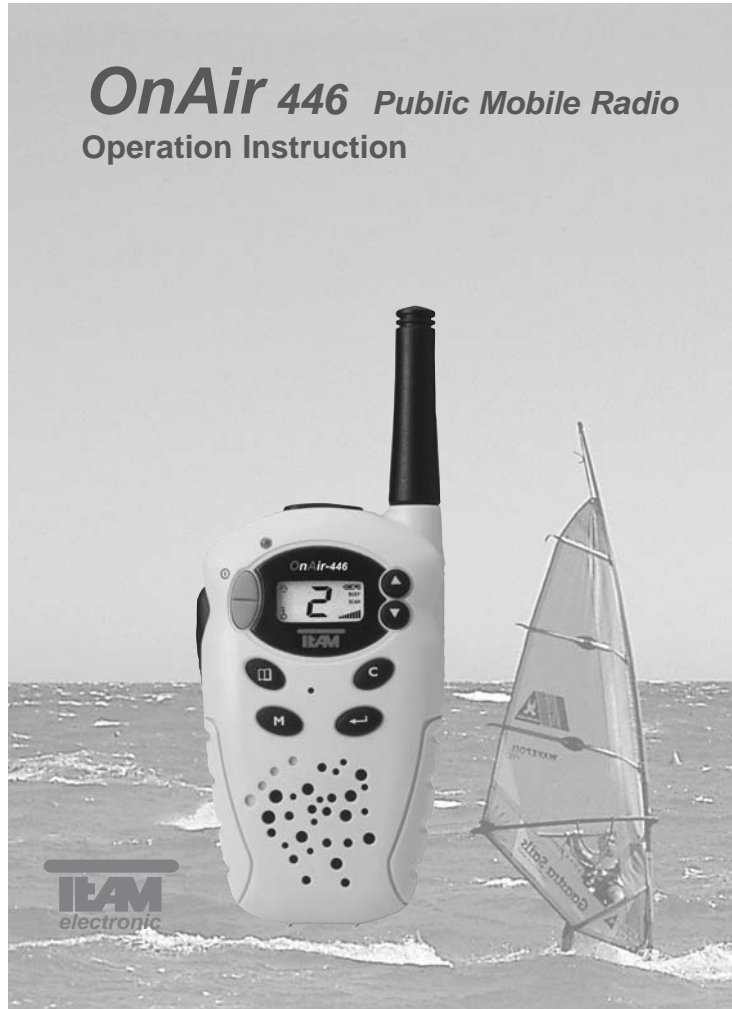


***OnAir 446*** *Public Mobile Radio*  
Operation Instruction












# OnAir 446



## Features

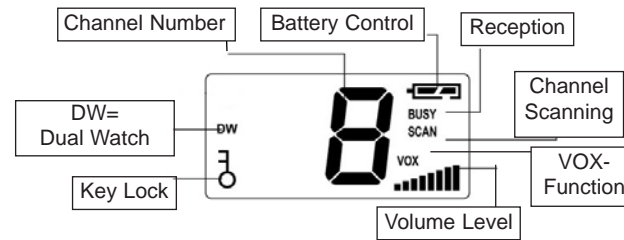
- 1.) Antenna
- 2.) LCD Screen
- 3.) Up Key 
- 4.) Down Key 
- 5.) Call Tone Key 
- 6.) Enter Key 
- 7.) Speaker
- 8.) Battery Compartment
- 9.) Microphone
- 10.) Monitor Key 
- 11.) Menu Key 
- 12.) PTT Key
- 13.) On/Off Key 
- 14.) TX LED
- 15.) Jacks SP./MIC/CHG
- 16.) Belt Clip

# English

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LC-Display



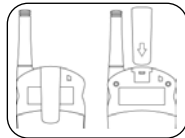
- SCAN** Appears when the channel scan function is active.
- 🔑** Appears when the key lock function is active.
- BUSY** Appears when there is an incoming receiver signal.
- 8** The channel number can go from 1 to 8, according to the user.
- 🔋** Indicates the actual battery level. Flashes if the charger is connected.
- 📶** Indicates the actual volume level adjustment.
- DW** Appears when the dual watch function is active.
- VOX** Appears when the VOX function is active.

