

# Box Manual for RADDY ATS200

V1.0, May 21<sup>st</sup>, 2024

#### About AADDY

**Our Mission**: Keep connected while you are enjoying the outdoors.

We all could use a little more time outdoors. When we get off the couch and take our eyes off the screen, we can see some beautiful things. Even when we are enjoying the outdoors it can be nice to have a few modern comforts.

From shortwave radios to emergency radios, weather stations to solar panels, and everything in between, we offer a line of outdoor and emergency-preparedness products to keep you safe or just let you enjoy the outdoors while staying connected to the rest of the world.

We believe that preparing for whatever comes next is as important as enjoying the outdoors.

#### Be prepared, get Raddy, and HAVE FUN!

Please feel free to contact us by email via <u>support@iraddy.com</u> and we'll do our best to solve your concerns.

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# **1 Product features**

- The RADDY ATS200 can receive radio signals of LW, MW, SW, FM and AIR. Depending on the selected band It supports several kinds of demodulation (FM, AM, LSB, USB and Stereo) and Bandwidth (BW) settings according to the used frequency band, attenuation for local stations, preamplifier for DX-stations and a socket for connecting an external antenna.
- Built in aviation frequency converter, capable of receiving aviation frequency band
- Frequency ranges:

FM: 64-108 MHz (Stereo & RDS supported) LW: 153-500 kHz (AM) MW: 520-1710 kHz (AM) SW: 1730-30000 kHz (AM, USB and LSB (SSB) AIR: 118-138 MHz (AM)

- Operating mode, frequency, signal strength remaining battery voltage/capacity and other details are visualized on the 2.4" color touch screen.
- Touch screen and encoder locking function to be placed in the pocket without triggering by mistake
- Backlight may be adjusted to your personal needs
- High precision long life rotary encoder knob
- FM RDS supported
- LNA amplifier can switch freely to meet different occasions
- Built in Bluetooth LE HiFi Stereo audio transmission
- 3.5 mm stereo headphone output
- 3.5 mm external antenna socket for outdoor antennas
- Mini LED flashlight (can be used without turning on the phone)
- Built in 820 mm ultra long 10 segment rod antenna
- Built in 3.7V/1200mAh high capacity lithium-lon battery
- Built in large 40mm speaker
- USB-C socket for charging and firmware upgrades
- Sturdy high precision CNC aluminum alloy housing

# 2 What is in the box?

Thank you for choosing the **RADDY ATS200**. We recommend that you first check the delivery contents listed in the following table and keep the packaging for later storage. If something is missing or damaged, please contact your dealer immediately.

Item	Quantity	Picture
אכסאק <b>ATS200</b> high-performance all-band radio	1	
USB-C charging cable	1	
Box Manual	1	Box Manual for

# **3 Get started**

For those that would like to start listening to a radio station without further reading of this manual, here you go:

- 1. Carefully extract the rod antenna located at the top right of the radio and direct the end of the antenna towards the sky.
- 2. Long press the upper left button on the front of the radio until the radio powers up.
- 3. The screen is touch sensitive and the shown button-areas are pretty well self-explaining.
- 4. Use the rotary encoder knob on top of the radio to adjust the currently displayed parameter value (such as frequency, volume, ...) to your personal needs.

Those, that would know how to get the most out of your radio, continue reading

# 4 **Operation**

The radio is operated by touching the soft buttons displayed on the TFT screen, turning or pushing the rotary encoder knob on top of the radio or pushing one of the three buttons located on the front side of the radio.

## 4.1 Charging

The internal battery of your **RADDY ATS200** comes pre-charged with about 30% of its nominal capacity. So, before you start using the radio, please fully charge its battery. Therefore, plug the supplied USB-C cable with the USB-C side into the socket of the **RADDY ATS200**. Plug the opposite USB-A side into a free USB-port of your PC. The internal battery of your **RADDY ATS200** will now be charged. During the charging process, the red charging status LED besides the encoder-knob will light up. The red charging status LED will turn off as soon as the battery has been fully charged.

## 4.2 Flashlight on /off

Press the upper left button for about 2 seconds to turn on the flashlight at the top of the **RADDY ATS200**. Press it again to turn off the flash light.

## 4.3 Power on/off

Press the upper left button for more than 2 seconds until the touch screen backlight is turned on and the radio powers up. Press the upper left button again for more than 2 seconds until the touch screen backlight is turned off and the radio powers off.

