

USERS MANUAL



Alecto® FR-22

INTRODUCTION

The Alecto FR-22 is a PMR-446 2-way Family Radio. With these handsets it is possible to communicate with other FR-22 units or with other 2-way Family Radio units, working with the PMR-446 standard.

The Alecto FR-22 complies with the essential requirements and provisions as described in the European Directive 1999/5/EC.

The declaration of conformity can be found on the website www.alecto.info

DISPLAYFUNCTIONS

	battery indication
	LOCK indication
	BUSY receive indication
	indication 2-scan
	channel indication
	scan-mode activated
	VOX-mode
	volume indication

FUNCTIE

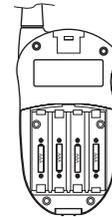
1. Antenna
2. Headset connection
3. Indication TRANSMIT
4. button ON/OFF
5. PTT button
6. Microphone
7. Button MODE
8. Button Monitor
9. Loudspeaker
10. Button ENTER
11. Button CALL
12. Button DOWN
13. Button UP
14. Display



POWER SUPPLY

The FR-22 is powered by means of 4 pcs AAA batteries. (Batteries not included)

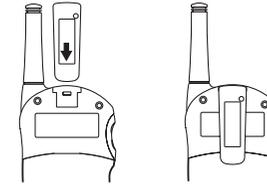
Open the batterycover and install the battery pack or 4 pcs AAA batteries. Please mind the polarity.



Remove the batteries in case the set will not be used for a while. This to prevent that leaking batteries will damage the handsets.

BELTCLIP

Beltclips are provided. These are to be attached to the backside of each handset.



USAGE

ON/OFF:

Press button ④ (4) for one second to switch-ON the FR-22. Press again for one second to switch-OFF. When switching-ON and switching-OFF, a confirmation tone is heard.

Channel setting:

For communication, both handsets must be set to the same channel

1. press button (7), the channel-indicator 'CHAN' starts to flash
2. press button Δ or ∇ to set the required channel (1-8)
3. press button **ENTER** (10) to confirm the channel setting

Transmit and receive:

1. press button **TALK** (5) to transmit, the transmit indication (3) lights
2. release this button to receive

Volume:

1. use buttons Δ or ∇ to set the volume. This level will remain in memory until a new level is set
2. the volume-icon () indicates the set level

Call:

By pressing button **CALL** (11), all other handset(s) in range and which are set to the same channel will beep.

VOX: (Voice Activated Transmission)

When this function is activated, the FR-22 starts transmitting if the soundlevel exceeds a preset value. In this case the use of the **TALK** button can be omitted.

1. press 4x button (7), the word 'VOX' starts to flash in the display
2. press button Δ or ∇ to set the VOX-level (the amount of bars in the display indicates the sensitivity level, no bars = no VOX)
3. press **ENTER** (10) to confirm the VOX setting

Keyboardlock:

With a locked keyboard, no settings can be changed anymore.

1. press button **ENTER** (10) for three seconds
2. a beep sound and the symbol lights
3. press button **ENTER** again for three seconds to deactivate the lock-function

Channel-scan:

With the channel-scan feature, you can scan all 8 channels until the handset finds one on which another user is transmitting.

This channel can be monitored for 5 seconds after which the FR-22 continues with the scanning.

Activate / deactivate:

1. press 2x button (7), the word 'SCAN' flashes in the display
2. press Δ or ∇ to activate the scan mode

communicating on a found channel:

1. press **TALK** (5)
2. the scan mode will be deactivated and communicating will be possible

stop the scan mode:

1. press **ENTER** (10) to stop the scan mode

2-channel scan:

The 2-channel scan-mode can be used when 3 handsets are used, transmitting on 2 different channels

1. make sure your handset is set to one of the 2 channels which you want to scan
2. press 3x button (7), the word 'DW' flashes in the display

3. use buttons Δ or ∇ to select the second channel
 4. as soon as you release the button Δ or ∇ , the FR-22 starts scanning the 2 channels
- During scanning you can change the second channel by pressing Δ or ∇ .

Press **TALK** (5) to communicate or **ENTER** (10) to stop the scanning.

Monitoring:

Weak stations may not be able to turn the speaker ON. In such cases you may want to temporarily de-activate (turn OFF) the Auto Mute feature:

1. press and release button **MONI** (8), all signals on that channel are now heard
2. press this button again to return to the Auto Mute mode

Stopwatch:

The handset has a built-in stopwatch (timer) counting from 00 to 99 seconds

1. press 5x button (7), the display read-out starts to flash
2. press **ENTER** to set the read-out at 00
3. press Δ to start the timer
4. press ∇ to stop the timer (press Δ to continue)

As soon as the FR-22 receives a signal, the timer mode will be stopped.

