# USER MANUAL

Alecto®

FR-66

INTRODUCTION

The Alecto FR-66 is a PMR-446 Walkie-Talkie.
This walkie-talkie will allow you, free of charge, to communicate with each other or with other (Alecto) walkie-talkie users whom devices meet the PMR-446 standards.

The Alecto FR-66 complies with the European essential requirements and other relevant provisions of Directive 1999/5/EC.
Please refer to our website www.alecto.info

DISPLAY FUNCTIONS
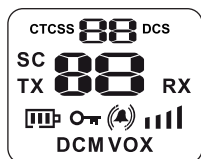
CTCSS: Displays when The Continuous Tone Controlled Squelch System code has been set (see page 13)

DCS: Displays when the DCS code has been set (see page 13)

SC The 8 channel SCAN function has been activated (see page 12)

TX displays during transmission

RX displays when it receives a signal

▥ battery level indicator (see page 19)

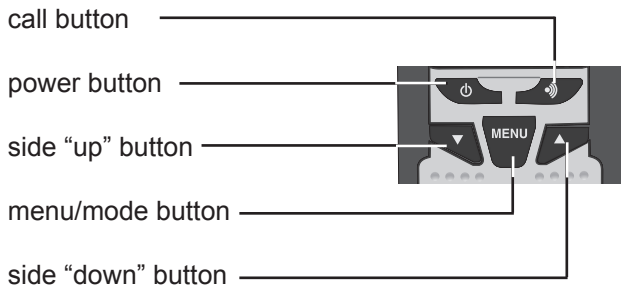**⌐** keyboard lock indicator. The keyboard is locked (see page 17)

(▲) call mode icon. Shows used call-mode (see page 15)

ıtl volume level indicator

DCM The 2 Channel SCAN function has been activated (see page 11)

VOX The VOX function (hands-free transmitting) has been activated. (see page 9)

FUNCTIONS

antenna

display

PTT button

microphone

speaker

charging contacts

shoulder microphone and speaker (or earpiece) connection

this connection is not in use

CTCSS 88 DCS
SC
TX   RX
DCM VOX

call button

power button

side "up" button

menu/mode button

side "down" button

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INSTALLATION

POWER SUPPLY:
The FR-66 is powered by the supplied rechargeable NiMH
battery pack, with a power source of 4.8V (4x AAA)

1. Remove the belt clip by releasing the belt clip latch
   and sliding the clip up.
2. Open the battery compartment by pulling
   the tab on the bottom. Now remove the
   battery cover.
3. Insert the battery pack or batteries
   as indicated ensuring correct
   polarity (+ and -).
4. Click the battery compartment into
   place and attach the belt clip.
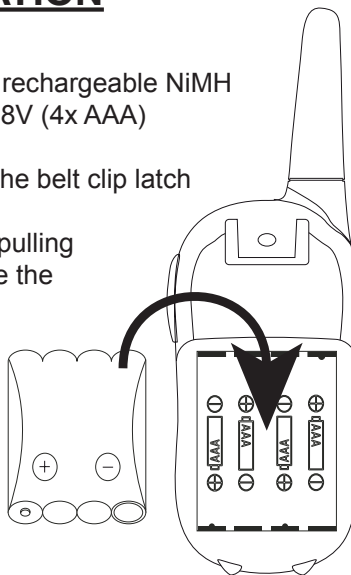
CHARGING THE BATTERY:

Connect the round connector of the
adapter into the input jack on the

back of the desktop charger and plug the adapter into a 230V 50Hz
electrical outlet.
Insert the radio(s) into the desktop charger to recharge the battery
pack. The charge indicator light will turn red.

The charging of the FR-66 units is timer-regulated. As soon as the walkie-
talkies are placed into the desktop charger, the red charge indicator lights
will be on and the battery pack will be recharged. If the charge indicator
lights turn green, the battery pack is fully charged. It is not necessary to
wait until the indicator turns green, however it could be that the battery
packs are therefore not fully charged. Every time the walkie-talkies are
placed into the desktop charger, the timer-regulation will start over again,
regardless of whether the battery packs are empty or full. Because the
charging current is electronically limited, there is no risk for overcharging.

