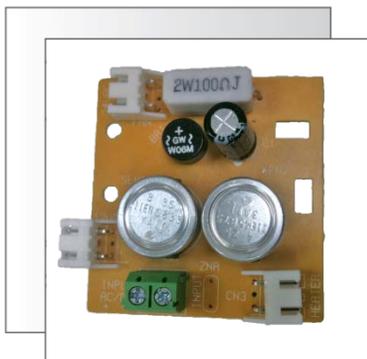




## Side-Opening Outdoor Camera Housing



HS91 Series



**INSTALLATION AND OPERATING INSTRUCTIONS**  
[www.linearcorp.com](http://www.linearcorp.com)

## IMPORTANT SAFEGUARDS

1. Read Instructions - All the safety and operating instructions should be read before the unit is operated.
2. Retain Instructions - The safety and operating instructions should be retained for future reference.
3. Heed Warnings - All warnings on the unit and in the operating instructions should be adhered to.
4. Follow Instructions - All operating and use instructions should be followed.
5. Cleaning - Unplug the unit from the outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
6. Attachments - Do not use attachments not recommended by the product manufacturer as they may cause hazards.
7. Accessories - Do not place this unit on an unstable stand, tripod, bracket, or mount. The unit may fall, causing serious injury to a person and serious damage to the unit. Use only with a stand, tripod, bracket, or mount recommended by the manufacturer or sold with the product. Any mounting of the unit should follow the manufacturer's instructions and should use a mounting accessory recommended by the manufacturer.  
An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.
8. Ventilation - Openings in the enclosure, if any, are provided for ventilation, to ensure reliable operation of the unit, and to protect it from overheating. These openings must not be blocked or covered. This unit should not be placed in a built-in installation unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
9. Power Sources - This unit should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply you plan to use, consult your appliance dealer or local power company. For units intended to operate from battery power or other sources, refer to the operating instructions.
10. Grounding or Polarization - This unit may be equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug. Alternatively, this unit may be equipped with a 3-wire grounding-type plug, a plug having a third (grounding) pin. This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug.
11. Power Cord Protection - Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords and plugs, convenience receptacles, and the point where they exit from the appliance.
12. Power Lines - An outdoor system should not be located in the vicinity of overhead power lines or other electric light or power circuits or where it can fall into such power lines or circuits. When installing an outdoor system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal. U.S.A. models only - refer to the National Electrical Code Article 820 regarding installation of CATV systems.
13. Overloading - Do not overload outlets and extension cords as this can result in a fire or electric shock.
14. Object and Liquid Entry - Never push objects of any kind into this unit through openings, as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the unit.
15. Servicing - Do not attempt to service this unit yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
16. Damage Requiring Service - Unplug the unit from the outlet and refer servicing to qualified service personnel under the following conditions:
  - a. When the power supply cord or plug is damaged.
  - b. If liquid has been spilled or objects have fallen into the unit.
  - c. If the unit has been exposed to rain or water.
  - d. If the unit does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions, as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the unit to its normal operation.
  - e. If the unit has been dropped or the cabinet has been damaged.
  - f. When the unit exhibits a distinct change in performance--this indicates a need for service.
17. Replacement Parts - When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
18. Safety Check - Upon completion of any service or repairs to this unit, ask the service technician to perform safety checks to determine that the unit is in proper operating condition.
19. Coax Grounding - If an outside cable system is connected to the unit, be sure the cable system is grounded. U.S.A. models only--Section 810 of the National Electrical Code, ANSI/NFPA No.70-1981, provides information with respect to proper grounding of the mount and supporting structure, grounding of the coax to a discharge unit, size of grounding conductors, location of discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.
20. Lightning - For added protection of this unit during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the cable system. This will prevent damage to the unit due to lightning and power line surges.

