

# Specifications

Power Consumption	5.2 W max.
Operating Voltage Range	9 to 14 VDC (powered by DVR)
Transient Protection	1.5 kW
Operating Temperature Range	-40 to 122°F (-40 to 50°C)
Environmental Rating	IP67
Resolution	720p
Camera Sensitivity	0.7 lux at F2.0, 0 lux (IR on)
Dimensions, LxWxH	3.45" x 5.16" x 3" (88 mm x 131 mm x 78 mm)
Enclosure Material	Solid aluminum alloy, powder-coated
Viewing Window	Impact-resistant polycarbonate, scratch-resistant, UV protected
Wiring Options	20'(6m), 50'(15m), 75'(23m)
Gimbal	Rotate: 360°, Pan: 7.5°, Tilt: 10 ~ 37.5°
Weight	1.22 lbs (554 g)

## Routine Maintenance

Most liquid cleaners or graffiti gel can be used to clean your camera enclosure. Do not use abrasive cleaners that can scratch the window and reduce visibility of the camera.

## Damaged Camera

If the camera housing and window is damaged or scratched, order a replacement camera from your camera distributor. To remove and replace the housing, follow the steps in sections **Open the Camera** and **Replace Camera Housing**.

## Service

If your HD1S Stop Arm Camera is to be returned for service, please contact the Seon technical support team, provide the model and/or serial# of your unit, and ask for a **Return Merchandise Authorization (RMA)** number. An **RMA#** allows the support team to better track your product when it comes in for service. Please show the RMA# on the **outside** of the package.

ANY PRODUCT SENT WITHOUT AN RMA# MAY BE REFUSED!

## Technical Support

- Email: [service@seon.com](mailto:service@seon.com)
- Phone: 1.844.899.7366

## Documentation

Additional copies of this guide, along with other supporting documentation can be found on the SafeFleet Community (<https://community.seon.com/documents/>)

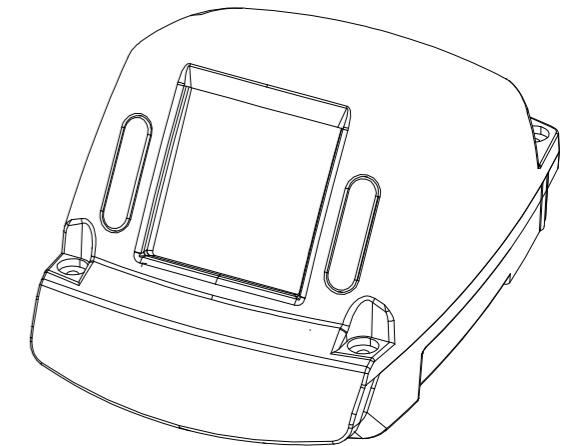
# HD1S Stop Arm Camera Quick Installation Guide

## Installation Kit Contents

- 1x HD1S wedge camera
- 1x security key
- 3x #10 3/4" Phillips screws
- 1x Drilling template

### CAUTION: Cable Compatibility

This camera requires a special Analog High Definition (AHD) cable - as indicated by a blue band in front of the connectors. A standard cable may appear to work on a small analog screen, but the image will be significantly degraded during subsequent playback.



## 1. Choose Camera Location

- Select a flat location to minimize possible moisture leakage into the vehicle. Cameras must be installed with the cabling running inside the wall panels.
- Use the supplied drilling guide template to mark the cable (7/8") and screw (5/32") holes on the panel.
- Use a step-bit to drill the cable hole, and regular bits for the screw holes.

### TIP: Seal the Camera Mounting Holes

For outdoor installations, if a flat surface is not available, carefully seal the mounting holes under the base of the camera after installation. Do NOT apply silicone or other sealants around the base of the camera.

## 2. Connect the Camera

- Connect the camera cable to the extension cable through the panel cable hole. See Figure 1. Ensure the extension cable has a blue band in front of the connectors, indicating it is AHD (Analog High Definition)-compatible.
- Connect the extension cable's 2x3 Micro-Fit connector into a digital video recorder (DVR).