REMOTE MICROPHONE / EARPIECE:
The input jack for the supplied remote microphone and earpiece can be found on the right side of the FR-66, which is covered by a rubber cap.

WRIST STRAP:
You can attach the wrist strap to the top of the belt clip.

USING NORMAL BATTERIES:
Normal and rechargeable batteries are compatible with the FR-66. Insert those batteries as indicated in the battery compartment ensuring correct polarity (+ and -)

It is possible to place the walkie-talkies in the charge cradles if normal single AAA (whether or not rechargeable) batteries are used. The only difference is that the charge LED indicator does not light up.

In case single rechargeable batteries have been placed, please use a different charger. The FR-66 desktop charger is only compatible with the supplied battery pack.

OPERATION

SWITCHING ON/OFF:

Press and hold the power button for 2 seconds to switch the FR-66 on or off.

the "ON" icon will appear in the display when the walkie-talkie is activated.

the "OFF" icon will appear shortly in the display when you turn the device off.

**TRANSMITTING:**

Press and hold the **PTT** button to transmit

With the microphone 10cm from your mouth, speak clearly and in normal voice

If transmitting, the "TX" icon will appear in the display

To prevent the first words cease because the walkie-talkie of the other party was not switched over yet to receiving, we advise you not to start talking directly but first after one or two seconds
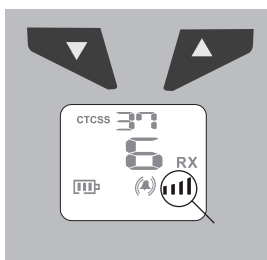
RECEIVING:
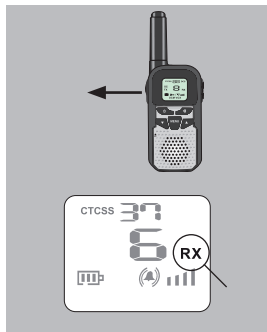
As soon as the PTT button has been released, the FR-66 is ready to receive.

If the FR-66 receives a signal, the "RX" icon will appear and you will hear the signal

VOLUME:

Use the ▼ and ▲ buttons to change the volume level

The selected level will be shown in the display

CALL TONE:

Press and release the •)) button to transmit a pager alert tone

This call tone also sounds from your own speaker

To activate or deactivate the vibrate function see page 15
To change the sound of the call tone see page 16

ADDITIONAL FUNCTIONS

REMOTE (SHOULDER) SPEAKER OR EARPIECE:
The input jack for the supplied shoulder microphone and earpiece can be found on the right side of the FR-66, which is covered by a rubber cap. As soon as you plug it in, the in the FR-66 built-in microphone and speaker turn off.

The remote shoulder speaker comes with a swivel clothing clip. Therefore it ensures secure and different attachments to your clothing.

The earpiece also has a clothing clip.

Receiving:
As soon as your walkie-talkie receives a signal, the signal will be reproduced through the speaker in the remote shoulder microphone or via the earpiece.
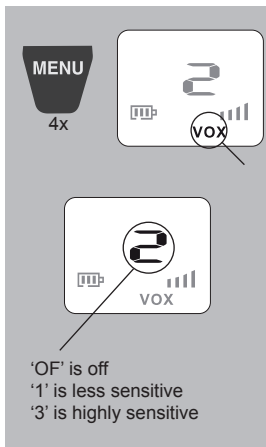Use the ▼ and ▲ buttons of the FR-66, to change the volume level.

Transmitting:
Push the transmit button on the left side of the remote speaker or use the small button when using the earpiece.

VOX MODE:

In VOX mode (VOX= Voice Activated Transmission) the FR-66 automatically transmits when you speak.

Push 4 times the **MENU** button. "VOX" will appear on your display

Use the ▼ and ▲ buttons to set the sensitivity level. ("OF" is off, 1 is less sensitive, 3 is highly sensitive.)