Headset:

On the upperside of the FR-22, a 3.5mm stereo connector for a headset is fitted (2).

When using a headset or earpiece with an electret microphone, the use of the VOX-function is recommended because this will work much better and is also easier in use.

LCD backlight:

Each time a function of the FR-22 is activated, the LCD backlight lights for some seconds. Press button **ENTER** (10) to switch-ON the backlight for some seconds without activating whatever feature.

Low battery alarm:

In case the batteries of the FR-22 become empty, the battery-icon in the display will flash.

USERTIPS

It is advisable to check the correct working of the FR-22 each time before and during use.

The FR-22 is a transceiver, which uses radio frequencies in the 446 MHz band. Other wireless systems, computers, wireless telephones, TV and other systems can disturb the signal. If your FR-22 is disturbed or is disturbing other equipment, please switch to another channel.

It is not allowed to change or to modify the electronic circuit or antenna of the handset. Service only by qualified technicians.

The FR-22 resides under the law of the PMR446 equipment and is free for use in the whole of Europe even though it could be that in each country different frequencies are allowed. Please consult the restrictions for use of PMR446 equipment in specific countries before using these sets there.

Never use your FR-22 outdoors during a thunderstorm.

Remember that your conversations can be heard on other equipment as well.

The range of the FR-22 is up to 3Km. This maximum range depends on local conditions like other transmitters, steel constructions, high buildings, power lines etc.

An optimum range is reached at a user height of 5 meter and with a free sight to the other handset.

It is not allowed to change or to modify the electronic circuitry or the antenna of the FR-22. Service only by qualified personal.

CARE and MAINTANCE

- Clean the FR-22 with a damp cloth only.
- Never place the transceiver in direct sunlight or in a damp environment.
- Prevent ingress of water or dirt in the FR-22.
- When confronted with a malfunction, first try to move to another location and try again.
- Remove the batteries when the set is not used for a longer period.
- Never just throw away exhausted or empty batteries but hand them over to your local depot for chemical waste.



FAULTFINDING

If you find a problem, please first try to solve it with the help of the following table:

No function:

- the batteries are empty, replace them.

Weak or no receiving:

- batteries are weak or empty, replace the batteries.
- the channel setting is wrong (both sender and receiver should be on the same channel)
- the distance between the transmitter and receiver is too large, decrease the distance

Noise and other disturbing sounds:

- another transmitter is using this channel, change the channel
- disturbance from other equipment, switch-off if possible

High whistling tone:

- the transmitter is too close to the receiver, increase the distance
- the volume of the receiver is too loud, decrease the volume

SPECIFICATIONS

Operating frequency:

Channel 1:	446.00625 MHz
Channel 2:	446.01875 MHz
Channel 3:	446.03125 MHz
Channel 4:	446.04375 MHz
Channel 5:	446.05625 MHz
Channel 6:	446.06875 MHz
Channel 7:	446.08125 MHz
Channel 8:	446.09375 MHz

Channel spacing: 12.5 kHz

Headset connector: 3,5mm stereo

Range: up to 3Km

Weight handset: 90 gr. (batteries excl.)

Dimensions: 105(155)x60x30mm

Power source: 4x 'AAA' batteries

Approvals: EN 300296 (RF testing)
EN 300339 (EMC testing)

GUARANTEE CARD

CUSTOMER:

Name: attach here
Address: your purchase
Zip-code: ticket
City:
Telephone:

You have a guarantee of 12 MONTHS after the date of purchase of this FR-22. We guarantee during this period the free repair of defects caused by material- and construction faults. This at the importers discretion. It is only possible to claim to the guarantee when you enclose your purchase ticket with the defect FR-22 handset(s).

HOW TO ACT:

If you notice a defect, consult the manual first. If this manual gives you no definite answer, consult your dealer with a clear description of your complaint. He will collect the device together with this guarantee card and the dated purchase ticket and he will take care of a prompt repair, respectively free sending to the importer.

THE GUARANTEE EXPIRES:

When used in expert, faulty connections, leaking and faulty placed batteries, use of unoriginal parts or accessories, negligence and defects caused by fire, flood, stroke of lightning and natural disasters. With unqualified modifications or repairs by third persons. With incorrect transport without a suitable packing. If the device is not handed in with the correct filled in guarantee card and the purchase ticket.

NOT UNDER THIS GUARANTEE: batteries and antenna.

All further responsibilities, in particular subsequent damages, are excluded.