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We congratulate to your choice of the newly developed PMR professional radio "ALAN HP 68 L".

Our principal goals when developing the **ALAN HP 68 L** has been; simple and logical handling, high quality and robust design. **ALAN HP68 L** complies with the European R&TTE Directive 1999/5/EC and has a protection rate according to IP54 and MIL-STD 810 C, D, E.

The transceiver is delivered programmed with channels for hunting and radio location. The transceiver also has 38 standard CTCSS tones which you easily can select per channel.

## Introduction

Read the instruction in this handbook carefully before using the radio.

### Important information

- Never carry the transceiver by the antenna. This may damage the antenna or the antenna terminal.
- Never service the radio by yourself. It may cause damage to the radio and it will void the warranty. Always contact your local dealer for assistance.
- Only use accessories adapted for the radio.
- Don't short-circuit the battery terminals: this may cause fire or explosions.
- Never dispose of batteries in open fire. Follow the disposal regulations of your country.

## Conventions and symbols in this book

- 📄 This symbol marks a "note" which offers additional information for your help.
- 👉 This symbol marks a "caution" which contains important information to avoid possible serious damage.
- Key names are highlighted in **Bold**.
- LCD messages are highlighted in *Italic*.
- Keys on the front of the radio are shown with the corresponding symbols.

## The radio HP 68 L



1. Antenna
2. Volume/On/Off
3. Status LED
4. Speaker
5. Accessory connector
6. Microphone
7. LCD Display
8. Up and Down buttons
9. Yes/Confirm button
10. **MON.** (squelch)
11. **PTT** button
12. **FUNC.** (menu choice)

## Getting started

### Antenna

The antenna is screwed on the antenna terminal.

 Don't use more force than necessary to tighten the antenna.

### Battery

The battery is fitted on the back of the radio. Put the three pins on the battery in the bottom part of the radio. Gently push the upper part of the battery towards the transceiver until you hear a click.

Remove the battery by pressing the release button on the upper part of the battery.


### Belt clip


The belt clip can be fitted on the back of the battery. Push the belt clip into the holder on the back of the battery until you hear a click.

Remove the belt clip by pressing the release button of the clip and pushing it upwards.

### Rubber gasket to the accessory connector

Are you going to use an external speaker mike, earpiece or other accessories we recommend that you replace the cover cap on the accessory connector with the supplied rubber gasket. Unscrew the lid and remove the screw. Insert the gasket in the accessory connector and attach it with the screw from the lid.

 The supplied grommet should be fitted nearest the screw top. Don't tighten the screw too hard it might deform the gasket.

 To protect the radio against moisture ensure that the gasket always is fitted when no accessories are used.

## Using the radio (Basic operations)

### On/Off

Turn the volume knob clockwise until you hear a click. The radio performs a short auto-test thereafter the most recently selected functions are shown on the display. Adjust the volume to a suitable level, normally half volume.

### Channel selection

With  or  you can now select a channel.


### Status LED

The status LED indicates the following:

Green light	Reception or squelch open
Red light	Transmitting

### Transmitting

Press **PTT**. Start talking at approx. 5–10 cms from the microphone. Reception is switched on when the **PTT** is released.

 The radio has a transmitting limitation that will turn off the transmission after 60 secs. This in order to avoid causing problems and disturbance if the **PTT** is kept pressed by mistake or too long.



## Squelch

The squelch can be opened momentarily by a short press on **MON**. If **MON** is kept pressed for more than 3 secs the squelch remains open continuously. To close the squelch, press **MON** shortly once again.

## Key lock

To avoid changing the settings of the radio unintentionally you can lock all the keys with the exception of the **PTT** and the volume knob.

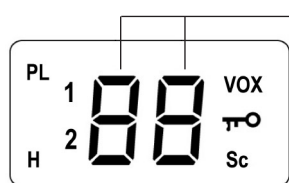
To lock or unlock the radio press and hold pressed **FUNC** and press thereafter . The key symbol on the display indicates that the radio is locked.

## Backlighting

The display is automatically backlit for 2 secs whenever a key is pressed.

A press on the **PTT** wont turn on the backlighting.

## Display



- Character segment
- PL** CTCSS activated
  - 1** CTCSS tone 100–192 Hz
  - 2** CTCSS tone 203–250 Hz
  - H** High transmit power
  - VOX** Indicates voice operated transmitting
  - Indicates radio lock
  - Sc** Scanning

## Charging the battery

You charge the battery with the supplied desktop charger which is connected to 230 Volt main current via the AC adapter. Connect the cable of the AC adapter on the back of the desktop charger. The battery is then inserted in the back of the charger. The charger can be used to charge a radio with battery or just a battery.

