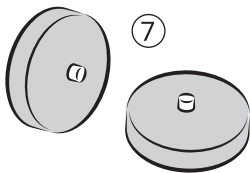
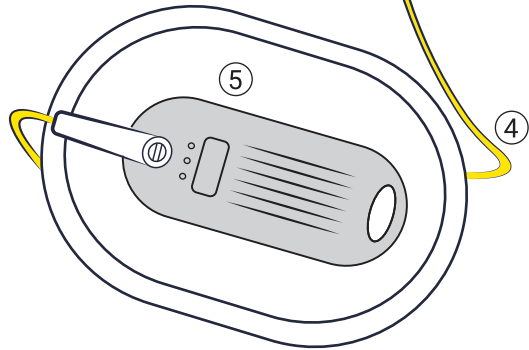
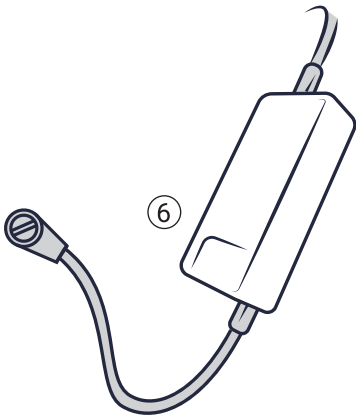
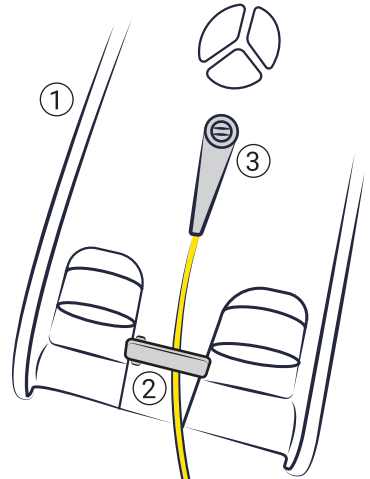


In the box:

- ① Trident Underwater Drone.
- ② Tail strap - Improves tether integrity when handling Trident via tether.
- ③ Tether & charger connection point.
- ④ 25m tether - Kevlar-reinforced data cable that sends video and control data from the Topside to Trident. It has the same D-ring connector on each side.
- ⑤ Topside - Sends video and control data to and from Trident to the controller via WiFi.



- ⑥ Trident wall charger - All connection points must be dry before charging. Attach D-ring connector to Trident only.
- ⑦ Trim weights - To maintain neutral buoyancy in saltwater, attach to bottom of Trident. This location is indicated by a weight symbol.

Sofar Trident

User Manual

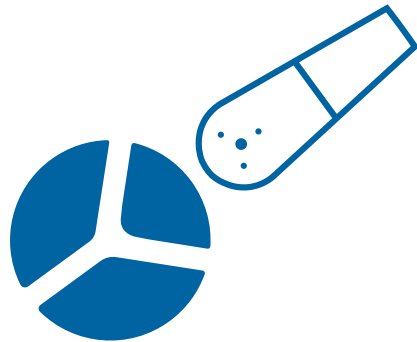


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Pro-Tips

Before dive:

Update software

It is recommended to update both the Sofar Trident App and Trident software before you head out to the water. Refer to pages 33 & 34 for more details.

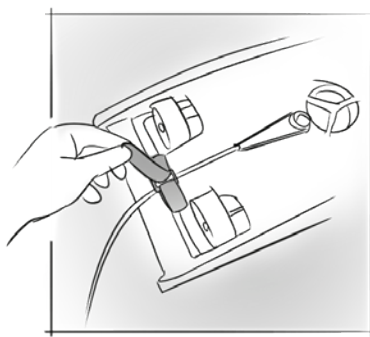
Secure Topside

Make sure the Topside and tether are safely secured. It is important to keep the Topside close to you and easily retrievable.

Unroll tether

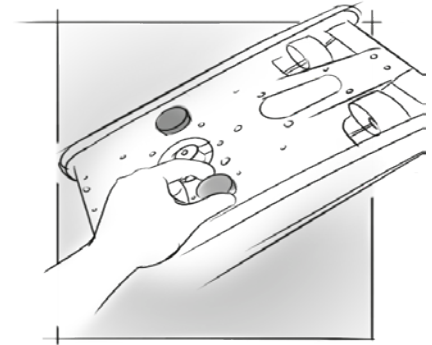
Unroll a couple meters of tether before diving and as needed during the dive.

Use tail strap as needed



Use tail strap when retrieval by pulling hard on the tether is likely. Using the tail strap reduces turning ability.

Add weights as needed



Attach Trim weights in salt water for neutral buoyancy. Screw trim weights to the underside of Trident. This location is indicated by the weight symbol. ⚖️

During dive:

Don't submerge the topside



Even though the Topside is water-resistant, it is not designed to be submerged for long periods of time.

Minimize excess tether

Only keep the amount of tether you need in the water to avoid entanglement.

What to avoid:



Avoid animals, fish, or other sensitive living things like corals which can be easily damaged.



Avoid rocks, branches, or other objects that can potentially damage Trident or pose a risk for entanglement.



Seaweed or other vegetation as it can get stuck in the propellers.

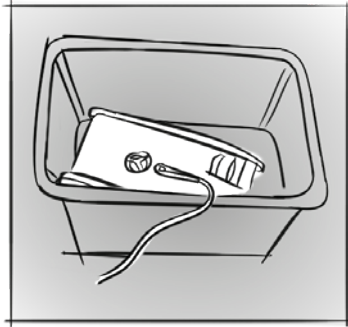


Avoid areas with lots of WiFi traffic, to ensure uninterrupted Topside signal quality.

Pro-Tips

After dive:

Rinse after every dive

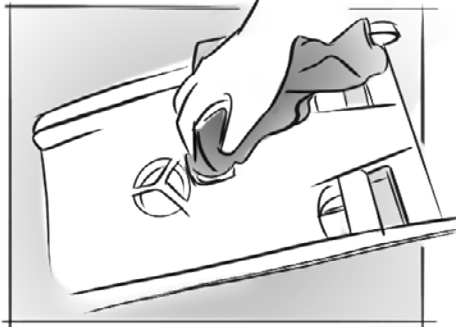


Rinse Trident with fresh water after every dive.

Keep tether attached

Be sure to keep tether plugged in while rinsing to protect the electrical contacts.


Dry connector area





After rinsing remove tether and dry connector area with cloth or towel.



Refer to the “Maintenance and care” section in the manual for more details.

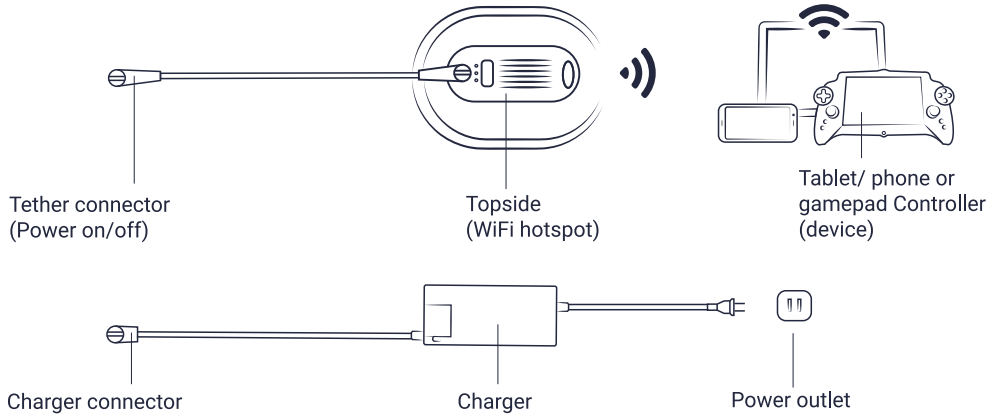
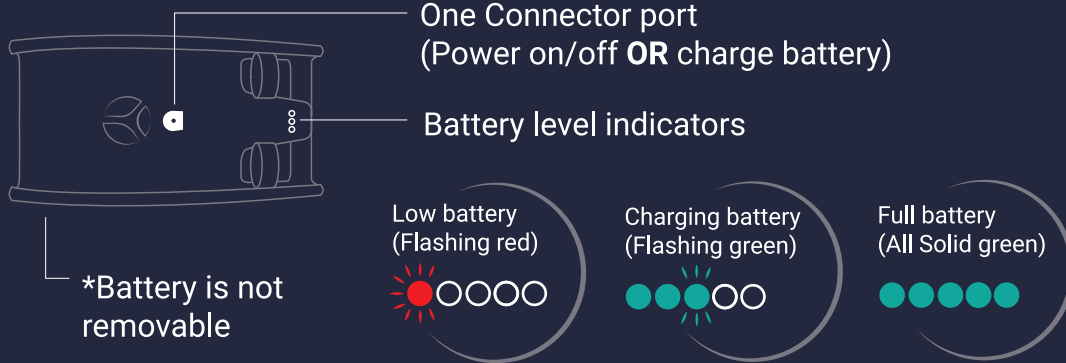
 **WARRANTY VOIDED:** If you suspect damage to your Trident, do not attempt to open your Trident. Contact support immediately for instructions at support@sofarocean.com or +1 (415) 230-2299. The Trident warranty will be voided if Trident is opened by customer.

