



Recon Instruments Inc.  
220-1050 Homer Street, Vancouver, BC V6B 2W9, Canada

Tel +1 604 638 1608  
[www.reconinstruments.com](http://www.reconinstruments.com)



# Mod Live User Guide

## WHAT'S IN THE BOX



Your MOD Live box includes the following components:

- **Micro-optic display and battery pack.** This snaps into your goggles.
- **Bluetooth remote control.** This lets you control the micro-optic display.
- **Goggle strap.** This attaches the remote control to your goggle.
- **Wrist strap.** This attaches the remote control to your wrist, jacket, backpack, or belt.
- **AC Adapters.** Includes two types of adapters (North American and European) for charging the battery on the micro-optic display.
- **Micro USB cable.** This lets you connect MOD Live to an AC adapter or to your computer for charging.

*Kirill: this is a good location for a detailed illustration or photo that has callouts to the main parts. We should identify the power button, the battery pack, the micro-optic "head" etc.*

## SAFETY INFORMATION

MOD LIVE uses Bluetooth low energy to communicate with the wireless remote controller. Follow these safety guidelines:



**ROAD SAFETY COMES FIRST.** To avoid distraction, turn off MOD Live before you drive. Never use the remote controller while driving: keep your hands free.



**SWITCH OFF IN HOSPITALS AND AROUND MEDICAL DEVICES.** Wireless devices can cause interference with medical equipment. Keep MOD Live turned off around medical equipment. Follow any restrictions posted in hospitals and health centers. If you wear a pacemaker, check with the manufacturer on



**SWITCH OFF IN AIRCRAFT.** Keep MOD Live turned off around helicopters or aircraft. Follow any restrictions posted in helipads and airports.



**SWITCH OFF NEAR BLASTING.** Keep MOD Live turned off in areas where blasting is in progress.



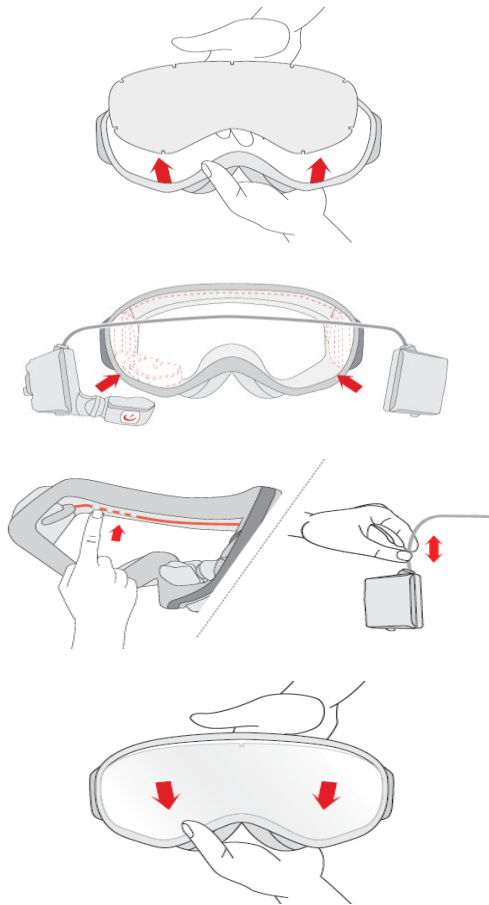
**SWITCH BEFORE REFUELLING.** Keep MOD Live turned off at gas stations, refuelling areas or in areas where fuel and volatile chemicals such as propane are stored.

# SETUP INSTRUCTIONS

## STEP 1. GOGGLE SETUP

Only use goggles that are Recon-Ready®. 2011 Recon Ready™ partners include: Uvex®, Briko®, Zeal®, and Alpina®.

Learn more about Recon-Ready goggles at <http://www.ReconReady.com>

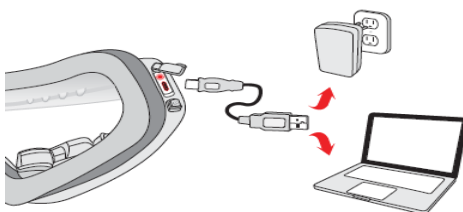


- 1) Remove the lens from the goggle frame. **See instructions provided by the goggle manufacturer.**
- 2) On the frame of your goggles, remove the protective badge from the left side of the frame. This will reveal slots for MOD Live to be inserted.
- 3) Next, insert MOD Live into the goggle frame as follows: with the goggles facing you, snap the MOD Live micro optics display unit into the left inner corner of the frame. Next, insert the battery pack into the right corner.
- 4) Push the MOD Live cable into the groove so that it fits tightly.
- 5) If the cable is too short, tug it gently so the white stripes appear. If the cable is too long, push it back in.
- 6) Insert the lens back into the goggles. Take care not to touch or smudge the lens.

## STEP 2. CHARGE UP MOD LIVE

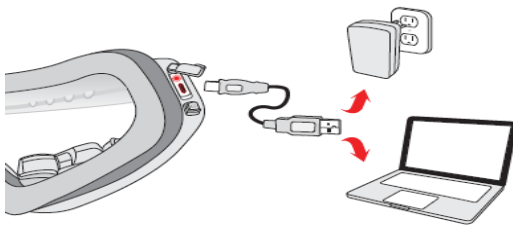
**NOTE:** Always use the Recon AC adapter and USB cable shipped with your unit. Never use third-party cables or adapters.

To fully charge MOD Live using an AC adapter:



- 1) Make sure MOD Live is turned off before you start. **Kirill: insert an illustration that shows power button**
- 2) Assemble the AC adapter by inserting the North American or European plug.
- 3) Insert the large plug of the USB cable into the adapter port.

### To charge up using a PC or Mac



insert an illustration that shows

- 6) After the red light disappears, disconnect the adapter. Remove the USB cable from MOD Live.
- 7) Replace the plastic USB port cover to ensure the port is protected from rain, snow and ice.

- 1) Make sure MOD Live is turned off before you start.
- 2) Turn on your PC or Mac. **Make sure the computer is not in standby mode.**
- 3) Find the MOD Live power button located next to the micro USB port. Hold down the power button for 3 seconds.
- 4) Plug the micro USB cable's smaller end into MOD Live's micro USB port.
- 5) Plug the USB cable's larger end into the USB port in your PC or Mac. **When MOD Live begins charging, a red light appears directly above the USB port.**
- 6) Wait for the red light to disappear.
- 7) Navigate to "safely remove or eject the hardware" using your PC or Mac before you disconnect the USB cable from MOD Live.
- 8) Disconnect the adapter.
- 9) Remove the USB cable and seal the micro USB tightly. Use the plastic USB port cover to ensure the port is protected from rain, snow and ice.

*NOTE: In optimal conditions, MOD Live can achieve a fast charge (80% of battery) using your computer or AC adapter in 1 hour. MOD Live can be fully charged in 3 hours. For more information, see the section BATTERY CARE, later in this guide.*

## STEP 3. CHECK THE REMOTE CONTROLLER

Although MOD live is factory-paired (synchronized) with the remote controller shipped in the box, follow these instructions to check that the remote is "paired" with MOD Live.

- 1) On MOD Live, press down the power button for 3 seconds.
- 2) On the remote controller, press any button and wait for a blue light to flash. **This confirms the remote is connected to MOD Live.**
- 3) Hold the goggles to your eyes and check the status bar on the display. The remote status indicator icon on the left-hand side should be blue.



For more information about caring and handling, see the section, Remote Care, later in this guide.

## STEP 4. ATTACH A STRAP

Do we have any images showing this?

### To attach the wrist strap:

1. Slip either end of the Velcro strap (rough side facing out) into the remote's handle. **Tip: insert the strap at a diagonal, and either pull or push it through the handle.**
2. Align the "V" of the Velcro strap with the edge of the controller. Push down until you hear a click.
3. Stretch the strap and insert the other end of the Velcro strap repeating steps 1 and 2.
4. Attach Velcro around the cuff of your glove or jacket and pull it for a snug fit. Or, use the strap on a jacket belt or backpack.

Do we have any images showing this?

### To attach the goggle strap:

1. Slip either end of the Velcro strap (rough side facing out) into the remote's handle. **Tip: insert the strap at a diagonal, and either pull or push it through the handle.**
2. Align the strap with the edge of the controller. Push down until you hear a click.
3. Stretch the strap and insert the other end of the Velcro strap repeating steps 1 and 2.

Do we have any images showing this?

### To remove either strap from the remote handles:

Open the plastic ends of the Velcro strap using a fingernail or slim object such as a nail file.

**WARNING: Avoid applying pressure to the handles of the remote controller. Velcro straps should never be attached to heavy objects such as backpacks or snowboard carrier bags.**

**Your MOD Live is ready to use. To take advantage of Bluetooth® technology and use MOD Live with your Android smartphone, follow the rest of these instructions.**

## STEP 5. CREATE AN HQ ONLINE ACCOUNT

Follow these steps to create a free account on HQ Online. HQ Online is Recon Instruments' online community where you can upload your stats, runs and highlights as well as compete for prizes.

- 1) Go to the HQ Online website at <http://hqonline.reconinstruments.com>
- 2) Click on the sign-up hyperlink. In the SIGN UP FORM, enter the following and click **SUBMIT**.
  - a. **Your name.** Enter your first name, an alias or a nickname.
  - b. **Your email address.** Enter a valid, unique email address. All account settings are linked to your email. (If you decide to create a second account, for example, for a family member, you cannot reuse the same email address.)
  - c. **A password.** Enter a minimum of six characters.
- 3) Check your email for a message from [noreply@hqonline.reconinstruments.com](mailto:noreply@hqonline.reconinstruments.com).
- 4) Activate your account by clicking the link for account activation (on the last line of the message).
- 5) When the HQ Online home page appears, log in using the email address and password in step 2. A Login Successful confirmation message appears.

## STEP 6. DOWNLOAD RECON HQ

Recon HQ is a free application for your PC or Mac that allows you to download statistics and information collected on MOD Live straight to your computer. After you download your MOD Live data, you can play runs and trips overlaid on Google maps, upload the best moments to Facebook, Twitter and HQ Online, and organize all of your data.

### What You Need

- An internet connection
- A PC or Mac

### PC Requirements

- Intel Pentium 4 or higher processor
- 1GB of RAM
- Screen resolution of 1024x768 or greater
- USB 2.0 port for connection with Recon goggles
- Internet connection for connection with Google Maps
- Windows XP Service Pack 2 or later, Windows Vista, or Windows 7

### To download HQ onto your computer:

1. Click this link: <http://www.reconinstruments.com/support/downloads>
2. Click on INSTALL NOW.
3. Follow the download instructions.

