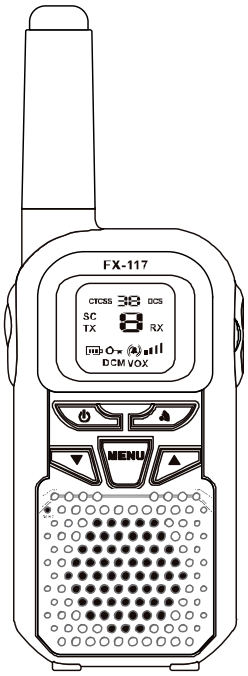
EXIBEL®

PMR Kommunikasjonsradio

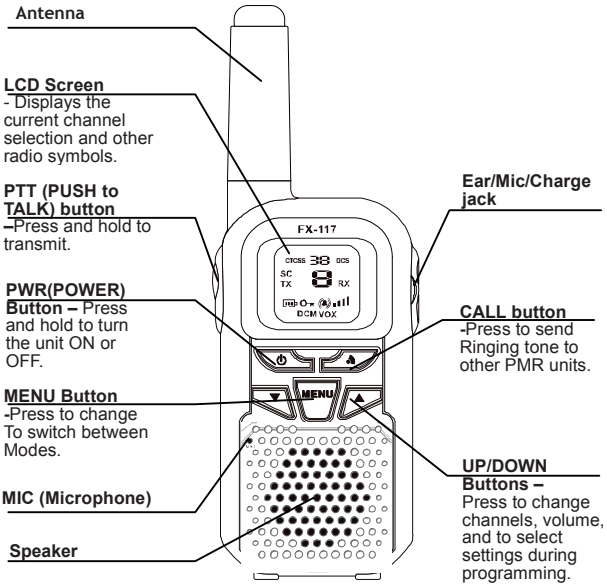


Art.no.	Model
36-3210	FX-117

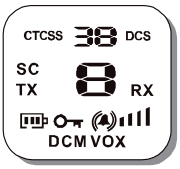
Ver. 200905

PMR Two-Way Radio

Art.nr: 36-3210 Modell: FX-117



1. LCD Screen



8	Channel Number. Changes from 1 to 8 as selected by the user.
38	CTCSS Code. Changes from 1 to 38 as selected by the user.
	Displays the Battery change level. When the bars are reduced, the battery needs recharging.

TX	Displayed when transmitting a signal.
RX	Displayed when receiving a signal.
DCM	Displayed when the Dual Watch function is turned ON.
DCS	Displayed when the Digital Code System is turned On.
VOX	Displayed when the VOX feature is enabled.
SC	Displays when the PMR is scanning all channels.
	Displayed when the Key Lock feature is activated.
	Displays the current Speaker volume level.
	Displays when the call signal is ON.
	Displays when the vibrator function is activated.

2. Installation

2.1 Removing the Belt Clip

a. Pull the Belt Clip latch forward (away from the FX-117)
b. While pulling the Belt Clip latch, push up the Belt Clip as shown in Figure1.

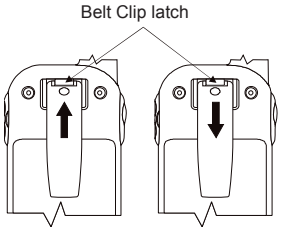


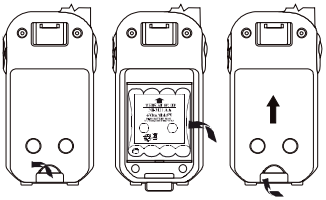
Figure 1 Figure 2

2.2 Installing the Belt Clip

a. Slide the Belt Clip into the slot as shown in Figure2. A "click" indicates the Belt Clip is locked into position.

2.3 Installing the Battery pack

Figure 3 Figure 4



Caution: Observe the proper battery polarity orientation when installing batteries. Incorrect positioning can damage both the batteries and the unit.

a. Slide down the Battery Compartment Cover.
b. Install the rechargeable battery pack by following the orientation as shown in Figure 3 (the arrow is showing and pointing upward.)
c. Replace the Battery Compartment Cover. See Figure 4.

Important

Read these Safety Warnings before you charge the batteries.

When placing the FX-117 in the charger, **use only the power supplies listed in the user instructions supplied with the FX-117.**

Don't try to recharge non-rechargeable batteries**.**

Make sure the battery compartment cover is securely locked in place when you are charging the batteries.

Dispose of used batteries safely and in a way that will not harm the environment- never try to burn them or put them anywhere, they could get burnt or punctured.

Don't leave dead batteries in your FX-117 units.

They might leak if you do.

