# Smart-Vision™ 4.3" Rearview Mirror/Monitor Combo Backup Camera System

INSTALLATION/USER'S MANUAL

P/N: STSK4530

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Jamaica, NY 11435

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## STSK4530 Component List

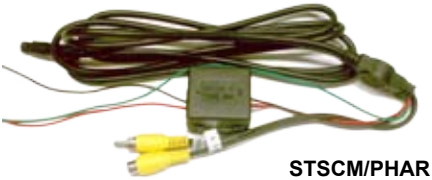
| Component | P/N | Qty. |
|---|---|---|
| Camera | STSC130W (White) or STSC130B (Black) | 1 |
| Monitor | STSM230 | 1 |
| 25 ft Power Harness | STSH330 | 1 |
| Power Harness | STSCM/PHAR | 1 |

**STSM230**


**STSC130W**

**STSC130B**

**STSH330**



**STSCM/PHAR**

**Notes:**
- Please read this manual carefully before using the product.
- This system is intended as an aid to safe reverse operation. Drivers must always use extreme caution when operating a vehicle.
- Specifications subject to change without prior notice.

**Warning:**
- To prevent electrical shock, DO NOT OPEN MONITOR CASE.
- Avoid exposing monitor to water, rain, moisture etc.
- Do not disassemble the camera. This voids the warranty. Disassembling the camera will compromise the waterproof seal.

## Smart-Vision™ 4.3" Rearview Mirror/Monitor Combo Backup Camera System

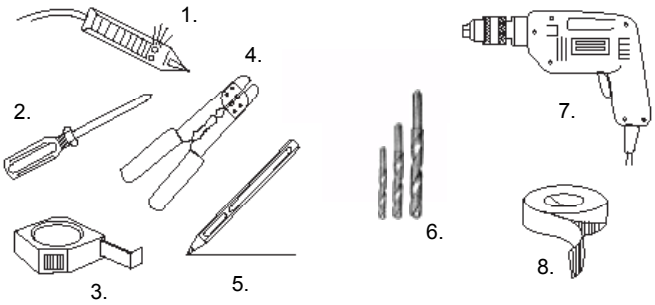
Rosco Vision Systems introduces a revolutionary new backup camera system for small to medium vehicles. Smart-Vision™ utilizes an interior rearview mirror to display a 4.3" LCD monitor when the vehicle shifts into reverse. This monitor allows the driver to see behind the vehicle for added convenience and safety.

The camera has an advanced CMOS lens sensor able to process excellent images under dark and light conditions. The camera has a 170° diagonal field of vision giving superb coverage behind the vehicle and complies with the latest NHTSA 49 CFR Parts 571 and 585 (RIN 2127-AK43).

### General Technical Specifications:

| | |
|---|---|
| Power Supply: | 12VDC |
| Power Consumption: | 1 Watt |
| Current Draw: | <2000 mA |
| Video Input: | 1 Vp-p@75 impedance |
| Operating Temp. °F (°C) | -°5 to °150(-°20 to °65) |
| Monitor Dimensions: | 11"W x 3"H x 1.5"D |

### Installation Tools:

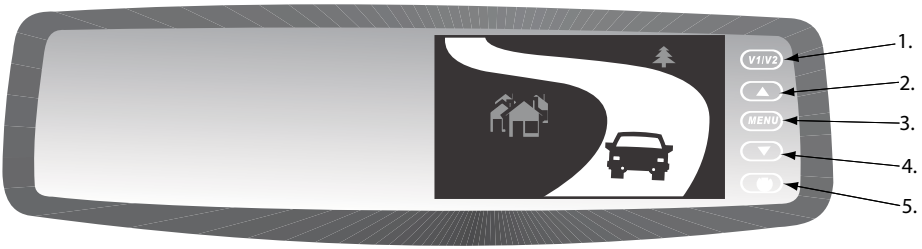



1. Wire Tester
2. Phillips Screwdriver
3. Tape Measure
4. Wire Stripper
5. Pencil
6. Drill Bits
7. Drill
8. Tape

CONTENTS

How To Operate Display ..... 3
Camera Specifications .. 4
Rearview Monitor Installation..... 5
Camera Installation..... 6
Wiring Diagrams ..... 7
Testing & Maintenance .... 8

## How To Operate Display




**How To Operate Display:**

1. V1/V2 - Switches video feed from channel 1 to channel 2.
2. "Up" - Menu selection control.
3. Menu - Switches to setup menu.
4. "Down" - Menu selection control.
5. Power - Switches monitor from Standby to Steady on.

