

Lighting systems from Tegan Lighting are supplied as complete systems. Use only factory-supplied parts and Drivers to preserve the validity of the ETL listing to U.L. Standard UL 2108 Low Voltage Lighting Systems and manufacturer's warranty.

Tegan Lighting system hardware is intended for installation in accordance with the National Electric Code and local regulations. To ensure full compliance with local codes and regulations, check with your local electrical inspector before installation.

Safety Instructions



1. When installing or using this lighting system, basic safety precautions should always be followed, including the following:
  - Read all instructions and use only as described in these Tegan Lighting Installation Instructions. Failure to follow installation instructions, or failure to heed all installation precautions, could result in falling fixtures which could cause serious injury or death. Failure to properly connect electrical systems could result in permanent system failure, as well as fire, shock, or electrocution.
  - Wire only into the output of a dedicated Exton 24VDC driver provided by Tegan Lighting.
  - Exton Monopoints are for 24VDC Exton Spotlights only; it must be used with an appropriate 24VDC power supply. Refer to Specification Sheets.
  - Use only Tegan Lighting supplied accessories.
  - For proper installation, have a qualified electrician install this product.
  - This system must be wired and grounded in accordance with accepted electrical installation practices, legal codes and ordinances.
  - Wire supply connections must be made with U.L. or comparable testing agency-approved connectors.
  - Turn off electrical power before modifying the lighting system in any way.

### Installation Location

Exton IP65 Kore EX5 Monopoints are not approved or listed for indoor pool/sauna/steam room installations or areas with chemicals.

Exton Monopoint Example

Exton Monopoint, Kore-EX5 Rigid Stem Mount Module with Frosted Sphere Gem and Disk Shade



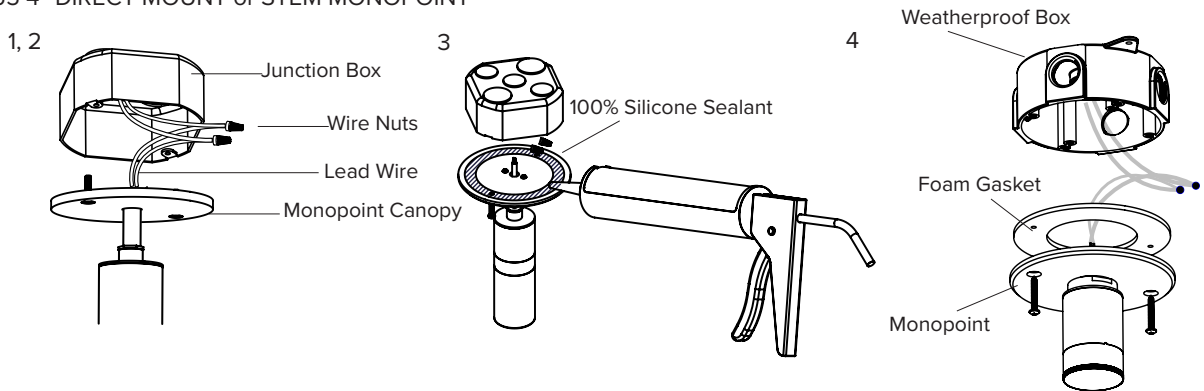
### Wintering System

During the winter season in climates with inclement weather, Exton Shades and Glass Envelopes are to be removed and stored. Failure to do so may result in breakage or damage to the system and will void the warranty. If heavy icing or snow is expected.



