

RADIANT TECHNOLOGY

Radiant Pocket Radio V1.0 **FCC ID HRD-737**

last revised October 28, 2018

All information subject to change without notice.



Radiant Pocket Radio V1.0 is our first aircraft band receiver. It is awesome for checking ATIS and listening to traffic in the pattern before getting in your plane. It's also loaded with features:

SIX reception bands

- Aircraft band, 118.000 --- 137.975 mhz
- AM 520 – 1720 khz
- FM 87.5 – 108.0 Mhz
- Shortwave 2.300 – 30.000 Mhz (AM only; not SSB)
- CB 25 – 28 Mhz
- VHF 30 – 233 Mhz (Narrow or Wide FM selection)

Excellent sensitivity & specs

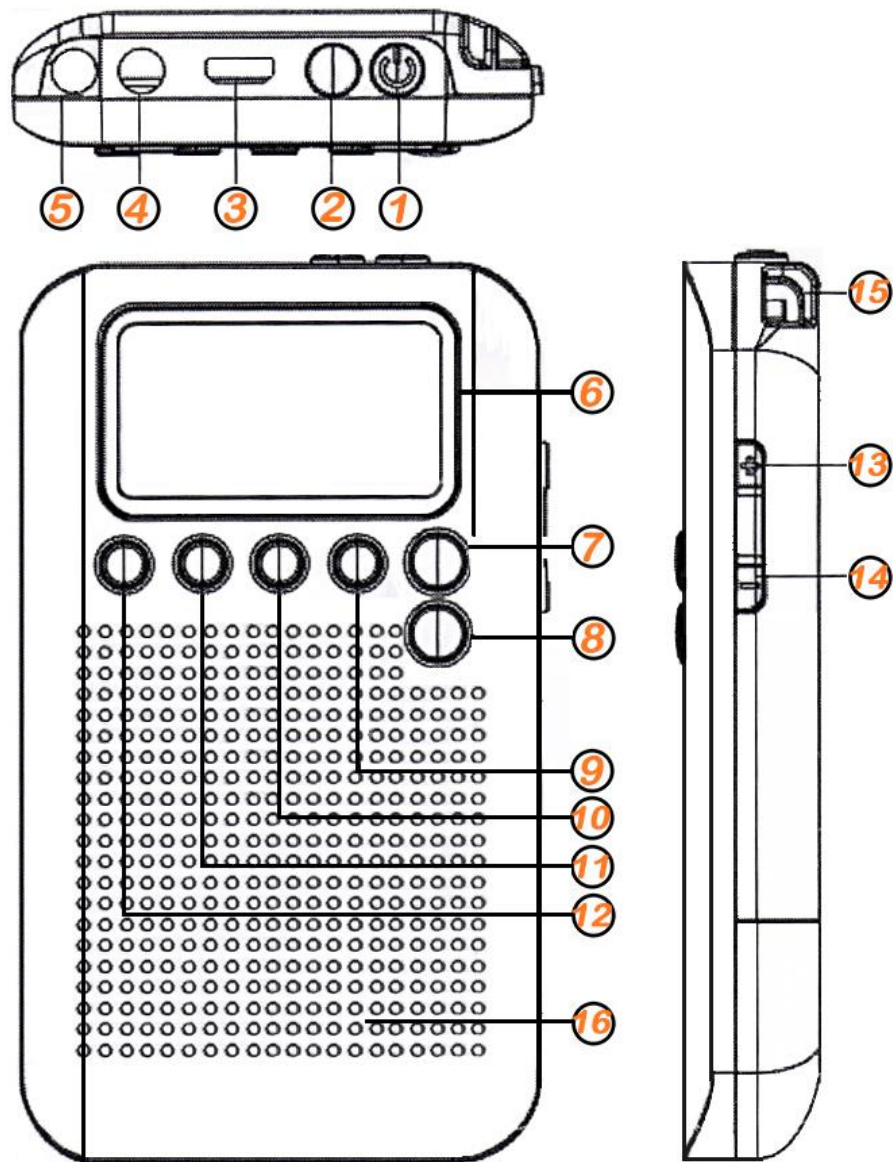
- Aircraft band, 2uv
- AM 3mV/M
- FM 2 uv
- Shortwave 30 dB uV
- CB 1 uV
- VHF -5dB uV
- Stereo separation of 32DB
- Audio distortion <0.5%

