



BRNKL

HARDWARE INSTALLATION GUIDE

VERSION 1.0

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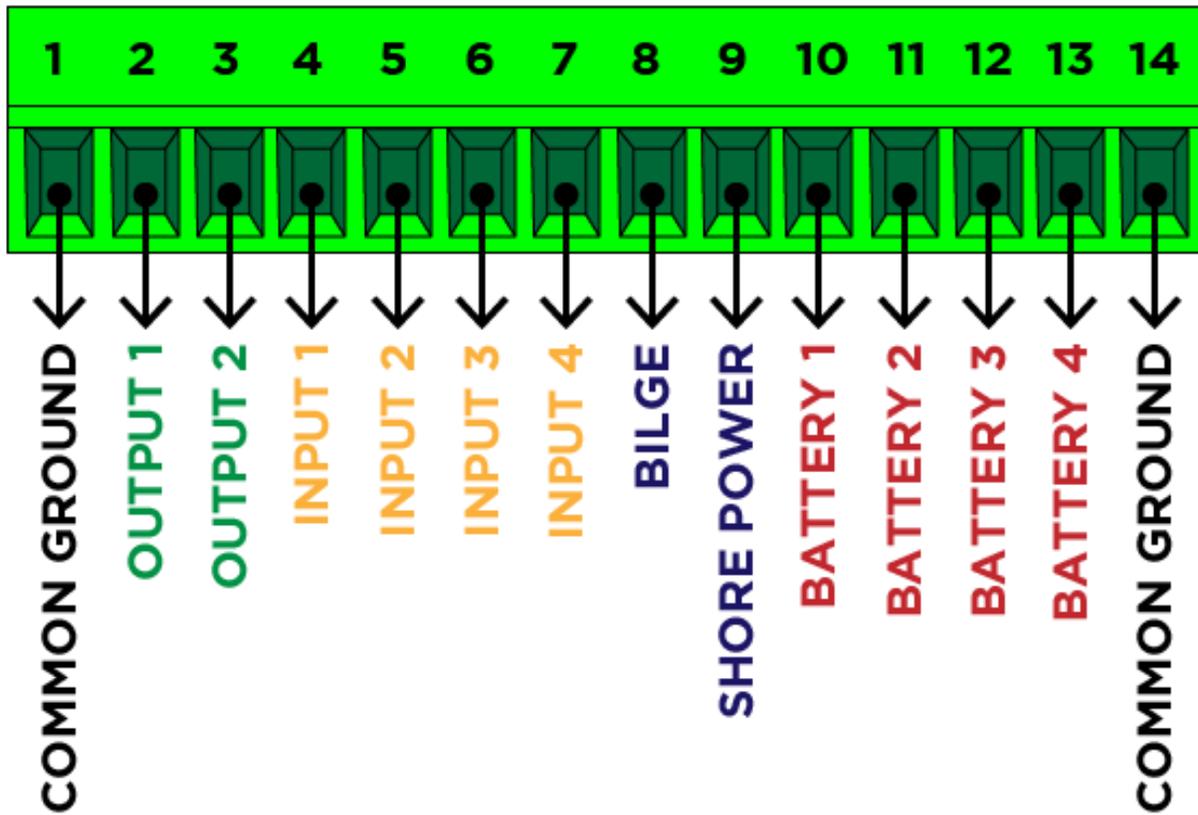


WE TAKE YOUR PRIVACY SERIOUSLY

We're committed to being open and honest about how we use data. We'll always ask for permission before sharing personally identifiable information like your e-mail address, and we keep your data safe with industry standard tools. To learn more about our Privacy Policy, go to brnkl.io/privacy

CONNECTOR LAYOUT

The BRNKL connector allows external components to be connected to the system for monitoring. The connector requires a 2.5mm slot-style screw driver in order to tighten the terminals.



SINGLE BATTERY MONITORING

In order to monitor your boat's battery voltage you must make a connection between the BRNKL and either the battery's terminal posts or to a constant 12/24/48V source powered from that battery.

It is recommended that a 3A fuse is placed in line between the battery's positive terminal and the BRNKL's connector.

Step 1: Connect a wire to the 12/24/48V DC power source and include a 3A inline fuse.

Step 2: Connect the wire to the BRNKL connector indicating BATT 1+.

Step 3: Connect a wire from the battery ground or from the common-ground of your vessel to the BATT GND terminal on the BRNKL connector.