Exton 4" Monopoint Installation

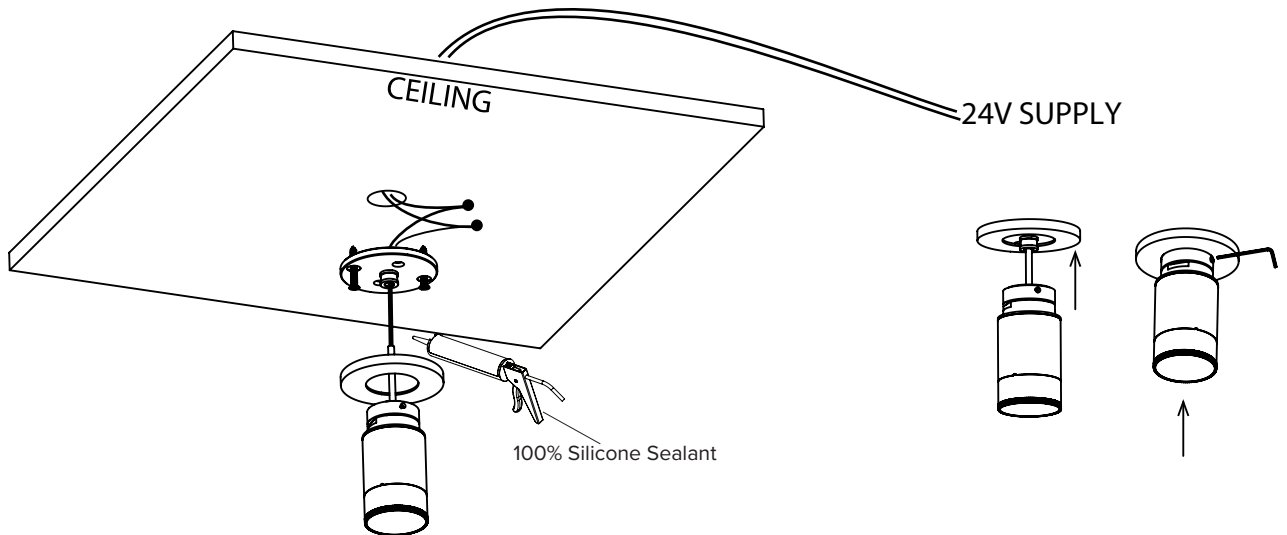
## IP65 4" DIRECT MOUNT or STEM MONOPOINT



1. Monopoint attaches to an appropriate IP65 Junction Box (by others) using 3.5" spaced 8-32 screws.
2. Make electrical connections to lead wire with Wire Nuts (by others) to connect Monopoint to a 24VDC output Exton Power supply. **DO NOT HOOK UP TO 120V.** (See below.)
3. Apply clear 100% silicone sealant to back of Monopoint Canopy before using screws to affix Monopoint onto Junction Box. Be sure to cover the screw holes.
4. For surface-mounted 4" Round weatherproof boxes, use foam gasket. Note: Gasket will not seal against building surfaces or non-weatherproof junction boxes. Use 100% silicone sealant in these situations.

