

## Introduction:

Congratulations on your purchase of an All Sky Cam! Please read the following important instructions before using the product.

## Cautions & Warnings:

Do not operate the camera without the glass dome. Removal of the glass dome may result in breakage of the glass. Only operate the camera with the glass dome oriented upwards, the camera is not water-resistant in any other orientation. Operation on a moving vehicle is not recommended, the glass dome is not designed to withstand impact from moving objects or debris. Continuous display on a CRT-style monitor may cause image burn-in damage to the monitor over time.

To reduce the risk of electric shock, do not disassemble the camera, there are no user-serviceable components inside. The power supply may only be operated indoors. Use the included weather sealant around outdoor cable connections to reduce the risk of shock or damage to the equipment.

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.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

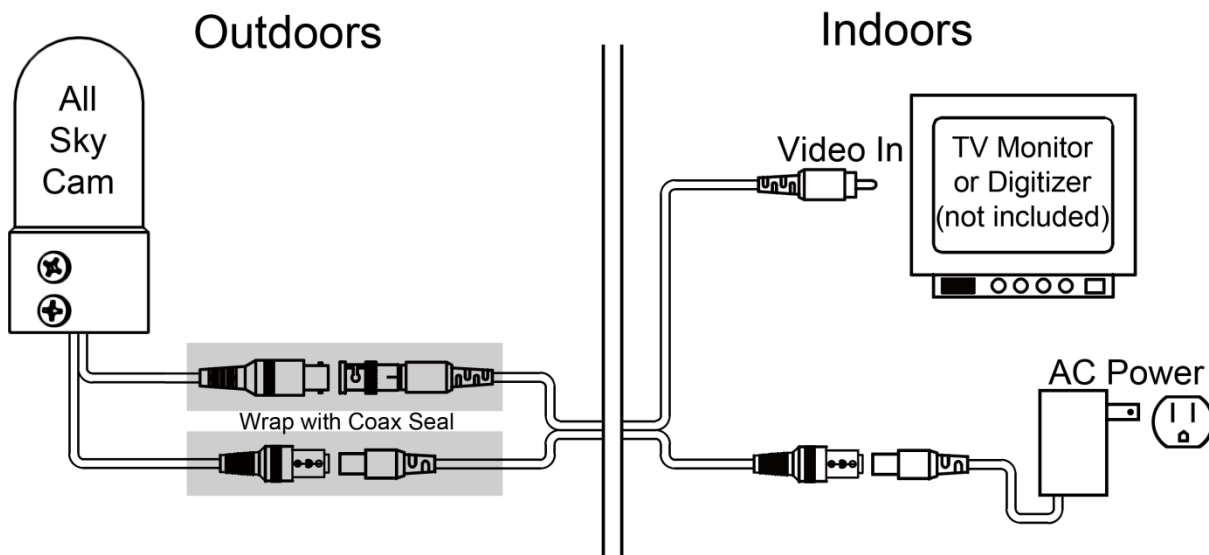
## Installation:

**For best results, mount the All Sky Cam above the roofline, away from bright lights and any nearby obstacles. Please orient the camera so that the side with an engraved 'N' points north.** This allows easy understanding when viewing the screen by orienting north up, east to the left, west to the right, and south to the bottom. The 'N' side is also the side with the two large set screws.

The All Sky Camera may be easily mounted with any number of methods. The preferred mounting is a standard satellite TV 1-5/8" (40mm) J-pipe mount, available from your local satellite TV installer, Radio Shack, or other supplier. Some models include poles up to 38" long, allowing it to reach far above a roofline or fencepost. Any of the poles, masts, wall mounts, roof mounts, eave mounts, and tripods intended for satellite TV or off-air TV antenna applications are good choices for mounting the All Sky Cam.

An alternative way to mount is to employ a sturdy L bracket purchased from a hardware store, screwed into a horizontal surface with wood screws. For temporary mounting, it is also possible to screw a long wood screw through one of the 1/4-20 holes in the side of the ASC and into a vertical surface. Or, removing the two screws allows mounting on a photo or video tripod.

## Connection:



After establishing a mounting for the camera, pass the camera's wires through the pole (if applicable) and connect it to the supplied extension cable. Then cable connections must then be wrapped with the included Coax-Seal weather stripping to prevent rain or dew from shorting out the power and video signals. See the Coax-Seal envelope for instructions. The extension cable can then be routed through the pole and into the building inside.