'OF' is off
'1' is less sensitive
'3' is highly sensitive

To confirm your setting, press the **PTT** button

Note: VOX mode does NOT work when the remote speaker or earpiece is in use. VOX mode can only be used when talking into the FR-66 directly
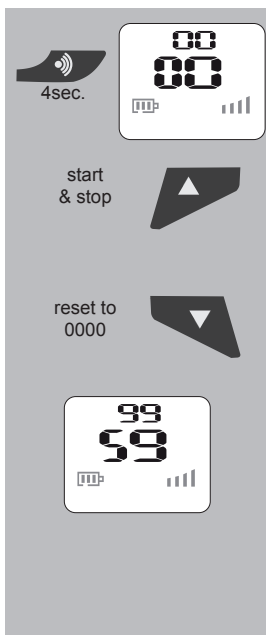
MONITORING FUNCTION:

With this function, noise suppression will be disabled to receive weak signals on that channel.

press simultaneously
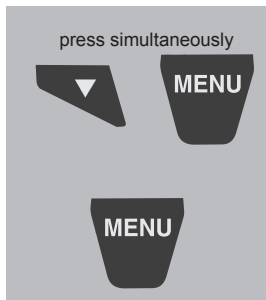
Simultaneously press the **MENU** and ▼ button. The monitoring function is enabled and you can listen to the channel

When activated, press the **MENU** button again to disable the monitoring function

STOPWATCH:

enable and using the stopwatch:
Press and hold the •)) button for 4 seconds. The stopwatch display appears

Press ▲ to start counting

Press ▲ again to stop the measurement. (Pressing the ▲ again will continue the counting)

Press ▼ to reset the digits to 00:00

The stopwatch can measure up to 59,99 seconds.

You can use the stopwatch during transmitting or sending. When using the stopwatch, adjusting the volume or changing other functions is not possible

start & stop

reset to 0000

disable the stopwatch:
Press and hold the •)) button for 4 seconds to disable the stopwatch function

ROGER BEEP:
As soon as the PTT button has been released, the walkie-talkie generates an alert tone or a so called roger-beep tone. This alerts the receiving party that you have intentionally ended the transmission and you are now in receiving mode. For turning the roger beep off see page 16.

Key tone:
When the key tone is on, an audible tone will sound each time a button is pressed, except the **PTT** button. To turn the key tones off see page 16.

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DUAL WATCH MODE:

In this mode , you are able to monitor two channels; the current and a second chosen channel.
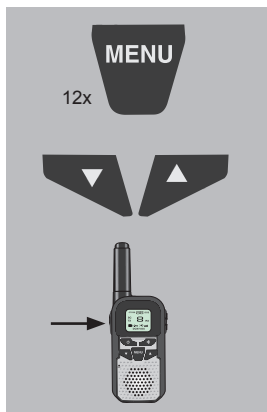
turning the dual watch mode on:
Press the **MENU** button 12x. "DCM" flashes on the display

Select with ▼ and ▲ the 2nd channel

Press the **PTT** button to start

The FR-66 will scan both channels and stop if an incoming transmission is detected.
After more than a second when the signal has stopped, scanning will be continued
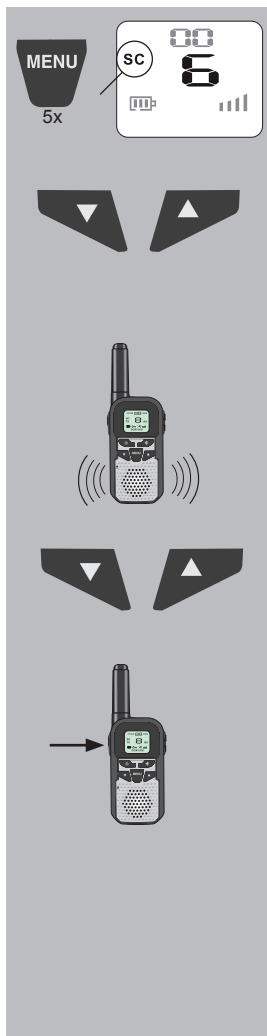
Turning the dual watch mode off:
Press the **MENU** button 12x. "DCM" flashes on the display

Select with ▼ and ▲ the option "OF" on the display

Press the **PTT** button to end

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AUTO CHANNEL SCAN:

This function will scan all 8 channels successively for active signals in an endless loop.