## STEP 7. DOWNLOAD HQ MOBILE

**Recon HQ™ Mobile is a free app for your Android smartphone available at Android Market™. You can easily download and install it on your smartphone with just a few taps of your finger.**

Use HQ Mobile to configure MOD Live settings to work with your smartphone. Check out the apps for tracking your buddies and runs. HQ Mobile uploads data from MOD Live into Trip Viewer so you can view your trip on a map, view stats, and share trips on Facebook and Twitter.

### What You Need

- An Android smartphone
- A data plan for applications such as Buddy Tracking and Smartphone text messaging
- An internet connection
- A Google account associated with your smartphone

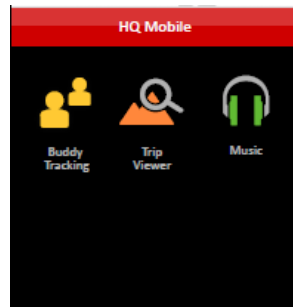
### To download HQ Mobile onto your smartphone:

1. Sign in to your Google account
2. Go to the Android Market™ web site at <https://market.android.com>
3. Search for HQ Mobile and select it.
4. From your smartphone's Home screen, tap or select **Market**.
5. When you open Android Market for the first time, the Terms of Service window will appear. Tap **Accept** to continue.
6. When you find HQ Mobile, tap it and then tap **Install**.

After selecting **Install**, the HQ Mobile app will download. Follow the on-screen instructions. To see the download progress, open the notifications window.

### To start using HQ Mobile:

1. Go to your smartphone's All Programs screen or wherever applications are stored on your smartphone.
2. Tap **HQ Mobile**.
3. When HQ Mobile presents a login screen, use the same email address and password you entered when you created an HQ account.
4. After you log in, choose the icon you want to use:



- **MUSIC.** Use this as an interface to the music stored in your smartphone. Choose from artists, songs and playlists. Use the digital controls to pause song, skip forward or skip back.
- **BUDDY TRACKER.** Use this to find buddies, add buddies, and view buddies' locations on GOOGLE Map.
- **TRIP VIEWER.** Use this to view trips stored in MOD Live that have been wirelessly downloaded to HQ Mobile. *When you select TRIP VIEWER for first time, no trips appear. Choose UPDATE TRIP LIST. HQ Mobile wirelessly downloads all trip data stored in MOD Live.*

[Refer to Recon's HQ Mobile Quick Reference Guide for instructions and information on using the app.](#)

### To configure services for MUSIC and BUDDY TRACKING:

1. In HQ Mobile, choose Settings.
2. Go to Services.
3. If Music Control and Buddy Tracking are not already selected, tap or touch them.

[You can now use MOD Live to access and control music playback. See the section, MUSIC, later in this guide to learn how this feature works.](#)

### To set up buddy tracking:

1. Choose the Buddy Tracker icon.
2. The first time you choose this icon, you'll see a message "No buddies added. Press here to find buddies."
3. Press the message. HQ Mobile shows three options:
  - Search by Phone Number.
  - Search by Email Address. (This refers to the email address your buddy used to sign up for HQ Online.)
  - Search by Name. (This refers to the HQ Online username)
4. Touch the search option you want to use. [Note that HQ Mobile searches the HQ Online database to find a match](#)



- HQ Mobile. This indicates your buddy is set up on HQ Mobile. When you select this option, HQ Mobile displays a prompt “Send buddy request”. Choose Yes.

6. HQ Mobile displays three types of lists:

- Pending buddy requests. These are buddies who have not yet accepted your Buddy Tracking request.
- Online buddies. These are buddies who have accepted your Buddy Tracking request and their smartphones are on.
- Offline buddies. These are buddies who have accepted your Buddy Tracking request but their smartphones are off.

Note: You can remove a buddy at any time by holding down on the contact’s name.

Choose **Remove Buddy**.

**To see if you have Buddy Requests:**

- Choose the Buddy Tracker icon.

**To turn off Buddy Tracking:**

If you don’t want to access Buddy Tracking features, receive Buddy Tracking requests, or receive locations of buddies, you can disable the Buddy Tracking service.

1. Choose Settings.
2. Under **Service**, go to Buddy Tracking.
3. Deselect (uncheck) **Buddy Tracking**. To reactivate Buddy Tracking, simply select this option.

**To configure additional settings for Buddy Tracking:**

1. Choose Settings.
2. Under **Service**, go to Buddy Tracking.
  - **Sync interval.** This interval determines how often you receive a buddy’s location or your location is sent to your buddies. This interval can be set to 10, 20 or 30 seconds. By default, the interval is 10 seconds. To increase the interval, choose the down arrow, and then select either 20 or 30 seconds.

Note: A short interval means you get locations more frequently but this can add a cost to your data plan. To lower your costs, choose a longer interval.

To get the most frequent GPS data, leave the default.

## STEP 8. ENABLE BLUETOOTH

Before you can use MOD Live's Android smartphone apps including Buddy Tracking, Smartphone and Music, you need to enable Bluetooth® on your Android smartphone and on MOD Live.

### To enable Bluetooth on your smartphone:





1. Go to your smartphone's main menu.
2. Select the Wireless and Networks option.
3. Find Bluetooth on the menu.
4. Touch or select Bluetooth. A check will appear inside the option box.

You will notice a green check inside the indicator box to show Bluetooth is now active.

### To enable Bluetooth on MOD Live:

1. Turn on MOD.
2. Look for the Bluetooth icon in the status bar.



3. Follow these steps if the icon does NOT appear:
  - a) Press  repeatedly until the wrench icon appears.
  - b) Press  to select the wrench. This will launch the Preferences app.
  - c) Press  to select Bluetooth from the Preferences submenu.
  - d) Look for a green check inside the Bluetooth check box. If this does not appear, press .




## MAKE MOD DISCOVERABLE

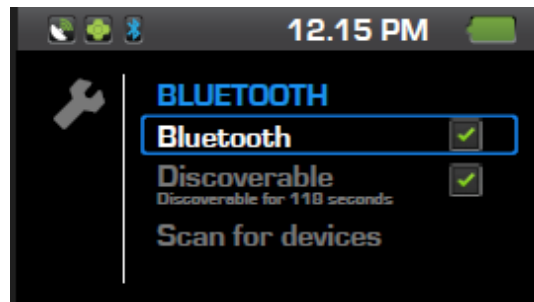
**NOTE:** Unless MOD Live and your smartphone are BOTH set to discovery mode, they will not be able to pair, find and connect to each other. To make your smartphone discoverable to Bluetooth enabled devices, in the Bluetooth Devices dialog box, click the Options tab, and then select the Allow Bluetooth devices to find this computer check box.




### Before You Start

- Make sure your MOD Live is nearby.
- Look for the serial number for MOD Live: it is printed on the back of the battery pack.

### To make MOD Live discoverable:

1. Press  to enter the PREFERENCES submenu.



2. Press  to navigate to Bluetooth.
3. Press  to navigate to **Discoverable**. Press  to select **Discoverable**.

After 120 seconds MOD Live will return disable discoverability to conserve battery life.

### To make your smartphone discoverable:

To make your smartphone discoverable to Bluetooth enabled devices, you can use the phone's **Wireless & Networks** option. You can also use **HQ Mobile**.



1. Go to HQ Mobile, and press the Settings icon.
2. Under Device, touch Make Device Discoverable.

### To use your smartphone's wireless options:

5. Look for MOD Live and the correct serial number for your unit to be displayed.
6. When a prompt to pair it appears, select it by tapping or touching the MOD Live name and serial number.
7. If automatic pairing fails, enter the passcode supplied with MOD Live. Or use the default: 0000.

**You need to confirm pairing on both MOD Live and your smartphone.**

**To confirm pairing on MOD LIVE:**

1. On MOD Live, press  to navigate to **Scan For Devices**.
2. Press  to select **Scan For Devices**.

After 20 seconds MOD Live will show Disable Discoverability to conserve battery life.

3. If a prompt for a passcode appears, choose the default (0000).

**Once you have successfully paired your smartphone and MOD Live, you won't need to go through the pairing process again for these devices.**

## INITIATE A CONECTION

**MOD Live waits for a connection request from your smartphone.**

**To initiate a connection from your smartphone to MOD Live:**

1. Go to your smartphone's Home screen.
2. Launch HQ Mobile.
3. Choose **Settings**.
4. Under Device, go to **Connect to MOD Live** and select it.  
A list of all your paired devices (for example, a laptop, a Bluetooth headset) appears.
5. Select **MOD Live**. If there are several MOD Live units displayed, find the one with the corresponding serial number.
6. Wait for the "connected" status update to appear in green text.
7. Press the back button to exit out of HQ Mobile and check the Home screen for an orange HQ phone icon on the upper left.

**MOD Live is now ready for receiving calls and text messages that are sent to your smartphone.**




## GETTING STARTED



- Hold down MOD Live's power button for about 3 seconds.
- Wait for the blue power light to appear.
- When this screen appears, press any button on the remote to launch MOD Live.



## EXPLORE MOD LIVE APPS

- Press  to navigate to each app. Press  to launch. Press  to exit.



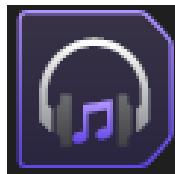
### DASHBOARD

Watch your speed in real-time. Track stats including your descents, distances travelled, altitude and temperature. Start a stopwatch.



### STATS

Access performance and environmental stats about your run, speed, environment and distances. See your top and average performances.



### MUSIC

Access and play music stored on your smartphone. **NOTE: This Bluetooth app only works with an Android smartphone.**



### SMARTPHONE

Access calls, text messages. Send canned messages and place calls to your Smartphone contacts. **NOTE: This Bluetooth app only works with an Android smartphone.**



### NAVIGATION

Download resort maps, zoom and pan, define waypoints, and track buddies. **NOTE: Buddy tracking is a Bluetooth app that only works with an Android smartphone.**

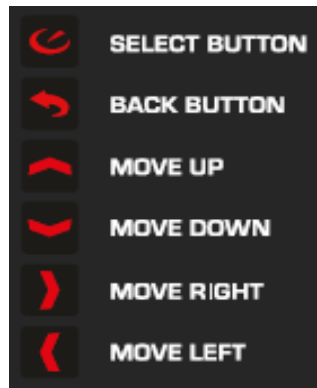


### PREFERENCES

Configure Bluetooth, set preferences for brightness and contrast, set the date time, choose language preferences.

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## EXPLORE THE REMOTE CONTROLLER



- Press to select an app, see a menu, or choose an option.
- Press to exit a screen or menu. Press repeatedly to exit an app.
- Press to navigate vertical menus, zoom or pan in maps.
- Press to navigate vertical menus, zoom or pan in maps.
- Press to navigate horizontal menus, zoom or pan in maps.
- Press to navigate horizontal menus, zoom or pan in maps.