Exton 2" Direct Mount Monopoint Installation

## IP65 2" DIRECT MOUNT MONOPOINT

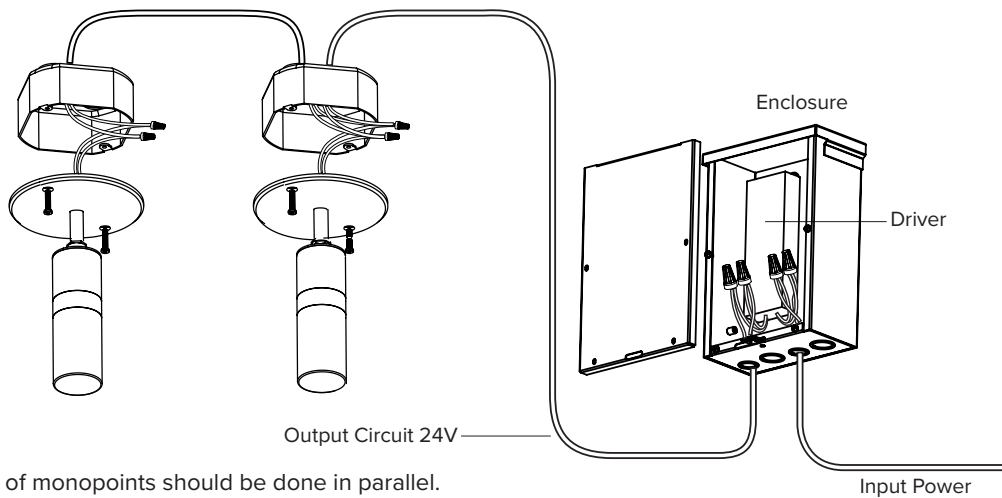


1. Feed wires from remote Tegan 24VDC Supply through a 1" hole in ceiling.
2. Connect to lead wires from Exton Module, polarity does not matter.
3. Apply silicone to the back of the Monopoint as well as around the wires that go through backplate to prevent water from getting into building.
4. Carefully push connection and excess wire back into ceiling. With screws or anchors (by others), affix backplate to ceiling.
5. Thread backplate cover over backplate, then push Exton Module onto small cylinder.
6. Test power.

SEE FOLLOWING PAGE FOR INSTALLATION OF TEGAN J-BOX, INTEGRAL DRIVER



## IP65 4" DIRECT MOUNT or STEM MONOPOINT



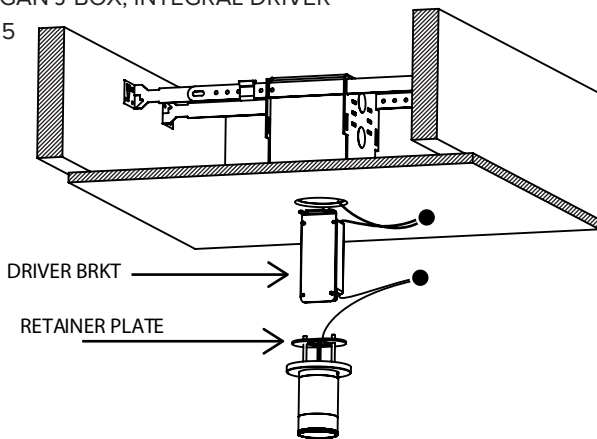
1. Wiring of monopoints should be done in parallel.
2. Use appropriate building wiring and outlet boxes for code compliance.
3. Tegan Lighting offers three power enclosure options. IP20 is for inside use only. IP24 & IP66 are for exterior installations and cannot be operated in temps over 70°C/158°F because doing so will shorten the lifetime of the driver. IP24: Wet Listed Nema 3R enclosure protects power supply from rain, snow, and ice outdoors. IP66 provides greater level of protection, resistant to any sort of sprayed or driven water jets from any direction.
4. Use 0-10V dimming controls with LED dimming option.
5. Max 300W per circuit.

### VOLTAGE DROP:

To calculate the maximum wiring distance of an Exton Monopoint circuit, you have to consider the wiring from the power supply to the first Monopoint, as well as the wiring from the first Monopoint to the last. Added together, these distances are the "total circuit run length". The voltage should not drop below 21V. Since an Exton circuit is low voltage and higher current, maximum circuit run length is achieved with thicker (e.g. 10AWG) wire. See p. 5 for examples.