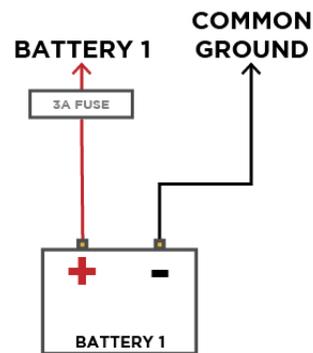


Figure 1: Single Battery Monitoring

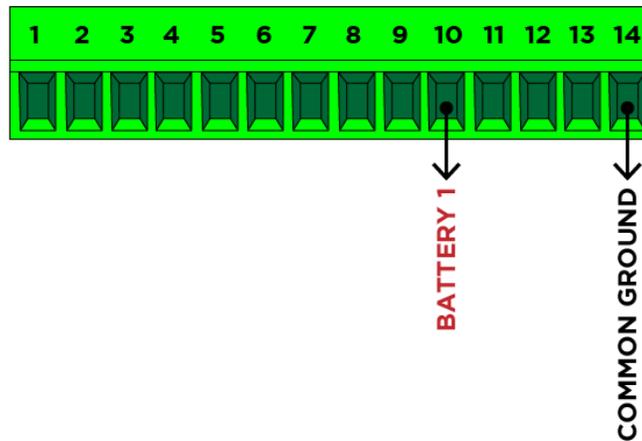


Figure 2: Single Battery Connection

MULTIPLE BATTERY MONITORING

In order to monitor multiple batteries (up to 4) on your boat you must make a connection between the BRNKL and the battery terminal posts or to a constant 12/24/48V source powered from each battery. The most common configuration includes a “Starter” battery and a “House” battery bank. The House battery will have a common 12 or 24V available on your boat. The Starter battery may go directly from the battery to the ignition on your engine, in this case you will want to connect directly to the Starter battery. It is recommended that a 5A fuse is placed in line between the battery’s positive terminal and the BRNKL’s connector.

Step 1: Connect a wire from the common-ground of your vessel to the BATT GND terminal on the BRNKL connector.

Step 2: Connect a wire to the 12/24/48V DC power source and include a 3A inline fuse. Connect this first wire to BATT 1+.

Step 3: Repeat Step 2 for all additional batteries. Simply move to BATT 2+, 3+ and 4+.

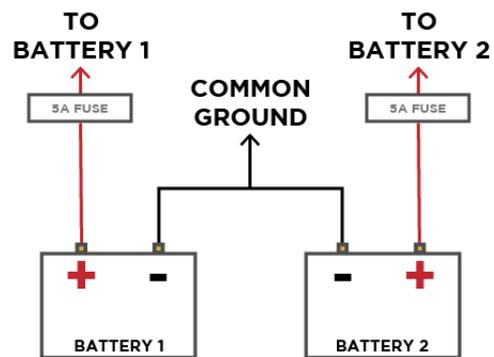


Figure 3: Multiple Battery Monitoring

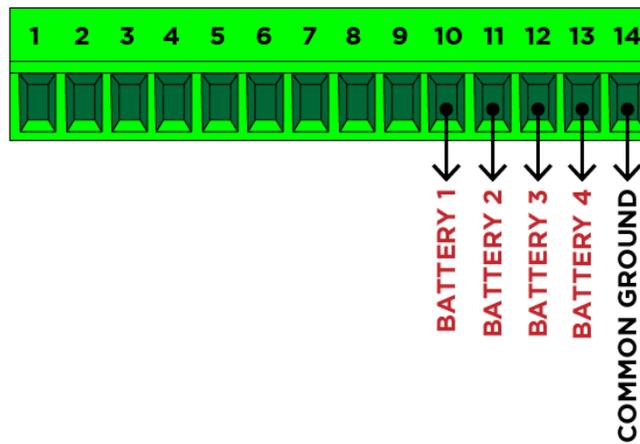


Figure 4: Connecting Multiple Batteries

BILGE MONITORING

In order to monitor your boat's bilge activity, the BRNKL must be connected to the bilge pump's switching power source. Most commonly the bilge pump is connected to a float switch, which is then connected to one of the boat's batteries. In this case, connect a wire from the bilge pump's positive terminal to the BRNKL bilge input.