 **WARNING:** If you suspect damage (or water inside), do not use or charge your Trident. Extra care is needed to store and transport potentially damaged lithium batteries. Place Trident safely in a cool, dry place away from combustible materials and contact support.

 Lithium batteries and products that contain them must be disposed of properly. Contact your local waste management company or municipality for safe disposal instructions.

How it works:

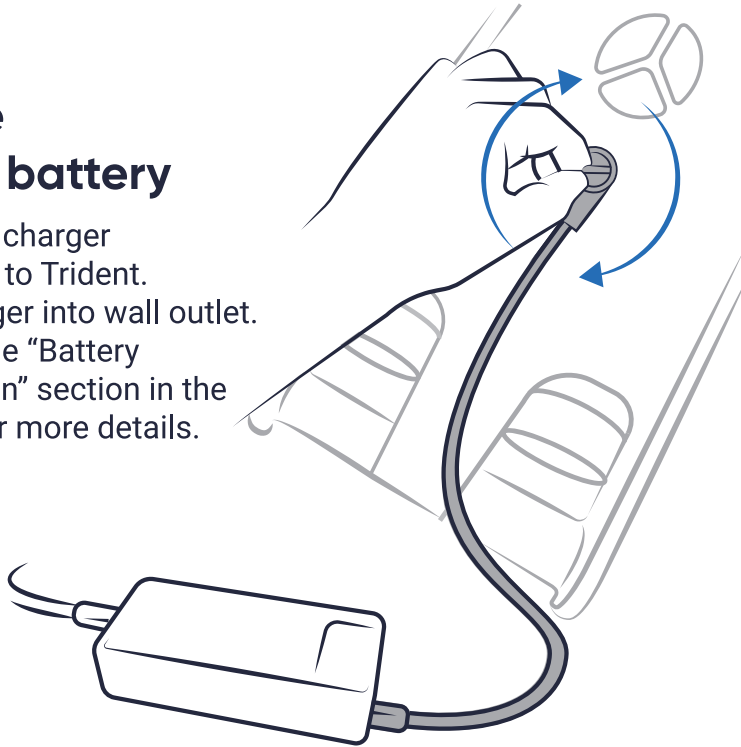
Quick - Start




1

Charge Trident battery

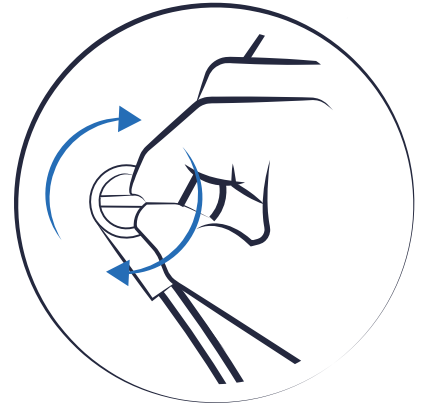
- Screw the charger connector to Trident.
- Plug charger into wall outlet.
- Refer to the “Battery information” section in the manual for more details.



 Topside does not need to be charged.

TIP:

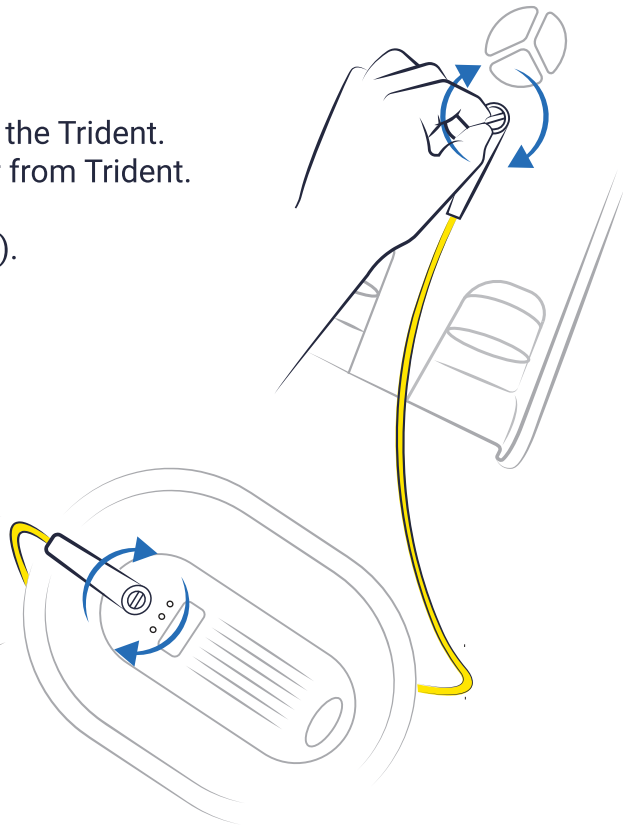
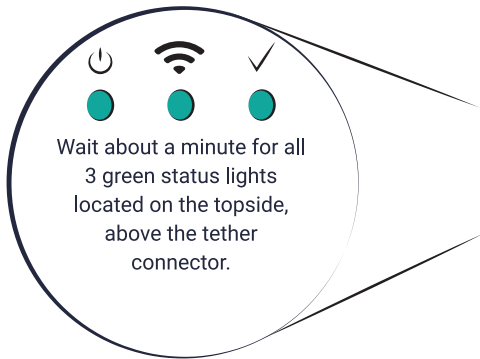
Make sure to always tighten connector snugly to ensure a proper connection.



2

Power Trident on/off

- To power on, screw the tether to the Trident.
- To power off, unscrew the tether from Trident.
- Tighten the tether to the topside (Topside tether ships connected).



3

Connect controller device

- Access WiFi settings on your controller device.
- Connect to your Trident Topside WiFi.
- Flip topside/tether reel over to find your Trident Topside WiFi details:

SSID: Trident-XXXX

Password: XXXXXXXX (Case sensitive)

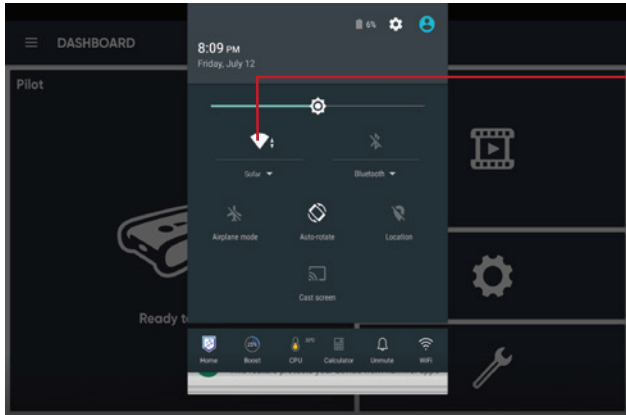
- Refer to the “Connect controller to Trident” section in the manual for more details.

TIPS:

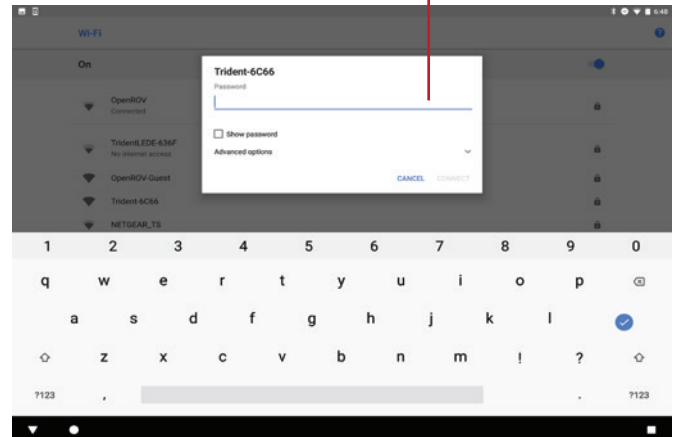
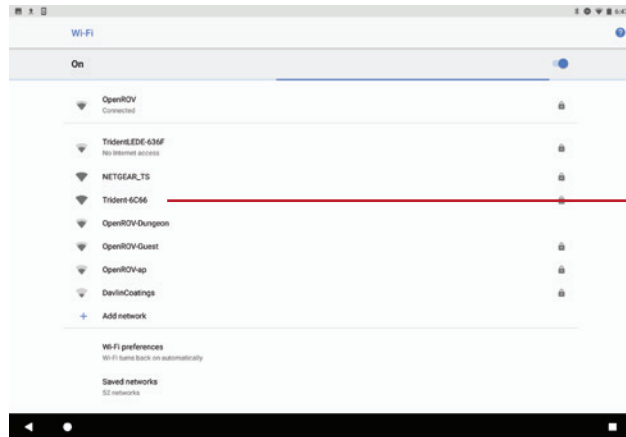
Turn off Bluetooth and mobile data for best performance. Before diving your Trident, refer to “Trident Pro-Tips’.