English

### Setup of TEAM OnAir 446

#### Removing and mounting of the belt clip ( 16 )

**Removing:** Turn the unit that way that the rear panel lies in front of you. The latch of the belt clip is located near the headset sockets SP/MIC/CHG ( 15 ). Pull the latch with the finger nail towards you and hold it for a moment. Push the belt clip at the same time towards the top of the antenna ( 1 ). Then, you can take it off.



**Mounting:** Insert the belt clip from above into its sliding bar on the rear panel of the unit. Then push the clip towards the unit's bottom side until the belt clip latch clicks into place.

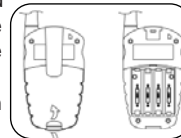
#### Inserting the batteries

Turn the unit that way that the rear panel lies in front of you. The lock of the battery compartment lid ( 8 ) is located at the bottom side of the unit. Push the locking aside and turn it down. Then, you can take off the lid.

Now, insert 4 alkaline or rechargeable AAA ( = Micro ) cells 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 ( 8 ) put the lid onto the compartment in that way that the guide bolt at the top of the lid grips into the guide hole at the top of the battery compartment.


Finally secure the lid by pushing the locking on it until it snaps in the battery compartment.



### Operation of TEAM OnAir 446

#### 1) Switching On/Off



Depress the On/Off key ( 13 ) for about 1 or 2 seconds to switch the transceiver on. You can hear two short receipt tones from the

speaker ( 7 ). For the period of the tones the display ( 2 ) shows all symbols. Now the unit is in receive mode. When the unit is switched on, the first time after the batteries have been inserted, the channel number will be channel 1 ( = 446,00625 MHz ). To switch the unit off, depress the On/Off key  ( 13 ) again for about 1 or 2 seconds. The speaker gives a long tone and all symbols disappear from the display. The last settings remain memorized.

## 2) Battery level indicator

The battery symbol on the upper right side in the display shows the battery level. As long as both bars are visible inside the symbol, the batteries are still strong enough. If the supply voltage drops below 4.4 V, the left bar disappears. If the supply voltage drops below 4.1 V, the other bar disappears also. Now, the battery symbol is blinking and in the loudspeaker you will hear every 5 seconds a warning melody. That means that you have to change or charge the batteries. The unit will automatically shut off if the supply voltage drops below 3.7 V. The *OnAir 446* is equipped with a battery save function. If there is no signal on the actual channel for at least 6 seconds, and if no key is pressed during this period, the battery save function starts to work. While this function is active the unit checks the actual channel for incoming signals in regular intervals. The current consumption in the power down mode drops down to 13 mA. But if you don't use the unit it is better to switch it off. If you won't use the unit for a longer period, we recommend to take the batteries out of the battery compartment.

## 3) Volume level adjustment

The bars meter in the lower right side of the display shows the currently adjusted volume level. Press the up key  ( 3 ) to increase the volume level adjustment for one step. Press the down key  ( 4 ) to decrease the volume level adjustment for one step. Pressing the keys for one second will make the volume level adjustment change quickly. The height of the confirmation tones depends from the currently adjusted volume level. At the end of

### English

the adjustment range two high signal tones are audible. The keys ( 3 ) and ( 4 ) are without effect if the key lock function is active.

#### 4) Disabling the noise suppression

The receiver is equipped with a circuit ( squelch ) that mutes the receiver if there is no station on the actual channel, because there would be much noise in the loudspeaker ( 7 ). Any incoming signal will make the squelch switch on the loudspeaker at once. So you can hear the station in the loudspeaker. In the case where the squelch lets signals pass, the symbol ( = BUSY ) below the battery symbol appears and indicates that the channel is occupied. The squelch function can be disabled to hear also weak stations ( monitor function ).

Depress shortly the Monitor key M ( 10 ). Now the noise suppression is shut off. In the display appears the symbol ( = BUSY ). If there is no station on the actual channel you hear a noise in the speaker.