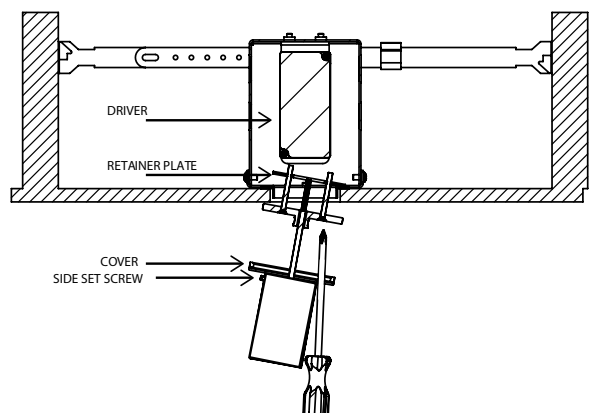
## TEGAN J-BOX, INTEGRAL DRIVER

1 - 5



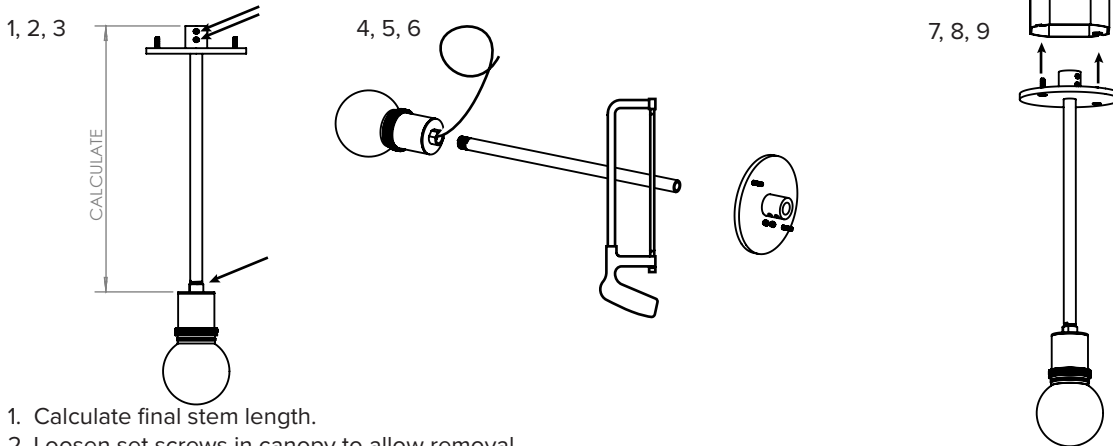
1. Recessed enclosure shall be installed securely between joists and regressed behind ceiling surface.
2. Turn power off. Loosen, do not remove, screws on driver bracket to allow it to slide out and be removed.
3. Connect input to driver, including dimming wires (optional).
4. Leave at least 8" wire length on Monopoint. Ensure the wires pass through center of retainer plate.
5. Re-attached driver plate into enclosure.
6. Loosen side set screw and disconnect canopy from Monopoint. Unthread cover from canopy.

6 - 10



7. Angle Retainer plate up through ceiling opening, into enclosure, while screws still pass through canopy. For use with 1" ceiling thickness or less. Contact factory for thicker ceiling installations.
8. Apply silicone to the back of the Monopoint as well as around the wires that go through backplate to prevent water from getting into building.
9. Tighten screws on canopy into retainer plate. Re-thread on the cover. Then carefully push monopoint cord up into canopy, and tighten side set screw.
10. Test with power.

## IP65 STEM MONOPOINT



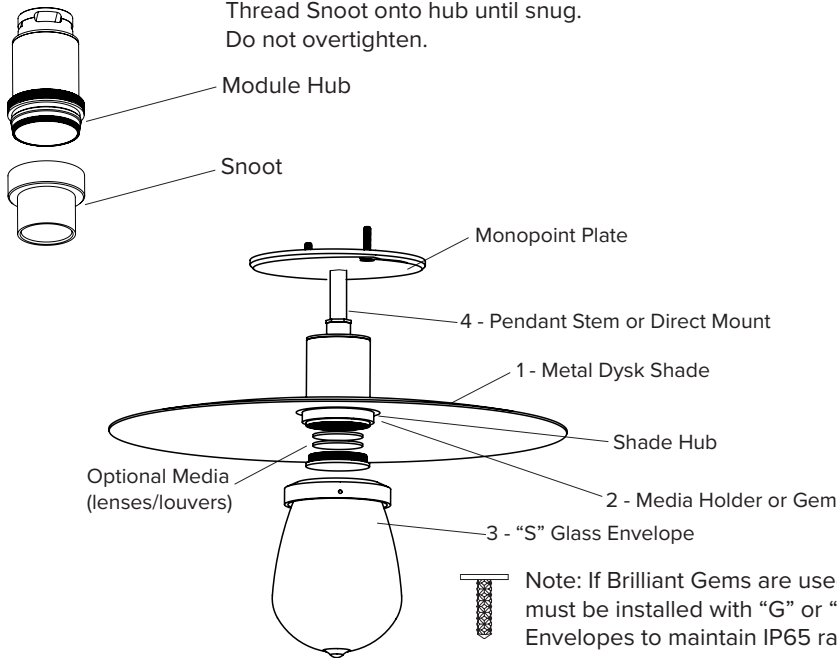
1. Calculate final stem length.
2. Loosen set screws in canopy to allow removal.
3. Unthread stem from back of Exton LED module.
4. Remove wires completely from stem to allow cutting with hacksaw, chopsaw or pipe-cutter.
5. Debur the cut edges!
6. Re-insert the wires into stem and thread stem back onto Exton module. Tighten securely by using pliers on stem near cut.
7. Use set screws to securely tighten against stem.
8. Make remote wire connections inside J-Box to remote power supply.
9. Caulk behind, then use screws to attach Canopy to J-Box.