If your boat has a "high-water alarm" or "bilge active" light then the installation requires far-less wire-routing. Simply 'steal' the signal from your high-water alarm or light by connecting a wire from that signal and connect it to the Bilge connection on the BRNKL connector.

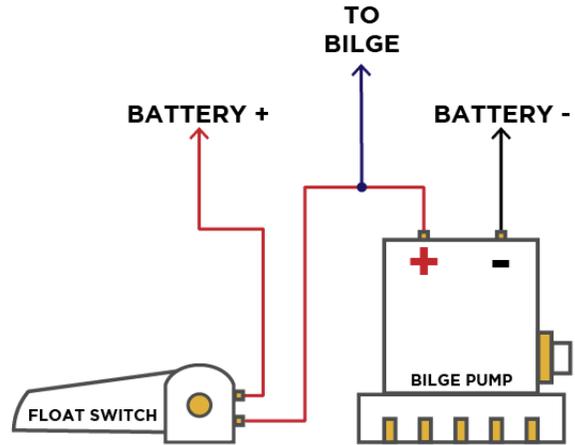


Figure 5: Bilge Monitoring

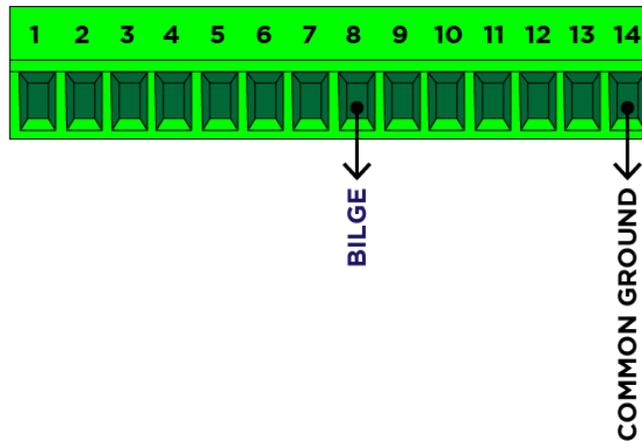


Figure 6: Connecting Bilge

DOOR AND WINDOW MONITORING

Monitoring the doors and windows can be done very easily with the BRNKL door/window sensor.

Step 1: Place using the supplied double-sided tape or screws, secure the sensor to the frame and door/window that you wish to monitor.

Step 2: Run the two wires from the sensor to the BRNKL's green terminal strip. On the terminal strip identify a digital input (one through four) that you would like to connect this sensor to.

Step 3: Screw one of the wires to the **Digital 1-4** terminal and the other wire to the **Common Ground** terminal. It does not matter which wire you select for **Digital Input 1-4** and **Common Ground**.

Tip: You can have multiple door/window switches connected to a single input. For example, if you'd like to have a single input associated with ALL of your doors, simply run one of the wires from each of your door sensors to **Input 1**. You can then connect the second wire from all of the door sensors to the **Common Ground** pin of the BRNKL connector.

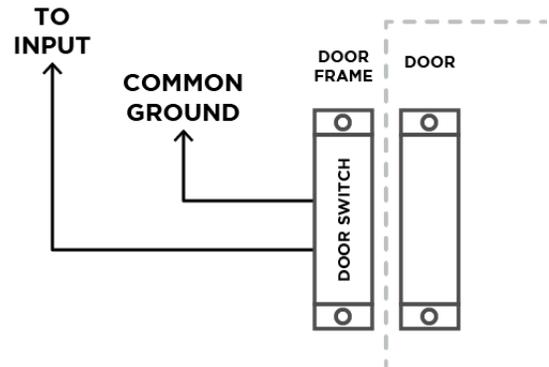


Figure 7: Door and Window Monitoring

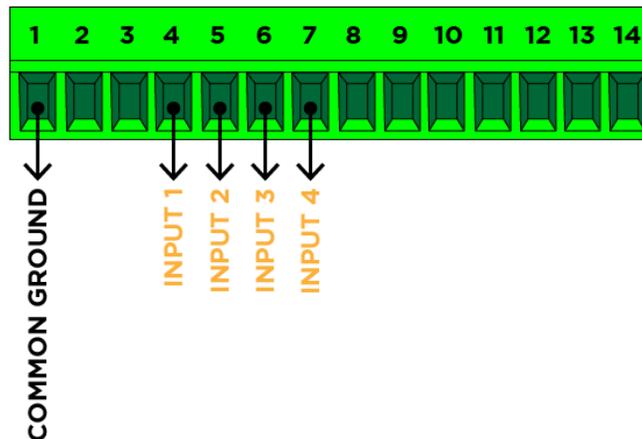


Figure 8: Connecting Inputs

TRIGGERING OUTPUTS

Outputs from the BRNKL switch the ground connection of your devices on and off. This will not only allow external devices to turn on and off, but it also allows your device to have a different power source than the one used in your BRNKL.

