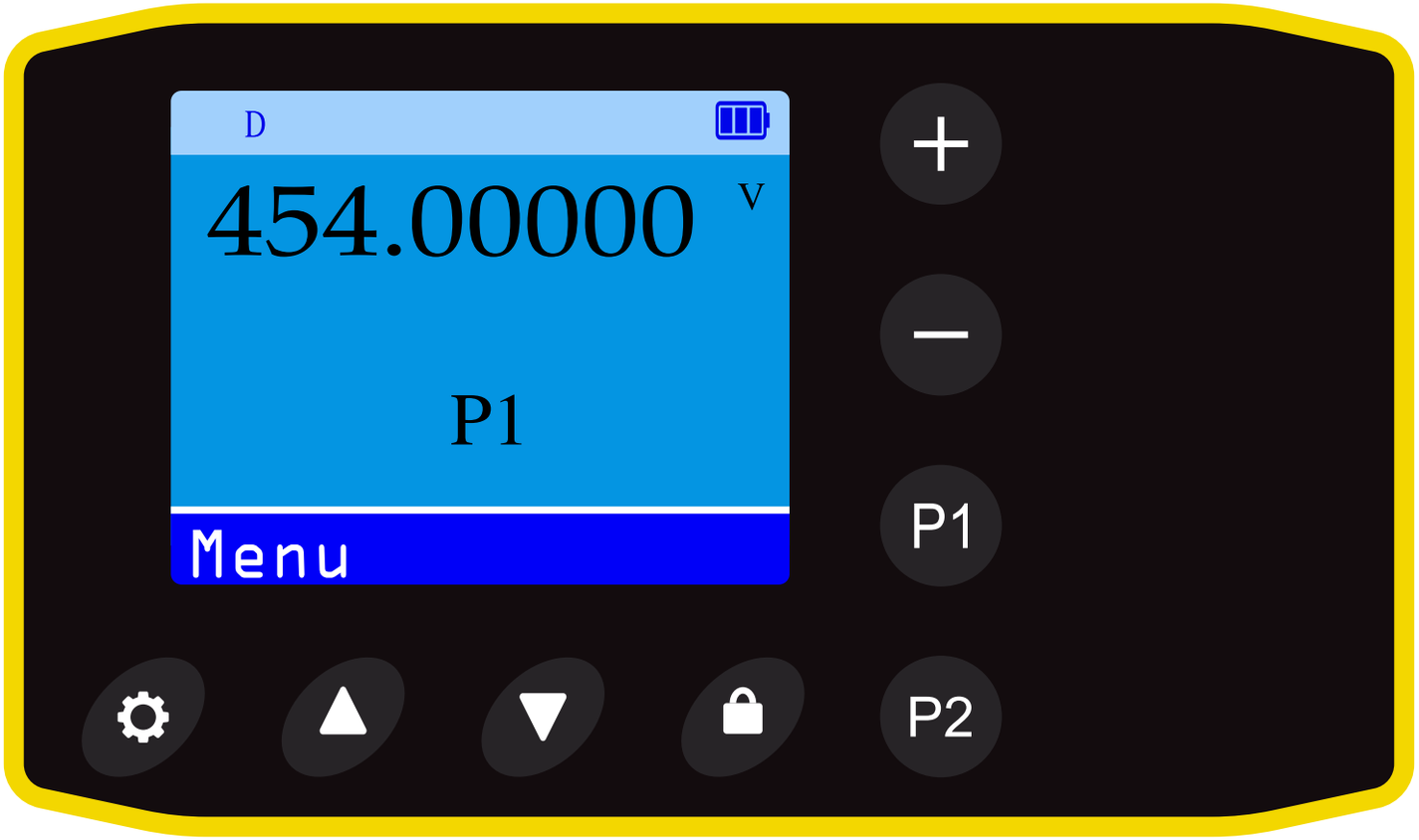


NITRO BEE

USER MANUAL VERSION 1.3.0

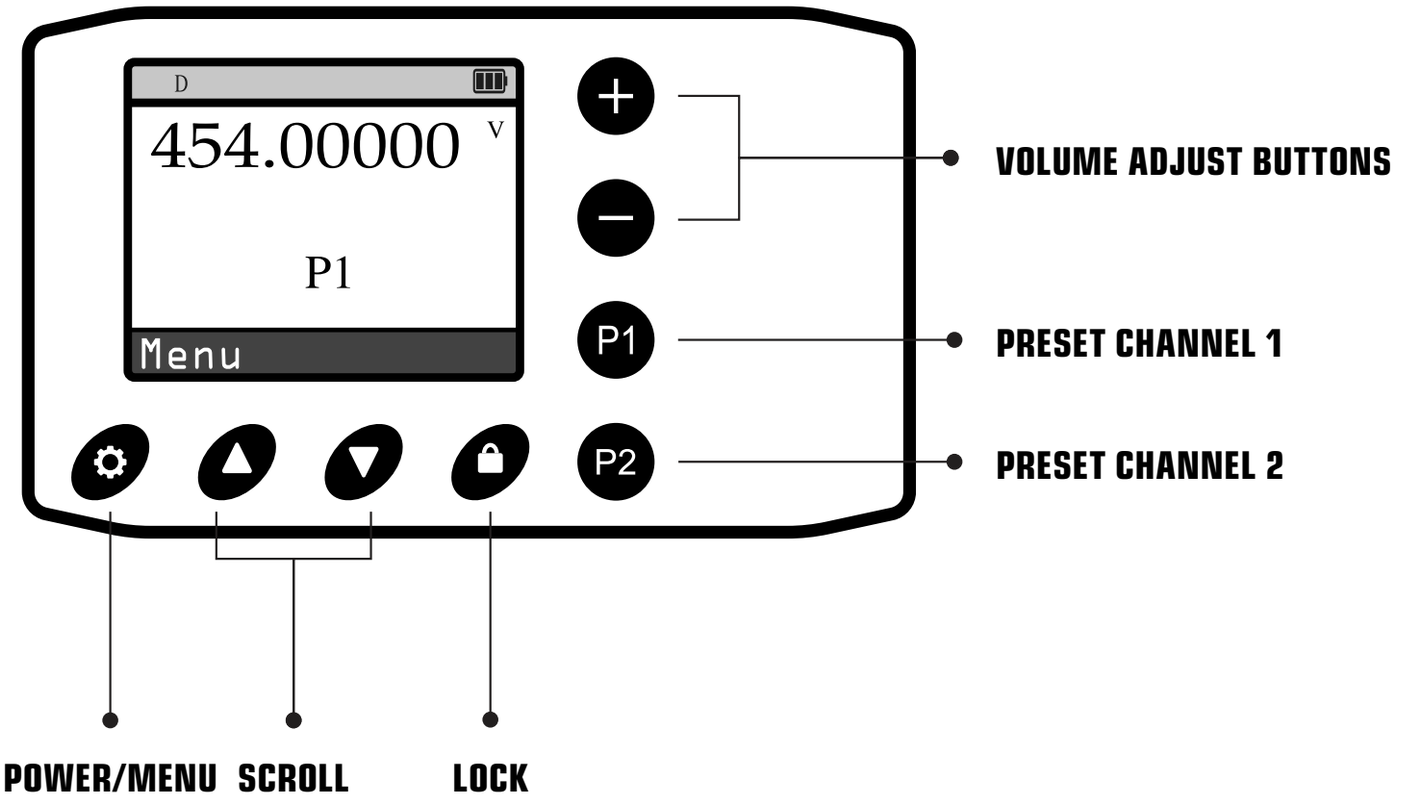
CONTENTS

QUICK START GUIDE

NITRO BEE

- POWER ON NITROBEE BY HOLDING DOWN [⚙] BUTTON UNTIL DEVICE POWERS ON
- USE THE UP AND DOWN KEYS TO SELECT THE FREQUENCY DESIRED DEFAULT FREQUENCY IS 454.0000
- LONG PRESS UP AND DOWN KEYS TO MOVE FASTER THROUGH THE FREQUENCY LIST
- P1 AND P2 ARE PREPROGRAMMED
  P1: 454.0000
  P2: 464.5500
- TO SAVE YOUR FREQUENCY IN THE PRESETS, PRESS AND HOLD P1 OR P2 UNTIL P1 OR P2 APPEAR ON THE DISPLAY UNDER YOUR FREQUENCY, **INDICATING YOUR FREQUENCY HAS BEEN SAVED**
- ADJUST VOLUME LEVELS BY PRESSING THE + FOR VOLUME UP AND THE - FOR VOLUME DOWN
- ONCE YOUR FREQUENCY AND VOLUME LEVEL ARE SET YOU CAN LOCK THE DEVICE BY PRESSING THE [LOCK] BUTTON UNTIL **“LOCKED!” APPEARS ON THE DISPLAY**
- TO POWER OFF THE NITROBEE, PRESS AND HOLD THE [⚙] BUTTON UNTIL **“PRESS [LOCK] BUTTON TO POWER OFF!!” APPEARS ON THE DISPLAY. PRESS [LOCK] TO CONFIRM POWER OFF**

CONTROLS


D
454.00000 V
P1
Menu
P1
P2
VOLUME ADJUST BUTTONS
PRESET CHANNEL 1
PRESET CHANNEL 2
POWER/MENU
SCROLL
LOCK

CONTROLS

POWER/MENU

To power on, long press [⚙].

