

PMR446 radio

PT-375



Operating instructions

Features - Scope of delivery

- PMR446 radio
- Compact, elegant design
- 99 channels (56 pre-programmed)
- Transmitting power 500 mW
- Channel spacing 12.5 kHz
- Voice announcement
- VOX function, sensitivity adjustable in 10 steps
- Splash-proof according to IPX2
- Search function
- Key tones
- Roger Beep
- Battery saving mode
- Monitor function
- Squelch adjustable in 10 steps
- Display with adjustable brightness
- Battery warning via voice output
- 2-pin socket for audio accessories
- Li-ion battery with 2300 mAh
- PC-programmable

Scope of delivery

- Radio
- Belt clip, rotatable
- Rechargeable Li-ion battery 3.7 V/2300 mAh
- Stand charger (for battery on radio or battery separately)
- Power adapter with micro USB cable

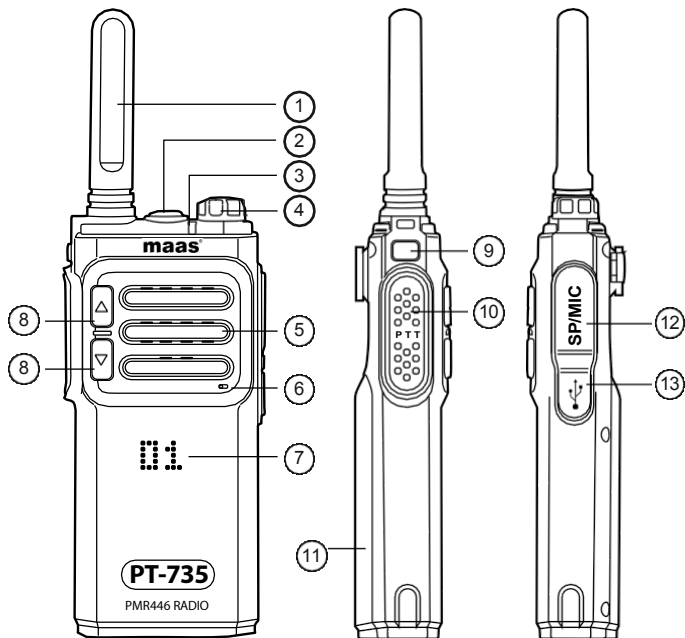
Maintenance


The PT-375 is designed to give you many years of trouble-free operation and enjoyment.

As with all electronic devices, the following recommendations apply:

- Do not open the unit. Improper handling can damage the appliance.
- High temperatures can damage electronic devices.
- Do not place the radio in a dusty or dirty environment.
- Protect the radio from moisture and rain.
- If the radio emits a strange smell or smoke, switch it off and remove the battery or disconnect the power supply.
- Do not transmit without an antenna.

Front and side views



1. Antenna (not removable)
2. Press the key briefly to enter the menu. Press and hold the key to start the search.
The button can be individually programmed using the PRG-10 programming kit.
3.  Switch/Volume knob: Turn clockwise to switch on the unit and then increase the volume.
Turn it counterclockwise to reduce the volume or turn the radio off.
4. LED Red=Transmit; Orange=Transmit with CTCSS/DCS; Green: Receive
5. Speaker openings
6. Microphone
7. Display
8. UP/DOWN buttons:
Press briefly to switch 1 channel up or down. Press and hold to skip 10 channels at once. During the scan, use the buttons to change direction.
9. Monitor button: Press briefly to switch the monitor function on or off. Press and hold to display the battery charge status.
The button can be individually programmed using the PRG-10 programming kit.
10. PTT: Press and hold the button to transmit. When the button is released again, the radio goes on reception.
11. Li-Ion battery 3.7 V/2300 mAh
12. Loudspeaker/microphone socket: Connection possibility for external accessories (e.g. headsets), compatible for Maas headsets , Speakermikes etc. with "K" plug or original Kenwood accessories. If you are not using an accessory, please cover the socket with the cover.
13. Micro USB socket: The battery of the radio can also be charged via USB.

Operation

Switching on/off and adjusting the volume

Turn the power/volume dial clockwise to switch on the radio.

Turn the control clockwise or counterclockwise to adjust the volume as needed.

Turn the control counter-clockwise until you hear a mechanical "click" to switch off the radio.

Send

To be able to communicate with each other, all radios in your group must be set to the same channel.

Press the monitor key briefly to activate the monitor function. This allows you to check whether the channel is occupied.

Then press the PTT button to transmit and release the PTT button to receive.