Step 1: Make a connection from a BRNKL output to the Ground or Negative '-' terminal on your load device (lights, siren, etc).

Step 2: Connect 12 or 24VDC power to your load's Positive '+' terminal.

Step 3: Trigger an output from your BRNKL app in order to test the switching of the load device.

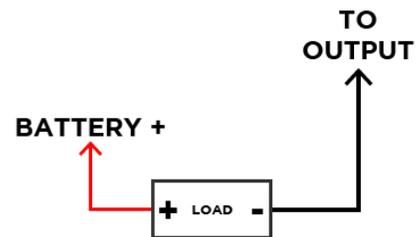


Figure 9: Triggering Outputs

Tip: You can trigger multiple devices connected to a single BRNKL output, however the maximum load that the BRNKL can support on a single output is 2A.

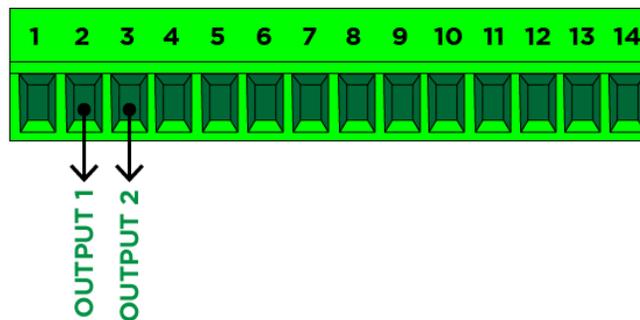


Figure 10: Connecting Outputs

TERMS AND CONDITIONS

Definitions

- **End User** refers to the owner of a Barnacle Systems Device (BRNKL).
- **Service Provider** is Barnacle Systems Inc.
- **Distributor:** The Service Provider's representative in Canada and the U.S.A. is Barnacle Systems, 2624 Victor St, Victoria, BC, V8R 4E2.
- **Service** means the communication and access to infrastructure and telecommunication systems needed to alert the End User of an occurrence on board detected by the installed Barnacle Systems Device.
- **Network** means the public telecommunications system by which the Barnacle Systems Service is made available.
- **Service Contract Agreement** means the contract between the Service Provider, Barnacle Systems, and the End User.
- **Minimum Contract Period** means the period during which the End User has agreed to use, and pay for the Service.
- **Service Charge** means the monthly payments the End User pays for the Service during the Contract Period.
- **Barnacle Systems Server** means the servers and other hardware and infrastructure needed in order to provide the Service.
- **Barnacle Systems Device** is any and all hardware that is sold by or distributed through Barnacle Systems Inc. Includes the BRNKL and all accessory sensors that are paired with the BRNKL base unit.
- **Early Termination Fee** is a fee of \$9.00 will be charged to the End User via the Service Provider if or when the End User terminates their Service Agreement with the Service Provider prior to the assigned date.
- **Action Plan** is a pre-determined plan of events to be acted on when or if any major event occurs onboard that you are notified via the Barnacle Systems Device.

In order to use the Barnacle Systems equipment there must be a current Service Contract Agreement between the End User and the Service Provider. The Service Contract has a minimum Contract Period during which the End User is obligated to pay the monthly Service Charge. The Service Contract Agreement is normally entered online during the installation of the Barnacle Systems Device. The Service Contract incorporates and includes by reference the current Terms & Conditions for the Barnacle Systems Device.

Scope of Service

The service includes cellular (GSM) communication between the Barnacle Systems Device and the Barnacle Systems Servers, text (SMS) message communication between the Barnacle Systems Server and the end user's mobile phone, E-mail communication between the Barnacle Systems Server and the End User as well as access to the Barnacle Systems Web Portal through the Internet. The server also includes access to Support during the Contract Period and free software upgrades as well as the right to use any software included in the Service.