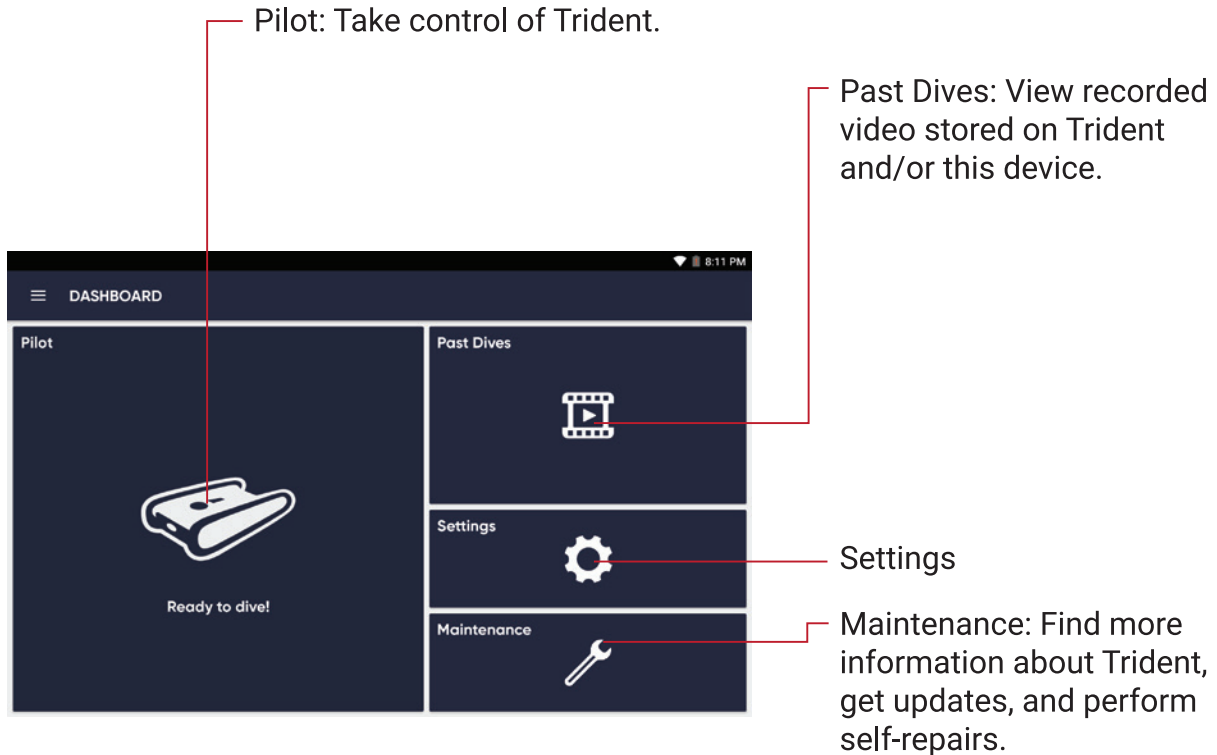
Connect Controller to Trident



1. Access the Android WiFi settings by swiping down from the top of the screen twice. This might be slightly different depending on the device you are using.
2. From the drop down menu, select the topside SSID ("Trident-XXXX") which can be found on the back of the topside / tether reel.
3. Enter the password located on the back of the topside / tether reel.



Dashboard screen



Past dives screen

1080p High-Quality (HQ) videos that are saved on Trident's on-board memory.

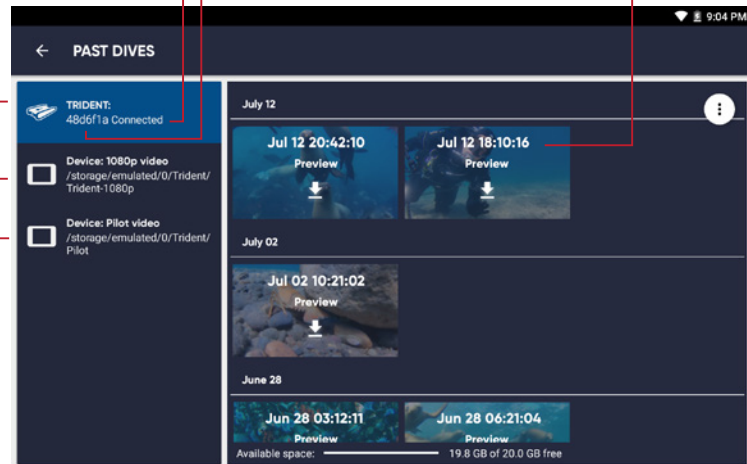
1080p HQ videos that have been downloaded to this device from Trident.

720p pilot videos that are saved directly to this device.

Trident connection status

Trident serial number

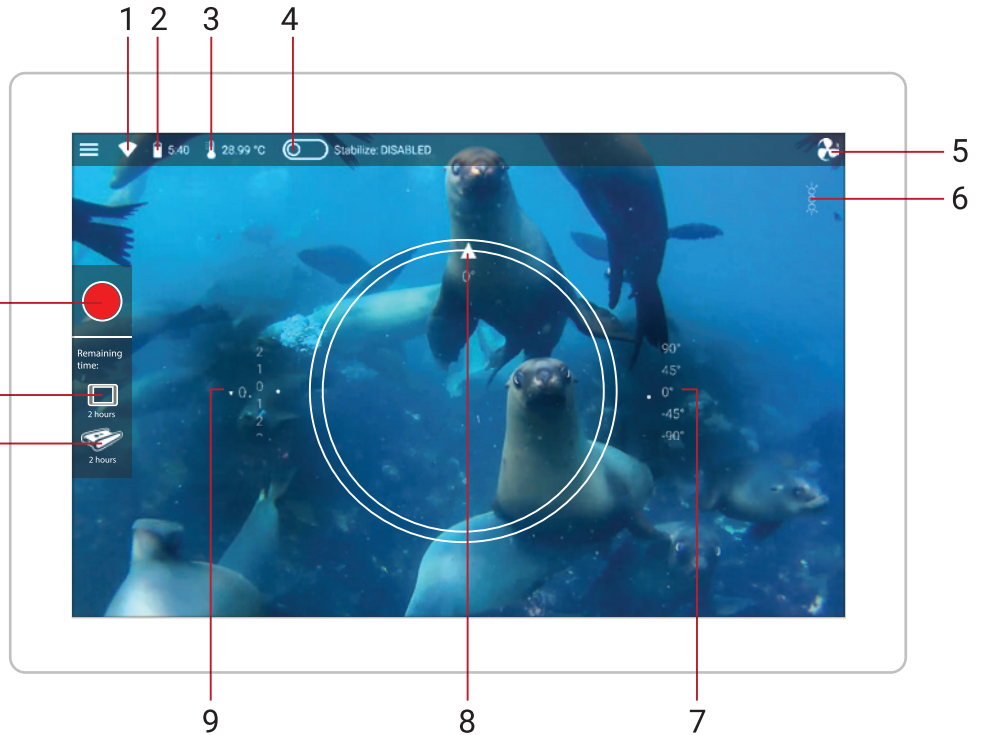
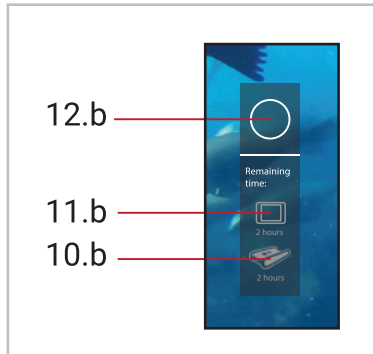
Date and time video was created:
month day hour:min:sec








Available Trident storage space:
Trident's storage capacity is 20GB which is about 2.3 hours of 1080p recording space.