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## TEST THE DASHBOARD

Follow these steps to get familiar navigating and using the remote controller.



- Press  to launch the dashboard app.

**TIP:** Adjust MOD Live's optic head by tilting it forward, pushing or r

- Press  five times to see each style of dashboard.

**Speed. KM/H.** Shows speedometer.

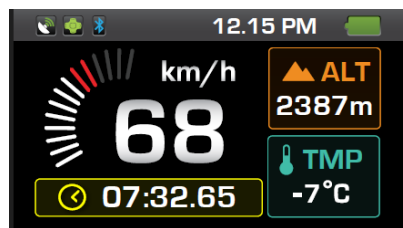
**Park.** Shows your playlist (for Bluetooth enabled devices), TMP, ALT.

**Performance.** Shows the stopwatch, VRT, DST, MAX (speed).

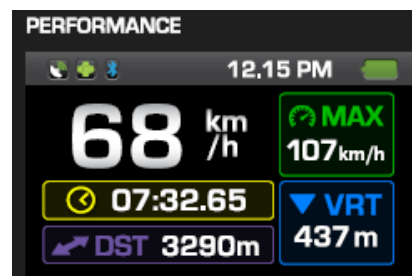
**Backcountry.** Shows ALT, VRT, DST, TMP.

**All round.** Shows ALT, TMP, MAX (speed)

**NOTE:** The first time you use MOD Live, values in the dashboard will be temperature and altitude (elevation above sea level).



## CHECK YOUR TIME AND DISTANCE

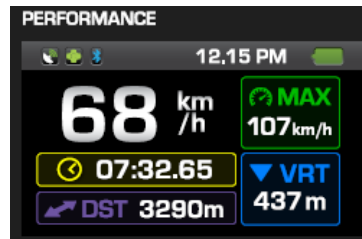


STEP 1. Navigate to the PERFORMANCE dashboard by pressing 

STEP 2. Start moving in an open area unobstructed by trees, poles or


STEP 3. Watch dial bars light up and change colour as you increase s

## CLOCK A TIMED ACTIVITY (JOG, CYCLE, SKI OR BOARD)





To clock yourself:




STEP 1. Press  to start the stopwatch.



STEP 2. Press  to stop. Check chrono data in yellow.

## SHUT DOWN, DISPLAY OFF, AND STANDBY

Press  on your remote. A DISPLAY OFF screen appears giving you three options.

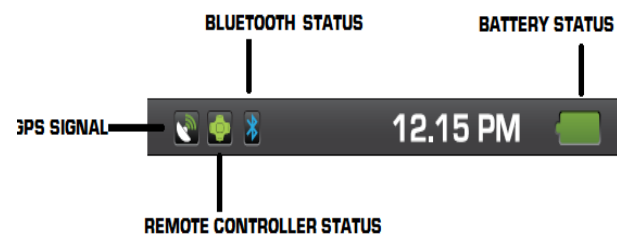
**DISPLAY OFF:** Press  on the remote. Press  to reactivate MOD Live.

**STANDBY:** Press  to navigate to this option, and . Press  to reactivate MOD Live.

**POWER OFF:** Press  twice to navigate to this option, and then press .

## STATUS BAR

MOD Live uses icons to tell you how it's doing.



The battery charge indicator is green. If it is red, it means it's time to recharge the battery.

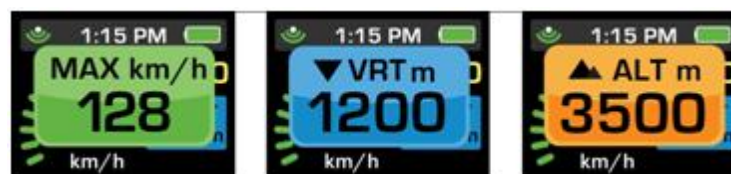
The GPS indicator shows green signal bars. If the bars are red, wait for MOD LIVE to finish searching for satellite data or move to a location away from buildings, trees, poles and obstructions.

The remote connection icon is blue. If it is red, check that the remote controller is nearby, and press any button on the remote controller and wait for the symbol to turn blue.

The Bluetooth status icon appears. This icon means that Bluetooth is enabled for MOD Live. When it does not appear, it means that Bluetooth is disabled.

## POPOP ALERTS

These popups appear momentarily to present you with your highlights:

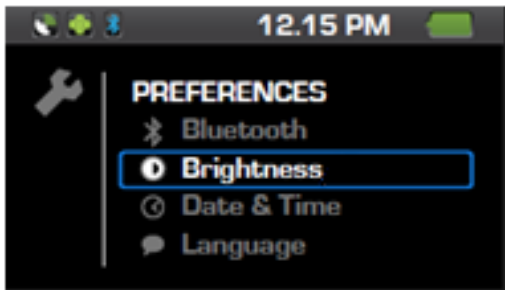


## PREFERENCES APP



Use this app for customization and configuration options:

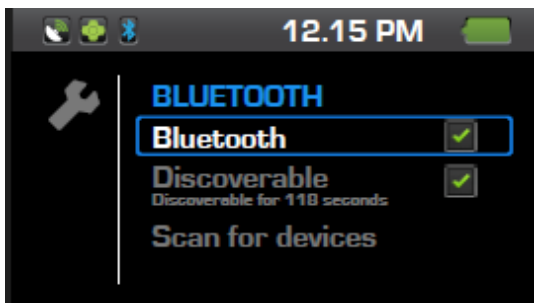
- Configure Bluetooth settings for your Android smartphone apps
- Change the time to reflect your time zone
- Set preferences for the appearance, units of measure, and the clock
- Perform firmware upgrades
- Check system stats
- Uninstall third-party apps



### NAVIGATING PREFERENCES



- Press  to launch this app. Press  to access the PREFERENCES submenu.
- Press  to navigate to an option. Press  to select it.

## BLUETOOTH SETTINGS




Use Bluetooth settings to communicate with your smartphone and other devices such as wireless cameras. For your smartphone, you need to select this setting to enable Bluetooth and make MOD Live discoverable.


### To select Bluetooth preferences:

1. Press  to enter the PREFERENCES submenu.
2. Press  to navigate to Bluetooth.


### To enable Bluetooth:

Press  when Enable Bluetooth is selected.

### To make MOD Live discoverable:

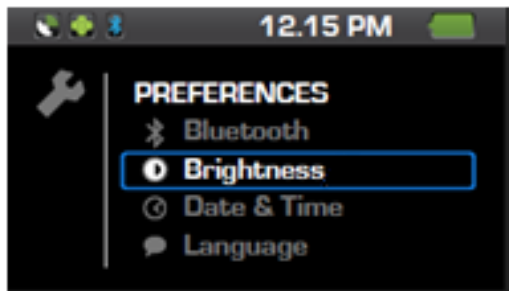
Press  to make MOD Live discoverable. See the check box which indicates if it is discoverable or not. After 120 seconds MOD Live will return disable discoverability to conserve battery life.

### To pair with a Bluetooth device:



Choose Scan for Devices. Press  when the device is highlighted. If needed, enter a



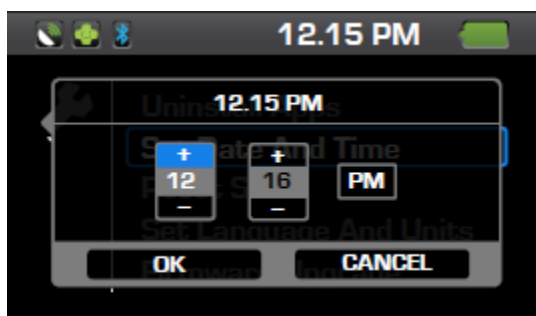
## BRIGHTNESS



### FAST FACTS








- A brightness slider lets you control how bright the display is set to. Press  to choose this setting. Use  to move the slider. Press DOWN and LEFT to select OK to save your setting.

## DATE & TIME OPTIONS



- MOD Live uses Coordinated Universal Time (UTC) when it receives a GPS signal in order to automatically set your clock to Greenwich Mean Time (GMT). GMT does not reflect your time zone. You need to set up your time zone by selecting this option.
- This setting menu provides five options:
  - Set Time Zone
  - Use 24-hour format
  - Automatic. This continually syncs the time with the satellite. This option is selected by default.
  - Set Date
  - Set Time





### To change the time on the clock (for example, for daylight saving time):

1. Go to the **DATE & TIME** option. Press .
2. Go to **Set Time**. Press .
3. Use the RIGHT and LEFT buttons to navigate between the hour, minutes and AM or PM.
4. To increase the hour, press UP and press  repeatedly. To decrease the hour, press DOWN and press  repeatedly.
5. To increase the minutes, press UP and press  repeatedly. To decrease, press DOWN and press  repeatedly.
6. To change AM to PM or vice versa, use the RIGHT button to navigate to AM and PM.  


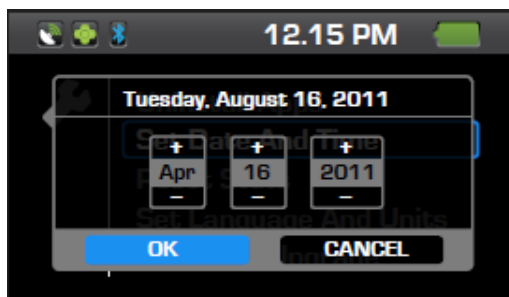
## SET TIME ZONE












### To set the time zone:

1. Press  to navigate to **TIME ZONE** option on the Preferences menu and press .
2. Press  to navigate to the zone you want to select using the DOWN arrow.
3. Press  to save the highlighted time zone.

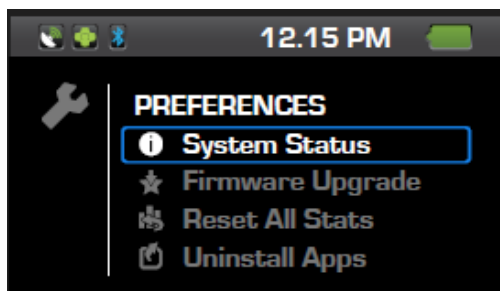
## SET DATE



### To set the date:

1. Press  to navigate to the **DATE & TIME** option and press .
1. Press  to navigate to **Set Date** and press .
2. Press  to navigate to **Automatic** and press .
3. In the Automatic submenu, press  to navigate to **Set Date** and press .
4. Use the left and right buttons to cycle through which digit you would like to change,
5. Use the up and down buttons to change the digits.
6. To save your changes, press  when OK is selected. To cancel, press the back button.