Service Availability

The cellular (GSM) service is available both domestically within the U.S.A. and Internationally. All cellular (GSM) communication between Barnacle Systems Device and Barnacle Systems Servers is included in the monthly Service Charge. There are no extra roaming charges for systems used outside the U.S.A. The End User hereby acknowledges that the availability of the service may be affected by factors outside the Service Provider's control such as, but not limited to, physical obstructions, availability of Internet connections, routing of data over the Internet, atmospheric conditions and other causes of radio interference and by faults in other telecommunication networks to which the Network is connected. In connection with any such adverse effect on the quality and availability of the Barnacle Systems Service, the Service Provider shall incur no liability to the End User whatsoever. Notwithstanding such effects to the Services during the Contract Period, the End User shall remain liable for the payment of the Monthly Service Charge.

Contract Period

Each Service Contract Agreement has a defined Contract Period, which commences on the date the first Billing Cycle starts. The Contract Period is defined in the Service Contract Agreement. The End User agrees not to suspend service more than once in a 12-month period.

Use of the Built-in SIM Card

The Barnacle Systems Device has a built-in SIM card, the title to which belongs to the Service Provider and not the End User. The Service Provider reserves the right to cancel the service and permanently terminate the SIM card if:

- The End User repeatedly fails to pay the monthly service charge agreed during the contract period.

- If the system remains unused and the service agreement is not renewed or terminated after a period of six (6) months after the initial contract period has expired.
- If the SIM card is abused in any way or is removed from the Barnacle Systems Device.
- If the Service is canceled the Barnacle Systems may be sent to Service Provider or Distributor for a replacement SIM card. A minimum service fee of US \$100.00 will be charged for this. In case the Barnacle Systems Device and/or its internal SIM card are lost or stolen the End User is required to immediately notify the Service Provider. Until such notification has been received by the Service Provider the End User is liable for any and all charges incurred by the use of the Barnacle Systems Device and/or the SIM card.

Monthly Service Charge

The End User is required to pay the monthly Service Charge on time during the Contract Period or as long as the Service Contract Agreement is valid. The monthly Service Charge is automatically billed to End User's credit card on the 8th of each month (Billing cycle). The End User is required to maintain and enter valid credit card information into the system through the Barnacle Systems Web Portal, so that the Service Charge can be billed each month. Upon failure to pay the Service Charge the Service Provider reserves the right to limit the use of the system and/or terminate the Agreement. If terminated in such a way the End User shall remain liable to pay the Early Termination Fee. The Service Provider reserves the right to adjust price, terms and conditions when forced by factors outside its control. A minimum three (3) months notice applies before any such changes can take effect.

The Reinstatement Fee

The Barnacle Systems Service Agreement may be terminated before the expiration date of the Contract Period, upon payment, to Service Provider, a Reinstatement Fee of US \$9.00.

Automatic Continuation of Service Contract

After the initial Contract Period has ended the service will be automatically extended until terminated by the End User. After the initial Contract Period the End User has the right to terminate the Service Contract Agreement by giving notice, in writing, to the Service Provider. A three (3) month termination period shall apply during which the End User is liable to pay the monthly Service Charge.

Termination of Contract

After the Contract Period has ended the Agreement may be terminated by the End User by giving notice, in writing, to the Service provider or its distributor in the U.S.A. either by mail or by fax. The agreement will be terminated after three (3) months, starting from the first date of the month after the notice has been received by the Service Provider. A confirmation of Termination will be sent by the Service Provider to the End User. The termination notice shall be addressed to the Service Provider or its distributor in the U.S.A., Barnacle Systems. For address information see Contact details above under Definitions.

Confidentiality

The Service Provider agrees not to make available to anyone not directly affiliated with the Service Provider, any data stored on its Barnacle Systems Service Servers, unless the End User has agreed so. This includes, but is not limited to, positions or movements of the boat, information regarding the End User's address, status of alarms and warnings, telephone numbers, e-mail addresses as well as user name and password. The End User hereby agrees to the Service Provider's and its Distributor's right to access data stored on the Barnacle Systems Servers in order to help the End User in case of support and for trouble shooting as well as for system maintenance and software upgrades. The Service Provider and Distributor reserves the right to contact the End User, using the contact information stored on the Barnacle Systems Servers, in order to notify the End User of any potential problems, improvements or other things that affect the quality and security of the Service. The Service Provider will not knowingly make data stored on the servers available to persons not affiliated with Barnacle Systems except as agreed to by the End User and except as required by applicable law.

