## DEISTEEM



# Safety, Installation and Service Manual Models UV-W-1-24, UV-W-1-32, UV-I-1-18, & UV-I-1-32

**READ AND SAVE THIS MANUAL** 

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### **I. SAFETY INSTRUCTIONS**

Please read the safety and installation instructions carefully to help ensure a correct and SAFE installation of DRI-STEEM UV Germicidal Systems.

### WARNING

**Avoid exposure.** DRI-STEEM's UV Germicidal Systems have lamps that emit ultraviolet light in the UVC (germicidal) bandwidth when energized. UVC light is harmful to skin and eyes and can cause short- and long-term serious skin damage, burns and eye injury either from direct or reflected exposure. To reduce personal injury risk, install only in applications providing adequate protection to area occupants. Do not operate within energized lamp's illumination (direct or reflected) without personal protective equipment such as UVC blocking face shield, gloves, and skin protection. (Sunglasses and sunscreen do not protect against injury caused by UVC light.) Turn off all lamps before installing, replacing, cleaning or performing any maintenance near fixtures. Install door interlock safety switches on all doors accessible to UV lamps.

**Touching hot lamps may cause skin burns.** After turning off electrical power to lamps, allow lamps to cool for several minutes before servicing.

**Electrical shock from high voltage may cause serious injury.** Shut off power before starting installation and do not turn power back on until complete.

Moving parts in air handling units can cause severe personal injury or death. Before entering an air handling unit disconnect and lock all power to the air handling unit. Unit may have multiple power supplies and/or remote disconnects. Do not enter the air handling unit until all moving parts have stopped moving.

**Sharp edges and broken glass may cause personal injury.** Wear protective gloves and safety glasses when handling lamps and sheet metal and when cutting sheet metal.

**Lamps contain mercury, which can cause personal injury.** If a lamp breaks, refer to the lamp disposal instructions on Page 13.

### CAUTION

UV light can cause color changes or structural degradation of plastics, rubber, paper, and other nonmetallic materials used in the HVAC system.

- Install lamp fixture in location that prevents exposure of plastics, rubber, paper, and other non-metallic materials to UV light, or shield such materials with aluminum tape, sheet metal, or metal conduit.
- Shield electrical wires that receive direct or reflected UV illumination with aluminum tape, sheet metal, or conduit.
- Install lamp at least 8" (200 mm) away from equipment or components made with UV resistant plastic. If equipment or components are not made with UV resistant plastic — or if the UV resistance of the material is unknown — shield with aluminum tape or sheet metal.

#### Water may damage lamp fixture.

- Install lamp at least 3" away from the evaporator coil.
- Do not install lamp fixtures below a humidifier or any source of water.

### **II. APPLICATION**

DRI-STEEM UV Germicidal System Models UV-W-1-24, UV-W-1-32, UV-I-1-18, and UV-I-1-32 are designed for the treatment of evaporator coils used in rooftop HVAC air handling units or in larger split systems used in the light commercial market. The UV germicidal light emitted from the lamps will kill microorganisms growing on evaporator coils and drain pans and prevent further growth. The units use 120 -277 VAC / 60 Hz / single phase power, and are designed for continuous lamp operation.

External Mount Rooftop Units Model UV-W-1-24 24" Rooftop Unit Model UV-W-1-32 32" Rooftop Unit

The External Mount Rooftop Units incorporate a NEMA 4 enclosure for protection against the elements. These units are intended primarily for installation on rooftop air handling units.

Internal Mount Rooftop Unit Model UV-I-1-18 Rooftop Unit, Internal Mount Model UV-I-1-32 Rooftop Unit, Internal Mount

The Internal Mount Rooftop Unit is intended primarily for rooftop applications in which it is preferred to mount the unit entirely within the air handler rather than penetrating the outer cabinet. This unit is either 18" or 32" in length and is mounted using supports supplied with the lamp.