## LED MODULES

### Downlight Snoot Installation

Thread Snoot onto hub until snug.  
Do not overtighten.

Note: Monopoint may have one or more of these decorative options.



1. Metal Disk, Bolle and Labyrinth (not shown) Shades are affixed to the Shade Hub, which is retained by the Gem (Media Holder Shown). A locknut (not visible) holds the metal Disk or Bolle Shade onto the Shade Hub.  
**NOTE:** There is a small detent tab on the Hubs that must be aligned with a recess in the outside of the Module.
2. If supplied with Media accessory(s), insert a maximum of two into the Media Holder.
3. Glass Envelope: "G" Glass (not shown) and "S" Glass (shown) Envelopes thread onto the Shade Hub.
4. 24" (.9m) Pendant Stem can be field-cut (see above).

## IP65 Kore EX5 Direct Mount/Stem Mount Wattage Guidelines for Power Supplies

Exton IP65 Monopoint Power Supply Installation	Qty of LED Modules per Driver Capacity	
	Description	Max # of Kore-EX5 Fixtures
	40W Non-Dimming Driver	4
	40W 0-10V Dimming Driver	4
	60W Non-Dimming Driver	7
	60W 0-10V Dimming Driver	7
	100W Non-Dimming Driver	11
	100W 0-10V Dimming Driver	11
	150W Non-Dimming Driver	17
	150W 0-10V Dimming Driver	17
	240W Non-Dimming Driver	27
	240W 0-10V Dimming Driver	27
320W Non-Dimming Driver	36	
288W 0-10V Dimming Driver	32	

1. We have listed the maximum number of Kore-EX5 Modules for each Driver option above based on the following common practice: Recommended De-Rating: Like all electronic power supplies, life is significantly increased when loads are 75/80% or less of the nominal power capacity.

Best life is in climate controlled conditions, or when the power supply stays below 70C. The type of enclosure and ambient environment can affect the operating temperature, and therefore the lifetime of the power supply. For all Tegan Lighting enclosures, load power supplies to only 75/80% of their nominal. These are general suggestions to increase the life of the supply in moderate climates; the actual operating lifetime of the power supply depends on the actual environment and use. Do not operate the power supplies during the day with direct sunlight with extreme hot temperatures.

2. Do not exceed a maximum of 40 Exton LED Fixtures per run/circuit.

### 3. VOLTAGE DROP

To calculate the maximum wiring distance of an Exton Monopoint circuit, you have to consider the wiring from the power supply to the first Monopoint, as well as the wiring from the first Monopoint to the last. Added together, these distances are the “total circuit run length”. The voltage should not drop below 21V. Since an Exton circuit is low voltage and higher current, maximum circuit run length is achieved with thicker (e.g. 10AWG) wire. Each Exton module draws about 0.5 A, so some examples that might work below:

- 10 AWG Exton Circuit, 250W total: 150' Total circuit Run Length
- 10 AWG Exton Circuit, 100W total: 250' Total circuit Run Length
- 12 AWG Exton Circuit, 100W total: 200' Total circuit Run Length
- 18 AWG Exton Circuit, 100W total: 50' Total circuit Run Length

These examples assume a roughly even spacing of modules along the circuit run, and good electrical connections. Poor or numerous “pigtailed” connections that interrupt the circuit, or grouping modules towards the end of a run, can increase the voltage drop and cause improper LED output for these examples.



