

USER MANUAL
CB RADIO PNI ESCORT HP 8024 ASQ
adjustable ASQ, dual voltage 12V – 24V



Before connecting and using this product, please read carefully these instruction manual and keep it for later use.

THERE ARE NO COMPONENTS THAT CAN BE REPAIRED BY THE USER.
FOR REPAIRS PLEASE REFER TO A N AUTHORIZED SERVICE.

ATENTION:

TO PREVENT FIRE HAZZARDS USE PROPER POWER SOURCE.

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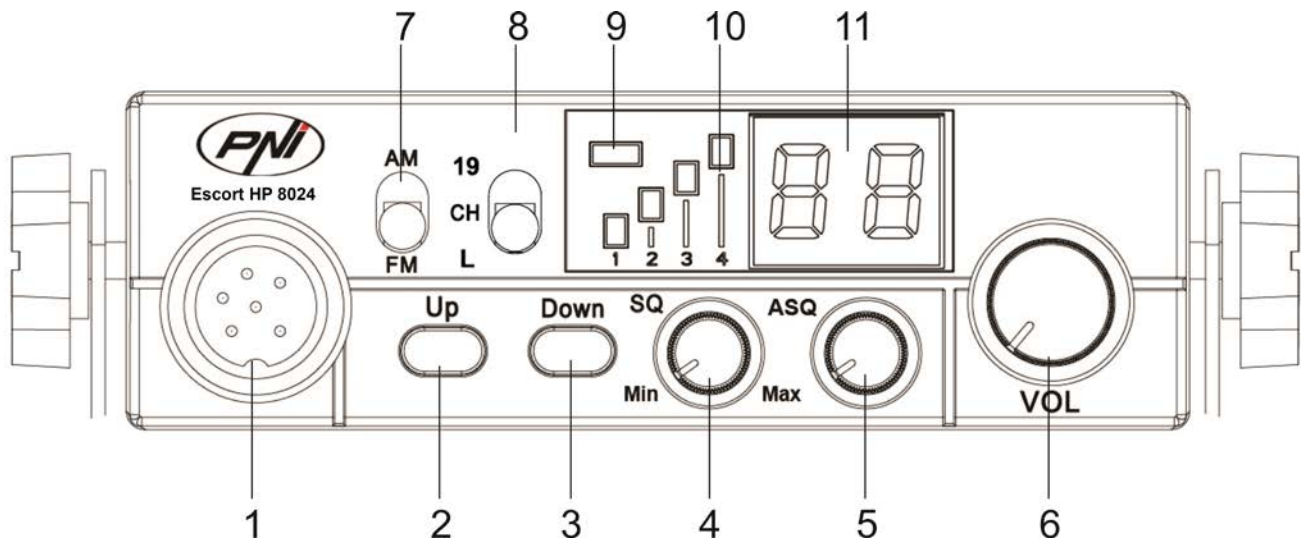
1. Main Features

- 40 AM/FM channels
- Mode AM/FM switch
- Emergency channel selector (19)
- Keypad lock function
- UP/DOWN buttons for channel selection
- Signal LED indicators
- 2 digit channel indicator
- Volume knob with power ON/OFF control
- TX/RX /ASQ LED indicator
- Microphone with Up /Down and ASQ buttons
- Front microphone plug
- Jack for external speaker
- Manual and automatic squelch

2. Technical specifications

Channels	40 AM/FM
Frequency range	26.965 – 27.405 MHz
Frequency control	P.L.L.
Operating temperature	-10° - +55°C
DC input voltage	12V / 24V
Size / Weight	115 x 36 x 152 mm / 0.8 kg
Receiver	
IF	1° 10.7 MHz / 2° 450 KHz
Sensitivity	-120dBm / 12dB SINAD (FM) -107dBm / 12dB SINAD (AM)
Audio output	@10% THD 2.5W la 8 ohm
Audio distortion	<8% at 1 KHz
Image rejection	65 dB
Adjacent channel	85 dB
Current drain	200 mA in stand-by
Transmitter	
Maximum RF power	4W FM la 13.8Vdc
Modulation	85% la 90% (AM) 3KHz ±0.2 KHz (FM)
ANT impedance	50 Ohm
Current drain	2 A