### **III. INSTALLATION**

#### **NOTES FOR ALL MODELS**

- Shut off power to HVAC unit at the main disconnect switch before starting installation.
- Only a licensed professional trained in HVAC equipment installation and servicing should perform the installation.
- Unit must be installed in accordance with all applicable governing codes.
- Read all safety instructions at the beginning of this manual.
  Failure to do so could lead to death, personal injury and/or equipment damage.
- Read the installation manuals for the equipment on which the lamps are being installed for additional information and warnings.
- Product must be connected to properly grounded and protected power supply source. Wiring and branch circuit protection is provided by the installer per the National Electric Code (NEC) latest edition. The installer provides wiring of the door interlock safety switches and power switch.
- DRI-STEEM strongly recommends installing a door interlock safety switch on all doors accessible to UV germicidal lamps to prevent accidental exposure to UV germicidal light. Direct or reflected exposure to UV germicidal light can cause burns to eyes and skin.
- The tools and equipment required to complete this installation include: Drill, drill bits (3/32 in. & 'Unibit'), hole cutter (2 in.), Phillips screwdriver, #10 nut driver, tape measure, sealant, aluminum tape, multimeter with clamp-on ammeter, alcohol & wipes, and safety glasses. Some installations may also require weatherproof conduit and conduit connectors.

#### APPROXIMATE COIL AREA COVERAGE FOR EACH MODEL

Coil Area	Model UV-I-1-18 18" Lamp	Model UV-I-1-32 32'' Lamp	Model UV-W-1-24 24" Lamp	Model UV-W-1-32 32" Lamp
(sq. in.)	792	1296	1008	1296
(sq. in.)	5.5	9.0	7.0	9.0

#### GUIDELINES FOR THE NUMBER OF LAMPS REQUIRED FOR A GIVEN COIL AREA

Coil	Area	Model UV-I-1-18	Model UV-I-1-32	Model UV-W-1-24	Model UV-W-1-32
(sq. in.)	(sq. ft.)	18" Lamp	32" Lamp	24" Lamp	32" Lamp
750	5.2	1	1	1	1
1000	6.9	2	1	1	1
1250	8.7	2	1	2	1
1500	10.4	2	2	2	2
1750	12.2	3	2	2	2
2000	13.9	3	2	2	2
2250	15.6	3	2	3	2
2500	17.4	4	2	3	2
2750	19.1	4	3	3	3
3000	20.8	4	3	3	3
3250	22.6	5	3	4	3
3500	24.3	5	3	4	3

**IMPORTANT NOTES:** The above tables are guidelines only. The most important requirement for an effective UV Lamp installation is complete illumination of the coil and drain pan. Install UV Lamps as required to fully illuminate the coil and drain pan.

The guidelines above are based on the following assumptions:

- UV Lamps to be installed 3 in. 12 in. from coil
- Coil thickness in the range of 2 in. 4 in.

### WARNING

DRI-STEEM strongly recommends installing door interlock safety switches on all doors accessible to UV lamps to prevent accidental exposure to UVC light. Direct or reflected exposure to UVC light can cause severe burns to eyes and skin.

#### Note:

DRI-STEEM's door interlock safety switch is a NEMA-4 switch, suitable for outdoor mounting in temperatures of -22 °F to 176 °F (-30 °C to 80 °C). The switch may be purchased from DRI-STEEM.

#### INSTALL THE DOOR INTERLOCK SAFETY SWITCH

- 1. Select a location on the exterior wall of the rooftop unit next to the access door to mount the door interlock safety switch. Do not mount the center of the switch farther than 2.5" (64 mm) from the opening edge of the door. See Figure 1.
- 2. Refer to Figure 2. Mount the interlock safety switch to the wall using the 1<sup>1</sup>/<sub>4</sub>" self-drilling screws. Apply weather-proof sealant (provided by installer) around sheet metal screws if necessary.
- 3. Remove the switch key from the interlock safety switch.
- 4. Pull off the plastic covering on the switch key.
- 5. Attach the switch key bracket to the switch key using the 3/8" thread-cutting screws.
- 6. Replace the switch key plastic cover.
- 7. Loop the lanyard through the 3/8" holes on the switch key bracket.
- 8. Attach the other end of the lanyard to the door bracket using a 3/8" thread-cutting screw.
- 9. Insert the switch key into the interlock safety switch.
- 10. Mount the door bracket to the exterior of the door using the 1¼" self-drilling screws.

Be sure to line up the door bracket with the interlock safety switch so that the switch key pulls straight out of the interlock safety switch when opening the door. See photo below.

Important: The switch key must be inserted into the interlock safety switch to power the UV Germicidal System.