The radio should be turned off during charging. Allow, if possible, the battery to fully discharge before recharging it. The battery will be fully charged after approx. 12 hours. You should then remove the battery from the charger.




To ensure that the battery works well it's important that you correctly charge and discharge it.

The red light diode of the charger should glow when charging.

- Check that the connectors on the back of the battery are touching the connectors of the charger.
- A new battery doesn't reach its maximum capacity until it has been charged/discharged 3–4 times.
- The battery charger is for indoor use only.
- If the battery isn't charged for some time it loses capacity through self-discharge, up to 25% in one week. Therefore always charge the battery at least once a month.
- Don't overcharge the battery. Interrupt the charging after 12 hours.




## Menu/Advanced operations

With **FUNC** you can choose among 5 further advanced functions. To attain these functions **FUNC** is pressed the number of times corresponding to the function. Thereafter you can with  or  choose the desired setting. With  you confirm and the radio then reverts to its normal condition.

To reach the different menu you must the first time you press **FUNC** press and hold **FUNC** for at least 1,5 secs. This is to avoid unintentionally activating the menu function.


After the first press of 1,5 secs you reach the menu of CTCSS tones. If you wish to come to other menus you press **FUNC** to go through to the next menu items.



-  All settings are automatically saved until a new setting is made. This also applies if the radio is turned off.

### Menu 1 – CTCSS tones






The radio is provided with CTCSS tones that can be enabled and disabled. If several hunting parties near each other use the same channel you can by using CTCSS tones avoid being disturbed by the radio traffic of others. The CTCSS tones works so that the speaker of the radio remains muted until the correct CTCSS tone is received on the selected channel.

All radios in the hunting team must have the same CTCSS tone selected to be able to hear each other. The radio has 38 standard CTCSS tones to choose among. When selecting the CTCSS tone the frequency in Hertz is indicated in the display.




-  Certain radio makes displays the CTCSS tone with numbers instead of the frequencies, see converting table for CTCSS tone.

-  When the CTCSS tone is enabled *PL* is shown on the display of the selected channel.
-  If the CTCSS tone is enabled check that the channel is free before transmitting. If the channel is busy the status LED glows with a fixed green light.


#### To enable CTCSS tone

- Select the channel with  or .
- Press **FUNC** for at least 1,5 secs. *PL* starts flashing in the display.
- Choose with  or  the CTCSS tone (the frequency is displayed in Hertz).
- Confirm with . The radio reverts to its normal condition and *PL* is shown on the display of the channel in question.

#### To disable CTCSS tone

- Press **FUNC** for at least 1,5 secs. *PL* starts flashing in the display.
- Choose with  or  tone *00* (no CTCSS tone) and confirm with .

#### To check the CTCSS tone


- Press **FUNC** for at least 1,5 secs. *PL* starts flashing in the display.
- The CTCSS tone is now indicated in the display. You revert without making changes by pressing .

### Converting table

No	Freq.	No	Freq.	No	Freq.
1	67,0	14	107,2	27	167,9
2	71,9	15	110,9	28	173,8
3	74,4	16	114,8	29	179,9
4	77,0	17	118,8	30	186,2
5	79,7	18	123,0	31	192,8
6	82,5	19	127,3	32	203,5
7	85,4	20	131,8	33	210,7
8	88,5	21	136,5	34	218,1
9	91,5	22	141,3	35	225,7
10	94,8	23	146,2	36	233,6
11	97,4	24	151,4	37	241,8
12	100,0	25	156,7	38	250,3
13	103,5	26	162,2		




### Menu 2 – Transmit power

The radio has two levels of transmit power that can be selected per channel; normal power 1,5 W and high power 5 W. When high power is selected the radio uses considerably more power during transmitting.


 Don't use higher power than necessary. High power reduces the duty of the batteries.

 Never use high power when you use a dry battery pack.

#### To change the transmit power


- Select the channel with  or .
- Press **FUNC** for at least 1,5 secs.
- Press **FUNC** once again. *H* starts flashing in the display.
- Press  to change the level of power. The radio reverts to its normal condition and *H* is shown in the display to indicate that


high power is selected. If high power was selected it will change to normal power.

 The symbol *H* in the display indicates that high power is selected. If no *H* is displayed normal power is selected.




### Menu 3 – VOX

VOX is a function which makes transmitting voice operated. The radio opens the transmitter when you speak in the microphone. Two levels of sensitivity can be chosen (high and low).




 VOX only works with an external speaker mike or other accessories adapted for VOX operation.

 If high sensitivity is selected you don't have to speak so loud to start transmitting but in return the transceiver becomes more sensitive to noises in the environment.


