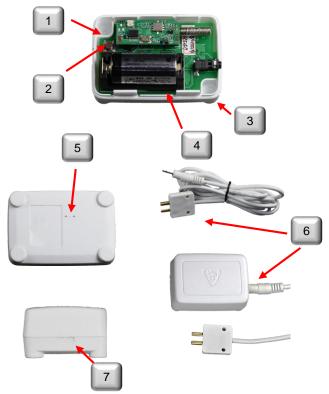


Vital Home Systems™ Model: VHS TWS-02 Temperature/Water Sensor

Dated 05/25/2016

Identifying Parts on the VHS TWS-02



- TWS-02 Temp/Water Sensor- This is the Temp/water sensor device to be paired with a control panel such as the Vital Home Systems 1050, 1060 4G or directly with the VC100.
- Test and Pairing Button

 Push this button to test
 the water sensor with a beep or push this button to
 when directed by the Vital Home Systems Control
 Panel PC Software.
- 3. Mounting Screws Holes
- 4. 3V CR123A lithium battery
- Water Detection Probes These two probes sit less than 1 millimeter off a hard surface. SEE WATER SENSOR PLACEMENT BEFORE DEPLOYING WATER SENSORS.
- Optional External Water Probe

 6 foot External
 Probe to monitor remote places such as under appliances or inside walls. Probe jack installs into side of TWS-02.
- 7. **TWS-02 Indent to Open Case** Use a Coin or other non-shape object to pry open case on left side.

TWS-02 Setup

IMPORTANT NOTE! Only use parts and devices supplied by Vital Home Systems with the TWS-02. Only use Vital Home Systems supplied batteries for the TWS-02. Installing or attaching devices not supplied by Vital Home Systems, may cause TWS-02 and system failure and damage as a result. All parts and devices are designed to work specifically with the Vital Home Systems. Any devices installed or attached to the TWS-02 from a third party, even if they have the same part number, immediately voids Vital Home Systems Limited Warranty and obligations.

<u>Step 1. Install batteries</u> – Remove any protective film from the CR123A 3V battery. To open sensor, use a coin or other non-sharp device to pry the top cover open from the indent on the left side of the sensor. Insert coin cell CR123A lithium battery at an angle with the positive (+) side up. Leave cover off for pairing

<u>STEP 2. Pair the TWS-02 to the 1050 /1060 4G or VC100</u> – All programming of the TWS-02 Temp/water sensor may be done via the 1050 or 1060 Control Panel with the Vital Home Systems PC software. The software may be downloaded from Vital Home Systems Website at: www.vitalhomesystems.com/#!resources/c9ds

You must register your 1050/1060, TWS-02 and VC100 (if purchased) on the Vital Home Systems Website to download the software. The Software is written only for Windows version 7 through Vista. Download and install the software to your Windows Desktop prior to plugging the 1050/1060 USB cable into the computer and the 1050 Control Panel. To pair the TWS-02 directly to the VC100, please contact Vital Home Systems.

TWS-02 Operation

IMPORTANT NOTICE TO USER: The installation of any temperature or water detection or automatic water shut off system does NOT guarantee a temperature condition or actual water will be detected on all occasions or circumstances. Due to the variety of environments the system can be installed, how it is maintained and types of installation, Vital Home Systems does NOT guarantee or warrant against temperature or water or property damage as a result of or/with the use of this system.

Normal Operation

The TWS-02 senses both temperature and water in the same device. The TWS-02 senses ambient room temperature and alarms when a set temperature band reaches an "out of band" condition. The TWS-02 also senses water via water probes on the bottom of the case and via an external water sensing probe. The TWS is paired with the VHS 1060 control panel and may also be paired with the VHS VC100. If the 1060 control panel loses connection with the TWS-02 after 12 hours it will send a "Fault Detected" report with the sensor ID to the user. The TWS-02 will also send a report on the condition of a low battery.

Temperature Detection

The TWS-02 will monitor temperature and report temperature when queried by the 1060. The TWS-02 can also have a temperature band set with a high and low temp band set by the 1060 setup software. Whenever the TWS-02 is above the high temperature setting it will alarm and whenever the TWS-02 is below the Low Temp Band setting it will alarm and notify the 1060 Control Panel with a Sensor Zone ID. If a VC100 is paired with the 1060 and TWS the VC100 will close on a Low Temp Alarm. The VC100 does not close on a high temp alarm.