## SYSTEM STATUS



Choose **System Status** to see the following information:

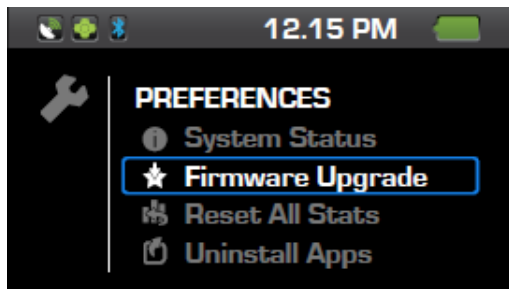
Model number

Android version number. This is the version of the Android SDK used to develop apps for the Android.

Build number. This is the firmware version number.

Kernel number. This shows the version of the Linux kernel. (This is used by Recon technical support).

## FIRMWARE UPGRADE



Whenever firmware upgrades are released for MOD Live, you will be automatically notified when you connect MOD Live to Recon HQ on your computer.

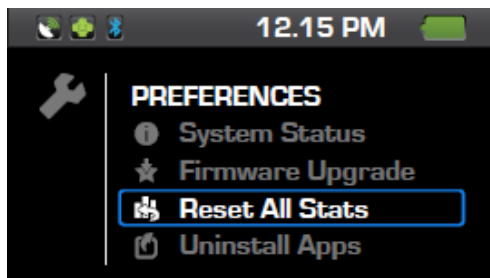
See the section, **Downloading Firmware** Upgrades, later in this guide for complete instructions.

### To perform an upgrade:

Navigate to Firmware Upgrade in the PREFERENCES menu, choose OK and press SELECT.




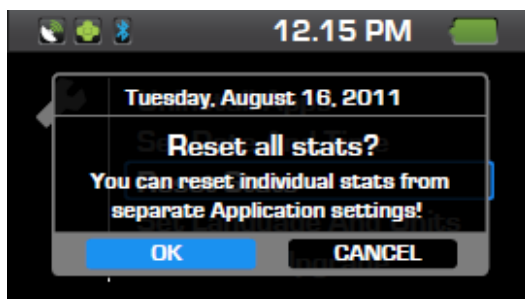
## RESET ALL STATS



Use Reset All Stats when you want data from your current and past use to be wiped clear from displays. If you are confused by any data, unsure of its value and you want to start fresh, choose this option. Reset All Stats clears all cumulative and max/min stats from displays including CHRONO and STATS apps. Note that temperature and environmental data obtained from MOD Live's sensors is continually refreshed and displayed. A reset does not delete the data stored in MOD Live. You can still download your data to a Mac or PC, and then upload it to HQ Online.

### To perform a reset:


1. Navigate to Reset All Stats using the DOWN button.
2. Press  at the prompt.
3. Press BACK to cancel and exit this option.



# DASHBOARD APP

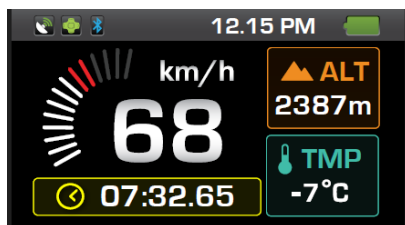


There are 5 styles of dashboard. Each style shows a different set of data.

Press  repeatedly to navigate to all 5 styles.

- ❖ **Speed. KM/H.** Shows speedometer.
- ❖ **Park.** Shows your playlist (for Bluetooth enabled devices), TMP, ALT.
- ❖ **Performance.** Shows the stopwatch, VRT, DST, MAX (speed).
- ❖ **Backcountry.** Shows ALT, VRT, DST, TMP.
- ❖ **All round.** Shows ALT, TMP, MAX (speed)

**NOTE: Use Recon HQ to customize your dashboard to suit your preferences.**




## DASHBOARD STATS

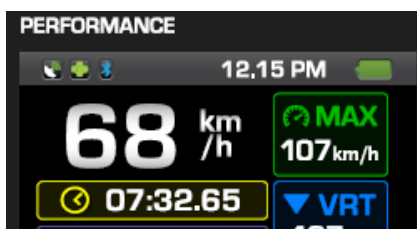
- **KM/H.** By default, MOD Live shows speed in kilometres. You can change this by going into Settings. **MAX.** Shows the top speed you have reached.
- **ALT.** Shows the distance above sea-level. This is calculated automatically using GPS data.
- **TMP.** Current temperature.
- **VRT.** Total vertical distance (descent) recorded during the current session. MOD Live records your ascent whether you travelled by gondola, tram, chairlift, t-bar, or on skis or snowboards.
- **DST.** Total distance travelled across land (up, down, and sideways) during the current session.

## DASHBOARD VALUES

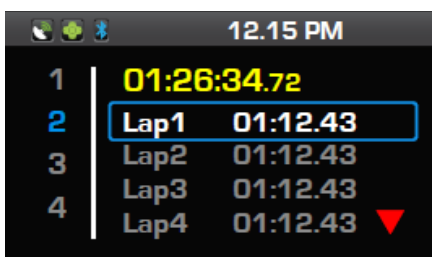
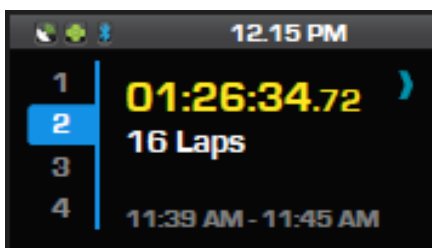
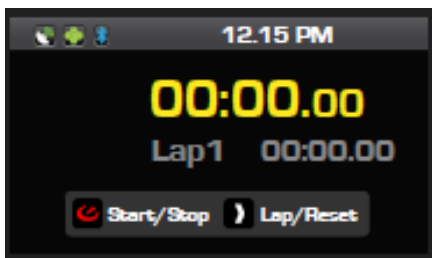
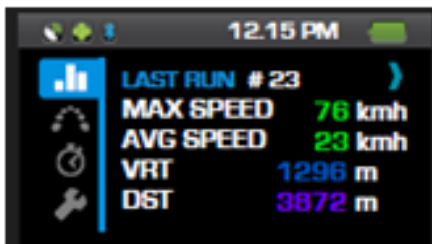
- The first time you use MOD Live, values in the dashboard will be at zero except for temperature and altitude (elevation above sea level).
- Certain values require a strong GPS signal. To get the most accurate GPS data, stand or sit still. MOD Live calibrates altitude values automatically when the unit is still.
- While MOD Live is acquiring data, a white bar can appear in the speedometer. Wait five minutes.
- Moving dots inside a stat box indicate that MOD Live is calibrating. Wait 5 minutes.

## PERFORMANCE DASHBOARD

- In the Performance dashboard, press  to start the stopwatch.




for safety.



## DASHBOARD STATS

- From any dashboard, press  and  to access CHRONO and LAST RUN.




- Press  in LAST RUN to navigate to RUN HISTORY.

- RUN HISTORY** shows your maximum speed along with average speed, your vertical drop, and the total distance covered including magic carpets, lifts.

**NOTE: MOD Live only records averages on sloped terrain.**

## CHRONO




In this view, you can record and save a timed activity or part of an activity.

- Press  to start the timer.
- Press  again to stop the timer.
- Press  to mark that you have completed a lap, reached a distance marker, the end of a run or any milestone. **WARNING: Do not press > after the timer has stopped or you will reset the stopwatch data. This only clears timing.**

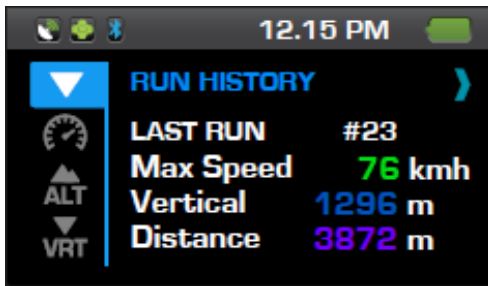
## VIEWING LAPS

- Press arrow buttons on your remote to navigate to different laps recorded.

## ACCESSING LAPS

- Press  and  to navigate between records.
- Press  to select and open a record.

# STATS APP



Every time you use MOD Live, a new day of data gets added automatically to your cumulative statistics. Choose this app to view your current day's highlights, all of your current day's stats, and historic stats accumulated since you started using MOD Live.

## NAVIGATING STATS

- Press  to launch the STATS app. Press  and  to navigate from RUN HISTORY to SPEED, ALTITUDE, VERTICAL, DISTANCE, TEMPERATURE, and PREFERENCES.

## RUN HISTORY

For a selected run, the following stats appear showing your latest run first:

- **LAST RUN.** This shows the run number for easy reference.
- **Max Speed:** the top speed you've achieved during the displayed run.
- **Vertical:** the total accumulated distance travelled vertically downwards during the displayed run.
- **Distance:** the total accumulated distance travelled up, down, and sideways during the displayed run.

## SPEED

- **Max:** the top speed you've achieved during the current day.
- **Average :** the average speed you've achieved during the current day.
- **All time Max:** the top speed you've achieved over MOD Live's entire lifetime, or since you last reset all-time stats.
- **All-time Avg:** the average speed you've achieved over MOD Live's entire lifetime, or since you last reset all-time stats.

## ALTITUDE

- **Max:** the maximum altitude achieved during the current day.
- **All-time Max:** the maximum altitude achieved over MOD Live's entire lifetime, or since you last reset all-time stats.

## VERTICAL

- **Total:** the total accumulated distance travelled vertically downwards during the current day.
- **All time:** the total accumulated distance travelled vertically downwards over MOD Live's entire lifetime, or since you last reset all-time stats.

## DISTANCE

- **Total Distance Travelled:** the total accumulated distance travelled up, down, and sideways

## TEMPERATURE

- **Max & Min:** the maximum and minimum temperature measured during the current day.
- **All time Max & Min:** the maximum and minimum temperature measured over MOD Live's entire lifetime, or since you last reset all-time stats.

## PREFERENCES

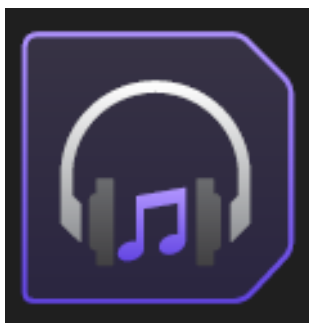
Choose this option to clear stats displayed on MOD Live.

Note that MOD Live automatically clears "trip" data every day.

- **Reset Trip Stats.** This clears your current day's stats.
- **Reset All Time Stats.** This clears all the "all time" stats accumulated since the last factory reset or the first time you used MOD Live.

For example, this clears your All Time Max, All Time Min, All Time Vertical.