Small size: 100 x 60 x 15mm (3.93” x 2.36” x 0.59”)

Unique features

- Rechargeable Lithium Battery (included)
- USB port for charging or base operation
- Aircraft / VHF / CB bands have on/off automatic squelch
- Clock & alarm
- Soft orange backlight
- Step width as low as 5khz (depends on band)
- Channel memory for your favorite frequencies
- Autoscan

Controls & Displays

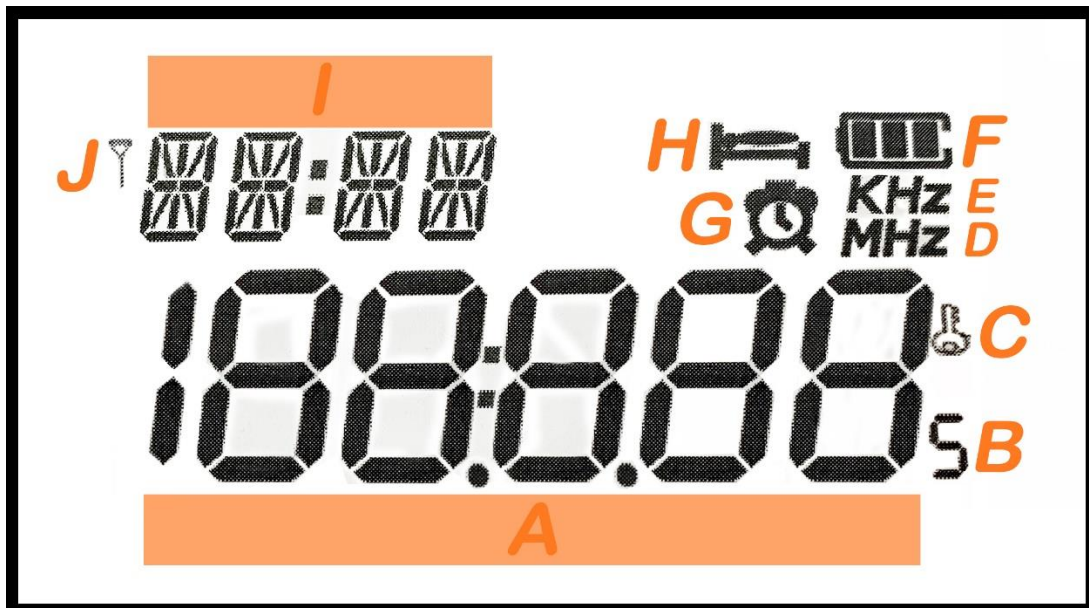


1. Power / Sleep
2. Lock
3. 5V in (USB)
4. 3.5mm Earphone jack
5. Antenna (Pull it out)
6. LCD Display
7. Volume + (louder)
8. Volume – (quieter)
9. Memo
10. Mode
11. Set
12. Band
13. Tune +
14. Tune –
15. Lanyard attachment
16. Loudspeaker

Controls & Displays Description (Detail)

1. Power / Sleep – for turning the radio on and off and for adjusting automatic shutdown.
2. Lock – pressing this disables all other buttons. Freezes the radio in its current state.
3. 5V in (USB) – for charging the lithium battery.
4. 3.5mm Earphone jack – headphone is included.
5. Antenna (Pull it out) – seven section telescopic antenna.
6. LCD Display
7. Volume + (louder); also allows scrolling through preset Memo channels
8. Volume – (quieter); also allows scrolling through preset Memo channels
9. Memo – allows storing and recall of channels
10. Mode – changes mode of selected band
11. Set – For setting time or for changing squelch function
12. Band – If the unit is off, this turns on the alarm. If the unit is on, this switches the band.
13. Tune + -- Station tuning. Also time adjustment.
14. Tune – -- Station tuning. Also time adjustment.
15. Lanyard attachment
16. Loudspeaker