When on, quick press [⚙] to open menu.

When in menu, quick press [⚙] to accept.

To power off, long press [⚙] then quick press [🔒] when prompted.

SCROLL

Quick-press [▲▼] to scroll up or down.

Long-press [▲▼] to fast scroll up or down.

LOCK

Quick-press [🔒] when in menu to go back.

Long-press [🔒] to lock or unlock display

VOLUME ADJUST BUTTONS

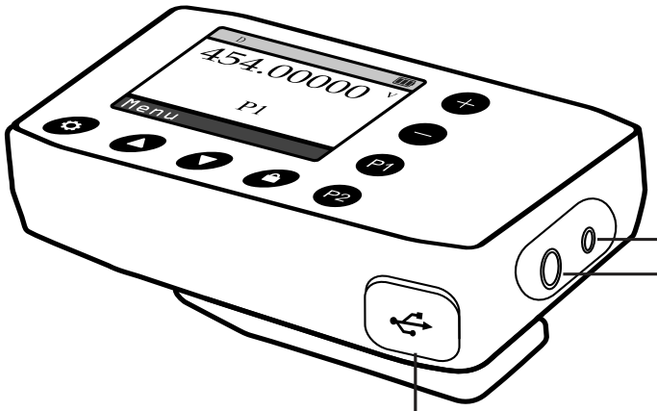
Quick-press [**+ −**] to adjust volume up or down.

PRESET CHANNELS

Quick-press [**P1/P2**] to shortcut to the preset channel.

Long press [**P1/P2**] to save current channel or frequency as a preset channel.

CONNECTIONS



AUDIO INPUT [2.5MM STEREO]

AUDIO OUTPUT [3.5MM STEREO]

CHARGE PORT [USB-C]

NITRO ADAPTER

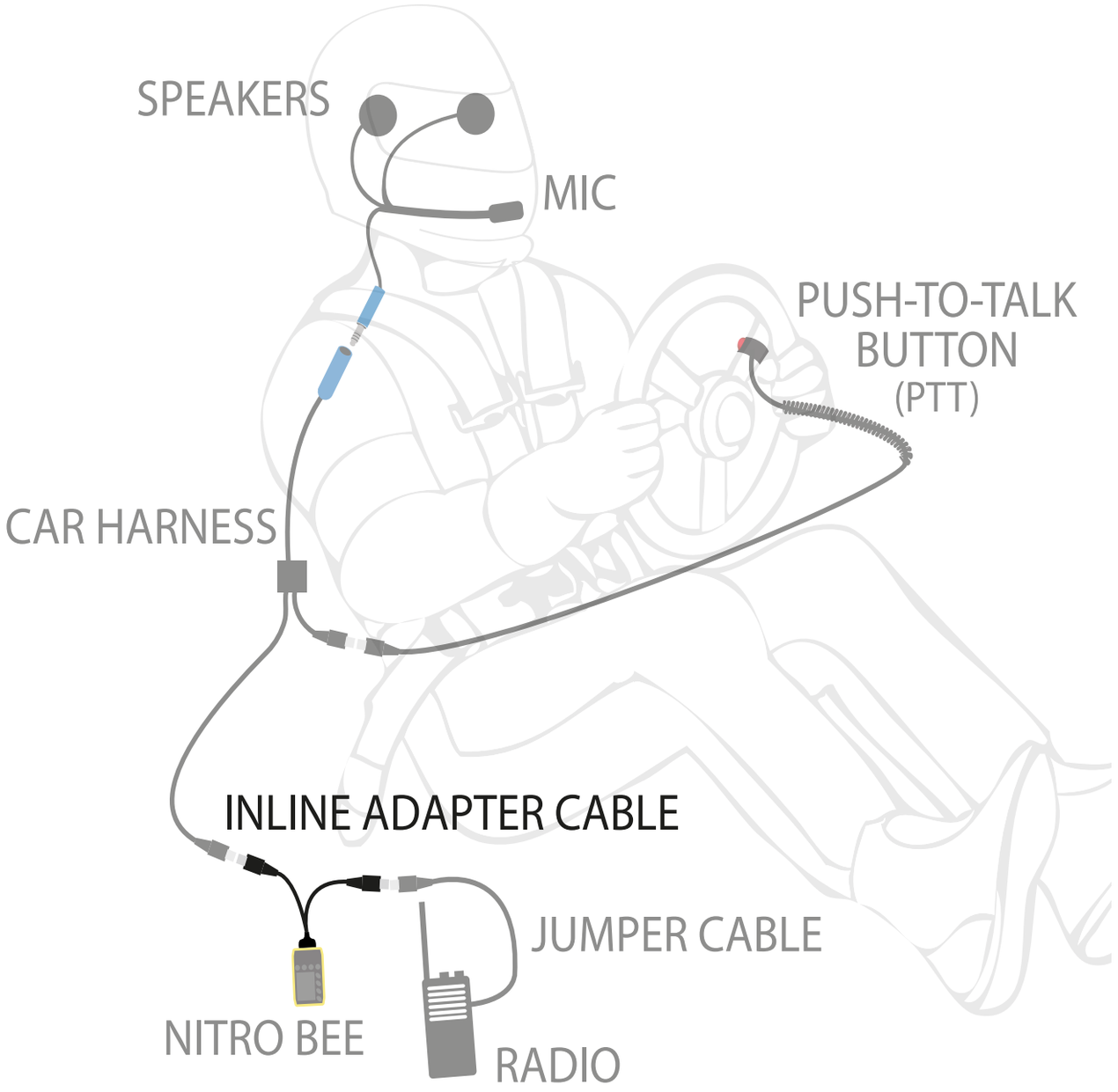
- The Nitro Bee can be integrated with a single-seat car harness and 2-way radio using accessory cable CS-NITRO-ADPT-2.