## MUSIC APP



MOD Live does not have an integrated microphone but the wireless remote lets you control music on your Android smartphone. The remote controller's buttons are designed to work with heavy gloves and withstand snow and ice. You can use MOD Live together with a Bluetooth hands-free headset, earphones or goggles with built-in speakers. **NOTE: Your Android smartphone needs to be turned on and within 15 meters of MOD Live.**

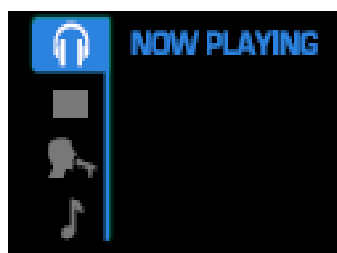
Complete the setup instructions earlier in this guide. Bluetooth must be enabled on both your Android smartphone and on MOD Live. MOD Live must be made "discoverable" on both your smartphone and on MOD Live. Your smartphone must be paired with MOD Live. Your smartphone must be connected to MOD Live. In the HQ Mobile settings, Music Control must be enabled.

**IMPORTANT NOTE: Currently, MOD Live does not support internal playlists. To use the MUSIC app with your playlists, make sure they are stored in a folder on your smartphone.**

Press  to launch the MUSIC app. Press  and  to browse the icons.

- **Headset icon.** Shows what is currently being played.
- **List icon.** Browse by collection.
- **Singer icon.** Browse by artist.
- **Music icon.** Browse by song.

Press the following buttons to control play, pause, skip, and volume:




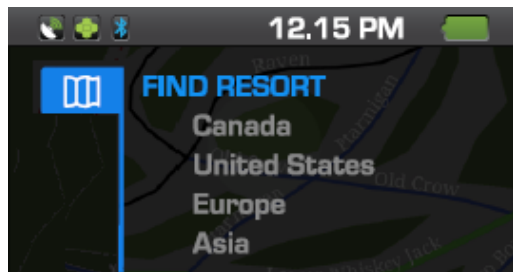
## NAVIGATION

**IMPORTANT NOTE: To use buddy tracking at a resort, you need an Android smartphone and a data plan.**



### FAST FACTS

- The Navigation app contains trail maps for over 600 North American and European resorts. Locate points of interest such as chairlifts, information centres, restaurants and parking areas. Mark waypoints by “pinning” any location on a map.
- Press  to launch Navigation. When Find Resort view appears, a list of countries for which there are resort maps appears.











### FINDING A RESORT

1. Navigate to the country where the resort is located: press 
2. Choose the country: press 
3. Navigate to the ski resort: press 
4. Choose the ski resort: press 




### MAP OPTIONS

#### Display Modes

- Press  to switch from the plain mode to compass, zoom and pan.
- **Compass.** To see the compass, press . The compass red arrow points to due North.
- **Zoom.** To zoom, press  until a scale and zoom magnification bar appear.
- Use  and  to change the magnification level (zoom). Press  to lock the zoom level. Repeat this to exit. Press  to switch to pan mode.
- **Pan.** To pan, press  once in the map default mode. A set of black arrows appears. Use buttons on your remote to move the view in any direction.

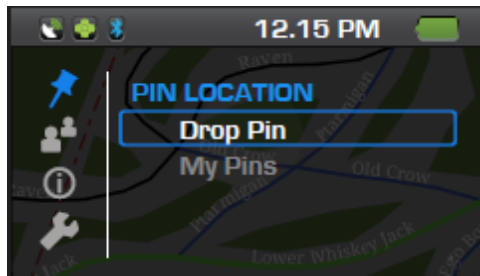
### NAVIGATION SUBMENU

Use the UP and DOWN buttons to display the Navigation submenu:

- Choose  to define waypoints.
- Choose  access POINTS OF INTEREST
- Choose  to access BUDDY TRACKING.






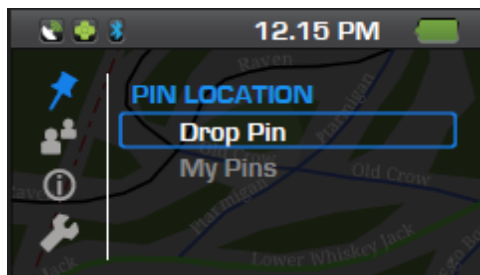
## PINS





This feature lets you create waypoints on a resort map.

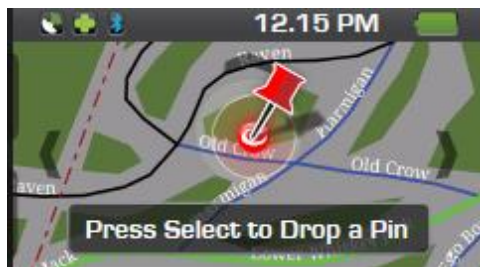
To select PINS:

1. Press  to return to the **Find a Resort** menu.
2. When the **Find a Resort** menu appears, press  to select the pin icon.
3. Press  to navigate to **Drop Pin** or **My Pins**. **Drop Pin** lets you create new waypoints. **My Pins** lets you manage waypoints.





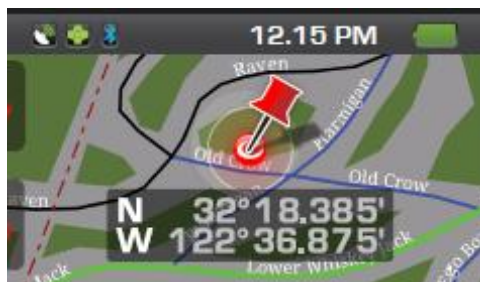
To select Drop Pin:

Press  to navigate to **Drop Pin**. Press  to choose **Drop Pin** when it is highlighted.





To save your current location (by default, the pin appears here):

Press . When OK appears in the Pin Name dialog box, press .



To move the pin to a different map location:

Press arrow buttons to change the location of the pin icon. Your coordinates will appear. Press  to save this location. When OK appears in the dialog box, press .






To cancel and exit, press .

## POINTS OF INTEREST



Use this feature to find lifts, restaurants and bars, ticket kiosks, information centers, and parking lots. When you select a specific category, the map shows all locales that are available. Note that you can only view one category of POI at a time.




### To select points of interest:

1. Access POINTS OF INTEREST by pressing  in map view.
2. In the Navigation submenu, press  to reach the i symbol to select POINTS OF INTEREST.
3. Press  to go to the POINTS OF INTEREST menu.
4. Press  to navigate this menu.
5. Press  to choose an option.




### To use the POIs on your map:

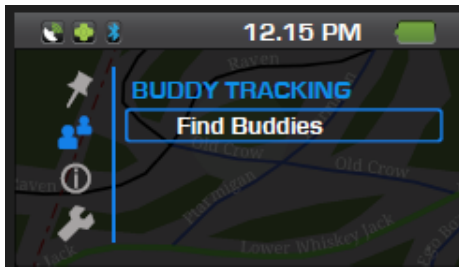
A bar of POIs appears on the left of your screen. In this example, the POI category selected is restaurants. Choosing a POI on the bar displays the location and name of the selection on the map.

- Press  and  to switch between different POIs.
- Press  to return to the Navigation screen.

### To choose a different category of POI:



- Press  to return to the POI selection screen.

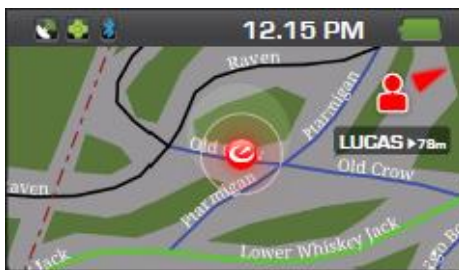
# BUDDY TRACKING



When buddy tracking is enabled in Recon HQ Mobile, you can use the Navigation app to find and track the location of buddies on a map.

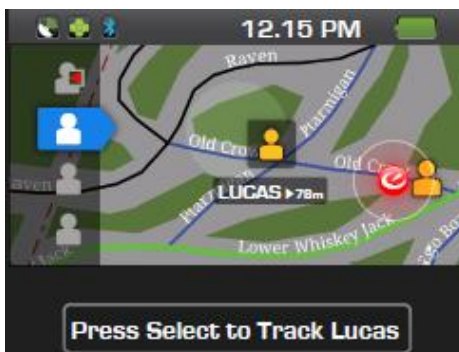
## FINDING BUDDIES AT YOUR LOCATION.

- Bring up the Navigation submenu.
- Press  to navigate to the silhouette icon. Press  when BUDDY TRACKING is highlighted.




## BUDDY TRACKING ICONS


- A “swirl” icon appears to show the location of your buddy.
- When your buddy is outside the map frame, a red buddy icon points to his or her direction and distance.




## BUDDY TRACKING OPTIONS

**Locate a buddy.** Press  to navigate the buddy list.

**Track a buddy.** Press  to get real-time updates of your buddy's location.

**Stop tracking a buddy.** Press  to go to the Navigation submenu. Navigate to

**STOP TRACKING** and press  to select it.

## SMARTPHONE APP





MOD Live does not have an integrated microphone but the wireless remote lets you take incoming calls and text messages. The remote controller's buttons are designed to work with heavy gloves and withstand snow and ice. You can use MOD Live together with a Bluetooth hands-free headset, earphones or goggles with built-in speakers. **NOTE: Your Android smartphone needs to be turned on and within 15 meters of MOD Live.** Complete the setup instructions earlier in this guide. Bluetooth must be enabled on both your Android smartphone and on MOD Live. MOD Live must be made "discoverable" on both your smartphone and on MOD Live. Your smartphone must be paired with MOD Live. Your smartphone must be connected to MOD Live. In the HQ Mobile settings, Call Relay and SMS Relay must be enabled.

## INCOMING CALLS






MOD Live displays incoming calls and incoming text messages regardless of which app you are using or which display is currently active. You don't need to press any button on the remote controller. If your smartphone's speaker is on, or you are using a Bluetooth hands-free headset, you'll hear the call automatically.

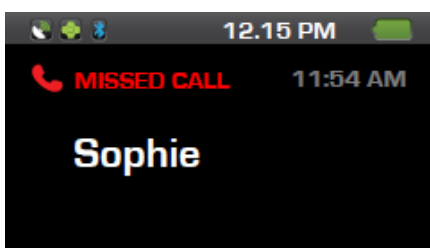
**Take the call.** Press  to select this option.




**Ignore the call.** Press  to navigate to this option, and then select it by pressing . The app's call history will capture call information for you.