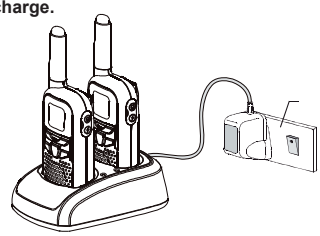
2.4 Charging the battery pack

a. Insert the small plug on the end of the mains adaptor into the Power-in Connection Jack at the back of the desktop charger.
b. Plug the mains adaptor into a 240V AC, 50Hz main socket with the switch on the socket set to OFF.
c. Switch ON the main socket.

The FX-117 must be charged using the mains adaptor provided. Using any other adaptor will result in non-compliance with EN60950-1 and will invalidate any approvals & warranty.

d. Place the FX-117 units in the charge cradle in an upright position and facing outward. **The Charge LED indicators will light up.**

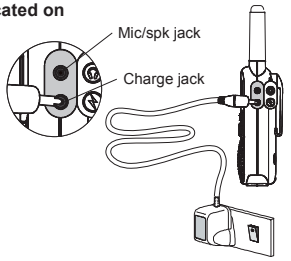
e. It takes about 10 hours to fully recharge the batteries if they are completely run down. **New batteries take up to 14 hours to fully charge.**



Important:
Always turn off the PMR units when charging. This will shorten the charging time.

f. Charging the battery pack (using adaptor)

Lift the charge socket cover located on the right side of the handset.



Insert the round connector of the 9.0V DC/200mA adaptor into the charge jack.

Plug the mains adaptor into a 240V AC, 50Hz main socket with the switch on the socket set to OFF. Use only power supplies listed in the user instruction. Csec AC Adaptor brand ; Model -CSD0900200G power supply

Then switch ON the main socket.

Battery meter

The battery meter is located in the left corner of the LCD Screen. It appears like a battery with three bars inside. These indicate the amount of power available. When the battery level reaches it minimum level in PMR on mode, unit will emit two beep tones and automatically the unit will power off.

The FX-117 can detect the battery charge in 4 levels;

Battery charge at high level.

Battery charge at medium level.

Battery charge at low level. At this level, the FX-117 will emit a “beep” sound for every 10 seconds in normal mode.

Important: Charge the unit for 10-14 hours.

Battery charge at very low level. When the battery level reach it minimum level in FX-117 on mode, unit will emit two beep tone and automatically turn off the power and proceeds to watch mode.

Important: Charge the unit for 10-14 hours.

CAUTION : Risk of explosion if battery is replaced by an incorrect type. Disposed of used batteries according to the instructions.

Use only the batteries listed in user-instruction - CEL brand; EPT43AAA60H Ni-MH 4.8V/AAA600mAh rechargeable battery pack

Battery life

The FX-117 has a built in power saver to make the batteries last longer. But when you are not using the units, turn them OFF to conserve battery power.

3. Operation

3.1 Transmitting range

The talk range depends on the environmental and terrain. It will be reach (up to about 8km) in wide open spaces, without obstructions such as hills or buildings. Don't try to use two PMR units which are less than 1.5m (5feet) apart. If you do, you may experience interference.

Important safety warning

To reduce radio frequency exposure when you are using your FX-117, hold the unit at least 5cm (2 inches) away from your face.

Never use your FX-117 outdoors during a thunderstorm.

Don't use the FX-117 in the rain.

If your FX-117 ever gets wet, turn it off and remove he battery. Dry the battery compartment and leave the cover off for a few hours. Don't use the unit until it is completely dry.

Keep the FX-117 out of the reach of babies and young children.

3.2 Turning the Unit ON/OFF

To Turn ON;

a. Press and hold the **POWER** button until the LCD Screen turns ON and displays the current channel.

To switch OFF;

b. Press and hold the **POWER** button until the LCD screen turns blank.

You can hear a musical tone each time to confirm.

3.3 Adjusting the Speaker volume

The volume level is shown by vertical bars the LCD screen. You can change the volume while using your FX-117, or while the unit is idle (switched on but not in use).

press the **UP** button to increase, or press the **DOWN** button to decrease the speaker volume.

3.4 Changing Channels

The FX-117 has 8 available channels, to communicate with other FX-117 users within range, you must all have your FX-117 tuned to the same channel.

a. Press the **MENU** button once, the current channel number flashes on the LCD Screen.

b. Press the **UP** or **DOWN** button to select the desired channel. The channel changes from 1 to 8, or vice versa.

c.Press the **PTT** button to confirm the channel setting.

Note: Refer to the "Channel Table" section of this Owner's Manual for detailed frequency listing.

3.4.1 Setting the CTCSS sub-channel

Each channel also has 38 sub-channels to let you set up group of users within the same channel for more private communication. If you have set the sub-channel, you can only communicate with other PMR users turned to the same channel and sub-channel.