Liabilities

The Service Provider is not liable for any goods stolen or damages incurred as a result of the Service not being available. Barnacle Systems is not liable for defects in the Barnacle Systems Device or in the Service. The End User recognizes that factors outside the Service Providers control may affect the quality of the Service. Furthermore, it is the responsibility of the End User to act on notifications sent by the Barnacle Systems Device and for maintaining an up-to-date Action Plan online so that alarms and warnings can be sent to the right person(s). It is also the End User's full responsibility to inform any person(s) entered in the action plan of the desired action, should an

alarm or warning be received. The Service Provider takes no responsibility for any data stored on the Barnacle Systems Servers by the End User that may be offensive, incorrect or fraudulent.

LIMITED WARRANTY

THIS LIMITED WARRANTY CONTAINS IMPORTANT INFORMATION ABOUT YOUR RIGHTS AND OBLIGATIONS, AS WELL AS LIMITATIONS AND EXCLUSIONS THAT MAY APPLY TO YOU.

1. WHAT THIS LIMITED WARRANTY COVERS; PERIOD OF COVERAGE

Barnacle Systems, Inc. ("Barnacle Systems"), 2624 Victor St, Victoria, BC, Canada, warrants to the owner of the enclosed product that the product contained in this box ("Product") will be free from defects in materials and workmanship for a period of one (1) year from the date of delivery following the original retail purchase (the "Warranty Period"). If the Product fails to conform to this Limited Warranty during the Warranty Period, Barnacle Systems will, at its sole discretion, either (a) repair or replace any defective Product or component; or (b) accept the return of the Product and refund the money actually paid by the original purchaser for the Product. Repair or replacement may be made with a new or refurbished product or components, at Barnacle Systems' sole discretion. If the Product or a component incorporated within it is no longer available, Barnacle Systems may, at Barnacle Systems' sole discretion, replace the Product with a similar product of similar function. This is your sole and exclusive remedy for breach of this Limited Warranty. Any Product that has either been repaired or replaced under this Limited Warranty will be covered by the terms of this Limited Warranty for the longer of (a) ninety (90) days from the date of delivery of the repaired Product or replacement Product, or (b) the remaining Warranty Period. This Limited Warranty is transferable from the original purchaser to subsequent owners, but the Warranty Period will not be extended in duration or expanded in coverage for any such transfer.

2. TOTAL SATISFACTION RETURN POLICY

If you are the original purchaser of the Product and you are not satisfied with this Product for any reason, you may return it in its original condition within thirty (30) days of the original purchase and receive a full refund.

3. WARRANTY CONDITIONS; HOW TO GET SERVICE IF YOU WANT TO CLAIM UNDER THIS LIMITED WARRANTY

Before making a claim under this Limited Warranty, the owner of the Product must (a) notify Barnacle Systems of the intention to claim by visiting brnkl.io/support during the Warranty Period and providing a description of the alleged failure, and (b) comply with Barnacle Systems' return shipping instructions. Barnacle Systems will have no warranty obligations with respect to a returned Product if it determines, in its reasonable discretion after examination of the returned Product, that the Product is an Ineligible Product. Please recycle Barnacle's 100% recyclable packaging. Barnacle Systems will bear all costs of return shipping to owner and will reimburse any shipping costs incurred by the owner, except with respect to any Ineligible Product, for which owner will bear all shipping costs.

4. WHAT THIS LIMITED WARRANTY DOES NOT COVER

This Limited Warranty does not cover the following (collectively "Ineligible Products"): Products marked as "sample" or "Not for Sale", or sold "AS IS"; or Products that have been subject to: (a) modifications, alterations, tampering, or improper maintenance or repairs; (b) handling, storage, installation, testing, or use not in accordance with the User's Guide or other instructions provided by Barnacle Systems; (c) abuse or misuse of the Product; (d) breakdowns, fluctuations, or interruptions in electric power or the telecommunications network; or (e) Acts of God, including but not limited to lightning, flood, tornado, earthquake, or hurricane. This Limited Warranty does not cover consumable parts, including batteries, unless damage is due to defects in materials or workmanship of the Product, or software (even if packaged or sold with the product). Barnacle Systems recommends that you use only authorized service providers for maintenance or repair. Unauthorized use of the Product or software can impair the Product's performance and may invalidate this Limited Warranty.