Press the **MENU** button 5x. "SC" flashes on the display together with the selected channel

Press ▼ or ▲ to start the channel scan.
(▲ = scan channel up,
▼ = scan channel down)

The FR-66 will scan both channels and stop if an incoming transmission is detected.
After more than a second when the signal has stopped, scanning will be continued

Use the ▼ or ▲ button to continue the scan if only noise is received

Press the **PTT** button to end the scan

CTCSS- or DCS CODE SCAN (*)

Setting the CTCSS or DCS code to 00, allows all signals to be heard but is not possible to transmit. Using the CTCSS or DCS scan, all codes from whatever channel can be scanned and as soon as you receive a signal, talking back is possible if using the same CTCSS or DCS code. Your walkie-talkie stays tuned on that particular channel.

Press 6 x the **MENU** button to start the CTCSS scan or Press 7x the **MENU** button to start the DCS-scan

"SG" icon will flash as well as "CTCSS" or "DCS"

Press ▼ or ▲ oto start the channel scan (▲ = scan channel up, ▼ = scan channel down)

The FR-66 will scan all channels and stops if an incoming transmission is detected. After more than a second when the signal has stopped, scanning will be continued

Press the **PTT** button to talk back. To successfully communicate using a privacy code, both the sending and receiving radios must be tuned to the same channel and to the same privacy code system (CTCSS or DCS) and privacy code number, last received. If talking back the scan will stop

Note: All channels that are set to CTCSS or DCS code 00 will be skipped during this scan method

: CTCSS and DCS code will be are further explained on page 18
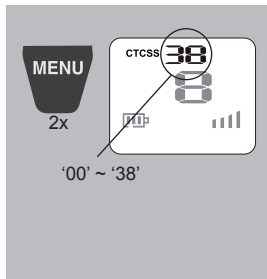
OPERATIONS

SETTING CHANNEL:
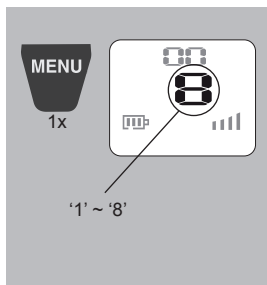
Press the **MENU** button once. The channel indicator starts to flash

Use ▼ or ▲ to select the desired channel (1-8)

To confirm your setting, press the **PTT** button
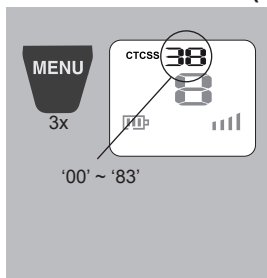
'1' ~ '8'

SET CTCSS CODES: (*)

Press the **MENU** button twice. The CTCSS icon will flash on the display

Use ▼ or ▲ to select the desired code (00-38)

To confirm your setting, press the **PTT** button

'00' ~ '38'

SET DCS CODES: (*)

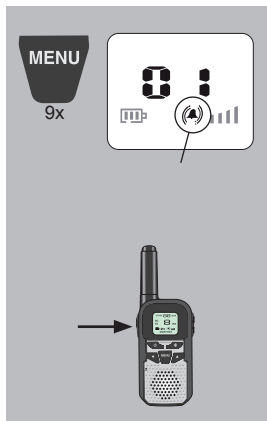Press the MENU button 3 times. The DCS icon will flash on the display

Use ▼ or ▲ to select the desired code (00-83)

To confirm your setting, press the **PTT** button

'00' ~ '83'

*: See page 18 for more explanation

Vibrate function:
When being called by another FR-66 user, you hear the same calling ring tone as the transmitter has set as a ring tone. Instead of hearing a call tone you also can put the FR-66 in vibrate mode.

Press the **MENU** button 9x. The call icon will flash

Use ▼ and ▲ to select the desired mode:
▲: call mode
( ):vibrate mode
(▲):call + vibrate mode

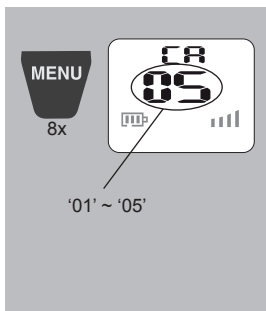To confirm your setting, press the **PTT** button