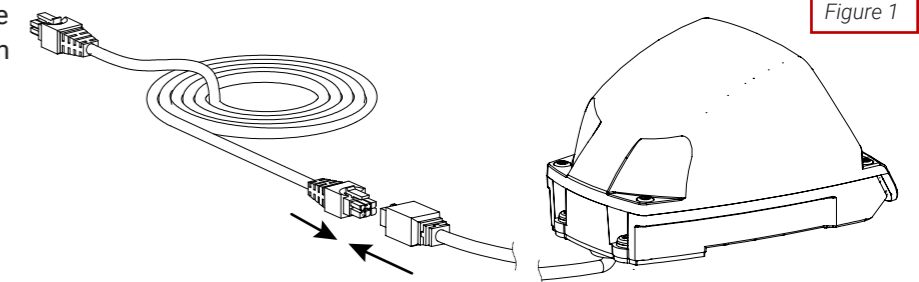


Figure 1

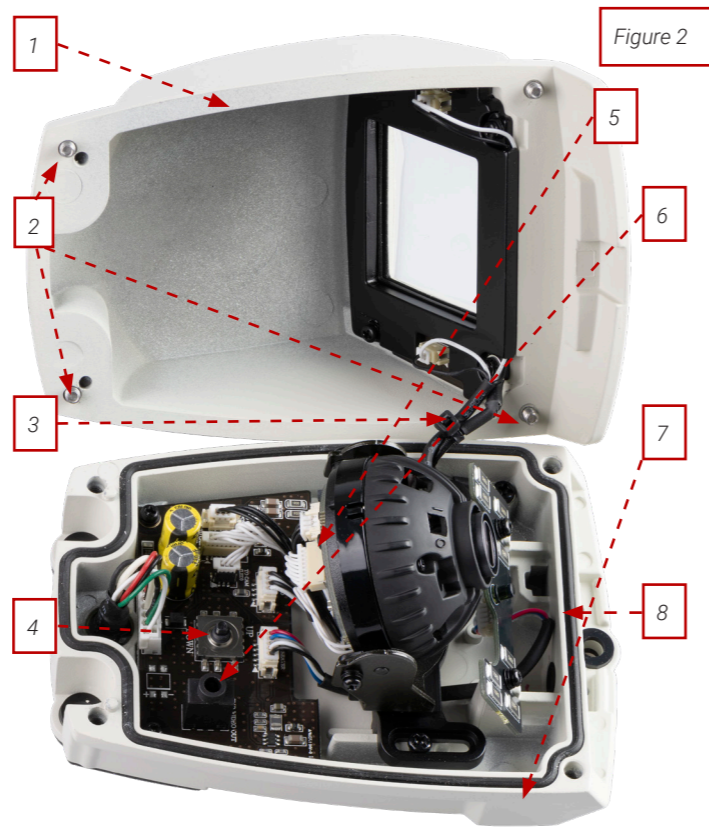
## 3. Open the Camera

- Using the security key supplied with the camera, loosen the four captive screws on the housing. See figure 2.
- Lift the housing off of the base.

### TIP: Housing Can Scratch Vehicle

When the camera cover is open, take care to ensure it does not flop against the vehicle surface. Damage to paint can occur.

- 1: Camera housing
- 2: Captive housing screws
- 3: LED & ground wires
- 4: Menu button
- 5: Camera gimbal
- 6: Local video out
- 7: Base
- 8: Camera sealing gasket



**CAUTION: Camera and PCB Wiring**

While installing the camera, do not impact the printed circuit board or wiring inside the camera with screws or screwdriver bits. Damage to the camera can occur.

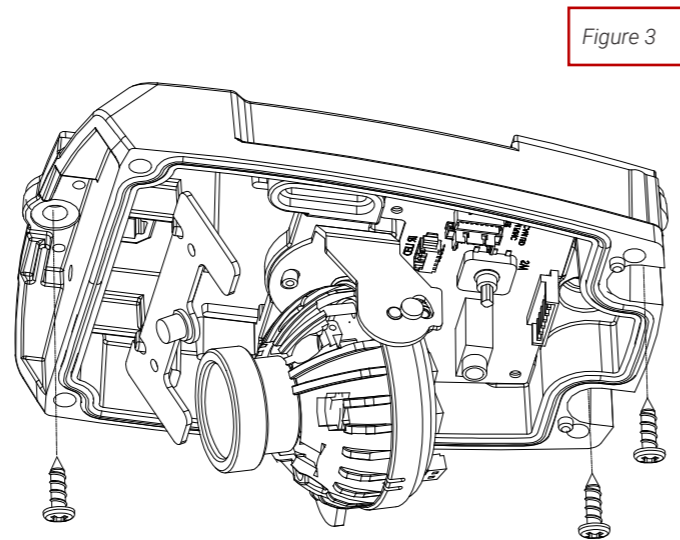
## 4. Install the Camera

**TIP: Allow Camera Ventilation**

The camera is designed to vent for proper operation. Do NOT apply silicone or other sealants around the base of the camera.