Pilot screen

Recording off:

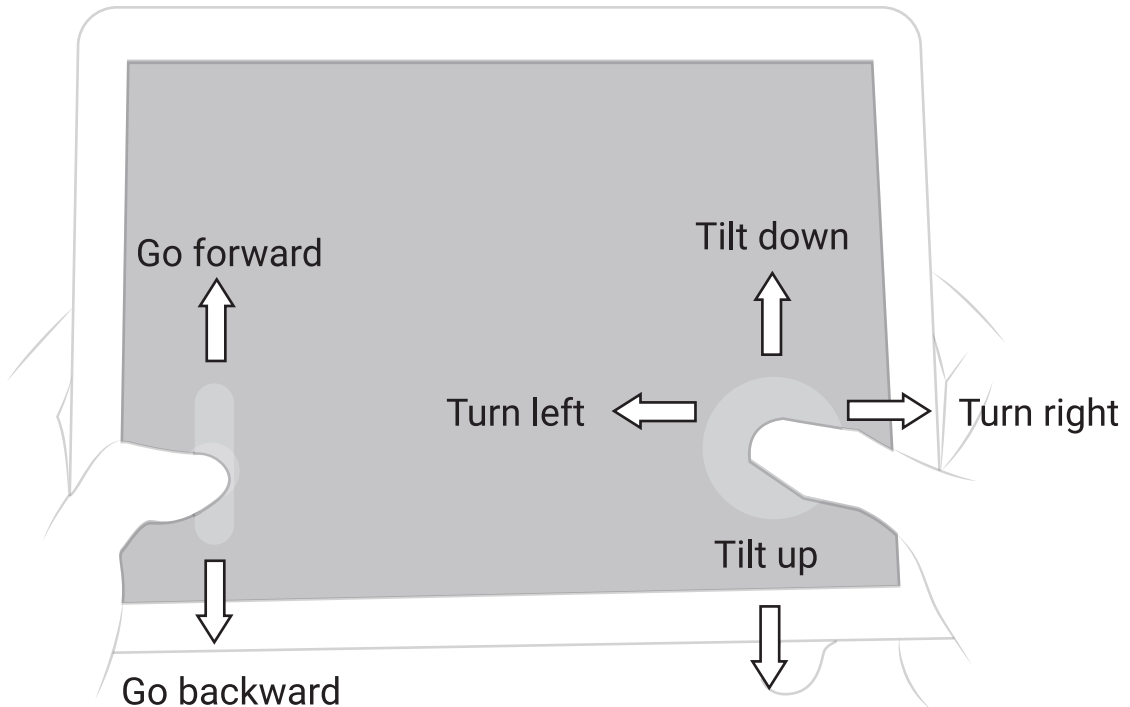


11.

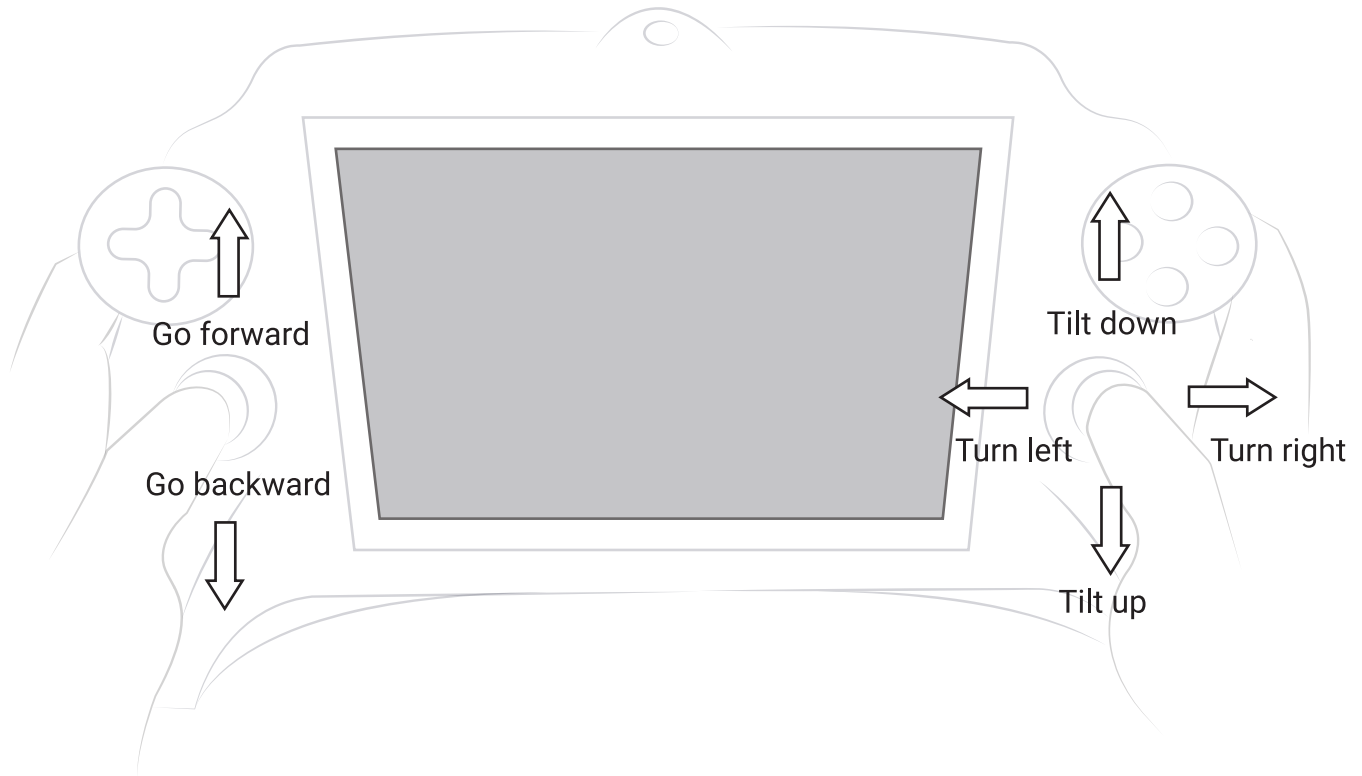
1. WiFi connection: Controller/topside connection status.
2. Trident battery level: hr:min (Switch to % in settings).
3. Water temperature in Celsius (Switch to Fahrenheit in settings).
4. Stabilization: Maintain heading and depth when no control inputs are being made
This system is automatically deactivated at depths shallower than 0.3 meters to prevent the motors from spinning when the vehicle is out of the water.
5. Motor speed:  Slow  Medium  Fast
6. Lights:  Off  On
7. Vertical pitch angle
8. Compass heading
9. Depth in meters (switch to feet in settings).
10. 1080p video storage remaining on Trident while recording.
- 10b. Grey icon and text indicate that you are not recording 1080p video to Trident.
11. 720p video storage remaining on your device while recording.
- 11b. Gray icon and text indicates that you are not recording 720p video to your device.
12. Red icon indicates recording mode has been started.
- 12b. Clear icon indicates not currently recording.

Tablet/phone controls

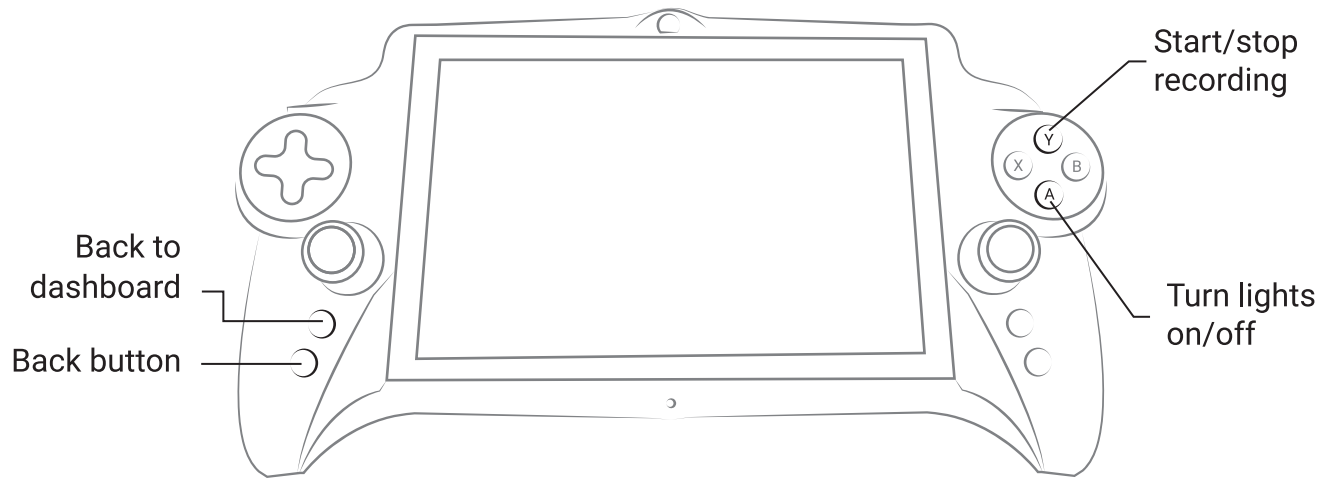
Hold the tablet/phone in landscape mode.
Put your thumbs anywhere on the screen to make the joystick appear.



