

# Charging the HHR5000

## Internal battery charger

- Connect the charger power supply to power outlet and attach the charger plate to the HHR5000 body
- Status LED on the HHR5000 will flash up in green color every 6 seconds and charging will begin
- When charging is done, the charging light will turn off.
- After charging, disconnect the charger plate from HHR5000 and unplug the charger.

## External battery charger (Art. no. 107421)

- The External Battery Charger is a battery charging base designed for the HHR5000 battery handgrip
- It is possible to charge up to two battery packs at the same time
- It will charge the battery handgrip in approximately 3 hours



# Charging the HHR5000

## Charging the battery handgrip

- Connect the charger power supply to power outlet and insert the DC plug of the power supply into the External Battery Charger
- Power light will light up in green color
- Insert the battery handgrip into charger until it stops
- When the battery handgrip is inserted, the green charging light will light up and charging will begin
- Once fully charged, the green charging light will automatically turn off
- After charging, remove the battery handgrip from charger and unplug the charger

## Note!

If the red light will light up charging is not possible. Disconnect the battery and reconnect again. If the red light is still on, the battery is wornout or damaged.

## Caution

- Use only the AC adapter specified for this product
- To reduce risk of injury, charge only original BioControl type rechargeable batteries. Other types of batteries may burst causing personal injury and damage
- Do not charge the battery handgrip in presence of flammable liquids or gases
- Do not expose charger to rain or snow

# Establishing Connection

## USB connection

- To connect HHR5000 and PC with USB interface, simply connect HHR and PC with included USB cable
- A window will automatically open on your computer

Click the Open folder to browse files

## Bluetooth connection

HHR5000 is equipped with a mobile phone application, which supports real time connection

**To connect the HHR5000 device with the mobile phone application:**

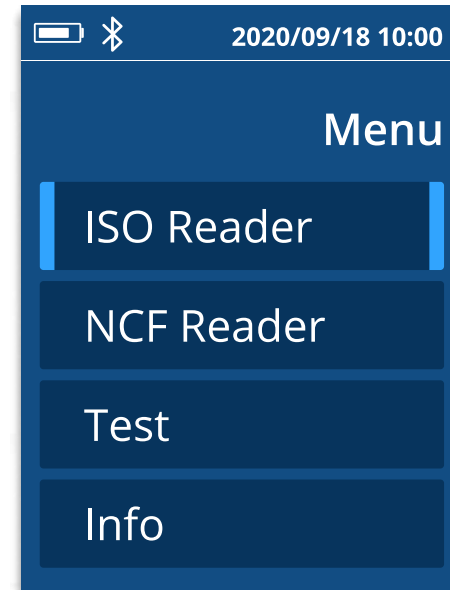
- 1.** Turn on the HHR5000
- 2.** Download and run the HHR5000 mobile application
- 3.** The mobile application will automatically connect with your HHR5000 device

# Demo Application

## Main Menu

HHR5000 Demo application has 4 menu entries. When the HHR5000 is launched, you will see the following screen.

The status bar is at the top of the display. Time, battery status and current connections like Bluetooth are displayed.



# Demo Application

## ISO Reader Menu

### Read ISO

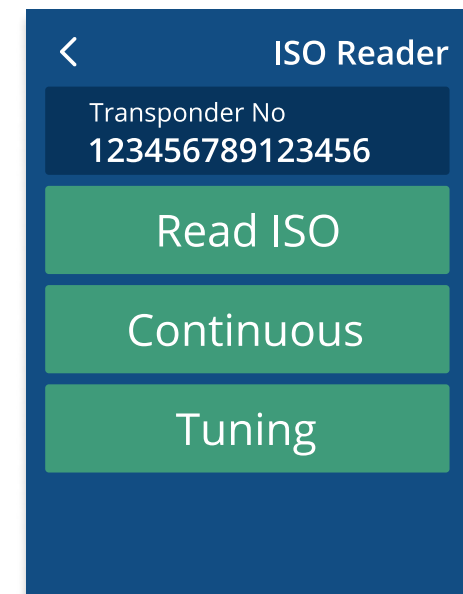
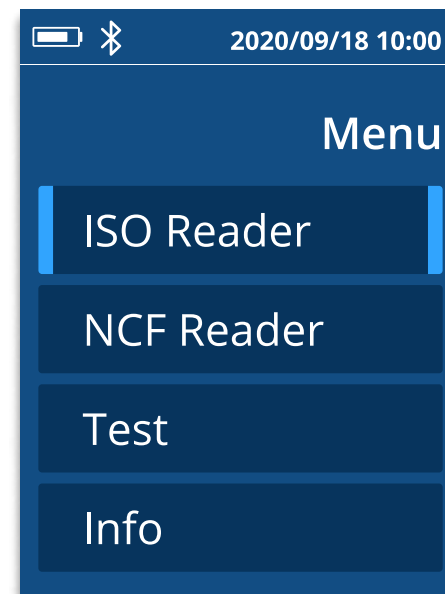
Is used for reading RFID tag after pressing the button. When the device reads a tag, it immediately displays it in a designated field above.