To connect the All Sky Cam to a television set, look on the back of the television for a yellow video input connector. It may also be labelled as "Composite", "Video In", or "Video". Then set the TV's input selector to that input (see the TV's user manual for instructions).

## Cleaning:

For regular cleaning of dust and bird residue, simply wipe off the glass with a wet cloth. Wiping with rubbing alcohol may be necessary to remove oily residue and reduce beading of precipitation. Removal of the glass dome is strongly discouraged, as the glass is easily broken during removal. If the glass must be removed, wedge a screwdriver between the underside rubber stopper and metal wall to allow air movement. We then recommend a gentle twisting motion, with your hand wrapped evenly around the glass, careful to apply pressure evenly. Do not leave the dome off for more than an hour or the internal desiccant will lose effectiveness.

## Specifications:

Video system:	NTSC, 60Hz interlaced.
Image sensor:	Color 1/3" Sony Super HAD CCD II
Lens:	1.24mm F2.8, 3 elements
Field of view:	190 degrees hemispherical
Projection:	Circular fisheye
Effective pixels across FOV:	546 x 457
Nighttime binning:	1x2 skip
Exposure time:	1/100,000 to 4 seconds, automatic
Limiting stellar magnitude:	Approx. 4 (limited by sky brightness)
Minimum illumination:	0.0002 lux (starlight)
Signal to noise ratio:	Greater than 50dB
White balance:	Automatic
Wall AC adapter:	120VAC, US style plug
Power supply:	DC 12V, maximum 120mA
Power consumption:	1.5 watts
Power connection:	2.1x5.5mm female barrel
Video connection:	Female BNC or male RCA
Housing construction:	Clear anodized aluminum
Origin:	Assembled in U.S.A. with components made in Korea and China.

RoHS compliant.

## Correct Disposal of This Product:



(Waste Electrical & Electronic Equipment)

(Applicable in the European Union and other European countries with separate collection systems)

This marking shown on the product or its literature, indicate that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources. This product should not be mixed with other commercial wastes purchased this product, or their local government office, for details of where and how they can take item for environmentally safe recycling. Business users should contact their supplier and check the terms and conditions of the purchase contract. Household users should contact either the retailer where they for disposal.

## Warranty:

Warrantor: Moonglow Technologies LLC

Elements of Warranty: Moonglow Technologies warrants, for one year of the original retail purchase owner, this Product to be free from defects in materials and workmanship with only the limitations or exclusions set out below.

Warranty Duration: This warranty to the original user shall last for one year of the original user. The warranty is invalid if the Product is (A) damaged or not maintained as detailed in the User's Manual (B) modified, altered, or used as part of any conversion kits, subassemblies, or any configurations not sold by Moonglow, or (C) serviced or repaired by someone other than Moonglow Technologies for a defect or malfunction covered by this warranty. This warranty includes shipping to any point inside the United States. Insurance upon that shipping and/or international shipping and/or any customs and/or import duties attached are the sole responsibility of the owner.

Statement of Remedy: In the event that the product does not conform to this warranty at any time while this warranty is in effect, warrantor will repair the defect and return it to you without charge for parts, service or any cost incurred by the warrantor in connection with the performance of this warranty. THE ONE YEAR WARRANTY SET FORTH ABOVE IS THE SOLE AND ENTIRE WARRANTY PERTAINING TO THE PRODUCT AND IS IN LIEU OF AND EXCLUDES ALL OTHER WARRANTIES OF ANY NATURE WHATSOEVER, WHETHER EXPRESS, IMPLIED OR ARISING BY OPERATION OF LAW, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THIS WARRANTY DOES NOT COVER OR PROVIDE FOR THE REIMBURSEMENT OR PAYMENT OF INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Procedure for obtaining performance of warranty: Upon discovery of flaw, we require that the user communicate by telephone and/or email to the Moonglow Technologies Service department to report the failure of equipment. Should technical support be unable to resolve the conflicts of the product, it should be packaged in its original packaging and returned with evidence of original purchase and note describing defect to include owner contact information. The product should be shipped freight pre-paid by traceable means or delivered to warrantor at:

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