- In this configuration, the driver can transmit and receive on a 2-way radio normally.

- When a Race Control call is received, the Nitro Bee mutes 2-way radio audio, giving Race Control audio priority so the driver does not miss critical race communications.

(See diagram on next page)

CS-NITRO-ADPT-2



RECHARGEABLE BATTERY

The Nitro Bee uses an internal, Fast-Charge, lithium-ion (Li-ion) rechargeable battery. It should be charged prior to use with the included USB-C charge cable. The battery indicator LED will illuminate red while charging and green when fully charged. When fully depleted, the Nitro Bee requires approximately 2.5 hour charge time to reach full charge.

GETTING ACQUAINTED

CHANGING FREQUENCIES

To change the frequency use the scroll buttons. Once the desired frequency is found, lock the keypad to prevent accidental changes. To lock the keypad, press and hold the Lock Button until you see “Locked!” appear on the display. To unlock the keypad, press and hold the Lock Button until you see “Unlocked!” appear on the display.

MODES OF OPERATION

Saved Channels: In this mode, the Nitro Bee operates on channels that have been saved to memory. Software is available to add and remove channels.

Manual Input: In this mode, users can manually tune to any frequency between 400 and 480mHz.

GETTING ACQUAINTED

MODE SELECTION

Press [⚙] > Select Ch. Mode > Select “Saved Channels” or “Manual Input”, press OK

To select from the preprogrammed (Saved Channels)

Switch to “Saved Channels” mode: [⚙] > [Ch. Mode] > [Saved Channels]

Select desired Channel Group: [⚙] > Ch. Group > scroll to desired group and press OK.

Scroll up / down to select the desired channel, lock the keypad to prevent accidental changes.

CHANNEL GROUP SELECTION

In the Ch. Group menu, use the scroll buttons to select the desired zone and press [⚙] to confirm selection.

GETTING ACQUAINTED

SAVING CHANNEL PRESETS

P1: To save channels to the P1 preset button, select the desired channel or frequency, then long-press P1 to save. Once saved, Pressing P1 shortcuts the Nitro Bee to the preset channel.

P2: To save channels to the P2 preset button, select the desired channel or frequency, then long-press P2 to save. Once saved, Pressing P2 shortcuts the Nitro Bee to the preset channel.

PC PROGRAMMING

Channels can also be saved (with alpha-tags) via PC programming software, available from RT Systems Inc software.

GETTING ACQUAINTED

SQUELCH

Adjusting the Squelch setting increases or decreases the sensitivity of the Nitro Bee receiver.