### Continuous

This function turns on continuous reading of transponder, it displays each transponder number in the field and stores it with time stamp in memory. You can break continuous reading by pressing Continuous button.

### Tuning

This function displays tuning parameters of antenna.



# Demo Application

## NFC Reader Menu

### Read NFC

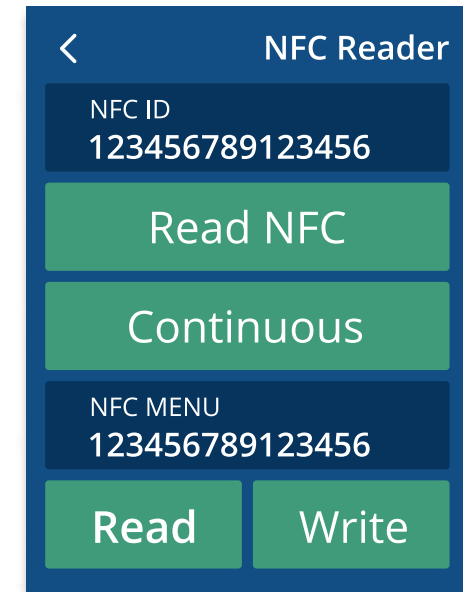
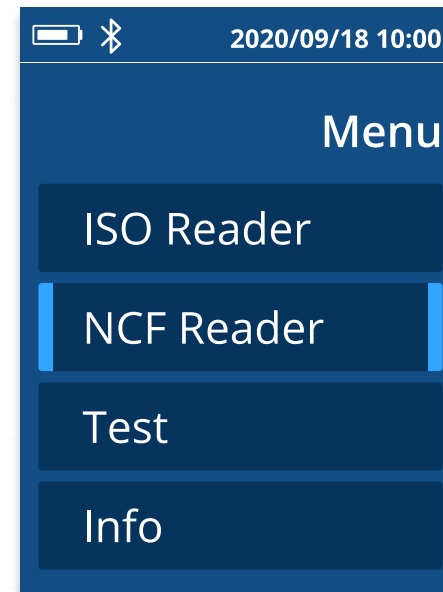
Is used for reading NFC tag after pressing the button. When the device reads a tag, it immediately displays it in a designated field above.

### Continuous

This function turns on continuous reading of NFC transponder, it displays each transponder number in the field and stores it with time stamp in the memory. You can break continuous reading by pressing Continuous button.

### Read/Write

Besides standard tag reading, there is a designated field to enter and store information on the NFC tag.



# Demo Application

## Test Menu

### ISO

Turns on or off continuous reading of RFID transponder

### NFC

Turns on or off continuous reading of NFC transponder

### LCD

Turns off LCD screen, to turn it on press any key on keyboard

### LEDS

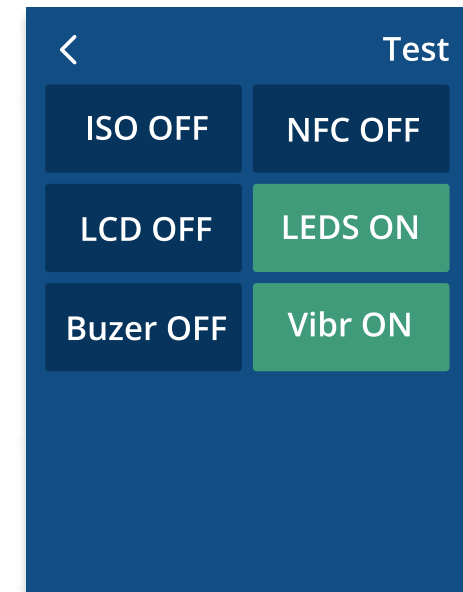
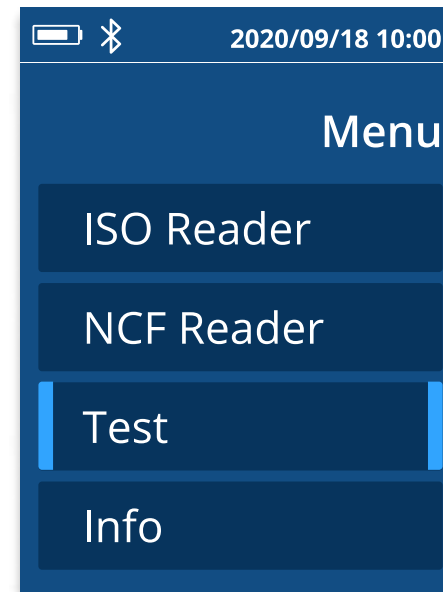
Turns LED on or off