Water Detection

The TWS-02 will only detect puddling water when it contact the water probes. It does not detect humidity. Water MUST contact the probes to actually report water. When water is detected and contacts the probe, the TWS-02 sends a "Leak Detected" report with the Sensor Zone ID. The TWS-02 will also make a beeping noise to alert the user. If the sensor is picked up and loses contact with the water or the alarm clears the TWS-02 will send an "Alarm Ended" report to the control panel. If a VC100 valve controller is paired with the 1050/1060 control panel and a specific TWS-02, it will be commanded to close upon the detection of water and will not reopen until the VC100 is commanded to open on the VC100, the 1050/1060 or remotely.

External Water Probe

To install the External water probe. Plug the jack into the right side of the TWS-02. The TWS-02 will now sense water in two locations at the same time. If possible affix the external probe to the surface to be monitored with 2 screws. You may also use double stick tape BUT only use thin film tape that does not raise the external probes more than 2 millimetres off the surface. DO NOT USE FOAM DOUBLE STICK TAPE this increases the distance from the probe to the surface of the water you are trying to detect. Accidental disconnect of the external probe will disable water detection by the external probe. The external probe does not detect temperature only water.

How to Avoid False Alarms

- Place the TWS-02 and probe in a location that will not accidentally contact water or come in contact with water while washing a floor.
- Do not place the TWS-02 on hot appliances or next to hot appliances
- Do not use the TWS-02 outdoors
- Do not place the TWS-02 in a drafty location as it will give erroneous readings
- Do not expose the TWS-02 to continuous high humidity with condensing moisture
- Avoid placing the TWS-02 or probe on a conductive surface or carpeting
- Avoid placing the TWS-02 or probe in a dusty environment
- Spider webs may also cause false alarms
- In the event of a false alarm. Wipe the probes with a clean dry cloth open the cover and inspect for water damage. If required allow to dry and insert a fresh battery to see if the false alarm clears.

Low Battery Condition

Once a "Low Battery" report is received. Replace the batteries in the TWS-02 as soon as possible, push the button on the sensor after installation. **NOTE: If the "Low Battery" report is cleared on the control panel the user will not receive another low battery alarm. Do not clear the alarm on the control panel until the TWS-02 batteries have been replaced.**

Water Immersion of a Water Sensor

If the water sensor is immersed in water or water enters the body of the sensor, the sensor must be replaced to operate properly and the new water sensor MUST be paired with the control panel with the PC software.

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Sensor Zone IDs

Sensor ID	Zone Name	Cold Water Valve ID	Hot Water Valve ID
1	AC Unit 1	1	1A
2	AC Unit 2	2	2A
3	AC Unit 3	3	3A
4	Bar Sink 1	4	4A
5	Bar Sink 2	5	5A
6	Bath Sink 1	6	6A
7	Bath Sink 2	7	7A
8	Bath Sink 3	8	8A
9	Bath Sink 4	9	9A
10	Bath Sink 5	10	9A
11	Bath Sink 6	11	11A
12	Bidet 1	12	12A
13	Bidet 2	13	13A
14	Bidet 3	14	14A
15	Bidet 4	15	15A
16	Coffee Maker	16	16A
17	Dehumidifier 1	17	17A
18	Dehumidifier 2	18	18A
19	Dishwasher 1	19	19A
20	Dishwasher 2	20	20A
21	Humidifier 1	21	21A
22	Humidifier 2	22	22A
23	Ice Maker 1	23	23A
24	Ice Maker 2	24	24A
25	Kitchen Sink 1	25	25A
26	Kitchen Sink 2	26	26A
27	Laundry Sink 1	27	27A
28	Master Bath Sink 1	28	28A
29	Master Bath Sink 2	29	29A
30	Master Toilet 1	30	30A
31	Master Toilet 2	31	31A

Sensor ID	Zone Name	Cold Water Valve ID	Hot Water Valve ID
32	Refrigerator 1	32	32A
33	Refrigerator 3	33	33A
34	Shower 1	34	34A
35	Shower 2	35	35A
36	Shower 3	36	36A
37	Shower 4	37	37A
38	Shower 5	38	38A
39	Shower 6	39	39A
40	Toilet 1	40	40A
41	Toilet 2	41	41A
42	Toilet 3	42	42A
43	Toilet 4	43	43A
44	Toilet 5	44	44A
45	Toilet 6	45	45A
46	Tub 1	46	46A
47	Tub 2	47	47A
48	Tub 3	48	48A
49	Tub 4	49	49A
50	Tub 5	50	50A
51	Tub 6	51	51A
52	Washing Machine 1	52	52A
53	Washing Machine 2	53	53A
54	Water Appliance 1	54	54A
55	Water Appliance 2	55	55A
56	Water Appliance 3	56	56A
57	Water Filter 1	57	57A
58	Water Filter 2	58	58A
59	Water heater 1	59	59A
60	Water heater 2	60	60A
61	Water Heater 3	61	61A
62	Water Main	62	62A
63	Water Soft 1	63	63A
64	Water Soft 2	64	64A

FCC Compliance Statement



Information for the U.S. Users:

FCC part 15:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

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

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.