## FCC NOTICE

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause 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:

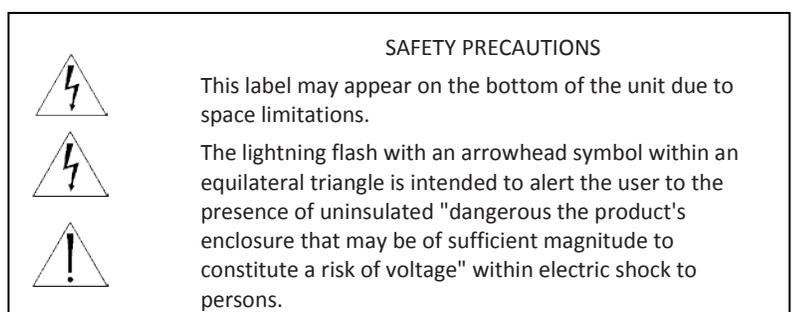
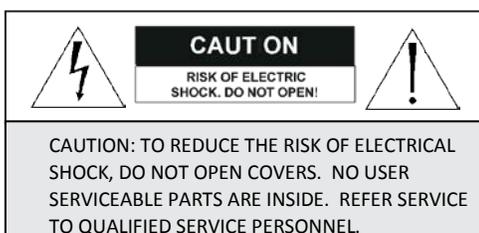
Relocate the monitor away from the TV/radio receiver.

Plug the monitor into a different wall outlet so that the console is on a different branch circuit.

Re-orient the TV/radio antenna.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions.

NOTE: Changes or modifications to the unit may void FCC compliance.



## Unpacking

Unpack carefully. This is electromechanical equipment and should be handled with care. If an item appears to have been damaged in shipment, replace it properly in its carton and notify the shipper. If any items are missing, notify Linear LLC. The shipping carton is the safest container in which the unit may be transported. Save it for possible future use.

## Service

If the unit ever needs repair service, the customer should contact Linear LLC for a return product authorization (RPA) and shipping instructions.

## Care and Maintenance

Perform routine maintenance to keep the unit dust free. Clean the viewing window as needed. Use a lens cloth or a Kimtech Kimwipes™ delicate task wipe with a mild detergent and water.

## Model Designation

HS91-2HB	Housing, Flip-Top, 12VDC/24VAC, Heater/Blower, Sunshield, Wall Mount Included, IP65 Rated
HS91-2HB68	Housing, Flip-Top, 12VDC/24VAC, Heater/Blower, Wall Mount Included, IP68 Rated

## Description

The HS91 Series CCTV camera housings are simple and effective solutions for installing cameras in outdoor environments. The HS91-2HB is an IP65 rated enclosure with air vent holes to vent excessive heat and includes a sunshield. The HS91-2HB68 is an IP68 rated water-tight enclosure. Both units have a heater/blower and include a 2-axis wall mount.

## Hardware Kit

2 x 1/4-20 Cross Recessed Screws  
2 x 1/4" Flat Washers  
1 x Cross Recessed Sheet Metal Screw  
1 x 2-Position Terminal Block  
1 x 5mm Allen Wrench

## Tools Required

7/8" (22mm) Crescent Wrench  
Drill

## Certification

Installation should be performed by a licensed professional and conform to the National Electrical Code (NEC) and any applicable local codes.

## Installation

1. Remove the housing and mount from the packaging.
2. Hold the mount up to the mounting surface and use it as a template to mark the mounting hole locations.
3. Drill a central hole large enough to accept all of the cables being run to the site.
  - 3.1. The housing includes two liquid-tight cordgrips that accept wire diameters between 0.20" and 0.35" (5-9mm).
4. Drill the mounting hole locations wide enough to accept appropriately sized wall anchors (not provided).
  - 4.1. The holes in the mount will accept up to 0.30" (7mm) diameter wall anchors.
5. Feed 20-inches of cable out through the wall, through the rear of the wall mount, and out the top. Leave the cables hanging.
6. Attach the mount to the mounting surface using appropriate wall anchors.
7. Remove the tightening caps from the liquid tight connectors.
8. Slide the caps down the cables (rounded side first).
9. Remove and discard the plugs from the cordgrips.
10. While lifting the housing up to the top of the mount, feed the cables into the housing.
11. Pull the cable through the housing until the mount is nearly resting on the mount.
12. Hand-tighten the caps onto the cordgrips. Once hand-tight, turn the cap at least 1/2 turn with a 7/8" crescent wrench.
13. Loosen the screw in the bottom of the mount using the 5mm Allen wrench.
14. Orient the mounting holes in the housing over the captive screws in the mount flange.
15. Orient the mounting holes in the housing over the captive screws in the mount flange.
16. Use the 5mm Allen wrench to tighten the screws and attach the housing to the mount.
17. Orient the housing in the desired direction and re-tighten the screw in the bottom of the mount.
18. The interior of the housing is shown in Figure 1.