Door interlock safety switch





#### INSTALLATION OF EXTERNAL MOUNT ROOFTOP UNITS (MODELS UV-W-1-24 & UV-W-1-32)



#### **DETERMINE MOUNTING LOCATION**

Determine a mounting location for the lamp. Use the criteria below to select a proper location:

- a. The lamps are intended for evaporator coil treatment. See Figure 4 for typical installation. If a single Lamp cannot illuminate the majority of the evaporator coil, two or more units might be required as shown. To the extent possible, the Lamp(s) should be centered on the coil (or section thereof) being illuminated.
- b. Install lamp in location that prevents exposure of plastics, rubber, paper, and other non-metallic materials to UV light, or shield such materials with aluminum tape, sheet metal, or metal conduit.
   See CAUTION statements at beginning of manual for more details.
- c. To protect lamp, do not install lamp below any source of water.
- d. Install units so that Lamp is at least 3 in., but not more than 36 in., away from evaporator coil surface.
- e. Install lamp in a location that can be easily accessed. Allow clearance to slide lamp in and out of rooftop unit. Model UV-W-1-24 lamp is 24 in. and Model UV-W-1-32 lamp is 32 in.



- f. Be certain the area in the equipment where you intend to drill and cut is free of any obstructions or components that would be damaged by the installation or interfere with the installation.
- g. While keeping these guidelines in mind, note that the more direct exposure the coil and drain pan receive, the greater the benefit the lamps will have.

#### **INSTALL THE UNIT BASE**

- 1. Using the Unit Base as a guide, mark the locations for the lamp and mounting holes on the rooftop unit cabinet.
- 2. Carefully inspect the inside of the rooftop unit and make sure that no damage to any components will occur as a result of drilling the holes.
- 3. Drill hole for the lamp using a 2 in. hole cutter. At the mounting hole locations, use 3/32 in. drill bit to make pilot holes for mounting screws.
- 4. Apply weatherproof sealant (not provided) to the side of the Unit Base that is in contact with the rooftop unit housing. Mount the Unit Base to the rooftop unit using #10 sheet metal screws.

#### **MAKE ELECTRICAL CONNECTIONS**

1. Verify power to the HVAC equipment is shut off. Determine where the power for the unit will come from. The units can use any voltage from 120 VAC up to 277 VAC (single phase), 60 Hz. The ballast automatically adjusts to whatever voltage is supplied in that range. The units must be wired such that the disconnect switch of the air handler is also the disconnect switch for the UV lamp. Additionally, to prevent accidental exposure to UV germicidal light, it is recommended that door interlock switches (available for purchase from DRI-STEEM) be installed on any access panel door within view of

**the UV lamp.** See Figure 5 for UV-W wiring diagram.

- 2. Use the hole in the bottom of the Unit Base and a corresponding hole through the rooftop unit housing for the electrical wiring. Be certain the area in the rooftop unit where you intend to drill and cut is free of any obstructions or components that would be damaged by the installation or interfere with the installation.
- If space limitations prevent running the wires through the hole in the bottom of the Unit Base, drill holes in the side of the Unit Base as well as the rooftop housing for watertight conduit connectors. Install the connectors and run conduit from the Unit Base to the rooftop unit penetration.
- Run wiring from the power source through the conduit, if applicable, and into the Unit. Connect wiring to terminals provided. Refer to wiring diagram, Figure 5. Unit must be grounded.



5. Shield non-metallic components (such as electrical wires and fan belts) that receive direct or reflected UV radiation with aluminum tape, sheet metal, or conduit.

#### **INSTALL LAMP**

- 1. Remove Lamp from shipping tube. Use ceramic ends of Lamp when handling **do not touch the glass tube of Lamp**. Use alcohol to remove any oil, dirt and/or fingerprints from the Lamp.
- 2. Referring to Figure 6, follow the steps below to install Lamp:
  - a. First, with the Lamp Retaining Bracket removed, slide the Lamp into the large side of the keyhole slot.
  - b. Next, with the shorter side of the ceramic Lamp Base facing the small side of the keyhole slot, slide the Lamp over and into the end of the keyhole slot. You should feel the Lamp Base engage the metal base of the keyhole slot.
  - c. Finally, return the Lamp Retaining Bracket onto the threaded stud of the Unit Base, securing with the washer and wing nut provided. (Note: the Lamp Retaining Bracket butts up against, <u>but not onto</u>, the Lamp Base.)



- 3. Attach the Lamp Socket to the Lamp.
- 4. Close the cover of the Unit Base using the latch mechanism on the front of the unit.
- 5. It is recommended that door interlock switches (not provided) be installed on any access panel door within view of the UV lamp.
- 6. Return all panel doors on the rooftop unit to their closed position.
- 7. Place three WARNING labels (included) on the rooftop unit: one by the Lamp, one on the main access panel, and one near the main disconnect switch.
- 8. Turn on the power to the rooftop unit.