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

Vital Home Systems Limited Warranty

This Limited Warranty shall apply to items manufactured sold or distributed by Vital Home Systems LLC ("VHS") that include the VHS and/or VHS wholly-owned or partially-owned brands or subsidiaries and were purchased from VHS or an authorized VHS distributor or reseller directly by the end user of the item (Customer).

VHS LIMITED WARRANTY AND LIABILITY

The Vital Home System is an advanced design in water detection; it does not offer guaranteed protection against a water event, water damage, or an emergency. Any controls system, whether commercial or residential, is subject to compromise or failure for a variety of reasons, including, but not limited to, installer or operator error.

Therefore, Vital Home Systems LLC does NOT WARRANT or REPRESENT water damage will not occur through the purchase or installation of this system. NOR IS VITAL HOME SYSTEMS LIABLE FOR WATER DAMAGE OR ANY OTHER DAMAGE AS A RESULT OF THE USE OR INSTALLATION OF ITS PRODUCTS.

VHS hereby represents and warrants that original items manufactured (hardware), sold (embedded downloaded software), or licensed (external software) by VHS and supplied to Customer for use, (hereafter known as "Product") shall be free from significant defects in material and workmanship and will reasonably conform to applicable specifications and drawings, each subject to normal use and service as set forth in the Product Limited Warranty Period section of this agreement (the "Limited Warranty"). This Limited Warranty is applicable when Product is installed and used under normal conditions and in accordance with the operating instructions, pursuant to the Terms and Conditions set herein.

The sole and exclusive remedy of Customer for a breach of any of the foregoing warranties shall be limited, at the option of VHS, to either the repair or replacement of any defective or non-conforming component of the Products. Replacement Products or parts may be new or reconditioned. Such remedies shall be available to Customer only if VHS is notified in writing within the applicable Limited Warranty Period and is provided with a reasonable opportunity to cure such breach.

Products under warranty will be repaired or replaced at no charge to Customer, excluding shipping, with the exception of any issues or damage caused by the unauthorized repair by any and all third-party repair houses, which will be subject to repair or replacement charges as determined by VHS. Products repaired or replaced while under warranty are warranted for the remainder of the original Product Limited Warranty or for a period of sixty (60) days from the date of repair or the date of return shipment to Customer, whichever is longer.

This Limited Warranty only applies to the Customer as defined herein, and shall be of no force or effect if Product is sold or transferred.

INSTALLATION TO BE WARRANTED BY INSTALLER

If VHS provides installation services, VHS hereby warrants that all Services shall be performed in a professional and workmanlike manner. VHS will re-perform those Services that the parties mutually determine to be defective at VHS's expense provided that VHS receives notice thereof within sixty (60) days of performance of the Services.

VHS upholds a very high standard of execution. Understanding that conditions affecting Product repair or replacement may be beyond VHS's control, including vendor and/or manufacturer discontinuation, market-affecting conditions, and those conditions listed in the Limitation of Warranty, VHS strives to make all commercially reasonable efforts to assist our Customers towards the best possible outcome.

VHS DOES NOT warrant or represent services provided by its distributors, resellers or other third party installer directly or indirectly contracted by the customer to install VHS products.

PRODUCT LIMITED WARRANTY PERIOD

The Limited Warranty Period for Products manufactured or produced by VHS and supplied to Customer for use is one (1) year. The Limited Warranty Period begins on the date of purchase by the Customer and a completed Warranty Registration Card is submitted at Vitalhomesystems.com. Software is limited to a one (1) year warranty subject to applicable license agreements. Products not manufactured by VHS will carry the warranty and related terms and conditions of the original manufacturer (see Limitation of Warranty section).

If you have questions regarding technical support and eligibility, please contact VHS customer service.

PRODUCT WARRANTY AND SERVICE

VHS guarantees that Products under warranty will be replaced at no charge within the first sixty (60) days from the date of written or electronic notification if the Customer experiences a service-affecting failure. Return of the defective unit to VHS will be at Customer expense.