To reactivate the squelch depress the Monitor key M ( 10 ) again. Thus the squelch works again. If there is no station on the actual channel, the symbol ( = BUSY ) disappears from the LCD window.

#### 5) Voice transmission




Radio contact is only possible with stations that work on the actual channel. Before transmitting you have to listen whether the actual channel is free. Don't send on occupied channels. To transmit depress and hold the PTT key ( 12 ). During transmission the red TX control lamp ( 14 ) lights up red and no key entry is possible. The sensitivity of the built-in microphone ( 9 ) has been set to give good results speaking normally at a distance of 2 - 3 inches. Speaking too loudly will cause distortions and make the signal difficult to understand. On completion of the transmission release the PTT key and the set will revert to receiving mode.

#### 6) Call tone transmission



By pressing the call tone key C ( 5 ) you can transmit a call signal. The call signal will be transmitted for three seconds and is

also audible in the internal loudspeaker ( 7 ). All stations in the neighbourhood that are on the same channel will hear it. Then, the unit will switch back to receive mode.





#### 7) LCD window illumination

By pressing the enter key  ( 6 ) the backlight of the LC display lights up. The illumination will switch off automatically four seconds later. The LCD backlight will also be switched on, if the menu key  ( 11 ) is pressed to select an instruction and switched off if the enter key  ( 6 ) is pressed to confirm the selected instruction.

#### 8) Key lock function

To prevent an unwanted activating of most keys, depress the enter key  ( 6 ) for 2 seconds until the key lock symbol ( key ) appears with a confirmation tone on the lower left side in the display. Now you can only send, deactivate the squelch and switch the unit off and on. To deactivate the key lock depress the enter key  ( 6 ) again for 2 seconds, until the key lock symbol ( key ) disappears with another confirmation tone.

#### 9) Channel selection

TEAM *OnAir 446* is equipped with 8 channels. The following instructions show how to select a channel: Depress the menu key  ( 11 ) one time, until the number of the actual channel flashes in the LCD window. The channel selection must be done as long as the channel number is still flashing, otherwise the unit returns to the normal mode without changing the channel. Press the up key  ( 3 ) to increase the channel number for one channel. Press the down key  ( 4 ) to decrease the channel number for one channel. Pressing the keys for one second will make the channel number change quickly. The height of the confirmation tones depends from the current channel number. The channels step in a ring like system. Depress the enter key  ( 6 ) to terminate the channel selection and to return to the normal receiving mode. No channel selection is possible in key lock mode.

#### 10) Channel scan function

If the channel scan function is active, the unit runs through all channels, until it has found an occupied one. In this case the squelch opens and the unit stops on that channel. The following instructions show how to activate the channel scan function: Depress the menu key  $\equiv$  ( 11 ) two times, until the channel scan symbol ( = SCAN ) flashes in the LCD window. Depress the keys ( 3 ) or ( 4 ) to start the channel scan into the desired direction. According to the chosen direction the channel number increases or decreases and the scan symbol ( = SCAN ) appears constantly. The scanning stops on every occupied channel for 4 seconds and then continues searching. To deactivate the scan function and to stay on the actual channel, you have 4 options:

- a) Depressing the enter key  $\rightarrow$  ( 6 ).  
The unit will transmit immediately.
- b) Depressing the PTT key ( 12 ).  
The unit will transmit immediately the call tone.
- c) Depressing the call tone key C ( 5 ).  
The unit will transmit immediately the call tone.
- d) Depressing the menu key  $\equiv$  ( 11 ) four times.

#### 11) Dual watch function

This function allows you to watch activity on two channels at a time. The following instructions show how to activate the dual watch function: First select the first survey channel. Then depress the menu key  $\equiv$  ( 11 ) three times, until the dual watch symbol ( = DW ) flashes in the LCD window. Depress the keys ( 3 ) or ( 4 ) to select the second survey channel. Now the dual watch symbol ( = DW ) appears constantly. If on none of both survey channels is received a signal, the unit will step from one channel to the other two times every second. If on one of these channels is received a signal, the unit will remain on it until the channel is free again. To deactivate the dual watch function and to stay on the actual channel, you have 4 possibilities:

- a) Depressing the enter key  $\text{↵}$  ( 6 ).
- b) Depressing the PTT key ( 12 ). The unit will transmit immediately.
- c) Depressing the call tone key C ( 5 ).  
The unit will transmit immediately the call tone.
- d) Depressing the menu key  $\text{≡}$  ( 11 ) three times.