Screen Description



- A. Frequency and time
- B. Minimum step indicator for certain bands (5khz, for example)
- C. Lock indication
- D. FM / SW / CB / AIR / VHF frequency multiplier (megahertz)
- E. AM frequency multiplier (kilohertz)
- F. Battery symbol
- G. Alarm symbol
- H. Sleep symbol
- I. Bands / preset recall & store address / memo / volume / sensitivity / minute clock
- J. Sensitivity flag
- K. (Not pictured) Charging Lightning Bolt

Operation

The battery compartment has a pre-installed rechargeable lithium battery. You will need to hook it up.

When the radio wakes up, it will turn on the orange backlight and show 12:00 on the display. The seconds indication will begin to change.

Charge your radio overnight using any host USB port.

Let's walk through the use of each button and feature on the radio.

(1) POWER / SLEEP / (USING RSSI FUNCTION)

POWER: A short press of the (1) button will turn the radio on. A long press of the (1) button will turn it off.

SLEEP: When the radio is turned OFF, a long press of the (1) button will enable the sleep timer. The bed symbol (H) will illuminate, and the sleep countdown timer can be selected 90, 80, 70... 20, 10. Each press of the (1) button will roll through the available countdown times. After you've selected a time, a few seconds later the radio will turn on in SLEEP countdown mode. The radio will turn off automatically after your selected countdown value. (Note: if you wish to cancel SLEEP countdown, press (1) for several seconds and the radio will turn off. Turn it on again; the SLEEP countdown will be cleared.)

RSSI: This stands for "Received Signal Strength Indicator" and provides feedback as to signal strength. A short press of the (1) button will cause the LCD display to show "*DB" and the numerical RSSI of the particular station being tuned.

BACKLIGHT: A quick press of this button anytime turns the backlight on briefly.

(2) LOCK

LOCK: If you want to lock the unit (prevent frequency changes, shutdown, band change, etc.) make a long press of the (2) LOCK button. Another long press cancels the LOCK.

(3) DC5v Micro USB port

The only purpose of this port is for charging the battery or running the radio on external power.

(4) 3.5mm Earphone jack

Using the included earphone turns off the speaker.

(5) ANTENNA

You can't receive stations unless you pull it out. Interested in even more sensitivity? Use an alligator clip to connect to a larger antenna of your choice.

(6) LCD DISPLAY

(7) VOLUME +

For turning up the volume. Also for changing preset MEMO stations.

(8) VOLUME -

For turning down the volume. Also for changing preset MEMO stations.

(9) MEMO

This button is used to store and recall stations. Tune the station of your choice; then press the (9) MEMO button for several seconds. You can roll through available MEMO locations by touching the (7)/(8) volume buttons. When you're happy with the MEMO location, make a short press of the (9) MEMO button. Your frequency is now stored in the selected MEMO location.

Recalling a MEMO location is easy. Briefly press the (9) MEMO button; the (7)/(8) volume buttons allow you to roll through saved MEMO channels. After you've found the MEMO channel you're after, just let the radio sit. A couple of seconds later, it will tune your selected MEMO channel.

(10) MODE

The MODE button has a different effect for each band.

FM Band: Attach a headphone and briefly touch the (10) MODE button. You'll hear the radio switch from Mono to Stereo and you'll see MONO or ST on the LCD screen. (Without headphones, the speaker is always in MONO mode.)

AM Band: A short press of the (10) MODE button will change between 9khz step and 10khz step. [This function may be disabled in your radio.]