3.4.2 SETTING THE DCS ADVANCED DIGITAL CODE.

Each channel also has 83 digital codes to let you set up group of users for more secured private communication.

a. Press the menu button 3 times. DCS code flashes out the LCD screen.

b. Press the up or down button to select the desired DCS code.

c. Press PTT button to confirm the channel setting.

To turn the sub-channel function off, simply set the sub-channel to 0 (zero). You can communicate with any FX-117 user set to the same channel who also turns off the sub-channel operation (or whose FX-117 unit does not have the feature).

a. Press the **MENU** button twice, the current CTCSS sub-channel number flashes on the LCD Screen.
b. Press the **UP** or **DOWN** button to select one of the 38 CTCSS sub-channels.
c. Press the PTT button to confirm the sub-channel setting.

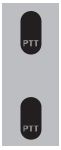
Transmitting and Receiving

- **The FX-117** transmission is "one way-at-a-time." While you are speaking, you can not receive a transmission.
- **The FX-117** is an open-license band. Always identify yourself when transmitting on the same channel.

3.4.3 Transmitting (sending a speech)

The unit is continuously in the Receive mode when the unit is turned ON and not transmitting. When a signal is received on the current channel, "**RX**" will be displayed on the LCD Screen and receiver LED lights up.

3.4.4 Transmitting (sending a speech)



a. Press and hold the **PTT** (push to talk) button to transmit your voice. "**TX**' will be displayed on the LCD Screen.
b. Hold the unit in a vertical position with the MIC (Microphone) 5 cm away from the mouth. While holding the **PTT** button, speak into the **MIC** (microphone) in a normal tone of voice.
c. Release the **PTT** button when you have finished transmitting.

3.4.5 Monitor

You can use the Monitor feature to check for weak signals on the current channel.

a. Press and hold the **MENU** and **DOWN** buttons at the same time. "**RX**" will be displayed on the LCD Screen. Your FX-117 will pick up signals on the current channel, including background noise.
b. Press the **PTT** button to stop the channel monitoring.

3.5 Setting the VOX (Voice Activated) Sensitivity

In VOX mode, the FX-117 will transmit a signal only when it is activated by your voice or other sounds around you. The unit will transmit further for 2 seconds even if you stop talking.

The level of VOX sensitivity is shown by a number on the LCD Screen. At the highest level, the units will pickup softer noise (including background noise); at the lowest level, it will pick up only quite loud noise.

a. Press the **MEN**U button 4 times, "**VOX**" will be displayed and "OF" flashes on the LCD Screen.
b. Press the **UP** button to set the VOX sensitivity level (the maximum level is"3 ".) To deactivate the VOX function, press the ***DOWN*** button until "OF" appears on the LCD Screen.

c. Press the **PTT** button to confirm your setting. "**VOX**" will steadily appear on the LCD Screen as along as the VOX feature is activated.

The VOX setting does not work with the headset.

VOX operation is not recommended if the FX-117 will be used in a noisy or windy environment.

3.6 Vibrator and Call alert

Your FX-117 can alert you to incoming signal by emitting an audible call tone and vibration signal.

3.6.1 Call-Ring tone

You can send a Call-ring tone to other PMR users to give an alert that you want to communicate with them.

Press the CALL button

Yu will hear a ring tone for about two seconds; "**TX**" appears on the LCD Screen. Any other units within the transmitting range and turned to the same channel and sub-channel (if applicable) will hear the Call-ring tone.

3.6.2 Selecting a Call- Ring tone

The FX-117 is equipped with 5 different types of Call-Ring tones.

a. Press the **MENU** button 8 times, the LCD Screen will display the **CA** while is blinking.

b. Press the **UP** or **DOWN** button to select the desired Call-ring tone. A respective Call- Ring tone sound will be played when changing from one tone to another.

c. Press the **PTT** button to confirm your setting.

3.6.3 Activating the Vibrator mode

a. Press the **MENU** button 9 times; "I" flashes on the LCD Screen.

b. Press the **UP OR DOWN** button to activate the vibrator function. Or

3.7 Setting the Roger Beep

The Roger Beep is a tone which is automatically transmitted whenever the PTT button is released. This alerts the receiving party to inform that you have intentionally ended the transmission, and you are now in receive mode.

a. Press the **MENU** button 10 times, "ON" flashes on the LCD Screen.

b. Press the **UP** or **DOWN** button ("ON" will be displayed on the LCD screen) or deactivate ("OFF" will be displayed on the LCD screen) the key Tone feature.

c. Press the **PTT** button to confirm your setting.

3.8 Setting the Key Tone ON or OFF

This feature allows the FX-117 to emit a confirmation tone after pressing each button.

a. Press the **MENU** button 11 times, "ON" flashes on the LCD Screen.

b. Press the **UP** or **DOWN** button ("ON" will be displayed on the LCD screen) or deactivate ("OFF" will be displayed on the LCD screen) the key Tone feature.

c. Press the **PTT** button to confirm your setting.