19. Remove the camera sled and attach it to the bottom of the camera using the supplied washers and 1/4-20 screws.
20. Install the terminal block from the hardware kit using the sheet metal screw. The terminal block should be installed in one of the holes marked "Terminal Block" in figure 1.
21. Terminate the power wires into the terminal block.
22. Double terminate hook up wire (customer supplied) into the opposite side of the terminal block.
23. Connect one pair of hookup wires to the appropriate terminals on the power board (see Figure 2). If using DC voltage, be careful to check the polarity.
- 24. IMPORTANT: Plug the fan into the appropriate connector depending on the input voltage (see Figure 2).**
25. Connect the other pair of hookup wires to the camera (again, be careful of polarity if using DC voltage).
26. Connect the video/data cable(s) to the camera.
27. On the inside of the building, pull excess wire into the building. Run the cables to the recorder and power supply.
28. Apply power to the unit.
29. Ensure the camera is focused.
30. Close the camera housing lid, press top and bottom together, and start the screw into the hole by hand until it catches. Tighten the screws until the lid is firmly secured using the 5mm Allen wrench.

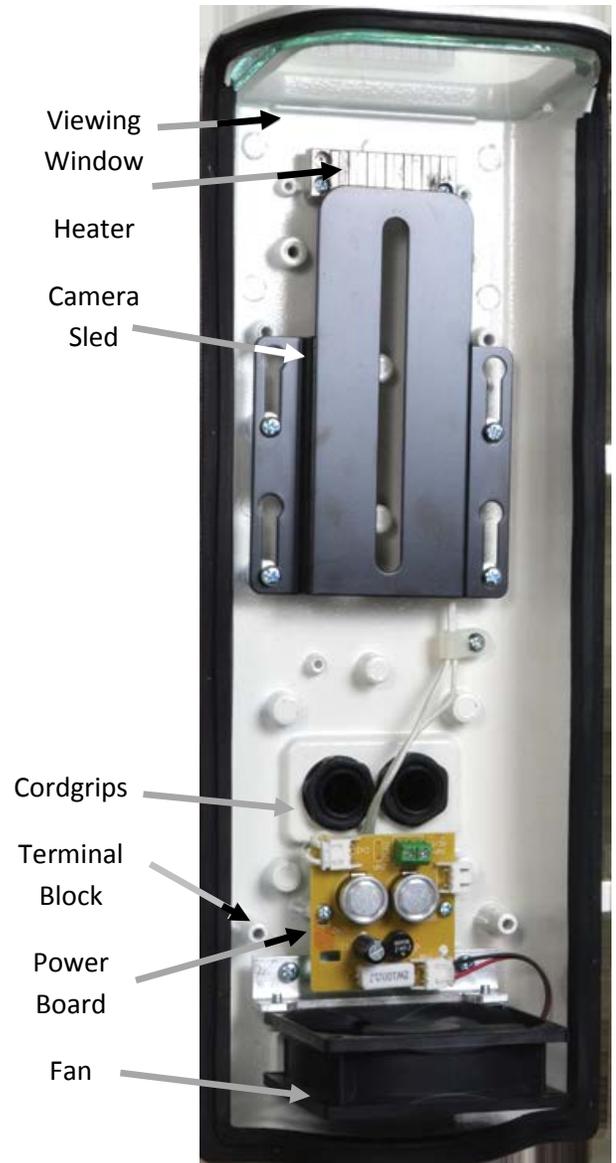


Figure 1 – Housing Interior

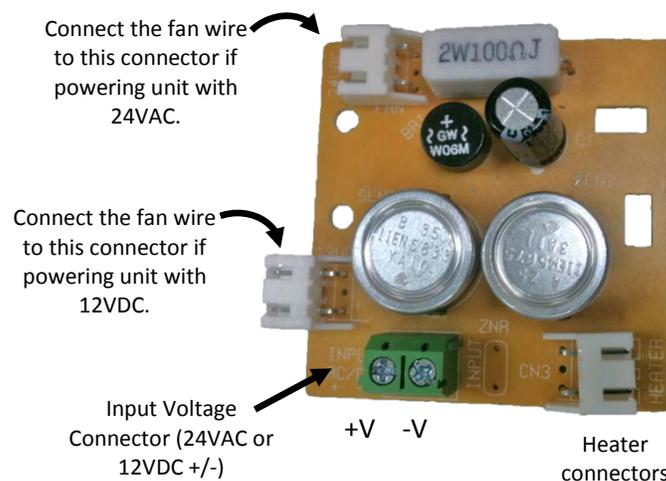


Figure 2 – Power Board