#### To activate VOX


- Press **FUNC** for at least 1,5 secs.
- Press **FUNC** twice more until VOX starts flashing in the display.
- Choose with  or  activation of VOX and the desired sensitivity *L* (low) or *H* (high).
- Confirm with . The radio reverts to its normal condition and VOX is shown in the display.

#### To deactivate VOX

- Press **FUNC** for at least 1,5 secs.
- Press **FUNC** twice more.
- Choose with  or  until only VOX is flashing.
- Confirm with . The radio reverts to its normal condition.

**To check the selected VOX sensitivity**

- Press **FUNC** for at least 1,5 secs.
- Press **FUNC** twice more. The selected VOX sensitivity is shown in the display. To revert without making changes press .




 The VOX function applies to all channels.

**Menu 4 – Scanning**




This menu allows you to select the channels you want to scan. The scanning function makes it possible to survey radio communication on several channels at the same time. The radio automatically cycles through the channels you have chosen to survey. When a signal is detected the scan automatically stops at that channel and you can hear the communication. Thereafter the scan automatically starts again after 4 secs.

 In menu 5 we describe how to start the scan.


**To select the channel/channels you want to survey**

- Choose with  or  the channel that you want to survey.
- Press **FUNC** for at least 1,5 secs.
- Press **FUNC** three more times until *Sc* starts flashing in the display.
- Press  to confirm. The radio reverts to its normal condition and *Sc* is indicated on the channels which are to be scanned (surveyed).

**To deselect channels from the surveillance list**


- Choose with  or  the channels you want to deselect.
- Press **FUNC** for at least 1,5 secs.
- Press **FUNC** three more times until *Sc* starts flashing in the display.
- Press  to confirm. The radio reverts to its normal condition.

**Menu 5 – Start scanning****To start the scan**

- Press **FUNC** for at least 1,5 secs.
- Press **FUNC** four more times until *JA* is shown and *Sc* flashes in the display.
- Press  to start the scan. All channels that you have selected to survey will be cycled through in the display.

**To stop the scan**

- Press  to stop the scan.




 If a CTCSS tone is selected on a channel the scan only stops if the right CTCSS tone also is received.



## Quick guide

Below you will find a quick guide for your **HP 68 L**. We suggest that you make a copy of this page and bring it with you as a help when you go out in the woods.

### Basic operations

1. Turn with the volume knob on the radio. Adjust the volume to a suitable reception level.
2. Select with  or  the channel.
3. Press **PTT** to transmit (the status LCD glows red) and release to receive (green light shows that a communication is carried out on the channel).
4. You can open and close the squelch by pressing **MON**.
5. To lock and unlock the radio press and hold pressed **FUNC** and press thereafter .

### Advanced operations

Menu 1 = CTCSS tone




Menu 2 = Transmit power

Menu 3 = VOX


Menu 4 = Scanning selection

Menu 5 = Start scanning



### Enable/disable and select CTCSS tones (Menu 1)

- Press **FUNC** for at least 1,5 secs the display changes from showing the channel to showing a flashing *PL* on the left of the selected CTCSS tone.
- Choose with  or  the desired CTCSS tone or *00* to disable the CTCSS tone.
- Press . The symbol *PL* on the left of the channel number shows that the CTCSS tone is selected on the channel.

### To change the transmit power (Menu 2)

- Press **FUNC** for at least 1,5 secs, press **FUNC** once again, a *H* flashes on the left of the channel number.
- Press  to change to the transmit power on the channel. High power is indicated by a *H*. When normal power is selected only the channel number is shown.

### Start scanning (Menu 5)

- Press **FUNC** for at least 1,5 secs, press **FUNC** four more times, *JA* and a flashing *Sc* is shown in the display.
- Press  and the scanning will start on the channels you have pre selected for scanning.
- To stop the scanning press .

## Optional accessories

Optional accessories can be used to improve the transceiver's performances. Please contact your dealer for further details regarding optional accessories.

## Technical specification

### General

Frequency bands	67–73MHz
Number of channels	up to 99 according to installer's programming
Number of CTCSS tones	38 possible to choose per channel
Channel separation	12,5 or 25 kHz
Temperature range	–30 to +60°C
Battery type	7,2 Volt DC battery NiMH 1300 MA/h
Operating time 5-5-90%	More than 8 hours

### Transmitter

Output power	1,5/5 Watt possible to choose per channel
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### Receiver

Sensitivity	Better than 0,28 $\mu$ V at 12 dB SINAD
Audio output power	500 mW (400 mW at 5% distorsion)

### Mechanics

Dimensions	130 x 42 x 60 mm (with battery)
Weight	355 grs (with battery)
Standards	IEC529, IP54 and MIL-STD 810 C/D/E