3. Product description



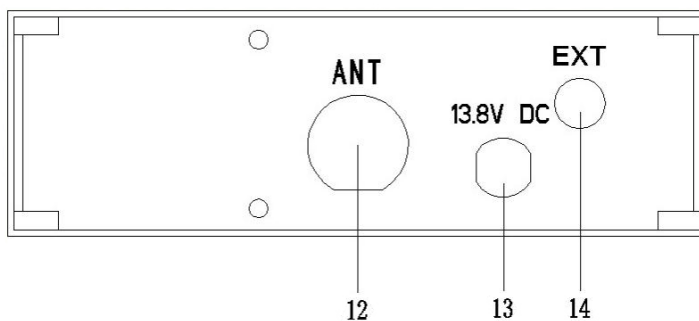
- 1. MICROPHONE connector** : Connect the supplied **electric condenser microphone** to this connector, and then lock it via the ring nut.
- 2. UP KEY** : Press this key and channel NO. runs up.
- 3. DOWN KEY** : Press this key channel NO. runs down.
- 4. SQ knob** : The SQUELCH control allows to silent the receiver by cutting the background noise. Turn the SQUELCH knob anticlockwise until the background noise is cut. Rotate the SQUELCH knob clockwise (SQUELCH ON) to listen to the weakest signals.
- 5. ASQ knob** : to increase the ASQ level rotate the knob clockwise, in this case the background noise is reduced but also the received signal. Reccomanded: turn on the radio CB with the ASQ knob on the left.
- 6. OFF/VOL** : This knob controls the radio ON and OFF as well as adjusts the volume. If no signals are being received on the operating channel, it is suggested to turn on the SQUELCH and adjust the volume to the desired level while listening to the background noise. When it is turned on by operating the Volume knob, the radio will remember the channel, frequency, AM or FM used last time.
- 7. AM/FM mode selector:** This switch allows selecting the modulation mode AM/ FM.
- 8. Emergency channel or function mode selector:** with this button you can select one the 19 emergency gchannels 19, the normal CH funtioning mode or activate keypad locking function. In the CH mode you cand select the number of the channel you want to use. In Romania they use channel no22.
- 9. TX/ASQ LED** : The indicator is bicolour light as red and green colour. When TX is red colour, when ASQ on is green light.
- 10. RX Signal Meter:** 4-bar RX signal Meter to monitor the strength of the received signals.

11.DISPLAY: The digital LED display shows the channel.

12. Antenna connector

13. Power cord

14. EXT (External Speaker) Jack



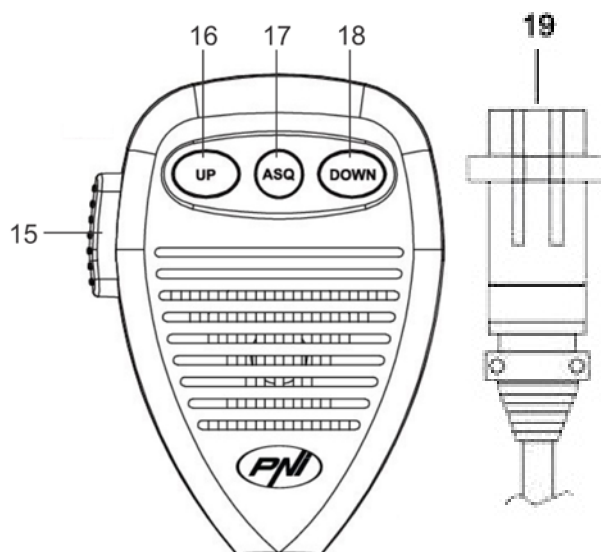
15. PTT (Push-to-talk) key: Push the button to talk then release to receiving mode.

16. UP key of the microphone: This switch allows increasing a channel number.

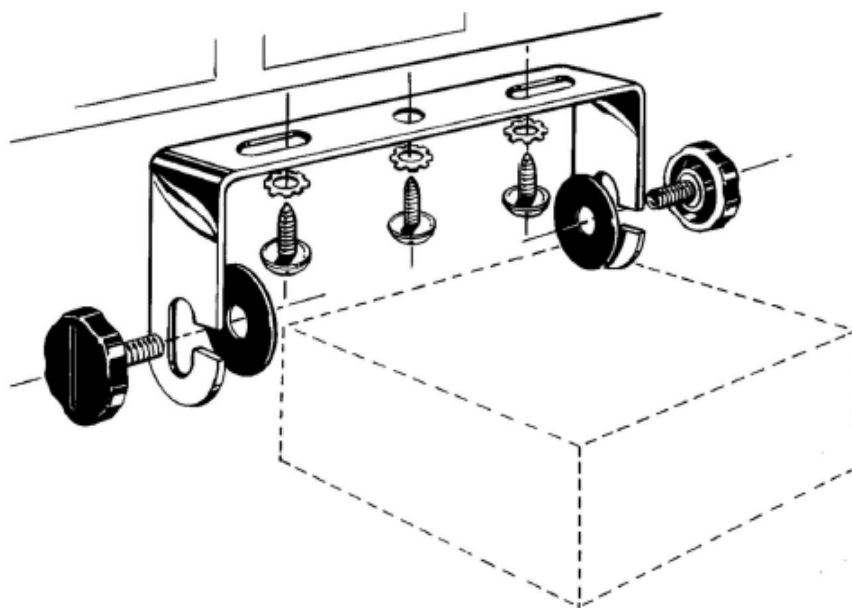
17. ASQ: Press this button, TX and ASQ on the LED would be green light, shows ASQ turn on.