3.9 Setting the Dual Watch Mode

Your FX-117 is capable of monitoring two channels, the current and another (dual watch) channel. If the unit detects a signal on either channel, it will stop and receive the signal.

a. Press the **MENU** button 12 times, "**DCM**" will be displayed while "OF " flashes on the LCD Screen.
b. Press the **UP** or **DOWN** button to select the Dual Watch channel (1-8, except the current channel).
c. Press the MENU button to change the CTCSS code.
d. Press the **UP** or **DOWN** button to select the desired CTCSS code (1-38)
e. Press the MENU button to change the DCS code.
f. Press the **PTT** button to confirm your setting.

3.10 Activating the auto Channel Scan

Channel scan perform searches for active signals in an endless loop for all 8 channels, 38 CTCSS codes and all 83 DCS codes.

a. Press the **MENU** button 5 times
b. Press the UP or DOWN button to begin scanning channels when an active signal is detected, channel scan pauses on the active channel.
c. Press the MENU button again, CTCSS flashes on the LCD screen press the **UP** or **DOWN** button to begin scanning the CTCSS from 1-38.
d. Press the **MENU** button again, DCS flashes on the LCD screen. Press the UP or DOWN button to begin scanning DCS code 1-83.
e. Press the PTT button to confirm your setting.

4. Auxiliary Features

4.1 Key Lock

The Key Lock feature allows user to disable the **UP**, **DOWN** and **MENU** buttons so that the FX-117 settings could not be changed accidentally.

a. To activate the Key Lock feature, press and hold the **MENU** button until " " appears on the LCD Screen.
b. To deactivate the key Lock feature, press and hold the **MENU** button until " " disappears on the LCD Screen.

The **PTT,** and **POWER** buttons will remain functional even if the Key Lock feature is activated.

4.2 LCD Screen Back Light

Every time a button is pressed (except PTT and CALL button), the LCD Screen back light will illuminate for 4 seconds.

4.3 Microphone/Earphone/Charge Jack

The FX-117 is equipped with an auxiliary microphone, earphone, and charge jack located at the opposite side of the PTT button.

5. Specifications

Channels Available	8 Channels
CTCSS Sub-channel	38 for each Channel
Output Power (TX)	0.5 W
Range	Up to 8 Kms.

Channel Frequency Table

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

6. Safety

⚠ CAUTION

Damaged Antenna

Do not use any FX-117 that has a damaged antenna. If a damaged antenna comes in contact with the skin, a minor burn may result.

Batteries

All batteries can cause property damage and/or bodily injury such as burns if conductive material such as jewelry, keys, or beaded chains touches exposed terminals. The material may complete an electrical circuit (short circuit) and become quite hot. Exercise care in handling any charged battery, particularly when placing it inside a pocket, purse, or other container with metal objects.

⚠ WARNING

For Vehicles with an Air Bag

Do not place your FX-117 in the area over an air bag or in the air bag deployment area. Air bags inflate with great force. If a FX-117 is placed in the air bag deployment area and the air bag inflates, the FX-117 may be propelled with great force and cause serious injury to the occupants of the vehicle.

Potentially Explosive Atmospheres

Turn your FX-117 OFF when in any area with a potentially explosive atmosphere, unless it is a type especially qualified for such use (for example, Factory Mutual Approved). Sparks in such areas could cause an explosion or fire resulting in injury or even death.

Batteries

Do not replace or charge batteries in a potentially explosive atmosphere. Contact sparking may occur while installing or removing batteries and cause an explosion.

Blasting Caps and Areas

To avoid possible interference with blasting operations, turn your FX-117 OFF near electrical blasting caps or in a “blasting area” or in areas posted: “Turn off the two way radio.” Obey all signs and instructions.

NOTE: *Areas with potentially explosive atmospheres are often, but not always clearly marked. They include fueling areas such as below deck on boats; fuel or chemical transfer or storage facilities; areas where the air contains chemicals or particles, such as grain, dust, or metal powders; and any other area where you would normally be advised to turn off your vehicle engine.*

7. Cleaning and Care

To clean your FX-117, use a soft cloth dampened with water. Do not use cleaners or solvent, which may cause damage that may not be covered by guarantee.

Declaration of Conformity

CE

Hereby, Clas Ohlson AB,
declares that following product(s):

PMR 446 Transceiver

36-3210

EXIBEL FX-117

is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

Article 3.1a (Safety):	EN 60950-1
Article 3.1b (EMC):	EN 301489-1 EN 301489-5
Article 3.2 (Radio):	EN 300296-1 EN 300296-2

CE

Insjön, Sweden, October 2008

Klas Balkow
President

Clas Ohlson, 793 85 Insjön, Sweden

EXIBEL®

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