During radio communication, only one partner can speak at a time. Therefore, do not transmit yourself when you hear a partner. Only transmit as little as possible so that the channel remains free.

A lot of power is consumed when sending. Therefore, keep your transmission time as short as possible so that the battery lasts longer. If you cannot reach a partner that you can normally receive without problems, they may be using CTCSS tones or DCS codes.

Monitor

The monitor function allows you to temporarily deactivate the squelch function in order to receive signals that are too weak to be heard when the squelch function is activated.

Briefly press the monitor key to activate or deactivate the function.

Search function

Press the Menu button for about 3 seconds to start the scan. The radio then scans all channels, starting from the current channel. The display of the radio shows an arrow running from left to right (upward search). Use the UP/DOWN buttons to reverse the search direction (downward search).

As soon as a signal is found, the search stops on the specified channel. With the optionally available PRG-10 programming software, you can select three different search modes.

The default mode is "Carrier". It searches for carrier signals and stops as soon as one is found.

If the signal disappears, the search continues automatically after about seven seconds.

By pressing the PTT button, you end the search and the radio transmits on the channel used.

To start the search again, press the menu key again for 3 seconds.

VOX

Thanks to the VOX function, hands-free talking is possible with the PT-375. Simply speak into the microphone and the radio automatically switches to transmit without having to press the PTT button.


The sensitivity of the VOX can be adjusted in ten steps (OFF, 1... 9) using the programming software or the menu of the radio.

"OFF" means that the VOX function is switched off; "1" is the lowest sensitivity level of VOX and "9" the highest.

Operation

To set the desired sensitivity of VOX via the radio's menu, proceed as follows:

Briefly press the menu key.

Now press the monitor button twice. The display shows the sensitivity with the indication . With the UP/DOWN keys you can now set the desired sensitivity from 0 to 9.




Confirm the setting by pressing the PTT button or wait about three seconds.

Note: Please note that the VOX function is only suitable to a limited extent in noisy surroundings or with background noise.

Voice announcements

The PT-375 has a voice prompt function: this informs you of every operation or selection you make on the radio. To activate or deactivate the voice prompt, proceed as follows:

Briefly press the menu key.

Now press the monitor button three times. The display shows  if voice announcement is activated and then  or  if voice announcement is deactivated.

The UP/DOWN keys can be used to activate and deactivate the function.

Confirm the setting by pressing the PTT button or wait about three seconds.

The voice announcement function can also be activated or deactivated via the optional programming software.




Squelch

The squelch function suppresses annoying noise on free channels.

The PT-375 has ten different squelch levels: "0" be-

indicates that the squelch is permanently open; the steps "1" to "9" are different levels of squelch. By default, the squelch on the PT-375 is set to level "5". The levels can be set via the optional programming software or via the menu of the radio. Do not set the squelch level too high, otherwise you may not be able to receive weaker signals. On the other hand, setting the level too low may open the squelch even though there is no signal. The squelch must be set so that it is closed when there are no signals.

The squelch must be set without signal reception. Procedure:
Briefly press the menu key.

Press the monitor button once. The display shows:   . Set the squelch level with the UP/DOWN keys.


Confirm the setting by pressing the PTT button or wait about three seconds.

Key tones



With this function, the PT-375 emits a confirmation beep every time a button is pressed.

Proceed as follows to activate or deactivate the key tones:

Briefly press the menu key.

Press the monitor key five times until  and is shown on the display.

Activate or deactivate the key tones with the UP/DOWN keys.

 = ON;  = OFF.

Confirm the setting by pressing the PTT button or wait about three seconds.

Operation

Charge battery

The PT-375 is equipped with a 3.7 V/2300 mAh lithium-ion battery. The battery can be charged on the radio or separately. Place the radio in the larger holder of the table charger or the battery alone in the smaller holder.

Plug the mains adapter into the mains socket and insert the charging plug of the mains adapter into the DC socket of the table charger.

It takes five to six hours to fully charge the battery. For maximum battery life, it is recommended to charge the battery when the PT-375 is switched off.

The use of chargers other than the one supplied may cause damage to your radio or the battery, including explosion, fire and personal injury. You can also charge the battery by connecting the supplied USB cable to the micro USB port on the radio. Then the LED indicator on the front of the radio lights up red during charging and goes out when the battery is fully charged.

If you switch on the radio and then connect the micro-USB cable, the display will show the battery charge status while the battery is charging, just like a smartphone.



The battery saving function can reduce power consumption by up to 50 per cent. When the radio is on, it is automatically activated if the radio does not receive a signal for more than seven seconds.