#### **CHECK LAMP OPERATION**

The preferred method for checking lamp operation is to measure lamp current draw using a clamp-on ammeter. The ammeter must be capable of measuring 10 mA and above. To prevent exposure to harmful UV germicidal light during this procedure, personnel should be shielded from UVC exposure. One approach is to read the ammeter in a location where there is no direct or reflected UVC illumination. To measure the lamp current draw:

- a. First, shut off power to the HVAC equipment.
- b. Next, in the control panel for the HVAC equipment, locate the hot and neutral wires that were installed to provide power to the lamp.
- c. Place the clamp-on ammeter around either the hot or neutral wire. Make sure the ammeter is set to read amps in the mA range. Prepare for turning on the lamps by moving to an area shielded from UVC illumination once the power is turned on.
- d. Next, turn the power to the HVAC equipment back on.
- e. If the lamp has been installed correctly and is drawing power, the amp reading will be a minimum of 150 mA. For multiple lamps, the reading would be a multiple of this value, i.e., with two lamps installed, the amp reading will be at least 300 mA.
- f. If the lamp is operating correctly, remove the ammeter from the wiring and put back any access panels that were removed during this procedure. If the lamp is not operating correctly, refer to the 'Troubleshooting' section of this manual.

**Note:** If other electrical components or accessories share the same circuit as the UV lamp(s), the current draw will be higher and the above method may not be an accurate indication of lamp operation.

#### INSTALLATION OF INTERNAL MOUNT ROOFTOP UNITS (MODEL UV-I-1-18 AND UV-I-1-32)



#### **DETERMINE MOUNTING LOCATION**

Verify that power to the HVAC equipment is off before continuing. To determine a mounting location for the lamp, use the criteria below to select a proper location:

- a. The lamps are intended for evaporator coil treatment. See Figure 6 for typical installations. If a single Lamp cannot illuminate the majority of the evaporator coil, two or more units might be required. To the extent possible, the Lamp(s) should be centered on the coil (or section thereof) being illuminated. Note that a Model UV-I-1-18 or UV-I-1-32 Internal Mount Unit can be installed in conjunction with a Model UV-W-1-24/UV-W-1-32 External Mount Unit as shown.
- b. Install lamp in location that prevents exposure of plastics, rubber, paper, and other non-metallic materials to UV light, or shield such materials with aluminum tape, sheet metal, or metal conduit. See CAUTION statements at beginning of manual for more details.
- c. To protect lamp, do not install lamp below any source of water.
- d. Install units so that Lamp is at least 3 inches away from evaporator coil surface.
- e. Install lamp in a location that can be easily accessed. Allow clearance to slide lamp in and out of duct. Model UV-I-1-18 lamp is 18 in. long. Model UV-I-1-32 lamp is 32 inches long.
- f. Be certain the area in the equipment where you intend to drill and cut is free of any obstructions or components that would be damaged by the installation or interfere with the installation.
- g. While keeping these guidelines in mind, note that the more direct exposure the coil and drain pan receive, the greater the benefit the lamps will have.

![](_page_9_Figure_9.jpeg)

#### **INSTALL THE UNIT BASE**

Using the supplied brackets and supports, mount the unit to solid, non-moving structural components within the rooftop unit. As every application is different, custom supports or brackets (such as 'Unistrut') may be required. Note that multiple Model UV-I-1-18 or UV-I-1-32 units can be assembled end-to-end, if desired. To do so, connect each unit with a nipple or similar conduit connector. Note that the units must be wired in parallel circuits.

#### **MAKE ELECTRICAL CONNECTIONS**

- Verify power to the HVAC equipment is shut off. Determine where the power for the unit will come from. The units can use any voltage from 120 VAC up to 277 VAC (single phase), 60 Hz. The ballast automatically adjusts to whatever voltage is supplied in that range. The units must be wired such that the disconnect switch of the air handler is also the disconnect switch for the UV lamp. Additionally, to prevent accidental exposure to UV germicidal light, it is recommended that safety interlock switches (available for purchase from DRI-STEEM) be installed on any access panel door within view of the UV lamp. See Figure 9 for Model UV-I-1-18 and UV-I-1-32 wiring diagram.
- 2. Run wiring from the power source through conduit, if used, and into the Lamp.
- 3. Shield non-metallic components (such as electrical wires and fan belts) that receive direct or reflected UV radiation with aluminum tape, sheet metal, or conduit.