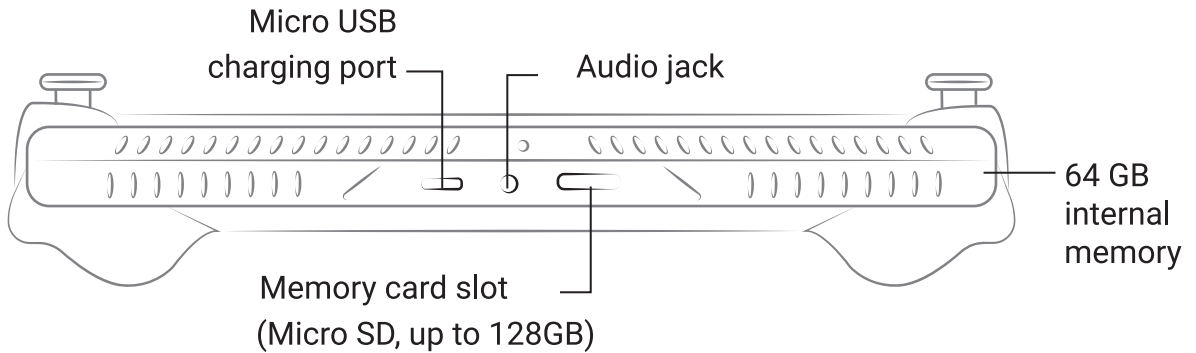
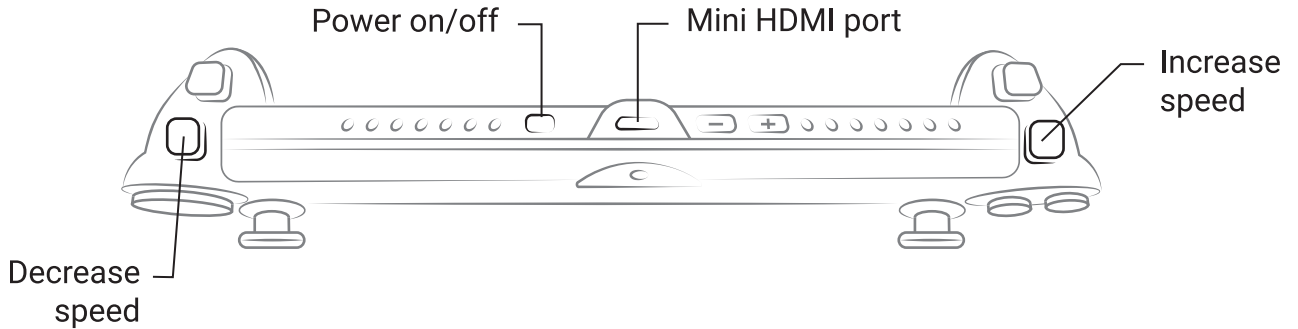
Gamepad controls



Gamepad controls continued



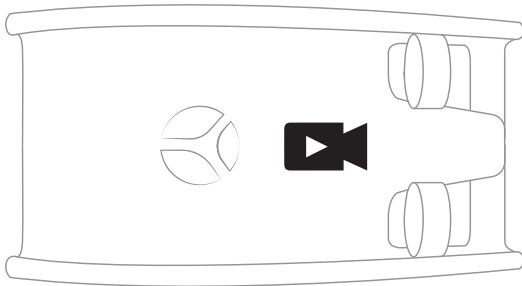
Gamepad controls continued



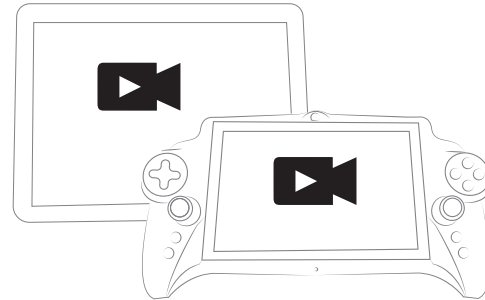
Record video

(Default)

Recording mode 1: Both (1080p and 720p)



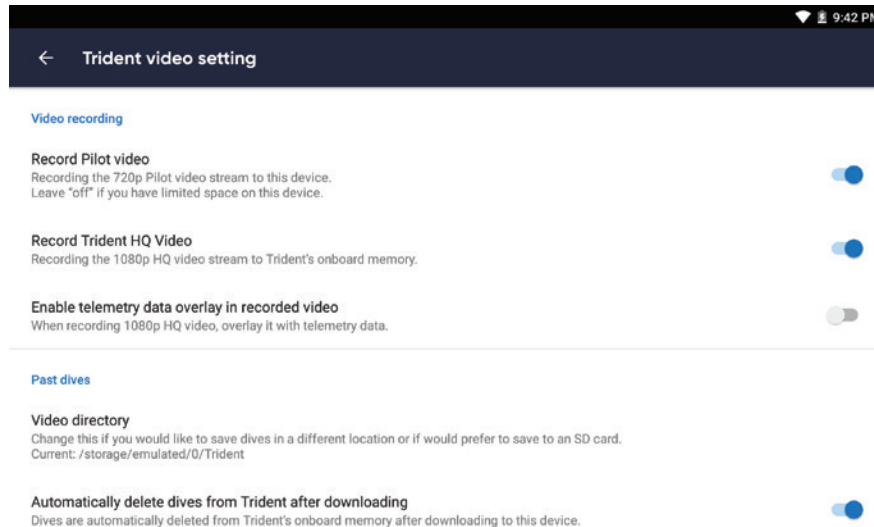
1080p video recording directly on Trident.



720p Pilot video recording directly on device.

Recording configurations

(Default) Recording mode 1: Both (1080p and 720p)

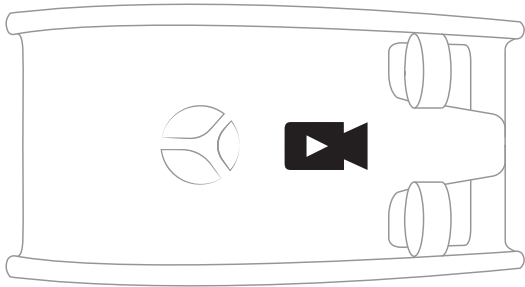


This configuration will record both 1080p “High-Quality (HQ)” video directly to Trident’s on-board memory *and* will record the 720p Pilot video to your device simultaneously.

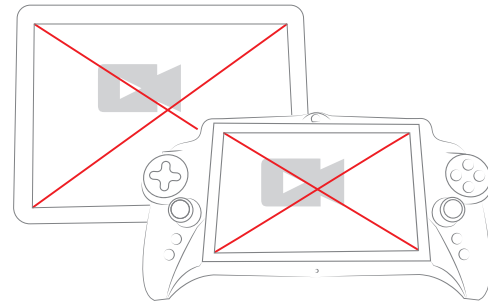
This is useful if you want a backup version of your dive video stored on your device.

Record video

Recording mode 2: Just Trident (1080p)



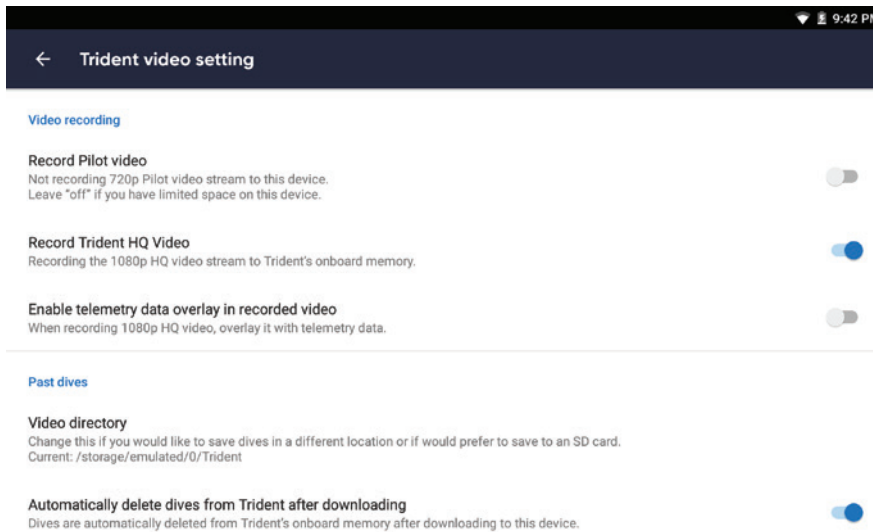
1080p video recording directly on Trident.



720p Pilot video not recording directly on device.

Recording configurations

(Default) Recording mode 2: Just Trident (1080p)

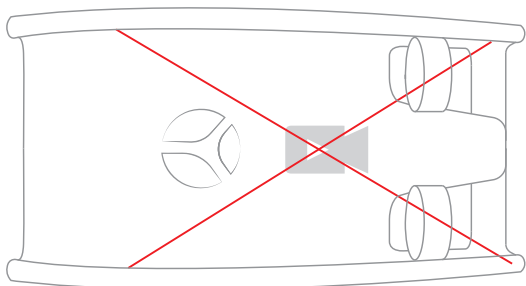


This configuration will record the 1080p “High-Quality (HQ)” video directly to the Trident’s on-board memory. You will view the 720 Pilot video on your device but it won’t be saved to it.

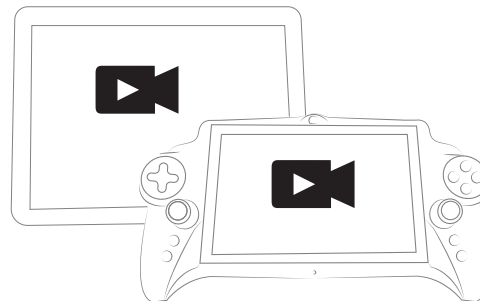
Use this configuration when you want to save space on your device which is especially important if you are using a smart-phone with limited storage.