To adjust Squelch setting: Press [⚙] > [Squelch Adj] > scroll up/down to the desired squelch level, press OK

A Squelch setting of 1 means the Nitro Bee is at its most sensitive setting (good for receiving weak radio signals). A Squelch setting of 9 means the Nitro Bee is at its least sensitive setting (good for blocking unwanted signals).

TONE CODES

To add Tone Codes

Press [⚙] > [ToneCodes] > [Type] > scroll up/down to the desired tone code type, press OK

Press [⚙] > [ToneCodes] > [Code] > scroll up/down to the desired tone code, press OK.

GETTING ACQUAINTED

KEY BEEPS

Turns audible button press beeps on / off

[⚙] > Settings > Key Beeps > On / Off

BACKLIGHT

The Nitro Bee has an adjustable backlight. Both brightness and the duration of illumination can be adjusted.

AUTOLOCK

Enabling this function automatically locks the keypad after the selected time.

[⚙] > [Settings] > [Auto Lock] > 5s / 10s / 15s

DIMMER

[⚙] > [Settings] > [Back Light] > [Dimmer] > up / down to select desired brightness, press OK

GETTING ACQUAINTED

TIMER

[⚙] > [Settings] > [Backlight] > [Timer] > up / down to select 5s, 10s, 15s, 20s, 25s, 30s, Press OK

CHARGING

The Nitro Bee uses a USB-C programming port and can be charged using most USB-C charge cables. The charge time for a fully depleted battery is approximately 2.5 hours (varies depending on the power output of the USB port.

AUDIO PRIORITY

The Nitro Bee can be used on its own with earbuds or speakers connected directly to the 3.5mm jack for listening to Race Control or other radio calls.

Alternatively, the Nitro Bee can be used in conjunction with a 2-way radio system (using cable PN: CS-NITRO-ADPT-2) to allow two-way radio use, while giving Nitro Bee audio priority over 2-way radio calls. This audio priority function is required by many racing sanctioning bodies that allow 2-way radio use.

SPECIFICATIONS

Battery Capacity: 1000mAh
Charge time: 2.5 hours (approximate)
Runtime: 4-5 hours (varies with volume setting)
Frequency Range: 400-480 mHz
Channel Capacity: 10,000
(10 separate groups, up to 1,000 channels each group)
Analog Sensitivity: 0.2μV @ 12dB SINAD
Digital Sensitivity: 0.25uV(BER:5%)
Adjacent channels selectivity: ≤-60dB@12.5KHz
Inter-modulation: ≥65dB
Spurious response: ≥70dB
Audio response: +1~-3dB
Audio distortion: <5%
Audio power: 1W
FM Noise ≥45dB@25KHz /≥40dB @12.5KHz

FCC STATEMENT

This device complies with part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference. NOTE: THE GRANTEE IS NOT RESPONSIBLE FOR ANY CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates and can radiate radio frequency energy. If not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. Verification of harmful interference by this equipment to radio or television reception can be determined by turning it off and then on. The user is encouraged to try to correct the interference by one or more of the following measures: • Reorient or relocate the receiving antenna. • Increase the separation between the equipment and receiver. • Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. • Consult the dealer or an experienced radio/TV technician for help.

MODIFICATION OF THIS DEVICE TO RECEIVE CELLULAR RADIOTELEPHONE SERVICE SIGNALS IS PROHIBITED UNDER IC RULES AND FEDERAL LAW.

WARRANTY

We guarantee our Radios, Intercoms & Headsets to be free from manufacturing defects in material and workmanship under normal use for a period of three (3) years from the date of purchase. Aviation headsets are warrantied 7 years. All other Rugged Radios branded products carry a one year warranty.

In the event that a defect covered by the warranty occurs during the applicable period stated above, Rugged Radios, at its discretion, will either repair or replace the product; such action on the part of Rugged Radios shall be the full extent of Rugged Radios' liability and the Customer's sole and exclusive reparation.

Rugged Radios shall not be responsible for any defects or damage that in Rugged Radios' view are a result from the mishandling, abuse, misuse, improper storage or improper operation of the device, including use in conjunction with equipment that is electronically or mechanically incompatible with, or of inferior quality to, the product, as well as failure to maintain the environmental conditions specified by the manufacturer.

Note: Features & Specifications are subject to change without notice. Rugged Radios is not responsible for unintentional errors or omissions on its packaging.

NOTES

WWW.RUGGEDRADIOS.COM