Note:
- *it is possible that a call ring tone can be heard even if the settings are on vibrate mode only.*
- *the vibrate mode only works if you are being called by another FR-66 user that has a vibrate mode ; if being called by a device that has no vibrate mode, although your settings are set on "vibrating", you will hear the call ring tone*
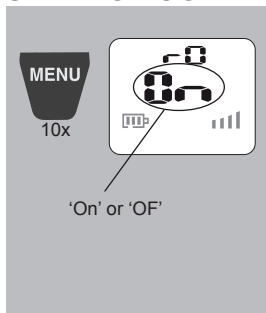
15

SETTING A CALL RING-TONE:

Press the **MENU** button 8x. "CA" will flash on the display

Use ▼ and ▲ to set the desired call ring-tone. The chosen tone sounds for review

To confirm your setting, press the **PTT** button

'01' ~ '05'

SETTING ROGER BEEP:

Press the **MENU** button 10x. "RO" will flash on the display

Press ▲ XX to activate the roger beep ("ON" icon displays) or ▼ to deactivate ("OFF" icon displays)

To confirm your setting, press the **PTT** button

'On' or 'OF'

SETTING KEY TONE ON/OFF:
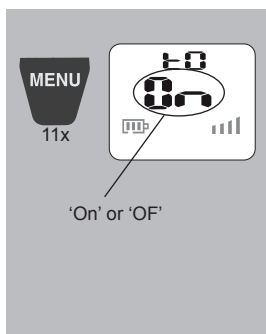
Press the **MENU** button 11x. "TO" will flash on the display

Press ▲ to activate key tones ("ON" icon displays) or ▼ to deactivate ("OFF" icon displays).

To confirm your setting, press the **PTT** button

'On' or 'OF'

LOCK FUNCTION:

To prevent accidental operation it is possible to lock your keyboard.
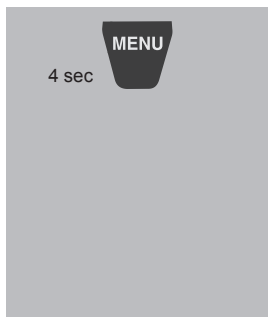
MENU

4 sec

Press the **MENU** button during 4 seconds

The display shows the lock key icon. **MENU,** •))), ▼ and ▲ are locked

Press the **MENU** button again during 4 seconds to unlock the keyboard

DISPLAY LIGHT:

To set up the various functions in a dark environment, your display will illuminate by pressing **MENU,** ▼ and ▲. Several seconds after pressing one of these button the display light will fade away automatically.

CTCSS AND DCS CODE

CTCSS (Continuous Tone Controlled Squelch System) is a tone code that will be sent during a transmission. This tone cannot be heard. To talk with someone on your walkie-talkie, both of you must be on the same channel CTCSS or DCS.
You can set a CTCSS code to prevent interference from other PMR-446 radio's using the same channel.

The FR-66 provides also DCS codes. DCS is a digitally coded system but works the same as a CTCSS code. Because DCS is not provided on most random walkie-talkies, the chance being interfered by other users is less.

NOTE:
* CTCSS and DCS codes cannot be used on the same channel at the same time. As soon as one of the systems is set, the other one is automatically switched off.
* Be sure both sending and receiving walkie-talkies must be turned to the same CTCSS or DCS code to be able to communicate.

WARNING:
* Using a CTCSS or DCS code only helps to reduce interference from other users. Your communication is NOT private. Every walkie-talkie without a CTCSS or DCS system or walkie-talkies that use the privacy code 00 can hear your conversation.

USER TIPS

GENERAL:

The FR-66 is a receiver/transmitter using radio waves in the 446MHz band.

Communication interference may occur through external influences such as other walkie-talkies, transmitters, mobile phones etc. If your walkie-talkie encounters or causes interference, changing channel may be a solution.

The use of this walkie-talkie is permitted in all EU countries. If you plan to take the FR-66 to countries outside the EU, please check the local conditions and restrictions concerning the use of PMR446 devices.

Be aware that the signal of the FR-66 can also be received by other walkie-talkies or receivers and therefore your conversations can be heard by others.

It is forbidden to repair, adjust or modify the electronics or antenna of the FR-66 in any way whatsoever. Only qualified engineers are allowed to maintain and service this device.

Do not use the FR-66 outdoors during a thunderstorm.