SW band: A short press of the (10) MODE button will advance between shortwave bands. The bands are set at 2.300 / 3.200 / 3.900 / 5.000 / 6.030 / 7.150 / 10.000 / 11.479 / 13.600 / 15.000 / 17.650 / 19.000 / 26.000 mhz.

AIR band: a short press of the (10) MODE button will switch between 5khz and 25khz spacing [5khz MAY allow you to tune some 8.33khz European spacing station frequencies – no guarantees!]

VHF band: Pressing (10) MODE allows selection between narrow and broadband FM demodulation. NOAA weather stations uses narrow band, for example. VHF-N or VHF-W will appear on the LCD screen.

(11) SET

The SET button is used for setting time, or changing the SQUELCH mode.

Setting time: Make sure the radio is clock mode (radio not turned on). Press the (11) SET button for several seconds. The hour digits will flash. Press the (13) / (14) TUNE buttons to adjust the correct hours. Briefly press the (11) SET button again, it will advance to minutes and adjust again. After a few seconds, the radio will default to your set time.

In CB, AIR, and VHF bands, the SQUELCH feature is available. Hold the (11) SET button down for several seconds; the SQ/ON or SQ/OFF will appear on the LCD display. Toggle the setting with short presses of the (11) SET button. After a few seconds, it will remember your selected state and return to normal operation.

(12) BAND

The BAND button is used to set the alarm. It is also used to select the band.

Setting Alarm: Turn your radio off, placing it into clock mode. Thereafter, a short press the (12) BAND button will toggle the ALARM symbol on the LCD screen on or off. A long press of the (11) SET button allows the ALARM value to be changed, by touching the (13) / (14) tune buttons. Set the hours, then set the minutes, then a third press the (11) SET button will show either “BU2 [buzzer]” or “rAD [radio]”. Pick what you want. The “rAD” will turn the radio on at the ALARM time. The “BU2” setting will cause the radio to ring at the ALARM time. Pressing any button will stop the ring.

Of course, the BAND button is also used to switch bands. When the radio is turned on, consecutive short presses of the (12) BAND button cause the band to change. The sequence is FM / AM / CB / AIR / VHF.

The BAND button is also used to initiate Auto-Scanning with auto MEMO storage. When on the band of your choice (for example, FM), a long press of the BAND button will cause the radio to start searching and automatically store stations as it finds them.

(13) TUNE + / - [with button (14)]

Use the tuner buttons to increase or decrease the frequency. A very short press advances one channel spacing; a short press will cause it to scan for the next active station. A long press speeds things up.

Honestly, tuning is a trick, especially in the AIR or VHF band. It takes some practice to easily tune a station. That's why the MEMO channel saving function is helpful – you can skip tuning.

Warranty:

One year to the original purchaser. Exclusions apply:

- a) **Breakage due to force or dropping invalidates your warranty.**
- b) **Bent antennas aren't covered under warranty. (Repair charge is \$50 + shipping)**
- c) **This radio is NOT water proof. Water damage is excluded.**
- d) **Any abuse causing damage is excluded.**
- e) **Our determination is final.**
- f) **If you open the radio, the warranty is also void.**

DISCLAIMER: Products from RADIANT Technology are not designed to be used in applications where their failure would endanger safe flight or human life in any way. They are intended solely for use in VFR conditions. They are not certified to meet any Technical Standard Order and are not produced under a Parts Manufacturing Authority (TSO / PMA). As a result, they are suitable only for use in experimental and ultralight aircraft, and in Light Sport Aircraft, if meeting the requirements of the respective manufacture.

WARRANTY: Your new RADIANT Technology instrument carries a one year warranty. Please contact us at support@beliteaircraft.com should your product need warranty service. International warranty service will be charged US\$50.00 for repairs, which includes return shipping after repair. Payment must be received before service begins.

RETURN/REFUND INFORMATION: Must be returned in new, resalable condition within 14 days.

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