### Buzzer

Turns sound buzzer on or off

### Vibration

Turns vibrations on or off



# Demo Application

## Info Menu

### Tuning status

Antenna voltage and tuning values are displayed

### Battery status

Battery voltage and percentage are displayed

### Bluetooth

MAC address and device name are displayed

### Firmware

Current firmware version:

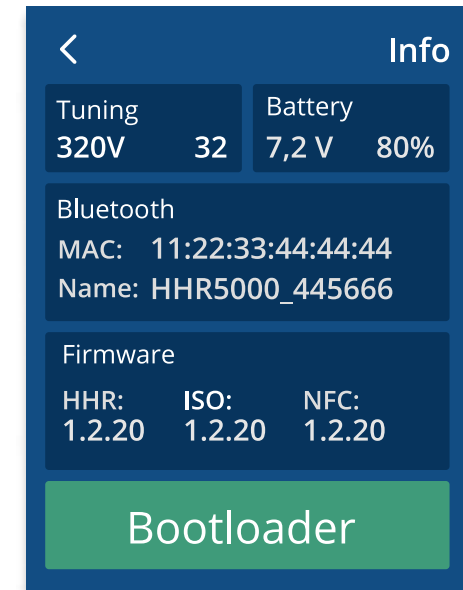
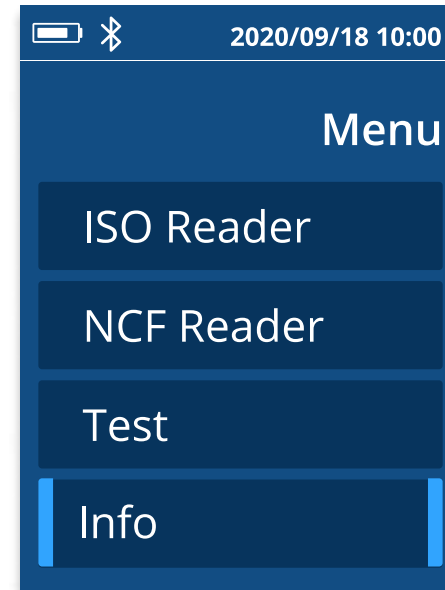
HHR – main unit

ISO – RFID reader

NFC – reader

### Bootloader

Enables updating HHR5000 firmware using your computer





# HHR5000 Care

The rugged design makes the HHR5000 fit for challenging circumstances, but you still need to take care of it. The following instructions will help you get the most out of your HHR5000 in real life circumstances.

## The body

Clean the HHR5000 with a soft cloth dampened with either water or a diluted mild detergent.

**Note:** *if a mild detergent is used, carefully rinse with water to ensure all residue is removed.*

## The screen

Protect the display from impact, pressure, or abrasive substances that can scratch or crack it.

## Temperature

Even though the HHR5000 is designed to be rugged, do not leave it in direct sunlight or in a vehicle in the sunlight for extended periods.

Batteries perform best at room temperature. The battery has a stable capacity when temperatures rise, but at lower the temperatures battery life may be reduced. When working in extremely cold conditions, battery performance will improve if you keep the HHR5000 warmer than the surrounding air if it is not being used. (e.g. keeping in a vehicle or in a jacket pocket).

## Specification

Supported tag standards	FDX, HDX, B-transponders, NFC
Standards	ISO11784/5, ISO14443A/B, ISO15693, ISO18000-3 and Tag-it
Interface	USB, Bluetooth
Battery	2x18650 Lilon batteries in series with protection circuitry
Battery charger output	8,2V/1,3A
Battery life	5 years
Power supply	External wall plug-in 12VDC/3A
Operating temperature	-20°C / +55°C
Long term storage temperature	0°C / +45°C
Charging temperature	+5°C / +45°C
Weight	HHR5000SN for smart phone w/NFC - 814g HHR5000LN with display and NFC - 760g
Dimensions	63,8x6,7x7,9 cm
Shock withstands	2 drops from 1 m
Humidity	IP67