![](_page_10_Figure_4.jpeg)

#### **INSTALL LAMP**

- 1. Remove Lamp from shipping tube. Use ceramic ends of Lamp when handling **do not touch the glass tube of Lamp**. Use alcohol to remove any dirt and/or fingerprints from the Lamp.
- 2. Snap the Lamp into the two Lamp Brackets.
- 3. Attach the Lamp Socket to the Lamp.
- 4. It is recommended that door interlock switches (not provided) be installed on any access panel door within view of the UV lamp.
- 5. Return all panel doors on the rooftop unit to their closed position.
- 6. Place three WARNING labels (included) on the rooftop unit: there are two for access panels and one to be placed near the main disconnect switch.
- 7. Turn on the power to the rooftop unit.

#### **CHECK LAMP OPERATION**

The preferred method for checking lamp operation is to measure lamp current draw using a clamp-on ammeter. The ammeter must be capable of measuring 10 mA and above. To prevent exposure to harmful UV germicidal light during this procedure, personnel should be shielded from UVC exposure. One approach is to read the ammeter in a location where there is no direct or reflected UVC illumination. To measure the lamp current draw:

- a. First, shut off power to the HVAC equipment.
- b. Next, in the control panel for the HVAC equipment, locate the hot and neutral wires that were installed to provide power to the lamp.
- c. Place the clamp-on ammeter around either the hot or neutral wire. Make sure the ammeter is set to read amps in the mA range. Prepare for turning on the lamps by moving to an area shielded from UVC illumination once the power is turned on.
- d. Next, turn the power to the HVAC equipment back on.
- e. If the lamp has been installed correctly and is drawing power, the amp reading will be a minimum of 150 mA. For multiple lamps, the reading would be a multiple of this value, i.e., with two lamps installed, the amp reading will be at least 300 mA.
- f. If the lamp is operating correctly, remove the ammeter from the wiring and put back any access panels that were removed during this procedure. If the lamp is not operating correctly, refer to the 'Troubleshooting' section of this manual.

**Note:** If other electrical components or accessories share the same circuit as the UV lamp(s), the current draw will be higher and the above method may not be an accurate indication of lamp operation.

### **IV. ANNUAL LAMP REPLACEMENT**

DRI-STEEM UV Germicidal Systems are designed for the lamp to be on at all times. After 13,000 hours of operation – 1.5 years of constant use – the effectiveness of the lamp diminishes and needs to be replaced. Rarely will a lamp burn out in one year of continuous use; replacement is necessary because the lamp's intensity decreases. Installation of the replacement lamp is best handled by a qualified HVAC Service Contractor.

#### LAMP REPLACEMENT INSTRUCTIONS (EXTERNAL & INTERNAL MOUNT UNITS):

- a. Shut off power to the rooftop unit. Wait several minutes for lamp to cool before proceeding. Remove access panel(s) to the rooftop unit.
- b. Remove Lamp from Unit. For External Mount Units, open the cover of the Unit Base, disconnect Lamp Retaining Bracket, and slide the Lamp to the large side of the keyhole slot and then pull straight out. For the Internal Mount Unit, simply disconnect Lamp Socket and remove Lamp.
- c. Use alcohol to remove any dirt and/or fingerprints from the new Lamp. Insert Lamp into the unit and attach Lamp Socket to the Lamp.

- d. For External Mount Units, close and secure the cover of Unit Base.
- e. Put access panels of the rooftop unit back in place.
- f. Turn power to rooftop unit back on.
- g. Refer to 'Check Lamp Operation' in the previous section to verify operation.
- h. Record the date the lamp was replaced in this manual so that the date for next replacement is clear.

Refer to 'Troubleshooting' section if the Lamp does not operate.

Under normal conditions, DRI-STEEM UV Germicidal Systems should not require any maintenance other than annual lamp replacement.

### V. LAMP DISPOSAL

As with a fluorescent lamp, the UV lamp contains mercury and must be disposed of properly. **Do not throw old lamps into the trash.** Many communities have agencies that take in mercury along with other materials – such as old paints, solvents, etc. – that require special disposal. Please contact your municipal or county waste collection agency for proper disposal procedures.