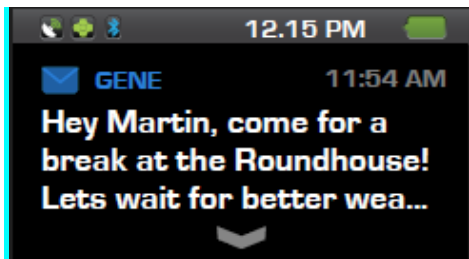
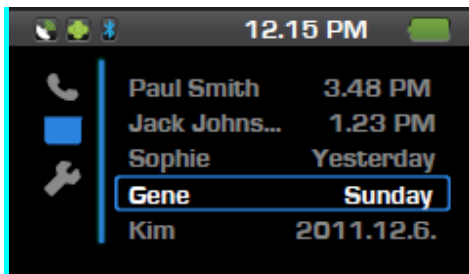
**See call history.** Press  to select the Smartphone app. Press  to navigate to the phone icon and select it by pressing .

**Call back later.** Press  to select the Smartphone app. Press  to navigate to the caller's name or select the unknown caller. Press  to place the call.



**Return a missed call.** Press  to select the Smartphone app. Press  to navigate to the **name of the caller**. Press  to select and place the call.





## INCOMING TEXT MESSAGES



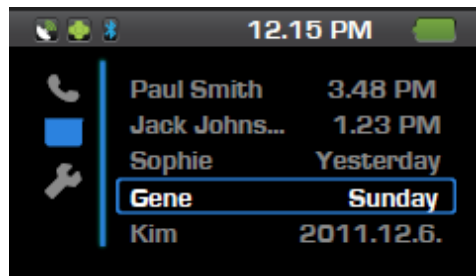
Read text message. Press .








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Send a “canned” reply.

1. Press  to navigate to Reply. Press  to select Reply.
2. When the Reply dialog box appears showing “canned” messages, press  to navigate to the message you want to send.
3. When the message appears highlighted, press  to select it.

## SENDING MESSAGES FROM TEXT HISTORY



1. Press  to navigate to the envelope icon. Press  to select it.
  2. Press  to access the sender list.
  3. Press  to navigate to the name. Press  to select it.
  4. When the Reply dialog box appears showing “canned” messages, press  to navigate to the message you want to send.
  5. When the message appears highlighted, press  to select it.
-

# MOD LIVE FREQUENTLY-ASKED QUESTIONS

## MOD LIVE APPS

### Can I download other Android apps to MOD Live?

Currently, third-party apps are not supported. In the future, Recon Store will provide additional apps you can download.

## MOD LIVE DISPLAY

### Will the display automatically turn off after a period of inactivity?

No. You need to manually switch to power-saving (DISPLAY OFF) mode or shut down.

### Why is my display frozen?

This may be due to the remote controller. Try using another remote if you have one.

#### Steps to take:

1. Perform a factory reset.
2. Turn the power on.
3. If the display continues to look washed out, contact Recon Support at <http://www.reconinstruments.com/support>

### Why does my display show a red icon?

Whenever the remote controller is more than ten feet away from MOD LIVE, the wireless connection is lost. A solid red icon means that MOD LIVE has stopped searching for a wireless connection with the remote controller.

#### Steps to take:

1. Press any button on the remote controller.
2. Wait for the icon to turn blue.

### Why does my display show the RECON logo instead of the dashboard?

#### Steps to take:

1. Turn the power off by pressing MOD LIVE's power button.
2. Wait a few seconds.
3. Turn the power back on.

### Why can't I access the dashboard or any apps? My display appears blank.

This happens when you leave your goggles stored in a very cold location (outdoors overnight, in the trunk of a vehicle).

## Why does my display look faded?

This happens when your goggles are out in the sun. Direct sunlight reacts with the liquid crystal display. This problem is temporary.

### Steps to take:

4. Move your goggles into the shade, or cover them.
5. Leave the goggles protected from the sun until the brightness and colours return to normal.
6. If the display continues to look washed out, contact Recon Support at <http://www.reconinstruments.com/support>

## Why is the display hard to read?

The default brightness setting isn't meant for a dark day or using MOD LIVE for night skiing. Change the brightness setting or turn off the display. MOD LIVE will continue recording even when the display is turned off.

### Steps to take:

1. Navigate to Preferences.
2. Go to the "BRIGHTNESS" menu.
3. Choose a value of 1 or 2.

## Why is my display solid red or green?

MOD LIVE has a loose or broken connection. It can happen after a bad crash or damage to the MOD LIVE components.

### Steps to take:

1. Hold down the Power/Select button, wait a few minutes, and then press this button again.
2. If this does not work, try recharging the battery or contact Recon Support.

## Why can't I see the edge of the display?

### Steps to take:

1. Tilt or rotate the head of the micro-optic display.
2. Tighten the strap of your goggles.
3. Check that the MOD LIVE is snapped into your goggles.

## MOD LIVE DATA

**IMPORTANT NOTE:** MOD LIVE can lose data or lose its connection to the remote controller due to electromagnetic interference. Sources of interference include transmission towers, two-way radios, wireless devices, industrial devices operating on RF frequency as well as motion sensors, remote controls, and microwave ovens. GPS technology works best in open spaces with access to at least three satellites. As long as the line of sight is clear, you won't have any problems getting a satellite signal. **Using MOD LIVE inside buildings and gondolas or near solid obstructions such as trees and rock faces can interrupt GPS coverage and cause incorrect data to appear.**

**When I try using the MUSIC app, all that happens is that messages "LOADING" and "NOW PLAYING" appear. I can't**

## Why does the dashboard show a solid white bar but no speed?

While MOD Live is waiting for a GPS signal, the dashboard speedometer displays "--" until it can calculate a valid speed from GPS data.

### Steps to take:

1. Wait for a few minutes after the GPS indicator turns green.
2. Restart MOD LIVE: turn the power off, wait a few seconds, and then turn the power on.
3. If the problem persists, contact [www.reconinstruments.com/support](http://www.reconinstruments.com/support) for support

## Why is the speed value wrong?

MOD LIVE uses GPS technology to determine speed. GPS technology works best in open spaces with a 360 degree view of the sky. Being in a valley, beside a tree, building or rock face can block MOD LIVE from getting GPS coverage.

### Steps to take:

1. If you have just turned on the MOD Live, wait ten minutes.
2. Move to an open location with a clear view of the sky. If you are in a valley or gulley, move to higher ground.
3. Check the GPS status indicator.
4. If changing location does not help, turn the power off and on again.
5. If you can't get a GPS signal, contact Recon Support.

## Why is the altitude wrong?

**MOD Live is designed for use between 0m and 8850m altitude (measured from sea level), and should be used only**  
MOD Live calculates altitude using a combination of air pressure and GPS data. When MOD LIVE is not moving, data from the air pressure sensor is changed to match the GPS reading. Storms affect air pressure, causing the altitude to decrease. In clear weather, altitude data will increase.

### Steps to take:

1. If you have been sitting or standing in an open area for more than a half hour, turn MOD LIVE off and on.
2. Wait ten minutes.
3. Turn MOD Live back on.

## Why are my statistics wrong?

MOD Live uses GPS technology to determine statistics. Your location affects the GPS coverage, for example, being in a valley, beside a tree, building or rock face.

### Steps to take:

1. Move to an open location with a clear view of the sky. If you are in a valley or gulley, move to higher ground.
2. Reset statistics by navigating to the Preferences menu, choosing RESET STATS and then choosing YES at the prompt to save and reset.

## Why does the clock show the wrong time?



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### Why is my temperature data higher than it should be?

The temperature sensor is contained in the remote controller, not in MOD Live. If you are wearing the remote controller inside a pocket, jacket, cuff or backpack, the temperature will be a few degrees higher. If the remote controller is worn close to your body, the temperature will be affected by your body heat.

#### Steps to take:

1. Wear the remote on your wrist, goggle outside your jacket instead of keeping in an inside pocket.
2. Wait a few minutes for MOD Live's temperature sensor to adjust.

### Why does my temperature show –C°?

This means that MOD Live is waiting for a temperature reading.

### Why does MOD Live show a value of – 0?

MOD Live truncates a value to the nearest digit. A value of .1 to .9 will appear as 0.



### Why doesn't STATS show any averages?

Unless you are on a sloped surface, no average will be calculated. MOD Live does not record averages when you use it on level terrain.

### Why can't I get the stopwatch to start?

You need to reset the stopwatch.

#### Steps to take:


1. Press  once. The timer is set to 0:00:00 and the numbers turn grey.
2. To start the counter, press  again. The timer starts counting and the numbers turn yellow.

## MOD LIVE BATTERY

### Why can't I get a full charge?

#### Steps to take:

- Check that you are using the Recon AC adapter and USB cable included in the MOD Live box.
- Check that the AC cable says Recon Instruments.
- Check that the MOD LIVE power is turned off.
- Check that the red light above the USB port appears. This shows that MOD LIVE is still charging.
- Check that your PC or Mac is turned on and not in standby mode.
- Check that the port on your PC or Mac is a USB 2.0 port (not a keyboard port).

- 
- Check that the AC cable says Recon Instruments.
  - Check that the MOD Live power is turned off.
  - Check that the red light above the USB port appears. This shows that MOD LIVE is still charging.
  - Check that your PC or Mac is turned on and not in standby mode.
  - Check that the port on your PC or Mac is a USB 2.0 port (not a keyboard port).

**Tips to prolong battery life:**

- Avoid using MOD Live at temperatures below -20°C (-4°F).
- Turn off the power when you are not using the unit.
- Use the DISPLAY OFF feature when you are not using the unit.
- Turn the brightness down to 1 or 2.

**Why won't my PC or Mac won't recognize MOD LIVE when I try to charge it or transfer data?**

**Steps to take:**

1. Check the port you are using on your PC or Mac. Use the USB 2.0 port (not a keyboard port).
2. Check that the USB cable connection is tight. Unplug it and then plug it back in.
3. Unplug MOD Live from your PC or Mac, and then restart MOD LIVE: turn the power off, wait a few seconds, and then turn the power on. Then try plugging the USB cable in again.

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## MOD LIVE CARE

### How to contact Recon for assistance:

- Email **Recon Instruments** [support@reconinstruments.com](mailto:support@reconinstruments.com)
- Follow us on Twitter: [twitter.com/@Reconinstrument](https://twitter.com/Reconinstrument)
- Follow us on Facebook at [facebook.com/reconinstruments](https://facebook.com/reconinstruments).
- Search for Support FAQs at <http://support.reconinstruments.com>

### When you contact Recon for assistance, you need to provide the following information:

- **MOD Live firmware version number.** Go to Preferences and select Settings.
- **MOD Live serial number.** See the white sticker on the back of the battery pack.
- **Remote controller ID.** See the white sticker on the back of the remote controller. Refer to the last 3 digits.

## STORAGE AND TRAVELLING TIPS

### Handle MOD Live with the same care as a smartphone, iPod, or MP3 player.

- Make sure that MOD Live is powered off.
- Pack MOD Live in a separate compartment away from sharp or hard objects. Do not place items directly on top of MOD Live.
- Avoid leaving MOD Live in direct sunlight.
- Avoid leaving MOD Live in subzero temperatures.
- Keep MOD Live out of water.
- Store MOD Live and its accessories away from the reach of small children.