Energy-saving mode

The power saving mode can be used to reduce power consumption. The function is activated by default.

The energy saving mode can be deactivated or reactivated. Enter the menu of the radio and proceed as follows:

Briefly press the menu button. Press the monitor key four times.

The display shows  when the energy-saving mode is activated and then  when the energy-saving mode is deactivated.

The energy-saving mode can also be activated and deactivated via the programming software.

Adjust the brightness of the LED display

Briefly press the menu key.

The display shows the current brightness level by the symbol .

Use the UP/DOWN keys to set the desired brightness (from "1" to "4").

Confirm the setting with the PTT button or by waiting about three seconds.

Firmware version check

To view the firmware version of the radio, proceed as follows:

Briefly press the menu button. Press the monitor key six times.

The firmware version is shown on the display.

Error handling

Problem	Cause	Remedy
Radio cannot be switched on	Battery may be discharged or not correctly installed.	Charge the battery or check the seating
Radio switches off shortly after it has been switched on	Battery discharged	Charge battery
Battery will not charge	Battery is not connected correctly or not installed correctly	Check the contact and the correct fit of the battery.
Radio not receiving signals	Receiving location is heavily shielded Volume is too low Wrong CTCSS tone or DCS code	Change location Increase volume Check that the CTCSS tone or DCS code matches that of the communication partner.
Radio permanently noises	Monitor function is activated	Deactivate monitor function
VOX starts the transmission unintentionally	VOX sensitivity too high	Reduce VOX sensitivity
Very loud speaking is required for the VOX to switch to transmit.	VOX sensitivity too low	Increase VOX sensitivity

Error handling

Problem	Cause	Remedy
Communication not possible	Wrong channel Distance too great Wrong CTCSS tone or DCS code	Select the same channel as the communication partner Change location Check that the CTCSS tone or DCS code matches that of the communication partner.
Reception is disturbed or choppy	Signal is very weak Distance too large Channel is also used by others Interference from other devices	Activate monitor function Change location Change channel Change location
Battery life too low	Battery life exceeded High power transmission	Replace battery with a new one Reduce transmission power
Radio does not behave normally		Reset of the radio required

Technical data

General

Frequency	446.00625-446.19375 MHz
(PMR446)	
Channels	99 (56 pre-programmed)
Operating temperature	-20°C..+55° C
Operating voltage	3.7 V
Operating mode	Simplex
Dimensions	126 mm × 57 mm × 27 mm
(without antenna)	
Weight	142 g (with battery)
Antenna impedance	50 Ω
Duty Cycle	5/5/90%

Transmitter

Frequency stability	±2 .5 ppm
Output power	≤500 mW
(ERP) Max. Frequency deviation	≤2.5 kHz
Audio distortion	≤3% adjacent channel power
	<60 dB
Secondary transmissions	Meets the legal requirements
Occupied bandwidth	Meets the legal requirements

Receiver

Sensitivity	<0.2 μV@20 dB
SINAD Audio distortion	≤3%
Transmission range	300 Hz ...3 kHz