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## 4.4 Touch lock

Short press the lower left button to activate/deactivate the touch screen lock function (TL). An activated Touch screen lock function is indicated by "TL" right to the battery symbol.

## 4.5 Rotary lock

Long press the lower left button to lock/unlock the rotary encoder (RL). An activated rotary encoder lock function is indicated by "RL" right to the battery symbol.

## 4.6 LowNoiseAmplifier

Short press the lower left button twice to activate/deactivate the Low Noise Amplifier (LNA). An activated Low Noise Amplifier is indicated by "LNA" left to the battery symbol.

## 4.7 Bluetooth

The **RADDY ATS200** normally automatically pairs to Bluetooth devices that are in pairing mode. Short press the lower right button to disconnect a paired Bluetooth-Speaker/Earphone.

#### 4.8 Change value

Use the rotary encoder on the top of your **RADY ATS200** to change the currently displayed value. Confirm your change by short pressing the rotary encoder knob.

# 5 Menu structure of soft buttons

The menu structure is subject to change without further notice depending on the firmware version. This manual is based on firmware "V5.2b\_Dark".

**Notes:** Not all buttons/parameters are available in all bands.

## 5.1 Top line on display

The top display line (above the frequency display) does show various settings, depending on the selected band, such as:



- Beat Frequency Oscillator (BFO). Only available in CW mode. Represents the audio frequency signal heard when receiving continuous wave (Morse code) transmissions.
- Gain/attenuation: AGC, ATT 1...26)
- FM/AM/USB/LSB: demodulation mode
- Bandwidth-filter (F-AUTO, F2.2 kHz, F4.0 kHz, F110kHz)
- Band: FM, LW, MW, 120M, 90M, 75M, 49M, 41M, 31M, 25M, 22M, 19M, 17M, 15M, 13M, 11M, CB, AIR/6M
- Channel stepping: depending on selected band: 1 kHz, 5 kHz, 9 kHz, 10 kHz, 100 kHz

#### **Notes**: Not all values possible in all bands.

## 5.2 Soft buttons:

To switch between the two screen parameter pages, use the soft-key "NEXT" or "BACK" displayed in the bottom right of the screen

#### 5.2.1 HAM

Select one of the various HAM radio bands, such as: 800M, 630M, 160M, 80M, 60M, 40M, 30M, 20M, 16M, 14M, 12M and 10M.

#### 5.2.2 BAND

Select one of the radio station frequency bands FM (normal FM radio band), Long Wave (LW), Middle Wave (MW), 120M, 90M, 75M, 49M, 41M, 31M, 25M, 22M, 19M, 17M, 15M, 13M, 11M, CB and AIR/6M.

#### 5.2.3 FREQ

Within a selected band, you can enter the frequency via a numerical keypad

#### 5.2.4 BFO

The Beat Frequency Oscillator (BFO) is only selectable in CW mode and represents the audio frequency signal heard when receiving continuous wave (Morse code) transmissions.

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#### 5.2.5 STEP

Depending on the selected band the stepping width (when turning the rotary encoder to change the frequency can be set.

#### 5.2.6 BANDW

Depending on the selected band the bandwidth can be selected.

#### 5.2.7 AGC

Automatic Gain Control (AGC) can be turned on and off. If turned on, any previous attenuation setting (see next parameter) will be deactivated.

#### 5.2.8 ATT

The received RF-signal can be attenuated with this parameter.

#### 5.2.9 MODE

Depending on the selected band, the available demodulation mode can be selected.

#### 5.2.10 MUTE

To mute the radio without changing the volume setting, use this soft button.

#### 5.2.11 VOL

The Audio volume can be set from 0 (no audio output) up to 63,

#### 5.2.12 >>UP

Start scanning upward (increasing frequency).

#### 5.2.13 SCAN

Automatically sweep a limited frequency area for stations and their signal strength.

#### 5.2.14 SETUP

Within the setup menu various options may be altered. It is not recommended to alter any of those values.

#### 5.2.15 <<DN

Start scanning downward (decreasing frequency).

#### 5.2.16 LIGHT

Set the level of backlight illumination(backlight)

#### 5.2.17 SQLCH

Set the squelch level between 0-50 dB.

#### 5.2.18 RDS

If in FM mode, the decoding of Radio Data System messages can be activated/deactivated with this parameter.

## 5.3 External accessory

#### 5.3.1 USB-C

On the top of the **RADDY ATS200** you find a USB-C socket. To charge the builtin battery connect the USB-C socket via the supplied USB-cable to a 5V DC USB-A power source.