Record video

Recording mode 3: Just device (720p)



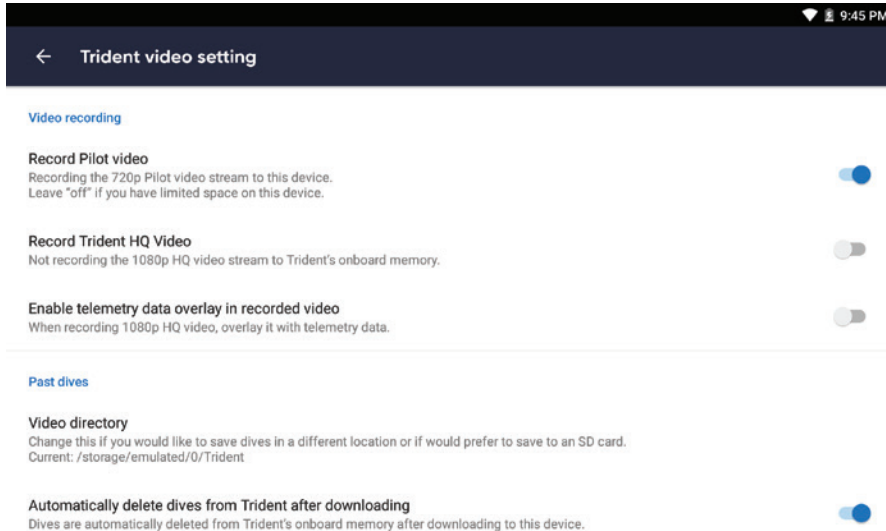
1080p video is not directly recording on Trident.



720p Pilot video is recording directly on device.

Recording configurations

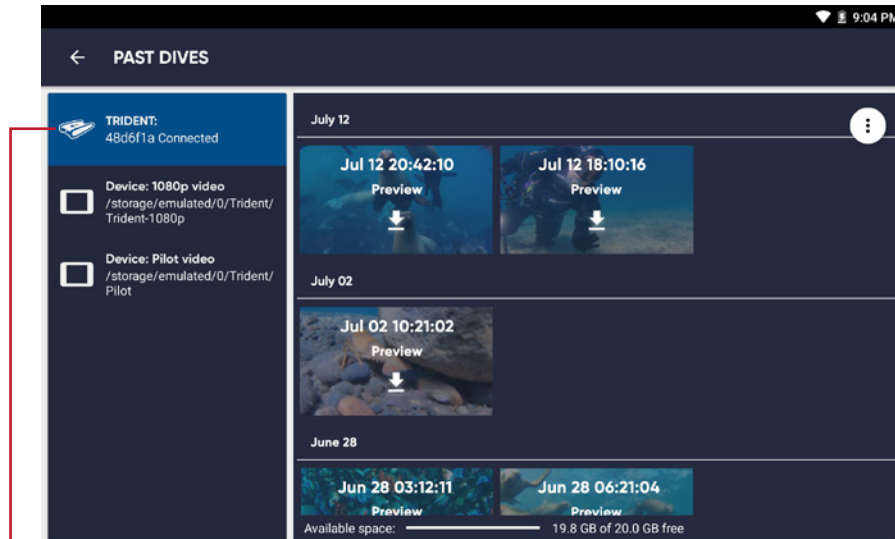
(Default) Recording mode 3: Just device (720p)



This configuration will record the 720p “Pilot” video that you are seeing on your device directly to your device. This is the configuration that all standard Tridents had prior to the 1.5.1 update.

This can be useful if your Trident’s on-board memory is full.

Preview recorded 1080p video on Trident

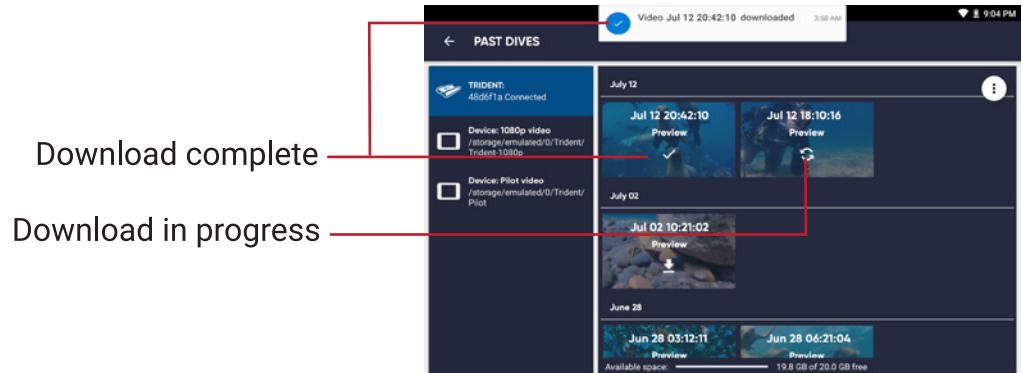
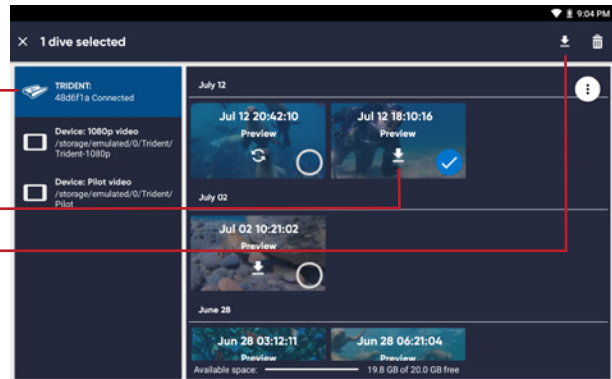


1. Connect Trident to device.
2. Press "Past Dives" from Trident "Dashboard" screen.
3. Press the "Trident" icon.
4. To preview a 1080p recording before downloading press anywhere on the video image.

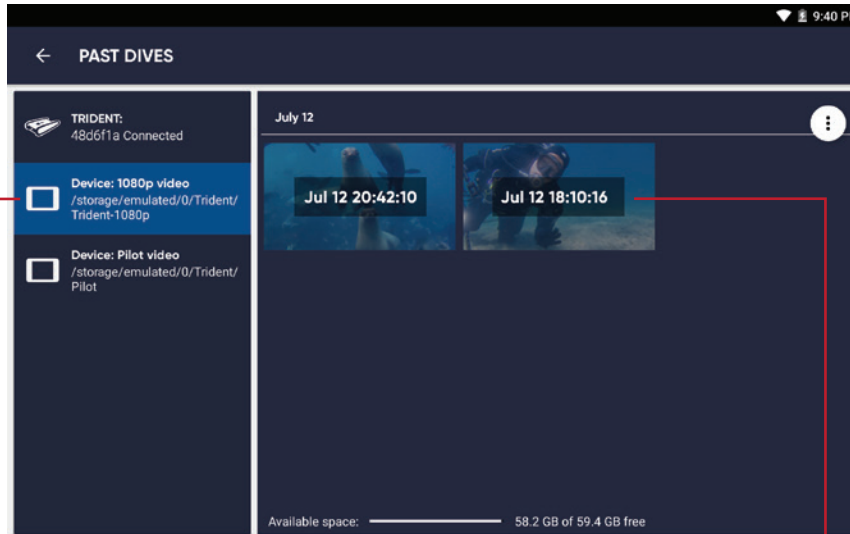
(Download 1080p video to the device for higher quality playback)

Download 1080p video to device

1. Connect Trident to device.
2. Press “Past Dives” from Trident “Dashboard”.
3. Press the “Trident” icon.
4. Press the download icon on each desired video. You can long press to select multiple videos, the download icon is then in top right corner.