In order to obtain warranty coverage, Customer must first contact VHS's Technical Assistance Center ("TAC") by phone or email. TAC will ascertain the problem and determine the most appropriate solution for the Customer. TAC will assist and resolve the problem by phone and/or email when possible.

After the initial sixty (60) day period but within the Product's Limited Warranty Period, VHS will repair (or replace if Product cannot be repaired) an affected Product. Customer can return such item(s) (after obtaining a Return Material Authorization ("RMA") from VHS), freight prepaid, to VHS, and VHS will, in its sole discretion, either repair or replace the hardware, replace the software and/or correct substantial program errors and return such items to Customer, freight prepaid. If TAC determines that the Product can be repaired, Customer must first obtain an RMA from VHS. An RMA number is required prior to the return of any Product to VHS.

Failure to obtain an RMA number may result in rejection of the shipment to VHS and the subsequent return of this equipment to Customer at Customer expense. Instructions for obtaining an RMA number and the RMA form to be submitted with an RMA request can be found online at www.vitalhomesystems.com. VHS may elect to replace hardware parts with new or refurbished parts of equal quality. If VHS determines that the hardware and/or media are not defective, it will return such items to Customer, freight prepaid.

After the initial sixty (60) day period, VHS will replace a Product with an advanced field replacement if, and only if, Customer has purchased a maintenance agreement and for the installation base that includes the affected Product ("Maintenance and Support Package"). For questions on purchasing a Maintenance and Support Package, contact VHS as provided in the Contact section herein, or call your authorized sales representative. For Product failures outside the initial Limited Warranty Period and not covered by a Maintenance and Support Package, Customer may have the Product repaired if parts are

available. Cost for repair is determined by each individual product. Please contact VHS for additional details.

LIMITATION OF WARRANTY

The foregoing warranties only apply to Product(s) purchased from VHS or its authorized distributors and resellers. It does not apply to any materials that are procured as third-party items to be shipped from VHS in conjunction with other parts and services of VHS or any third-party components within VHS parts or products. Examples of these items are items such as plumbing parts, power cables, batteries, external gateways wiring, hubs, routers, modems, and other products. It also excludes items added to the Purchase Order ("PO") for site-specific components, such as, but not limited to: batteries, cables, fuse panels, and any products that are not offered as a standard item in VHS's product and services catalog. Products not manufactured or distributed by VHS will carry the warranty and related terms and conditions of the original manufacturer.

The above Limited Warranties for Product do not apply if the hardware, software, or any other equipment (upon which the authorized Software is installed or any device authorized for use by VHS) has been:

- Installed, serviced or repaired by or on behalf of Customer, other than by VHS or by an authorized VHS Partner/distributor in accordance with the Maintenance and Support Package between VHS and Partner, without the written approval of VHS;
- Batteries, valves or any device or part not purchased from VHS and attached to any VHS supplied equipment such as the VC100.
- Altered or modified other than by VHS or its authorized representatives without written consent;
- Damaged from negligence, improper use, physical damage, improper installation, repair, operation, or maintenance except as described in VHS user documentation;
- Subjected to abnormal physical or electrical stress, abnormal environmental conditions, misuse, or accident including water damage. None of the VHS products are water resistant or water proof other than the physical water ball valve;
- 6. Damaged or destroyed by natural causes, including, but not limited to, lightning, flood,

- earthquake, hurricane, or other natural disaster or other act of God;
- 7. Damaged or destroyed by causes beyond the control of VHS, including, but not limited to, wars, upheavals, riots, accident, neglect, misuse, air conditioning, humidity control, transportation, electrical power failure, failure to comply with applicable operating instructions, or any cause other than ordinary use or a negligent or willful act or omission;
- 8. Subjected to the removal or alteration of its original identification marks;
- Provided for beta, evaluation, testing, or demonstration purposes;
- 10. Installed without proper surge protection.
- 11. Removal or relocation of the water sensor or control panel
- 12. Any loss of connection with the VHS system via a PSTN (dial-up), Wireless GSM, 3G or 4G operator network, wifi, wired or wireless connectivity.

Customers shall maintain environmental conditions at the locations of the Product in accordance with the Product's specifications. Failure to provide and maintain a proper operating environment shall render this Limited Warranty null and void.