5. DISCLAIMER OF WARRANTIES

EXCEPT AS STATED ABOVE IN THIS LIMITED WARRANTY, AND TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, BARNACLE SYSTEMS DISCLAIMS ALL EXPRESS, IMPLIED, AND STATUTORY WARRANTIES AND CONDITIONS WITH RESPECT TO THE PRODUCT, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, BARNACLE SYSTEMS ALSO LIMITS THE DURATION OF ANY APPLICABLE IMPLIED WARRANTIES OR CONDITIONS TO THE DURATION OF THIS LIMITED WARRANTY.

6. LIMITATION OF DAMAGES

IN ADDITION TO THE ABOVE WARRANTY DISCLAIMERS, IN NO EVENT WILL BARNACLE SYSTEMS BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, EXEMPLARY, OR SPECIAL DAMAGES, INCLUDING ANY DAMAGES FOR LOST DATA OR LOST PROFITS, ARISING FROM OR RELATING TO THIS LIMITED WARRANTY OR THE PRODUCT, AND BARNACLE SYSTEMS' TOTAL CUMULATIVE LIABILITY ARISING FROM OR RELATED TO THIS LIMITED WARRANTY OR THE PRODUCT WILL NOT EXCEED THE AMOUNT ACTUALLY PAID FOR THE PRODUCT BY THE ORIGINAL PURCHASER.

7. LIMITATION OF LIABILITY

THE BARNACLE SYSTEMS ONLINE SERVICES ("SERVICES") PROVIDE YOU INFORMATION ("PRODUCT INFORMATION") REGARDING YOUR BARNACLE SYSTEMS PRODUCTS OR OTHER PERIPHERALS CONNECTED TO YOUR PRODUCTS ("PRODUCT PERIPHERALS"). THE TYPE OF PRODUCT PERIPHERALS THAT MAY BE CONNECTED TO YOUR PRODUCT MAY CHANGE FROM TIME TO TIME. WITHOUT LIMITING THE GENERALITY OF THE DISCLAIMERS ABOVE, ALL PRODUCT INFORMATION IS PROVIDED FOR YOUR CONVENIENCE, "AS IS", AND "AS AVAILABLE". BARNACLE SYSTEMS DOES NOT REPRESENT, WARRANT, OR GUARANTEE THAT PRODUCT INFORMATION WILL BE AVAILABLE, ACCURATE, OR RELIABLE OR THAT PRODUCT INFORMATION OR USE OF THE SERVICES OR PRODUCT WILL PROVIDE SAFETY IN YOUR HOME, BOAT, OR OTHERWISE. YOU USE ALL PRODUCT INFORMATION, THE SERVICES, AND THE PRODUCT AT YOUR OWN DISCRETION AND RISK. YOU WILL BE SOLELY RESPONSIBLE FOR (AND BARNACLE SYSTEMS DISCLAIMS) ANY AND ALL LOSS, LIABILITY, OR DAMAGES, INCLUDING TO YOUR WIRING, FIXTURES, ELECTRICITY, HOME, BOAT, PRODUCT, PRODUCT PERIPHERALS, COMPUTER, MOBILE DEVICE, AND ALL OTHER ITEMS AND PETS IN YOUR HOME OR BOAT, RESULTING FROM YOUR USE OF THE PRODUCT INFORMATION, SERVICES, OR PRODUCT. PRODUCT INFORMATION PROVIDED BY THE SERVICES IS NOT INTENDED AS A SUBSTITUTE FOR DIRECT MEANS OF OBTAINING THE INFORMATION. FOR EXAMPLE, A NOTIFICATION PROVIDED THROUGH THE SERVICE IS NOT INTENDED AS A SUBSTITUTE FOR AUDIBLE AND VISIBLE INDICATIONS IN THE HOME OR BOAT AND ON THE PRODUCT, NOR FOR A THIRD-PARTY MONITORING SERVICE THAT MONITORS ALARM STATE.

8. YOUR RIGHTS AND THIS LIMITED WARRANTY

This Limited Warranty gives you specific legal rights. You may also have other legal rights that vary by state, province, or jurisdiction. Likewise, some of the limitations in this Limited Warranty may not apply in certain states. The terms of this Limited Warranty will apply to the extent permitted by applicable law. For a full description of your legal rights you should refer to the laws applicable in your jurisdiction and you may wish to contact a relevant consumer advisory