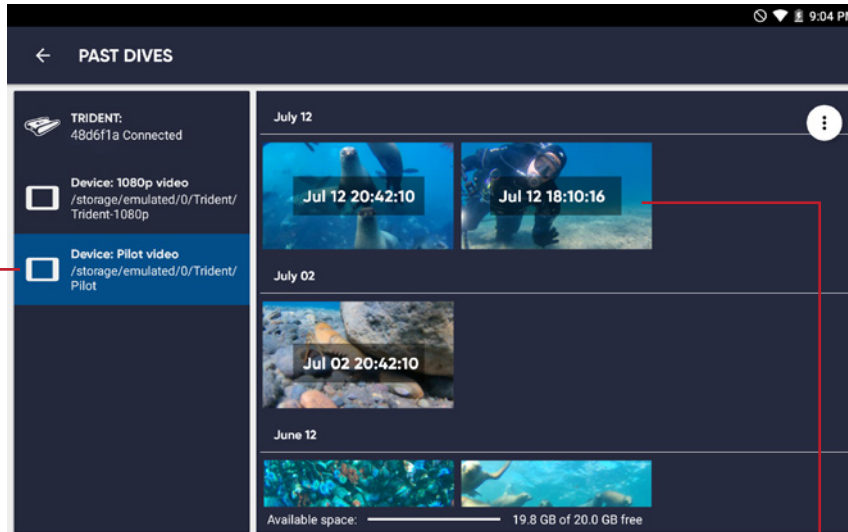


View downloaded 1080p video on device



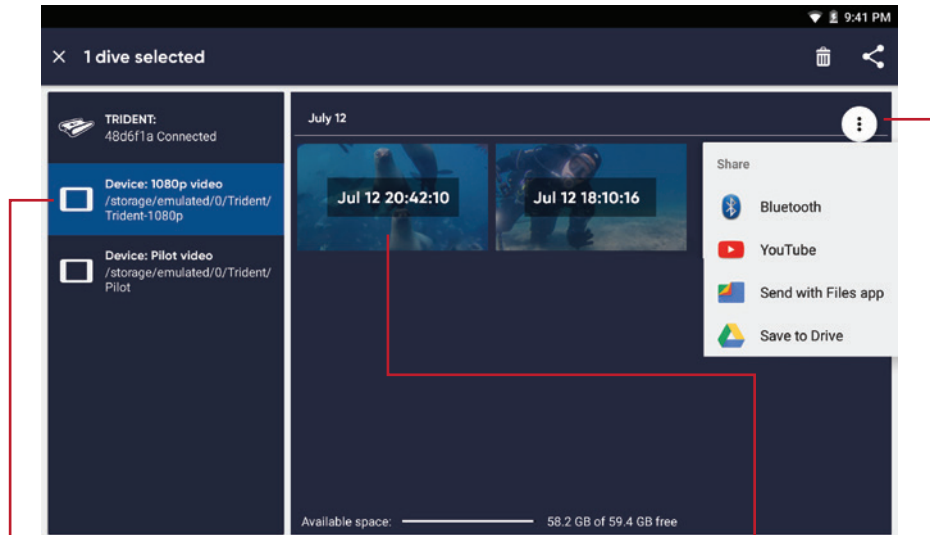
1. Press "Past Dives" from Trident "Dashboard" screen.
2. Press the "Device: 1080p video" icon.
3. To view a 1080p recording press anywhere on the video image.

View recorded 720p pilot video on device



1. Press "Past Dives" from Trident "Dashboard" screen.
2. Press the "Device: Pilot video" icon.
3. To view a 720p pilot recording press anywhere on the video image.

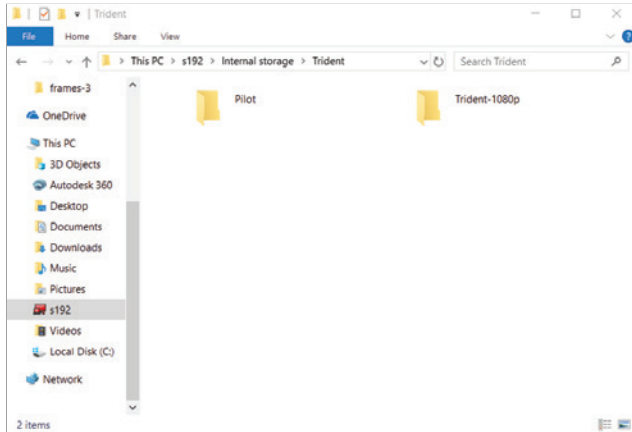
Shared recorded video to cloud storage



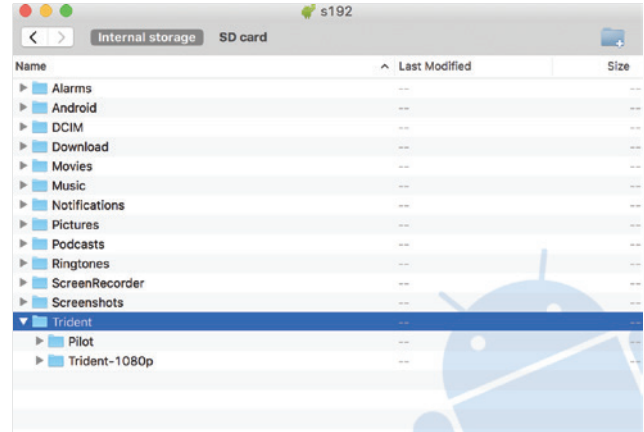
1. Press "Past Dives" from Trident "Dashboard".
2. Press the "Device: 1080p video" icon.
4. Long press the video you would like to share.
5. Press the Share icon in the top right corner.
6. Share via email, Google Drive, etc.

Export video via computer connection

Windows



Mac



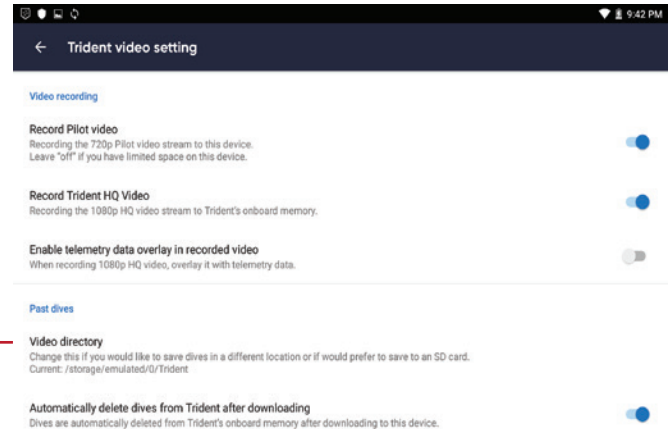
1. Connect Android device via USB cable to Mac or Windows computer. For Mac download the Android File Transfer app to your computer via the Android website.
2. Go to file explorer and drag your videos to desired storage location. Your videos will be located in the path below unless manually changed in the directory.

720p pilot video location: "Device name"> Internal storage > Trident > Pilot

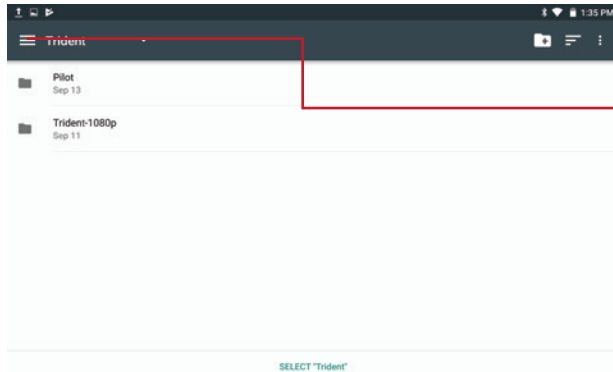
1080p video location: "Device name"> Internal storage > Trident > Trident-1080p

Record to device (controller) SD Card

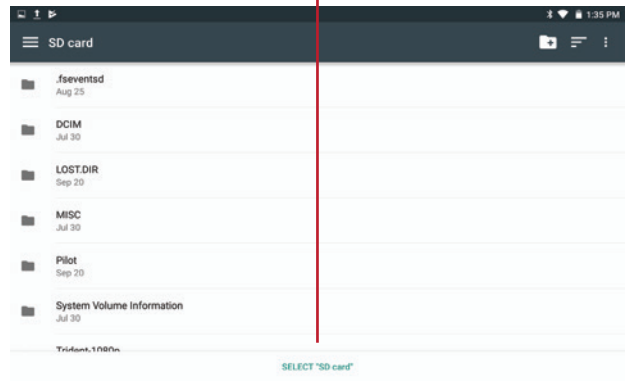
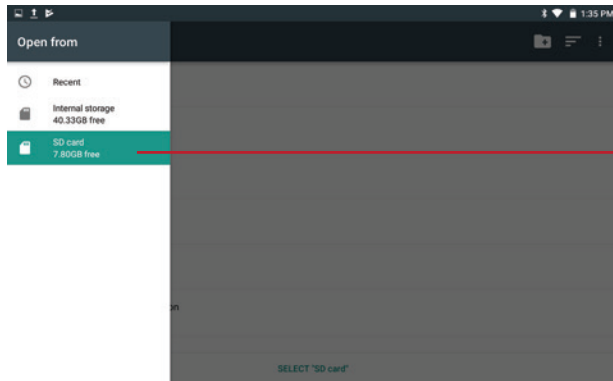
1. Insert SD card to your device before dive.
2. Launch Sofar Trident app, go to:
Settings > Trident video settings
3. Press video directory



Recording to device (controller) SD card



4. Press the hamburger menu bar.
5. Press "SD card"
6. Press "SELECT 'SD card'"



Manage updates



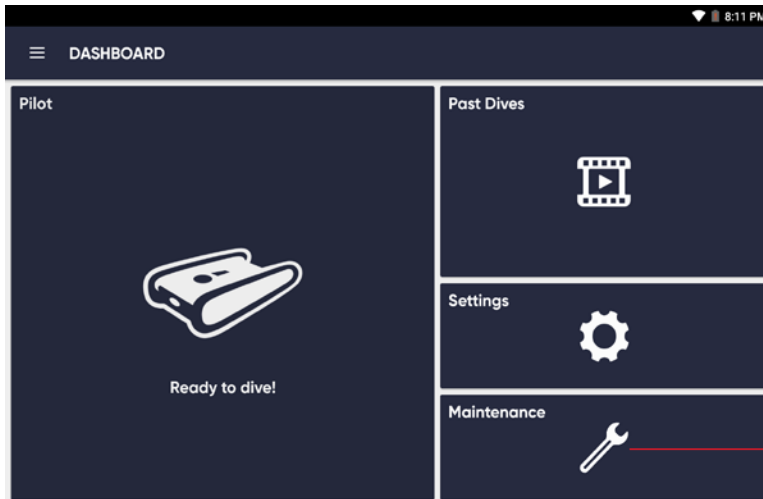
Check for App updates

New features, bug-fixes, and optimizations are released often. Make sure to keep the Sofar Trident App up-to-date. Remember to regularly connect your device to the internet to check for updates.