Furthermore, the USB-C port can also be used to update the internal firmware of the radio. If new firmware becomes available we will publish it on our website within the support/download area.

#### 5.3.2 Earphone

On the top of the radio a 3.5 mm TRS socket allows to connect an external stereo earphone to the radio.



#### 5.3.3 External antenna

On the bottom of the radio there is a 3.5mm TR socket. Either an external FM antenna or an external SW or magnetic MW loop antenna can be connected to the socket.



# 6 Frequencies of some stations

## 6.1 Shortwave stations

Country	Frequency (kHz)	Modulation
AUSTRALIA	2310, 2325, 2485, 4835, 4910, 5025, 5995, 6020, 6080, 7240, 9475, 9560, 9580, 9590, 9660, 9710, 11650, 11880, 12080, 13630, 13670, 15160, 15230, 15240, 15515, 17715, 17750, 17775, 17785, 17795, 21725	AM
AUSTRIA	5945, 6155, 7325, 9870, 13675, 13730	AM
CANADA	9610, 9755, 9770, 13650, 15365, 17740	AM
CHINA	AM	
CZECH REP	5930, 6200, 7345, 7385, 9400, 9430, 9435, 9890, 9955, 11600, 13580, 15710	AM
FRANCE	5920, 7315, 9720, 9765, 9805, 9865, 11615, 11725, 13680, 11995, 15160, 15275, 15605, 21620	AM
GERMANY	5905, 6140, 6180, 7225, 7240, 7280, 7285, 9565, 9735, 9755, 11690, 12045, 15275	AM
GREECE	7475, 9420, 9935, 12105, 15630, 17525	AM
ITALY	5965, 6010, 6035, 6090, 6120, 7170, 9760, 11800	AM
POLAND	7130, 9525	AM
SPAIN	6055, 6125, 9680, 11625, 11680	AM
SWEDEN	6010, 7420, 11550, 15240	AM
TURKEY	5960, 6020, 6055, 7240, 9525, 11735, 12035	AM
UKRAINE	5820, 5830, 9925	AM
UΚ	5875, 5975, 6005, 6040, 6130, 6195, 7130, 7160, 7320, 9410, 9480, 9660, 9740, 9750, 11675, 11750, 11765, 11920, 12095, 15105, 15285, 15360, 15400, 15575, 17640, 17830, 17885, 21470	АМ
UNITED NATIONS	9565, 17810	AM
USA	4319, 5446.5, 5765, 6350, 7811.5, 10320, 12133.5, 12759, 13362	USB
USA	4930, 4960, 5960, 6080, 6105, 6110, 7125, 7175, 7205, 7405, 9645, 9760, 9785, 9885, 11655, 11885, 11890, 11975, 12015, 12150, 13600, 13640, 13710, 13735, 13755, 15150, 15185, 15205, 15290, 15445, 15580, 17640, 17715, 17730, 17895	AM
USA	5110, 9330, 18910	LSB

# 7 Technical specifications

## 7.1 General specifications

Parameter	Value
Speaker	40 mm, 8Ω, 1W
Bluetooth version	BT LE 5.3 HiFi Stereo
Bluetooth receiving distance	≤ 10m
Battery	3.7V Lilon 1200mAh
External input voltage	5V DC USB-C
Product dimension	137 mm * 50 mm * 20 mm
	(including knob and antenna)

## 7.2 Covered frequency ranges

Band	Frequency range	Demodulation mode	Description
LW	153-500 kHz	AM	LW BAND
MW	520-1710 kHz	AM	MW BAND
SW	1.730-30.00 MHz	AM/LSB/USB	SW BAND
FM	64-108 MHz	WFM/ST	FM BAND
AIR	118-138 MHz	AM	AIR BAND

## 8 Where to find support material

Please kindly note that all the files related to the **RADY ATS200** can be found in the Download area of our official website by following these steps:

<u>https://iraddy.com</u>  $\rightarrow$  Download  $\rightarrow$  click on the appropriate radio model

As soon as any new file becomes available, it will be published within our download area.

We would like to thank all **COAR** customers for their constructive feedback.

If you do find any bug in this documentation or if you are missing a detail, you would have expected, write an email to <a href="mailto:support@iraddy.com">support@iraddy.com</a>.

Thank You for Shopping at TAANY!

FIND TUTORIALS, SUPPORT AND MORE AT:

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