## EXTON TRAC SYSTEM LIMITED WARRANTY

This limited warranty (“**Limited Warranty**”) applies to Exton Trac and Monopoint Systems (the “**Products**”) sold by Tegan Lighting (the “**Company**”) or its retail partners. This Limited Warranty does not apply to any paper or nylon shade accessory to the Products—the Company makes no warranty as to any paper or nylon shade accessory to the Products. The obligations under this Limited Warranty are only to the owner of the building or home in which the Products are installed, at the time in which the Products are installed. The Limited Warranty cannot be assigned or transferred, including to a subsequent purchaser of the building or home. This Limited Warranty applies only to Products purchased in the United States.

### Limited Warranty

The Company warrants that the Products will be free from material defects in materials and workmanship under normal use for a period of three years from the date of your purchase (“**Warranty Period**”). Your sole and exclusive remedies for warranty claims submitted pursuant to this Limited Warranty are as follows:

For all Products that contain or develop a material defect in materials or workmanship during the Warranty Period, the Company will do one of the following: (1) repair the Product, (2) replace the Product with a like product, or (3) refund your purchase price for the Product (taxes, shipping and handling costs excluded). The Company has the sole discretion to decide which of these three options to use. If the Company replaces the Product pursuant to this Limited Warranty, a new Warranty Period of three years will apply to the replacement Product.

### Warranty Claim Procedure

All claims pursuant to this Limited Warranty must be submitted in accordance with the procedures described in this section, and must be submitted within the Warranty period.

To make a Limited Warranty claim, you must contract your local selling Manufacturer’s Representative, and provide the Manufacturer’s Representative with the following information, in addition to any information requested by the Manufacturer’s Representative: (1) proof of purchase, including date of purchase; (2) a description of the problem or defect, along with any supporting documentation, including photographs; (3) the date the defect was first discovered; and (4) your name, address, and phone number.



## Warranty Claim Procedure (cont'd)

The Manufacturer's Representative will then provide the details of your claim to the Company. The Company will review your claim and then you will be notified whether the claim is denied or accepted, or whether the Company needs additional information. If the Company or Manufacturer's Representative requests additional information from you, then you must provide the information within 30 days of the requests or your Limited Warranty claim becomes void.

If the Company accepts your claim, you will be sent a Return Goods Authorization ("RGA") number and provide you with further instructions on where to ship the Product. You must return the Product, your proof of purchase, the RGA, and anything else requested by the Company or Manufacturer's Representative within 30 days of the date the RGA was sent to you; if you fail to do so, your Limited Warranty claim becomes void. The Company will not pay for any labor costs incurred by you prior to acceptance of a Limited Warranty Claim. If the Company accepts a Limited Warranty Claim, it will only pay for labor costs expressly approved by the Company in writing.

## Exclusions

This Limited Warranty does not apply to: (1) normal wear and tear and (2) defects or damage caused by misuse (including, but not limited to, failure to follow any instructions for installing and using the product, and failure to properly winterize the Product); tampering; accident; neglect; abuse; alteration; modification; improper or unauthorized repair; improper storage; acts of God (including weather-related events and wind velocity exceeding 27 (tree mount) or 40 (structure mount) Knots); or animals. The Company is not responsible for damages arising from or related to the failure to follow instructions relating to the installation and use of the Product, regardless of whose improper installation or use causes the damage. If the Product is not installed in accordance with the Company's installation instructions, or if the Product is tampered with after installation, the Limited Warranty immediately becomes void.