## CLEANING TIPS

## PERFORMING A FACTORY RESET

Perform a reset if any app seems frozen, missing from the display, if you can't get a GPS fix even after restarting. **WARNING: A factory reset clears all data that MOD Live has recorded, unpairs the remote controller, clears your settings, uninstalls any third-party apps, and restores MOD Live back to the default settings it was shipped with.**

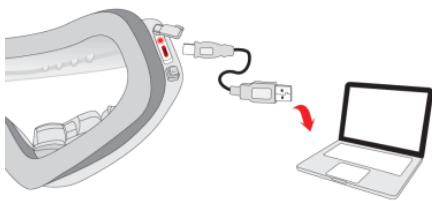
### How to perform a reset:

1. Hold down the MOD Live power button and wait until the blue power light and red battery charging light blink.
2. When the red LED starts to flash quickly, let go of the power button.
3. Hold down the power button until both red and blue LED lights blink in unison. Let go.
4. Hold down the power button for another second.

**NOTE: You need to re-pair your remote controller with MOD Live after each reset. See the section on repair instructions.**

## DOWNLOADING MOD LIVE DATA TO YOUR COMPUTER

Download MOD Live's data to Recon HQ software to preserve memory or access MOD Live data you want to share. We recommend downloading if your battery has been draining quickly, after five days of use, or if you have accumulated a lot of text messages.



### To download data from MOD Live:

1. Turn MOD Live off by holding down the power button for 2 seconds.
2. Attach the USB cable shipped with MOD Live to your computer and to MOD. Plug the micro USB cable's smaller end into the micro USB port located under the protective cover on the right side of the goggles. Plug the USB cable's larger end into the USB port in your PC or Mac. **Tip: If your computer does not recognize MOD try reinserting the USB cable.**
3. Click DOWNLOAD when the prompt DOWNLOAD TRIPS FROM GOGGLE appears.

Kirill: do we have an image of a run on a Google map?

On your computer, a Google satellite map appears overlaid with your recorded movements on runs, terrain parks or into the backcountry.

**IMPORTANT NOTE:** To avoid losing data, never disconnect while data is being transferred from MOD Live to your PC or Mac.

4. Press down on the plastic USB port cover on MOD Live. The seal should be snug so that water and snow can't ruin the port.

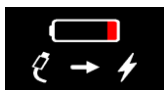
4. Choose your destination (Recon Online, Facebook, Twitter etc.).

## BATTERY CARE

Your battery is designed to last up to three years. Follow these tips on battery care:

- Never recharge the battery in temperatures below 0°C or above 40° C.
- Allow enough time for MOD Live to warm up and reach ambient room temperature before you recharge.
- Never use a different AC adapter and USB cable than what was shipped with the unit.
- Use DISPLAY OFF mode when you aren't checking looking at the dashboard or stats.

## RECHARGING THE BATTERY



**NOTE:** Whenever the battery warning popup appears, your unit will be automatically shut down unless you recharge it immediately. Recharge the battery immediately to avoid losing data. The battery must be recharged within ten days.

### Before You Start

- Use the Recon AC adapter and USB cable included in the MOD Live box. Check that the AC cable says Recon Instruments.
- Check that the port on your PC or Mac is a USB 2.0 port (not a keyboard port).

### To charge using a PC or Mac:

1. Make sure your computer is turned on, and not in stand-by mode.
2. Make sure MOD Live is turned off. If the unit is on, hold down the power button for 2 seconds.
3. Connect the USB cable shipped with MOD Live. Plug the micro USB cable's smaller end into the micro USB port located under the protective cover on the right side of the goggles. Plug the USB cable's larger end into the USB port in your PC or Mac.
4. Check that a red light above the USB port appears. This shows that MOD Live is charging.

**Tip:** If your computer does not recognize MOD Live, try reinserting the USB cable.

The red USB port light turns off when MOD Live is charged.

### To charge using a power outlet:

1. Connect the USB cable shipped with MOD Live. Plug the micro USB cable's smaller end into the micro USB port located under the protective cover on the right side of the goggles
2. Plug the USB cable's larger end into either the North American or European AC adapter shipped with your unit.
3. Plug the AC adapter into a wall outlet.

## REMOTE CARE

### REPLACING THE REMOTE BATTERY



You need to replace the remote controller's single 3-volt CR2032 battery approximately every three years.

#### To replace the battery:

1. Using a coin or flathead screwdriver, turn counter clockwise until you reach the unlock symbol.
2. Remove the back cover.
3. Insert a replacement battery.
4. Replace the back cover.
5. Using a coin or flathead screwdriver, turn the cover clockwise until the arrow aligns with the closed lock symbol.

### CHECKING WHICH REMOTE IS PAIRED WITH YOUR UNIT

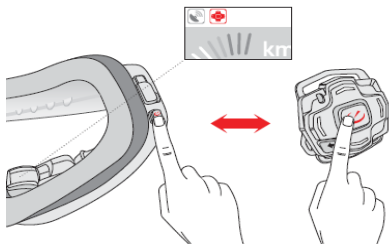
- Press the left or right button on the remote. **Kirill: do we have an image?**
- Check MOD Live's display to see if it responds. **Note that the remote controller status indicator should be blue.**

### UNPAIRING THE REMOTE CONTROLLER

Follow these steps when you intend to use your remote controller with a different RECON product or you are returning the MOD unit or the remote.

#### To unpair the remote from MOD Live:

1. Hold down the MOD power button for 3 seconds. **Kirill: insert image of power button.**
2. On the remote, press the right and left buttons at the same time and hold them both until an orange light flashes on the remote.



## PAIRING A REMOTE CONTROLLER

Follow these steps when you unpaired a remote controller by mistake, performed a factory reset, bought or borrowed a replacement MOD or MOD Live unit.

### To pair the remote controller with MOD Live:

1. Look on the back of the remote controller for the serial number printed on a white label. Note the ID number. Kirill: we should show this.
2. If MOD Live is turned on, turn off the power button, wait for a few seconds, and then turn the power button back on.

**Wait for the prompt to press the MOD Live power button. This prompt may show one or more remote ID numbers.**


3. Press the MOD Live power button to navigate to the remote ID that corresponds to your remote controller. Each press of the power button will take you down to the next ID on the list. Kirill or Rok: we need an image of this.
4. **Wait for the counter to reach 0, and then press any button on the remote.**
5. Wait for a blue light to flash on the remote.
6. Check that the remote is paired by looking at the status bar. Wait for the remote connection indicator icon to turn blue.

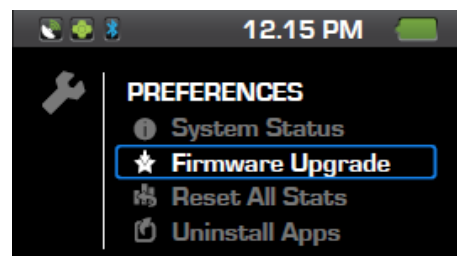
## DOWNLOADING FIRMWARE UPGRADES



Whenever firmware upgrades are released for MOD Live, a prompt like this appears when you connect MOD Live to Recon HQ on your computer. Recon HQ automatically detects free upgrades. **NOTE: You need to have an internet connection and Recon HQ application downloaded to your Mac or PC computer in order to perform an upgrade. Make sure that MOD Live is fully charged before you start a firmware upgrade. For best results, plug MOD Live into the AC adapter to charge while performing the upgrade.**

### To perform an upgrade:

1. Navigate to **Firmware Upgrade** in the PREFERENCES menu, and press SELECT.
2. Press  when OK is highlighted.
3. Attach the USB cable shipped with the product to your MOD Live unit and to your PC or Mac.
4. Follow the prompts provided. If the upgrade fails, power off MOD Live and restart the process.



## LIMITED WARRANTY

These terms and conditions apply to your purchase of the GPS-enabled module (the “**Product**”). marketed by Recon Instruments Inc. (“**Recon**”). Any reference below to the term “**You**” refers to the original buyer of any Product.

**Statutory Warranties.** This Limited Warranty sets out Recon’s responsibilities as to the Product. Nothing in this Limited Warranty affects any rights You may have as a consumer and does not disclaim any statutory or implied rights that Recon cannot disclaim. The laws of certain jurisdictions or states may state that the manufacturer may not exclude or limit aspects of its liability to the consumer, and in such circumstances, the exclusions and limitations of liability in this Limited Warranty may only apply to You to the extent permitted under applicable laws.

### **Warranty Terms.**

Recon warrants to You that the Product will be free from defects in materials and workmanship under normal use for two (2) years from the original date of purchase by You (the “**Warranty Period**”). The Limited Warranty is not transferable by You. All subsequent purchasers acquire the Product “as is” without benefit of this Limited Warranty. Where You purchased the Product from Recon’s website or other online vendors, the date of purchase is the date of the purchase invoice issued to You by Recon or such online vendors by email. Where you purchased the Product from an authorized reseller at a physical location, the date of purchase is the date of the invoice issued to you at the physical location.

In the event Recon determines that the Product is defective, RIM may in its absolute and sole discretion to:


- repair the defective part of the Product free of charge with new or refurbished parts;
- replace the defective Product with a comparable new or refurbished product; or
- in the event that Recon is unable to repair or replace the Product as provided under (i) or (ii), a proportionate refund of the purchase price You paid for the Product.

Where the Product is repaired or replaced during the Warranty Period, except as otherwise prohibited by applicable laws, the warranty for the repaired or replaced Product, as applicable, will expire upon the expiration of the original Warranty Period. Any warranty service or support under this Limited Warranty is conditioned upon Your return of the Product to Recon or its authorized service provider. Where there has been a replacement of the Product, the Product or its parts, as provided pursuant to the Limited Warranty, becomes Your property and the Product being replaced becomes Recon’s property. Where there is a refund, You will return the Product to Recon and such Product becomes Recon’s property.

**Exclusions.** The Limited Warranty does not apply to the following conditions:

- normal wear and tear;
- if the Product or any its parts is opened, disassembled, or repaired by someone not authorized by Recon;
- if the Product was not purchased from Recon or its authorized retailers;
- damages caused by misuse, moisture or liquids, proximity or exposure to heat, accident, abuse, neglect, misapplication, Your failure to abide by the use, safety, and maintenance instructions contained in the packaging of the Product, or repairs or modifications made by anyone other than Recon or its authorized service providers;
- physical damage to the surface of the Product;
- any Product where the serial number has been removed or that has been damaged or rendered defective as a result of misuse, abuse, contamination, improper or inadequate maintenance or calibration, or other external causes;
- any equipment other than the Product;
- malfunction or defects resulting from the use of the Product in conjunction with accessories, products, services or ancillary or peripheral equipment not expressly approved or provided by Recon, and where it is determined by Recon that such malfunction or defect is not the fault of the Product itself; and
- any software, whether or not supplied by Recon.