Channel table

Chan nel no.	Frequency MHz	CTCSS/ DCS	compatible nel	Chan
1	446.00625	94.8 Hz	Maas PT666/Kenwood TK-3401/3501/3701/UBZ-LJ9 (analogue)	1
2	446.09375	88.5 Hz	Maas PT666 / Kenwood TK-3401/3501/3701/UBZ-LJ9 (analogue) 2	
3	446.03125	103.5 Hz	Maas PT666 / Kenwood TK-3401/3501/3701/UBZ-LJ9 (analogue) 3	
4	446.06875	79.7 Hz	Maas PT666 / Kenwood TK-3401/3501/3701/UBZ-LJ9 (analogue) 4	
5	446.04375	118.8 Hz	Maas PT666 / Kenwood TK-3401/3501/3701/UBZ-LJ9 (analogue) 5	
6	446.01875	123.0 Hz	Maas PT666 / Kenwood TK-3401/3501/3701/UBZ-LJ9 (analogue) 6	
7	446.08125	127.3 Hz	Maas PT666 / Kenwood TK-3401/3501/3701/UBZ-LJ9 (analogue) 7	
8	446.05625	85.4 Hz	Maas PT666 / Kenwood TK-3401/3501/3701/UBZ-LJ9 (analogue) 8	
9	446.00625	107.2 Hz	Maas PT666 / Kenwood TK-3401/3501/3701/UBZ-LJ9 (analogue) 9	
10	446.09375	110.9 Hz	Maas PT666 / Kenwood TK-3401/3501/3701/UBZ-LJ9 (analogue)	10
11	446.03125	114.8 Hz	Maas PT666 / Kenwood TK-3401/3501/3701/UBZ-LJ9 (analogue)	11
12	446.06875	82.5 Hz	Maas PT666 / Kenwood TK-3401/3501/3701/UBZ-LJ9 (analogue)	12
13	446.04375	D132N	Maas PT666 / Kenwood TK-3401/3501/3701/UBZ-LJ9 (analogue)	13
14	446.01875	D155N	Maas PT666 / Kenwood TK-3401/3501/3701/UBZ-LJ9 (analogue)	14
15	446.08125	D134N	Maas PT666 / Kenwood TK-3401/3501/3701/UBZ-LJ9 (analogue)	15
16	446.05625	D243N	Maas PT666 / Kenwood TK-3401/3501/3701/UBZ-LJ9 (analogue)	16
17	446.10625	94.8 Hz	Kenwood UBZ-LJ9 (analogue)	17
18	446.19375	88.5 Hz	Kenwood UBZ-LJ9 (analogue)	18
19	446.13125	103.5 Hz	Kenwood UBZ-LJ9 (analogue)	19
20	446.16875	79.7 Hz	Kenwood UBZ-LJ9 (analogue)	20
21	446.14375	118.8 Hz	Kenwood UBZ-LJ9 (analogue)	21
22	446.11875	123.0 Hz	Kenwood UBZ-LJ9 (analogue)	22
23	446.18125	127.3 Hz	Kenwood UBZ-LJ9 (analogue)	23
24	446.15625	85.4 Hz	Kenwood UBZ-LJ9 (analogue)	24
25	446.10625	107.2 Hz	Kenwood UBZ-LJ9 (analogue)	25
26	446.19375	110.9 Hz	Kenwood UBZ-LJ9 (analogue)	26
27	446.13125	114.8 Hz	Kenwood UBZ-LJ9 (analogue)	27
28	446.16875	82.5 Hz	Kenwood UBZ-LJ9 (analogue)	28
29	446.14375	D132N	Kenwood UBZ-LJ9 (analogue)	29
30	446.11875	D155N	Kenwood UBZ-LJ9 (analogue)	30
31	446.18125	D134N	Kenwood UBZ-LJ9 (analogue)	31
32	446.15625	D243N	Kenwood UBZ-LJ9 (analogue)	32
33	not documented			

Notes

34 not documented

35 not documented

36 not documented

37 not documented

Channel

table

Chan nel no.	Frequency MHz	CTCSS/ DCS	compatible	Channel
38	not documented			
39	not documented			
40	not documented			
41	446.00625	OFF	Wintec LP-4502+	1
42	446.01875	OFF	Wintec LP-4502+	2
43	446.03125	OFF	Wintec LP-4502+	3
44	446.04375	OFF	Wintec LP-4502+	4
45	446.05625	OFF	Wintec LP-4502+	5
46	446.06875	OFF	Wintec LP-4502+	6
47	446.08125	OFF	Wintec LP-4502+	7
48	446.09375	OFF	Wintec LP-4502+	8
49	446.10625	OFF	Wintec LP-4502+	9
50	446.11875	OFF	Wintec LP-4502+	10
51	446.13125	OFF	Wintec LP-4502+	11
52	446.14375	OFF	Wintec LP-4502+	12
53	446.15625	OFF	Wintec LP-4502+	13
54	446.16875	OFF	Wintec LP-4502+	14
55	446.18125	OFF	Wintec LP-4502+	15
56	446.19375	OFF	Wintec LP-4502+	16
57	not documented			
58	not documented			
59	not documented			
60	not documented			
61	446.00625	OFF	Motorola T Series (8 channels)	1
62	446.01875	OFF	Motorola T Series (8 channels)	2
63	446.03125	OFF	Motorola T Series (8 channels)	3
64	446.04375	OFF	Motorola T Series (8 channels)	4
65	446.05625	OFF	Motorola T Series (8 channels)	5
66	446.06875	OFF	Motorola T Series (8 channels)	6
67	446.08125	OFF	Motorola T Series (8 channels)	7
68	446.09375	OFF	Motorola T Series (8 channels)	8

Channel table



maas radio electronics

Inh. Peter Maas

Heppendorfer Str. 23 - 50189 Elsdorf-Berrendorf

Tel. (0 22 74) 93 87-0 - Fax (0 22 74) 93 87-31

info@maas-elektronik.com

www.maas-elektronik.com