Use the three #10x3/4" mounting screws supplied with the camera to attach the camera to a wall or ceiling. See figure 3.

The mounting gaskets on the camera base seal the screw and cable holes when mounted on a flat surface.



## 5. View Camera Output

1. Power on the DVR and camera.
2. Connect the supplied local video out adapter cable's 3.5mm audio plug to the camera's Local Video Out socket. See figure 2.
3. Connect the local video out cable's RCA end to a video monitor to see the camera's line of view while adjusting the camera's rotation, pan, and tilt positions.

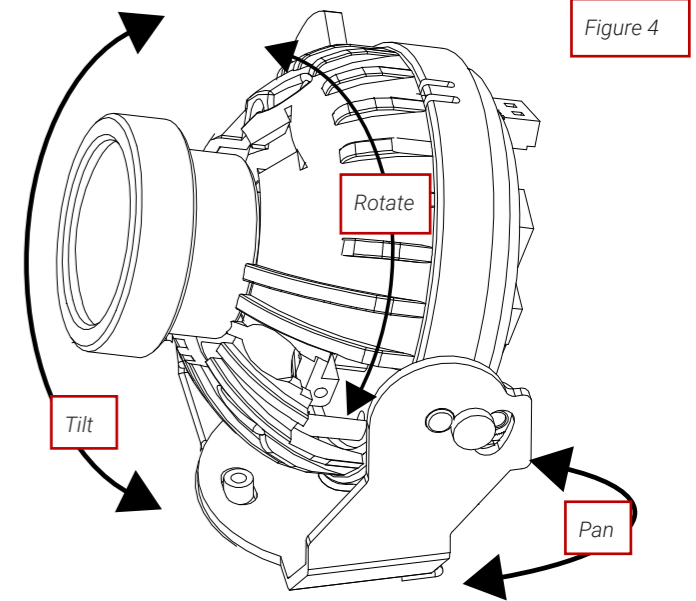
## 6. Aim the Camera

To get the required video image, adjust the camera's rotation, pan, and tilt settings using the adjustment controls shown in Figure 4 and described in the following steps:

1. **Rotation:** depending on how the camera is mounted, rotate the camera lens so the video appears upright on the video monitor.
2. **Pan:** grip the camera pan adjustment U-Bracket sides and twist it to find the required view.
3. **Tilt:** loosen the tilt adjustment screws on the U-Bracket until the camera tilts. Tighten the tilt screws after adjustments are complete. Do not adjust tilt after tightening screws.

**TIP: Do Not Adjust Other Screws**

The HD1S camera is factory adjusted for lens position. Sliding back the gimbal may result in the camera seeing parts of the housing.



**TIP: Check Video Output from DVR**

After replacing camera housing, ensure the desired field of view is achieved. Adjust if camera housing obstructs the view.

## 7. Configuration Settings

The HD1S Stop Arm Camera is configured out-of-the-box for optimal performance. Should you want to make changes to any of the presets, contact the Seon Support team (service@seon.com, 1.844.899.7366).

## 8. Replace Camera Housing

1. Close the housing back over onto the base.
2. Use the security key to tighten the four captive locking screws. Figure 2 shows the HD1S camera in detail.

**CAUTION: Do Not Pinch Safety Wire**

Ensure closing the cover does not pinch the wire connecting the cover to the base. This can allow moisture to enter and damage the unit.

## 9. Recorder Settings

Ensure the recorder channel connected to the HD1S Stop Arm Camera has Camera Settings as follows (for detailed instructions, see the recorder documentation).

1. Right-click in the camera live view to access recorder menus.
2. Go to **Configuration > Record > Camera**.
3. (TN16/TE16 only) Click the **Analog** tab.
4. Set the following values:  
**FPS** to 30 fps, **Quality** to 4, and **Resolution** to 1280 X 720

FPS	Quality	Resolution
30 fps	4	1280x720
30 fps	3	1280x720
15 fps	3	1280x720

Fold Here