Recon outside of the Warranty Period, Recon's standard repair terms and charges may apply. Recon may limit the Limited Warranty to the country where Recon or its reseller sold the Product to You. You may be responsible for shipping, handling, or other costs if You request warranty services not in the country of original purchase.

**Data Recovery.** You acknowledge and agree that Recon will not be responsible for any data, software, application, or information that may be damaged, lost, or destroyed during the course of evaluating, repairing, or replacing the Product. This Limited Warranty also does not cover backup, recovery, and reinstallation of Your data on the Product.

**Exclusive Remedies.** Repair or replacement of the Product as provided for in this Limited Warranty is the exclusive remedy provided to You under this Limited Warranty. To the extent permitted by applicable laws, this Limited Warranty is in lieu of all other warranties, express or implied, and except as set out in this Limited Warranty, all representations, warranties, endorsements, and conditions of any kind, express or implied, including, without limitation, ANY WARRANTIES OF TITLE OR NON-INFRINGEMENT AND ANY IMPLIED REPRESENTATIONS, WARRANTIES AND CONDITIONS OF FITNESS FOR A PURPOSE, MERCHANTABILITY, MERCHANTABILITY, NON-INFRINGEMENT, SATISFACTORY QUALITY, DURABILITY, OR ARISING FROM A COURSE OF DEALING OR USAGE OF TRADE ARE HEREBY EXCLUDED.

**Limitation of Liability.**

RECON, ITS OFFICERS, DIRECTORS, AGENTS, EMPLOYEES, LICENSORS, SUPPLIERS, SERVICE PROVIDERS, RESELLERS, AND DISTRIBUTORS WILL IN NO WAY BE LIABLE TO YOU FOR, AND YOU HEREBY WAIVE YOUR RIGHT TO RECEIVE, ANY INDIRECT, ECONOMIC, SPECIAL, COMMERCIAL, INCIDENTAL, EXEMPLARY OR CONSEQUENTIAL DAMAGES (INCLUDING WITHOUT LIMITATION LOST PROFITS, LOSS OF BUSINESS REVENUE OR EARNINGS, LOST DATA, DAMAGES CAUSED BY DELAYS OR A FAILURE TO REALIZE EXPECTED SAVINGS AND THE LIKE AND PERSONAL INJURY OR WRONGFUL DEATH DAMAGES) ARISING FROM OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THE PRODUCT, EVEN IF SUCH PERSON/ENTITIES IS/ARE AWARE OF THE POSSIBILITY OF SUCH DAMAGES.

IN NO EVENT SHALL RECON'S LIABILITY UNDER THIS LIMITED WARRANTY TO YOU OR TO ANY THIRD PARTY CLAIMING THROUGH YOU OR ON YOUR BEHALF EXCEED THE PURCHASE PRICE OF THE PRODUCT THAT YOU PURCHASED OR THE COST OF REPAIRING OR REPLACING THE PRODUCT, WHICHEVER IS GREATER.


THE LIMITATIONS OF LIABILITY SET OUT IN SECTION 7(A) AND 7(B) ABOVE IS INTENDED TO APPLY AND DOES APPLY TO ANY DAMAGES, LOSSES, OR LIABILITY HOWEVER CAUSED, REGARDLESS OF THE THEORY OF LIABILITY (CONTRACT, TORT, NEGLIGENCE, OR OTHERWISE) AND EVEN IF RECON OR ITS LICENSORS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, EXCEPT WITH RESPECT TO LIABILITY FOR DEATH, BODILY INJURY, OR STATUTORY LIABILITY FOR INTENTIONAL AND GROSS NEGLIGENT ACT OR OMISSIONS, FOR WHICH NO LIMIT APPLIES.

Nothing in this Limited Warranty limits Recon's liability to You in the event of: (i) death or personal injury to the extent resulting directly from Recon's negligence; or (ii) any intentional fraudulent act or intentional fraudulent omission of Recon.

**Privacy.** Information about You that Recon receives or collects (including, without limitation, Your personal contact information and financial information such as credit card information) will be used, processed, transferred, stored, and disclosed in accordance with Recon's privacy policy (available at <http://www.reconinstruments.com/corporate/legal/privacy-statement>) for the purpose of resolving problems with the Product and to provide and perform the services relating to the warranty described in this Limited Warranty.

**Dispute Resolution.**

**Arbitration.** Any and all disputes, controversy or claims arising out of or in connection with or in relation to this Limited Warranty or the breach thereof, including any question regarding its existence, validity, performance or termination and any tort or other common law or statutory claim arising out of or relating to its negotiation, execution or performance (collectively, the "Dispute"), will be referred to and finally resolved by binding arbitration, with the losing party paying all costs of arbitration including pursuant to the provisions of the Commercial Arbitration Act (British Columbia) and any amendments thereto, and the determination of such arbitrator will be final and binding upon You and Recon. The arbitration will be conducted in the English language. Any judgment on the award of the arbitrator may be entered into any court having jurisdiction over the party or parties against whom an award may be



In any arbitration proceeding between You and Recon, it is agreed that the parties will be entitled to discovery to the same extent permitted by the Supreme Court of British Columbia as if the matter were being adjudicated in such Court.

**Attornment.** You waive (a) any right to object to venue or jurisdiction based on inconvenient forum or for any other reason; and (b) any statutory or other right pursuant to the laws of the jurisdiction in which the You are resident to have a court case or arbitral hearing relating to this Limited Warranty adjudicated or resolved in that jurisdiction. Any rule of interpretation, law or regulation that provides that the language of a contract will be interpreted against the drafter will not apply to this Limited Warranty.

**Governing Law.** This Limited Warranty will be governed by and interpreted in accordance with the laws (procedural and substantive) of the Province of British Columbia and the federal laws of Canada as if made and performed by and between parties situate in such province and without regard to the conflict of law rules that would apply a different body of law.

**Severability.** Each provision of this Limited Warranty is declared to be a separate and distinct promise and to be separable from all other such separate and distinct promises. If any promise, provision or part thereof is determined by a court of competent jurisdiction or other constituted legal authority to be void, unenforceable or unreasonable in whole or in part, it will not be deemed to affect or impair the enforceability or validity of any other promise or provision in this Limited Warranty or any part thereof and the said court or other constituted legal authority will have the authority to limit such promise or provision as it deems proper.

**Waiver.** The failure by Recon to insist on strict compliance with any provision of these terms and conditions will not be deemed to be a waiver of such provision, and a waiver of any provision of these terms and conditions at any one time or times will not be deemed to be a waiver for any other time. The failure of Recon to assert its rights in a timely fashion for any of its rights or remedies under these terms and conditions will not be interpreted as a novation or a waiver of any subsequent or continuing breach and will not serve to modify, alter or restrict the right of Recon to assert any rights at any time thereafter

**English Language.** Except to the extent prohibited by applicable law, You acknowledge and agree that that this Limited Warranty and any and all related documents be drawn up in English.

**Updates and Supplementary Terms.** This Limited Warranty may be updated or supplemented by Recon from time to time. For Produits purchased in specific countries, unique terms may replace or modify this Limited Warranty if so posted on Recon's website. All terms that are not changed by these unique country terms (if any) remain unchanged and in effect. Please visit Recon's website to obtain the latest version of, or supplements or any country-unique terms to, this Limited Warranty.



## FCC Compliance Class B Digital Device

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, 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. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and 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.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### FCC Declaration of Conformity

MOD Live (FCC ID: ZW5007) and Recon-Ready Remote (ZW5001) comply with FCC standard CRF 47 Part 15 subpart B and subpart C – section 15.249. Operation is subject to the following two conditions:

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

### Industry Canada Compliance

MOD Live and Recon-Ready Remote were certified with IC numbers 9717A-007 and 9717A-001, respectively.

These devices comply with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil est conforme avec les normes de l'Industrie Canada-sans les standards RSS (s). L'utilisation est soumise aux deux conditions suivantes: (1) cet appareil ne peut pas provoquer d'interférences et (2) cet appareil doit accepter toute interférence, y compris les interférences qui peuvent causer un mauvais fonctionnement de l'appareil.



## TECHNICAL SPECIFICATIONS

<b>Processing</b>	ARM® Cortex™-A8 Core 600 MHz
<b>Platform</b>	Android™ with Recon HQ™ Mobile
<b>Capacity</b>	Memory: 512 MB    RAM: 256 MB

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### Environment / Mechanical

Weight of the unit	~65Grams (~2.3oz)
Storage Temperature range	-20°C to 60°C (-4°F to 140°F)
Operating Temperature range	-20°C to 30°C (-4°F to 86°F)
Vibration resistance	4.4 g <sub>rms</sub> 5 Hz to 2000 Hz
Shock / drop resistance	40 g, 15-23 ms, ½ sine (1 m vertical drop)
Enclosure	Water Resistant enclosure, IP65

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### Environmental Considerations

RoHS compliant
Brominated flame-retardant-free
Mercury-free

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### Power Requirements

Primary supply voltage	3.7 Lithium Polymer Rechargeable Battery
Charge Time	1 hour fast charge to 80% capacity, 3 hours to full
Battery size and life	1200 mAHr /up to 6 Hours

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### Display and Virtual Image

Display resolution	WQVGA- 428X240
Display Type	LCD Microdisplay
Virtual image size	11 " Diagonal from 5 feet away
Max Horizontal field of view (FOV)	8° Vertical FOV: 6°Horizontal FOV

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## Sensing

Global Positioning System (GPS) Receiver

6 Degrees of Freedom Inertial Sensor (Tri-axial Gyroscope, Tri-axial Accelerometer)

3 Axis compass sensor

Temperature sensor

Barometric pressure sensor

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## RF and Antenna

### **GPS Receiver:**

65-Channel Ultra Low Power GPS IC

Cold start of 2-5 minutes in typical outdoor environment

Multipath detection and suppression

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## Multimedia

### **Video supported formats:**

**Playback** .3gp, .mp4 (H.263, H.264 AV, MPEG-4 SP), .webm (VP8)

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## Connectivity

Micro-USB 2.0 (5-pin) port for data connection and charging

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## Bluetooth®

Bluetooth® 2.0

Recon (object push) for file transfer

Serial Port Profile (SPP)

Video Distribution Profile (VDP)

BTLE, wireless user interface remote control

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## System Requirements

Windows PC: Intel Pentium 4 or higher, Windows XP, Vista, 7 or higher