## Limitation of Damages and Implied Warranties

TO THE FULL EXTENT PERMITTED BY LAW, THIS WARRANTY DOES NOT COVER, AND TEGAN LIGHTING IS NOT RESPONSIBLE FOR: (A) SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF WARRANTY OR CONDITION, OR UNDER ANY OTHER LEGAL THEORY, INCLUDING, BUT NOT LIMITED TO, LOSS OF USE, LOSS OF REVENUE, LOSS OF ACTUAL OR ANTICIPATED PROFITS (INCLUDING LOSS OF PROFITS ON CONTRACTS), LOSS OF THE USE OF MONEY, LOSS OF ANTICIPATED SAVINGS, LOSS OF BUSINESS, LOSS OF OPPORTUNITY, LOSS OF GOODWILL, LOSS OF REPUTATION, INJURIES TO PERSONS, OR DAMAGES TO PROPERTY (OTHER THAN DAMAGES TO THE PRODUCT ITSELF).



## Limitation of Damages and Implied Warranties (cont'd)

TO THE FULL EXTENT PERMITTED BY LAW, THIS WARRANTY DOES NOT COVER, AND TEGAN LIGHTING IS NOT RESPONSIBLE FOR: (A) SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF WARRANTY OR CONDITION, OR UNDER ANY OTHER LEGAL THEORY, INCLUDING, BUT NOT LIMITED TO, LOSS OF USE, LOSS OF REVENUE, LOSS OF ACTUAL OR ANTICIPATED PROFITS (INCLUDING LOSS OF PROFITS ON CONTRACTS), LOSS OF THE USE OF MONEY, LOSS OF ANTICIPATED SAVINGS, LOSS OF BUSINESS, LOSS OF OPPORTUNITY, LOSS OF GOODWILL, LOSS OF REPUTATION, INJURIES TO PERSONS, OR DAMAGES TO PROPERTY (OTHER THAN DAMAGES TO THE PRODUCT ITSELF).

INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS, WHICH VARY FROM JURISDICTION TO JURISDICTION.

All implied warranties (including the implied warranties of merchantability and fitness for a particular purpose) are limited in duration to the Warranty Period. All such implied warranties are expressly disclaimed for periods beyond the Warranty Period.

Some jurisdictions do not allow limitations on the duration of an implied warranty, so this limitation may not apply to you.

## Governing Law and Disputes

This Limited Warranty (and any non-contractual disputes/claims arising out of or in connection with them) are subject to the laws of the state of California, United States of America, without regard to choice or conflicts of law principles. The parties expressly agree that the provisions of the Limited Warranty or to their relationship.

Further, you and the Company agree to the jurisdiction of the Northern District of California to resolve any dispute, claim, or controversy that relates to or arises in connection with the Limited Warranty (and any non-contractual disputes/claims relating to or arising in connection with them) and is not subject to mandatory arbitration under Limited Warranty, or, if that court lacks jurisdiction, the Superior Court of California of the County of Marin.

You and the Company agree that any dispute, claim, or controversy between you and the Company arising in connection with or relating in any way to these Agreements or to your relationship with the Company as a user of the Service (whether based in contract, tort, statute, fraud, misrepresentation, or any other legal theory, and whether the claims arise during or after the termination of the Limited Warranty) will be determined by mandatory binding individual (not class) arbitration.





## Governing Law and Disputes (con'd)

You and the Company further agree that the arbitrator shall have the exclusive power to rule on his or her own jurisdiction, including any objections with respect to the existence, scope or validity of the Limited Warranty, this arbitration clause thereto, or to the arbitrability of any claim or counterclaim. Arbitration is more informal than a lawsuit in court. THERE IS NO JUDGE OR JURY IN ARBITRATION, AND COURT REVIEW OF AN ARBITRATION AWARD IS LIMITED. There may be more limited discovery than in court. The arbitrator must follow this agreement and can award the same damages and relief as a court (including attorney fees), except that the arbitrator may not award any relief, including declaratory or injunctive relief, benefiting anyone but the parties to the arbitration. This arbitration provision will survive termination of the Limited Warranty.