## 12) VOX function

While the VOX function is active, the unit switches automatically to transmit mode when the sound level at the microphone ( 9 ) is above a certain threshold. If the voice loudness at the microphone ( 9 ) remains below this threshold for a certain time, which is called the VOX delay time, the radio switches back to receive mode. Thus you can communicate without having a hand at the unit. If the squelch is open because of a received signal the VOX function is inhibited. The following instructions show how to activate the VOX function and how to work with it:

- Depress the menu key  $\text{≡}$  ( 11 ) four times, until the VOX function ( = VOX ) flashes in the LCD window.
- Now you can adjust the VOX sensitivity. Press the up key  $\text{▲}$  ( 3 ) to increase the VOX sensitivity for one step.
- Press the down key  $\text{▼}$  ( 4 ) to decrease the VOX sensitivity for one step.

Pressing the keys for one second will make the VOX sensitivity change quickly. The bar meter in the lower right side of the display, which indicates normally the volume level adjustment, shows the currently adjusted VOX sensitivity. The height of the confirmation tones doesn't depend from the currently adjusted VOX sensitivity. At the end of the adjustment range two high signal tones are audible. If the VOX sensitivity is set at the lowest possible value, so that no more bar is visible, the VOX function is deactivated. To return to the normal receiving mode, you have 3 options:

### English

- a) Depressing the enter key ( 6 ).
- b) Depressing the PTT key ( 12 ).

The unit will transmit immediately.

- c) Depressing the menu key ( 11 ) two times.

If you adjusted the VOX sensitivity at a too high level in a noisy area, it is possible that the transmitter starts to work unwanted. By depressing two times the enter key ( 6 ) the transmitter can be inhibited for 4 seconds. During this time you have time to reduce the VOX sensitivity.

### 13) Second counter function

Depress the menu key ( 11 ) five times, until two zeros are flashing at the position of the channel number in the display. Press the up key ( 3 ) to make the numbers appear constantly and count upwards in the rate of a second. Press the down key ( 4 ) to stop the counting and to make the number flash again. By depressing the enter key ( 6 ) the counter will be reset to zero. By pressing any key or at the arrival of a reception signal, the unit will return to the normal receiving mode.

### 14) Charging of accumulators in the unit

The charger and the accumulators are not included to the set. Never try to charge alkali cells. If you use rechargeable cells you can charge them inside the *OnAir 446* with the help of the optional available charger item No. PR2023. Before charging make sure, that 4 rechargeable cells of NiMH type are inside the battery compartment, and that the unit is switched off. Then insert the charger into a wall outlet ( 230 V, 50 Hz ). Then connect the plug at the end of the cable into the 2.5 mm socket MIC/CHG ( 15 ) on the upper panel of the unit. The loudspeaker ( 7 ) gives a long tone, and the display shows constantly the actual channel with the currently adjusted volume level, and flashing the battery symbol with both bars. The charging time amounts to about 14 hours and in case of partially discharged cells about 6 hours. After the charging time has terminated, you have to disconnect the charg-

er. The loudspeaker gives a long tone and in the display all symbols disappear. The unit is switched off now.

#### **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 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 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 warranty or repair claims, they are also likely to result in nonconformity 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 *OnAir 446* complies with the rules of the European Directive R&TTE and meets the European Telecommunication Standards ETS 300 296 & ETS 300 279.

**English**

Channel number	Frequency (MHz)
1	446.00625
2	446.01875
3	446.03125
4	446.04375
5	446.05625
6	446.06875
7	446.08125
8	446.09375

This product is meant for distribution and sale in the following European countries:  
Austria, Belgium, Denmark, Finland, France, Germany, Great Britain, Greece, Italy, Luxemburg, Netherlands, Portugal, Spain, Sweden, Switzerland.