OBSOLETE AND DISCONTINUED PRODUCTS

Obsolete and discontinued Products are supported for the balance of the specified Limited Product Warranty period by VHS as noted herein. VHS may replace obsolete and discontinued Products still within warranty with approved substitute Products at its sole and absolute discretion. Customers with Support and Service Packages in place when a Product is discontinued or becomes obsolete may be offered remaining Product. This will be determined only by VHS in its sole and absolute discretion. Obsolete and discontinued Products that are out of warranty are not supported by VHS and cannot be repaired under the terms and conditions of standard out-of-warranty Products unless covered separately by a mutually agreed to Maintenance and Support Package.

DISCLAIMER OF WARRANTY AND LIMITATION OF LIABILITY

OTHER THAN CONTAINED HEREIN, VHS DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, WITH REGARD TO THE PRODUCTS, SERVICES, AND MATERIALS PROVIDED HEREUNDER, INCLUDING ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR

PURPOSE OR INTENDED USE ARISING OUT OF OR IN CONNECTION WITH PERFORMANCE OF THIS AGREEMENT. IN NO EVENT SHALL VHS BE LIABLE FOR ANY DAMAGES CAUSED BY DELAY IN RENDERING SUPPORT SERVICES. IN NO EVENT SHALL VHS BE LIABLE FOR ANY PERSONAL OR COMMERCIAL LOSSES, LOSS OF PROFITS OR REVENUES, OR SPECIAL, INCIDENTAL, INDIRECT, CONSEQUENTIAL OR PUNITIVE DAMAGE WHATSOEVER RESULTING FROM ANY BREACH ON THE PART OF VHS OR FROM THE PRODUCTS DELIVERED OR SERVICES PERFORMED, WHETHER IN CONTRACT OR TORT, WHETHER OR NOT CAUSED BY A DEFECTIVE PRODUCT, NEGLIGENCE ARISING FROM CUSTOMER'S INABILITY TO USE THE PRODUCT EITHER SEPARATELY OR IN COMBINATION WITH ANY OTHER PRODUCT OR FROM ANY OTHER CAUSE, EVEN IF VHS HAS BEEN ADVISED OR SHOULD BE AWARE OF THE POSSIBILITY OF SUCH DAMAGES.

THE SOLE AND EXCLUSIVE LIABILITY OF VHS FOR ANY CLAIM HEREUNDER SHALL BE LIMITED TO THE REPAIR OF DEFECTIVE PRODUCT AND SHALL NOT, IN ANY EVENT, EXCEED THE PRICE PAID TO VHS FOR THE PARTICULAR PRODUCT OR SERVICE THAT IS THE SUBJECT OF THE CLAIM, REGARDLESS OF THE FORM OF ANY SUCH CLAIM.

All Products should only be installed indoors within the specifications on the product specification sheets. Failure to properly install the Product shall void this Limited Warranty.

EXCLUSIONS

The warranties set forth above are exclusive and in lieu of all other warranties. VHS makes no other warranties, express or implied, and VHS expressly disclaims all other warranties, including, but not limited to: implied warranties of merchantability, fitness for a particular purpose, non- interference, non-infringement, and/or satisfactory quality. These other warranties are hereby excluded to the extent allowed by applicable law and are expressly disclaimed by VHS, its suppliers and licensors. The provisions set forth state VHS's entire responsibility and Customer's sole and exclusive remedy with respect to any breach of any warranty or contract.

INFRINGEMENT INDEMNITY

Subject to the restriction in this Limited Warranty, VHS SHALL NOT assume responsibility for any suit or proceeding brought against Customer, insofar as it is based on a claim that a Product, or any part thereof, furnished by VHS, infringes upon any United States trademark, patent, or intellectual property rights; provided, however, that VHS shall have been given timely notice in writing of the assertion of any such claim and of the threat or institution of any such suit or proceeding, and all authority, information, and reasonable assistance required for the defense of same. The determination to assume any responsibility or indemnify any Customer or third party pursuant to this section is in the sole and absolute discretion of VHS.

GOVERNING LAW

Any action, regardless of form, arising out of the Agreement between VHS and Customer is governed by the laws of the State of California. Any action or proceeding brought by any party against any other party arising out of or related to this Limited Warranty shall be brought exclusively in San Diego County.

TRANSFER OF OWNERSHIP

Transfer of Product ownership or software rights from the original VHS purchaser, excluding distributors and resellers, or from the original VHS licensee will void all existing VHS warranties of any kind.

CONTACT

Vital Home Systems is a registered trademark of VHS. Information published here is current as of the date of publication.

You may verify information by contacting us at:

Vital Home Systems Phone: 847-609-9000

Email: Support@vitalhomesystems.com

www.vitalhomesystems.com