18. DN key of the microphone: This switch allows decreasing a channel number.

19.MICROPHONE plug: 6-pole microphone plug with locking ring nut, to be connected to socket (1) located on the front side of the radio.



4. Installation



Before installing the main unit in the vehicle, please check and select the most convenient position, in order that the radio will be easy to reach and comfortable to

operate without disturbing or interfering driving. Use the supplied bracket and hardware to install the radio. The bracket screws must be well tightened to avoid looseness as the vehicle vibrates. The car mounting bracket can be installed over or below the radio and the radio may be inclined as desired according to the specific type of installation (under dashboard or track cabin roof installation).

Installation of the main unit

Before connecting the radio to the vehicle electric system, please make sure the radio is powered off with the OFF/VOL (6) knob completely turned anticlockwise at OFF position. Connect the power cord to the cigarette lighter of the station.

Installation of the antenna

A specific mobile antenna adjusted for 27 MHz frequency range must be used. The antenna installation must be done by a qualified technician or service centre. Please install the antenna carefully on the vehicle with proper connection to ground. Before connecting the antenna to the radio, it is necessary to check the correct operation of the antenna with low standing wave ratio (S.W.R.) via adequate instruments. If not, the transmitter circuit of the radio could be damaged. The antenna usually must be installed on the highest part of the vehicle, free from obstacles and as far away as possible from any source of electric or electromagnetic noise. The RF antenna coaxial cable must not be damaged or pressed on its way between antenna and the radio. The correct operation of the antenna and the low standing wave ratio (S.W.R.) must be checked periodically. Connect the RF antenna coaxial cable to the antenna connector (15), located on the rear side of the radio.

Checking operation of the radio

Once radio has been connected to the vehicle electric system and to the antenna, the correct operation of the system should be checked. Please proceed as following:

- 1) Check that the power cable is correctly connected.
- 2) Check that the RF antenna coaxial cable is properly connected.
- 3) Connect the microphone to the connector (1) that is on the front side of the radio.
- 4) Rotate the SQUELCH (4) knob anticlockwise.
- 5) Turn radio on by the OFF/VOL (6) knob and adjust volume to the desired level.
- 6) Select the desired channel with the up/down key on the front side of the radio.
- 7) Rotate the SQUELCH (4) knob clockwise to cut the background noise.
- 8) Press the PTT key to transmit and release it to receive.
- 9) Check the level of the received and transmitted signals on the 4 bar RX signal Meter and TX LED. The transceiver will work correctly.

5. Standard change

To change the working standard of the radio follow the next instructions:

- When the radio is off, press the Down button simultaneously and PTT on the microphone and then turn on the station, keeping the buttons pressed.
- Use up and down buttons on the front panel of the radio to select the desired standard
- Turn the radio off and on again

To check the current standard use the same procedure.

Available standards: CE > -9 > -A > -b > -C > -d > -E > -F > -p > -n

- **CE:** 26.965 - 27.405 MHz FM only
- **9:** 26.965 - 26.955 80 channels AM FM (Germany)
- **A:** 25.615 - 26.055 MHz
- **b:** 26.065 - 26.505 MHz
- **C:** 26.515 - 26.955 MHz
- **d:** 26.965 - 27.405 MHz
- **E:** 27.415 - 27.855 MHz
- **F:** 27.865 - 28.305 MHz
- **p:** 26.960 - 27.400 MHz
- **n:** 26.330 - 26.770 MHz AM FM

6. Usefull tips

- Do not invert power polarity
- Do not replace the fuse with a bigger one. The default is 2A.
- Do not transmit without an antenna connected, you risk damaging the device.
- Set the SQ and ASQ at the limit of the background noise.
- Do not cut cigarette lighter socket, because it contains inside safety protection

7. Legal frequencies and transmitting powers in Europe

Italy 40CH AM/FM 4 watt

Italy 34CH AM/FM 4 watt

Germany 80 CH FM 4watt/ 12 CH AM 1watt

Germany 40 CH FM 4watt/ 12 CH AM 1watt

Europe 40 CH FM 4 watt/ 40 CH AM 1watt

Romania CEPT 40 CH FM 4watt

Spain 40 CH AM/FM 4watt

France 40 CH FM 4watt/ 40 CH AM 1watt

GB 40 CH FM 4watt english frequencies + EC 40 CH FM 4 watt CEPT frequencies

Specifications subject to change without notice!