Notwithstanding this clause you and the Company both agree that nothing in this Arbitration Agreement will be deemed to waive, preclude, or otherwise limit either of our rights, at any time, to (1) bring an individual action in a U.S. small claims court or (2) bring an individual action seeking only temporary or preliminary individualized injunctive relief in a court of law, pending a final ruling from the arbitrator.

YOU AND THE COMPANY AGREE THAT EACH MAY BRING CLAIMS AGAINST THE OTHER ONLY IN YOUR OR ITS INDIVIDUAL CAPACITY AND NOT AS A PLAINTIFF OR CLASS MEMBER IN ANY PURPORTED CLASS OR REPRESENTATIVE ACTION. Unless both you and the Company agree, no arbitrator or judge may consolidate more than one person's claims or otherwise preside over any form of a representative or class proceeding. The arbitrator may award injunctive relief only in favor of the individual party seeking relief and only to the extent necessary to provide relief warranted by that party's individual claim. If a court decides that applicable law precludes enforcement of any of this paragraph's limitations as to a particular claim for relief, then that claim (and only that claim) must be severed from the arbitration and may be brought in court.

Either you or we may start arbitration proceedings. Any arbitration between you and the Company will take place under the Consumer Arbitration Rules of the American Arbitration Association ("AAA") then in force (the "AAA Rules"), as modified by this agreement. You and the Company agree that the Federal Arbitration Act applies and governs the interpretation and enforcement of this provision (despite the choice of law provision above). The AAA Rules, as well as instructions on how to file an arbitration proceeding with the AAA, appear at [adr.org](http://adr.org), or you may call the AAA at 1-800-778-7879.

Any arbitration hearings will take place in the county (or parish) of your address, provided that if the claim is for \$25,000 or less, you may choose whether the arbitration will be conducted (1) solely on the basis of documents submitted to the arbitrator; (2) through a non-appearance based telephonic hearing; or (3) by an in-person hearing as established by the AAA Rules in the county (or parish) of your billing address.



## Governing Law and Disputes (con'd)

If you choose to file an arbitration proceeding and you are required to pay a filing fee, the Company will reimburse you for that filing fee, unless your claim is for greater than US \$10,000, in which case you will be responsible for the filing fee. The Company will pay any other arbitration fees, including your share of arbitrator compensation, unless otherwise required by AAA rules or court order. Regardless of the manner in which the arbitration is conducted, the arbitrator shall issue a reasoned written decision sufficient to explain the essential findings and conclusions on which the decision and award, if any, are based. The arbitrator may make rulings and resolve disputes as to the payment and reimbursement of fees or expenses at any time during the proceeding and upon request from either party made within 14 days of the arbitrator's ruling on the merits.

A party who intends to seek arbitration must first send a written notice of the dispute to the other, by certified mail, Federal Express, UPS, or Express Mail (signature required), or in the event that we do not have a physical address on file for you, by electronic mail ("Notice"). The Company's address for Notice is: the Company USA Inc., Attn: CEO, 25 Pelican Way, San Rafael, CA 94901. The Notice must (1) describe the nature and basis of the claim or dispute; and (2) set forth the specific relief sought ("**Demand**"). We agree to use good faith efforts to resolve the claim directly, but if we do not reach an agreement to do so within 30 days after the Notice is received, you or the Company may commence an arbitration proceeding. During the arbitration, the amount of any settlement offer made by you or the Company shall not be disclosed to the arbitrator until after the arbitrator makes a final decision and award, if any. In the event our dispute is finally resolved through arbitration in your favor, and the arbitrator issues you an award that is greater than the value of the Company's last written settlement offer, then the Company will instead pay you either the amount of the award or \$1,000, whichever is greater. All documents and information disclosed in the course of the arbitration shall be kept strictly confidential by the recipient and shall not be used by the recipient for any purpose other than for purposes of the arbitration or the enforcement of the arbitrator's decision and award and shall not be disclosed except in confidence to persons who have a need to know for such purposes or as required by applicable law.