If a lamp is broken, **do not use a vacuum cleaner to pick up the waste**. Instead, squeegee up the waste into a plastic bag and seal. Contact your municipal or county waste collection agency for proper disposal procedures.

### **VI. TROUBLESHOOTING**

If the Lamp does not operate, check the following:

- Electrical Connections Verify that the Lamp has been wired correctly. The power to lamp must be always 'on' during normal operation. On External Mount Units, verify that safety switch inside the cover of Unit Base has not been damaged. The voltage into the units should be in the range of 120 277 VAC / 60 Hz / single phase. If it is not in that range, re-check the wiring or contact an electrician.
- Fuse If the lamp is still not illuminated, turn off power to the rooftop unit, and check the Fuse. Look to see if Fuse is darkened or visibly blown (i.e., wire broken) or check fuse continuity with multi-meter.
- 3. Lamp Verify that Lamp is not broken and is properly seated into Lamp Socket. To check this, shut off power to the rooftop unit and wait several minutes for lamp to cool before proceeding. Then remove access panels in order to look at Lamp. Verify that lamp tube is not broken and that it is firmly pushed into its Lamp Socket. If necessary, use alcohol to remove any dirt and/or fingerprints from the lamp. If the lamp is broken read the 'Lamp Disposal' section of this manual for proper disposal.
- 4. Ballast If all of the above are okay, but the light still does not illuminate, replace the ballast.

Model UV-W-1-24 Replacement Lamp	412000-024	Multi-Voltage High Output Ballast (for UV-W-1-24, UV-W-1-32, UV-I-1-18	
Model UV-W-1-32 Replacement Lamp	412000-032	and UV-I-1-32)	412000-005
Model I IV-I-1-18 Benlacement Lamn	412000-018	Fuse (3 Amp, slow burn)	412000-010
Medel UV 1 1 22 Peplacement Lamp	412000 022	Fuse Cap	412000-015
	412000-032	Lamp Socket	412000-020

### VII. LAMP REPLACEMENT RECORD

LIST OF REPLACEMENT PARTS

Date	Dealer Name

Date	Dealer Name

### NOTES

### NOTES

### **VIII. TWO-YEAR LIMITED WARRANTY**

DRI-STEEM Corporation ("DRI-STEEM") warrants to the original user that its products will be free from defects in materials and workmanship for a period of two (2) years after installation or twenty-seven (27) months from the date DRI-STEEM ships such product, whichever date is the earlier. Lamp warranty shall be one year.

If any DRI-STEEM product is found to be defective in material or workmanship during the applicable warranty period, DRI-STEEM's entire liability, and the purchaser's sole and exclusive remedy, shall be the repair or replacement of the defective product, or the refund of the purchase price, at DRI-STEEM's election. DRI-STEEM shall not be liable for any costs or expenses, whether direct or indirect, associated with the installation, removal or reinstallation of any defective product.

DRI-STEEM's limited warranty shall not be effective or actionable unless there is compliance with all installation and operating instructions furnished by DRI-STEEM, or if the products have been modified or altered without the written consent of DRI-STEEM, or if such products have been subject to accident, misuse, mishandling, tampering, negligence or improper maintenance. Any warranty claim must be submitted to DRI-STEEM in writing within the stated warranty period.

DRI-STEEM's limited warranty is made in lieu of, and DRI-STEEM disclaims all other warranties, whether express or implied, including but not limited to any IMPLIED WARRANTY OF MERCHANTABILITY, ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, any implied warranty arising out of a course of dealing or of performance, custom or usage of trade.

DRI-STEEM SHALL NOT, UNDER ANY CIRCUMSTANCES BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS, REVENUE OR BUSINESS) OR DAMAGE OR INJURY TO PERSONS OR PROPERTY IN ANY WAY RELATED TO THE MANUFACTURE OR THE USE OF ITS PRODUCTS. The exclusion applies regardless of whether such damages are sought based on breach of warranty, breach of contract, negligence, strict liability in tort, or any other legal theory, even if DRI-STEEM has notice of the possibility of such damages.

By purchasing DRI-STEEM's products, the purchaser agrees to the terms and conditions of this limited warranty.

#### **CONTACT INFORMATION**

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DRI-STEEM Corporation is an ISO 9001:2000 certified corporation and a subsidiary of Research Products Corporation. Continuous product improvement is a policy of DRI-STEEM Corporation; therefore, product features and specifications are subject to change without notice.

![](_page_15_Picture_13.jpeg)

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