POWER SUPPLY:

The battery indicator displays the usage of your batteries:

⫼ = full, ⫽ = 1/3 full, please replace or charge your batteries.

* The FR-66 desktop charger is only compatible with the supplied battery pack. Do not use a different charger. Be sure to switch the walkie-talkies off before placing them in the charge cradles.
* Single rechargeable batteries can only be recharged using a different charger.
* Non-rechargeable batteries should be replaced.

RADIO CONNECTION:

The FR-66 optimal range has a coverage up to 7 kilometers. This range depends on the local circumstances such as the presence of high buildings, high-voltage lines or overhead wires. An optimal talk range occurs in flat, open areas.

CTCSS OR DCS CODE:

A walkie-talkie that does not use a CTCSS or DCS code is able to receive the signals from all walkie-talkies that transmit on the same channel. Talking back is only possible if both receiving and sending walkie-talkies are set to the same CTCSS or DCS code.

MAINTENANCE:

* Use a damp cloth to clean the FR-66.
* Do not expose the FR-66 to direct sunlight and avoid placing it in moist environments.
* Avoid moisture and/or sand to penetrate your device.

ENVIRONMENT:

* When discarding the walkie-talkie, please return it to your supplier. They will dispose of it in an environmental responsible manner.
* Do not dispose of empty or used batteries in normal domestic waste but enter them into a recycling scheme or return them to your supplier.

TECHNICAL SPECIFICATIONS

Operating frequency: 446.00625 MHz tot 446.09375 MHz
Channel spacing: 12.5 KHz
Transmit power: 0,5W
Power source: battery pack 4,8V (4x AAA penlites) or
4 (rechargeable) batteries
Power source adapter: 9V/DC/300mA / − —⊙— + (via adapter)
Charging time: 11-12 hours
Headset connection: 2.5mm, 3-polig
Talk range: up to 7 kilometers
Power consumption: transmit : up to 2 hours
standby : up to 2 days
Weight: 160gr. (incl. batteries)
Dimensions: 110(165) x 60 x 30mm
Conform: EN 300 296-2 V1.1.1 (2001-03)
EN 301 489-1 V1.6.1 (2005-09)
EN 301 489-5 V1.1.1 (2002-08)
EN 60950-1 : 2001 + A11 : 2004

TROUBLE SHOOTING

If the FR-66 fails to function, please check first whether it works at a different location.

Does not work at all:
- Check batteries and replace or charge if necessary

Bad or no signal:
- The batteries are weak or empty; please change the batteries
- The channels or sub channels are set wrong. Both receiver and transmitter should have the sma channel or sub channel to be able to communicate.
- The distance between the transmitter and the receiver is to far. Reduce the distance

High pitch noise:
- the transmitter is too close to the receiver or the volume is too loud. Reduce the volume or take more distance

In case the above does not solve the problem, take the battery packs out and place them after several minutes back. Please call our Alecto service department if the above does not solve:
+31 (0)73 6411 355 (The Netherlands), +32 (0)3238 5666 (Belgium).

WARRANTY

Name: Attach here
Street: your original
Zip-code: purchase receipt
Town:
Telephone:

Alecto warrants the FR-66 to be free from defects in material or construction under normal use and service, for 24 months from the date of purchase. Alecto will, at it's sole option, repair any components that fail in normal use. Such repairs will be made at no charge to the costumer.

HOW TO ACT:
If the device malfunctions, please first consult the manual. If that doesn't solve the problem, visit our website: www.alecto.info or call our service department:
+31 (0)73 6411 355 (The Netherlands), +32 (0)3238 5666 (Belgium).

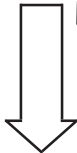THIS WARRANTY DOES NOT COVER:
Defects or failures due to: improper handling and abuse, incorrect connection, leaking and/or wrongly placed batteries, use of non OEM parts or accessories, unauthorized alternations, modifications and/or repairs made by third parties, unsuitable packaging during transport, neglect and defects caused by dampness, fire, flooding, lightning strokes and natural disasters.
If this device is not accompanied by this warranty certificate and the original purchase receipt, the guarantee will be considered invalid. Excluded from this warranty are the batteries, antenna and any further liability, in particular for any consequential damages.

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