If you have enabled auto-updates your device will periodically check when an internet connection is present.

You can check manually by opening Google Play and navigate to the Sofar Trident App page.

Check for Trident software updates

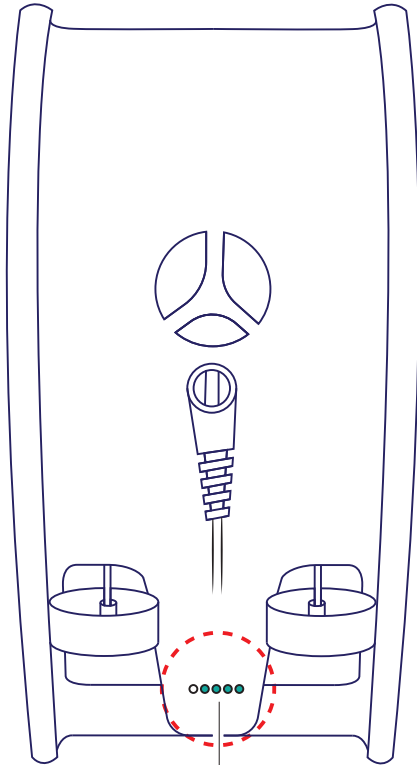


Trident has on-board software that also needs to be kept up-to-date.






You can do so by going to the "Maintenance" screen in the Sofar Trident App and press "Check for updates."

The latest version of the App will be needed for the latest Trident software update.

Battery information



33.

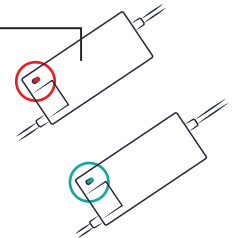
-  If the charging connector is not tightly screwed into Trident the battery will slowly drain.
-  Never run Trident until the battery dies as it is hard on the battery and you may corrupt your video files.
-  Always disconnect the charger from Trident first, then from the wall. Do not unplug the charger from the wall while still connected to Trident, otherwise the battery will slowly drain.
-  **WARNING:** If you suspect damage (or water inside), do not use or charge your Trident. Extra care is needed to store and transport potentially damaged lithium batteries. Place Trident in a cool, dry place away from combustible materials and contact our support team: support@sofarocean.com.
-  *After about 3 hours Trident will be fully charged.

Red charger light = Trident connected

Green charger light = Trident not connected

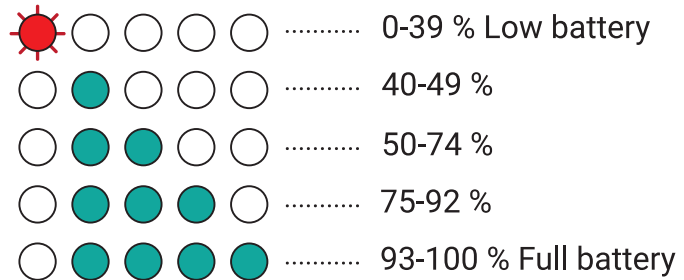
Battery level indicators - located on the tail board.

Battery charger

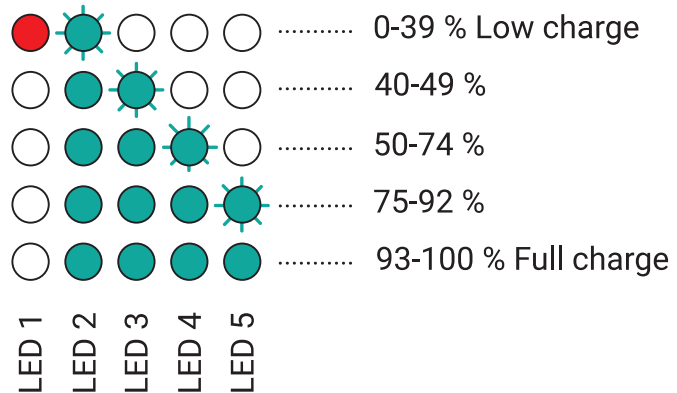


Battery information

Discharging battery level indicators (While Trident is in use)



Charging battery level indicators



Maintenance & care

***The tether connector port should always be dry and clean when the tether is not connected.**

After care

1. Leave the tether connected to protect the electrical contacts once removed from water.
2. Immediately after a dive, thoroughly rinse and/or submerge Trident in freshwater. The tether, tether reel, and topside (with USB cover in place) can all be rinsed in this way.
3. Remove the rear motor covers with a #1 Phillips screwdriver and flush both horizontal motors with freshwater. Make sure there is no foreign material in this area such as seaweed or sand.
4. Flush the vertical motor. No cover removal is necessary.
5. Towel dry Trident and remove the tether to turn off Trident and carefully dry the tether connector. Make sure the connector and connector port stay dry and free from sand and grit.
6. Allow any excess water to drain completely by holding Trident vertical with the camera facing up.
7. Make sure Trident is completely dry before storage. If you must travel immediately, make sure to open the carrying case and motor covers as soon as you arrive at your destination to allow everything to dry adequately.

General care

8. To clean the body of Trident use mild detergents (dish soap works) diluted in freshwater and a soft, clean cloth.
9. Dielectric grease can be used to protect the tether electrical contacts.
10. WD-40 or other hydrophobic spray can be used to remove particles and moisture from inside the moving parts of the motors.

Battery safety

Trident contains Li-ion batteries.

WARNING: Li-ion batteries are volatile and can be very dangerous if mishandled. Failure to read and follow the below instructions may result in fire, personal injury and damage to property if charged, stored or used improperly.

General safety

Charge and operate Trident between ambient temperatures of 0 and 40 degrees C (32 and 104 degrees F)

If you suspect damage to Trident, do not use it.

Do not place any conductive or magnetic materials or liquids on or near the tether connector on Trident.

Charger safety manual

For your protection, please read this manual completely before operating the appliance, and keep this manual for future reference.

Charging instructions

1. Connect the charger directly to a power source. Never use extension cords. 2. Avoid reverse charging. 3. Do not use for non-rechargeable batteries, as they can overheat and break. 4. The chargers are not intended to charge automobile batteries.

Important

1. The charger is designed for indoor use only. Do not expose it to rain or snow. 2. Misuse other types of batteries may burst causing personal injury and damage. 3. Do not incinerate, disassemble or short circuit batteries. 4. If the performance of the batteries decrease substantially, it is time to replace the batteries. 5. Store the charger in a cool and dry place when not in use. 6. Disconnect the supply before making or breaking the connections to the battery: **WARNING:** Explosive gases. Prevent flames and sparks Provide adequate ventilation during charging. 7. During charging, the battery must be placed in a well ventilated area. 8. Keep electrical appliances out if reach from Children or infirm persons. Do not let them use the appliances without supervision. 9. This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning the use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

-This product must not be disposed together with that domestic waste. This product has to be disposed at an authorized place for recycling of electrical and electronic appliances. - By collecting and recycling waste, you help save natural resources, and make sure the product is disposed in an environmentally friendly and healthy way. - This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of appliance in a safe way and understand the hazards involve.- Children shall not play with the appliance. - Cleaning and user maintenance shall not be made by children without supervision. www.mdacharger.com

Charging

Allow 30 minutes after operating Trident before placing it on charge.

Always have a fire extinguisher nearby for emergency use.

Always charge Trident in an isolated area, away from other flammable materials such as wooden furniture or carpet.

Use a charger specifically made for Trident.

Never charge Trident unattended.

Storage and Transport

Store Trident between 32 and 113 degrees F (0 and 45 degrees C) for best performance and longest life.

Do not expose Trident to direct sunlight or heat for extended periods.

When transporting or temporarily storing Trident, make sure not to exceed the temperature range listed above.

Flying on an airplane

Trident's total rated capacity is 95 Wh. The battery packs are UN 38.3 certified.

Always check with your airline prior to flight for the latest rules and regulations.

Shipping

Trident is classified as UN 3481, and for shipping purposes must follow PI967 section II.

If you have any questions, please contact us: support@sofarocean.com

Last Updated: July 23, 2019

Regulatory information

FCC Compliance Notice

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 and correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the 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.

Trident Contains FCC ID: 2ABCB-RPI32

Topside Contains Transmitter Module FCC ID:Z9W-RMB