**Monitor Technical Specifications:**

| | |
|---|---|
| Screen: | 4.3" TFT Color LCD |
| Brightness: | 350cd/$m^2$ |
| Contrast ratio: | 300:1 |
| Resolution: | 480 x 272 |
| Current Draw: | 120mA |
| Video format: | NTSC/PAL |
| Display format: | 4 : 3 or 16 : 9 |

**IMPORTANT:** The Rearview Mirror Monitor is not intended to be used for prolonged periods of time. Therefore the monitor stays off until triggered by reverse circuit,

**How To Set Your Monitor:**

On-screen menu commands may be selected pressing the MENU button while the mirror monitor is on.

To adjust **volume** press "UP" or "DOWN" buttons.

Press the MENU button **once** to set desired **brightness.** Press "UP" or "DOWN" to adjust.

Press the MENU button **twice** to set desired **contrast.** Press "UP" or "DOWN" to adjust.

Press the MENU button **three times** to set **color.** Press "UP" or "DOWN" to adjust.

Press the MENU button **three times** to set **color.** Press "UP" or "DOWN" to adjust.

Press the MENU button **four times** to set **sharpness.** Press "UP" or "DOWN" to adjust.

Press the MENU button **five times** to **reset.** Press "UP" or "DOWN" to rest the monitor to factory settings.

**Camera Technical Specifications:**

| | |
|---|---|
| Signal System: | NTSC |
| Sensing Area: | 5.55x5.55mm |
| Sync System: | Internal |
| Horizontal Resolution: | 420TVL |
| Minimum Illumination: | 0.2Lux |
| Diagonal Angle: | 170° |
| Video Output: | RCA, 1.0Vp-p, 75ohm |
| SNR: | Better than 48db |
| Waterproof Grade: | IP67 |
| Current Draw: | Max. 90mA |
| Nominal Voltage: | DC12V |

**Features and Benefits:**

- Superb Night Vision
- 170° Diagonal field of vision
- Easy install

## Rearview Mirror Installation

1. Attach windshield mounting bracket to the back of rearview monitor. Be certain that the monitor is in the upright position when attaching the mounting bracket. (Figure 1)

2. Remove old rearview mirror.

3. Replace the old mounting tab with new mounting tab provided if necessary.

4. Mount rearview mirror monitor securely to mounting tab by tightening screw. (Figure 2)

5. Route the 8-pin connector end of the power harness to the location of mirror monitor (preferably through the headliner and the vehicles A or B pillars).

6. Connect the power harness with the mating 8-pin receptacle end coming out of the mirror monitor.

   **IMPORTANT:** Please be certain to match both guiding lines on each connector for a proper connection.

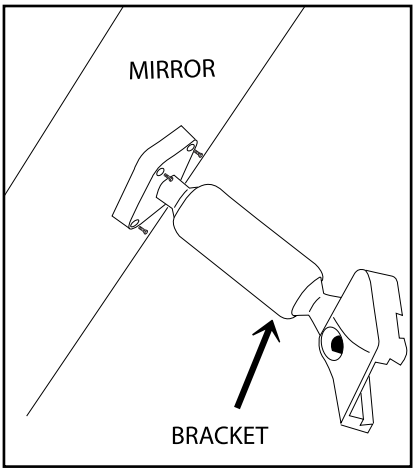



**Figure. 1**

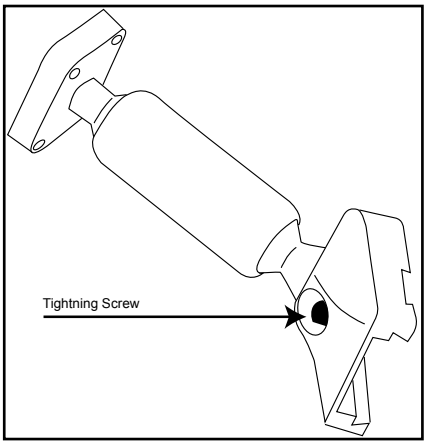



**Figure. 2**

1. Select a high and centered location at the rear of the vehicle to mount the STSC130 camera.

   **IMPORTANT:** When selecting this location it is highly recommended that the image transmitted by the camera show the rear bumper and area behind the vehicle.

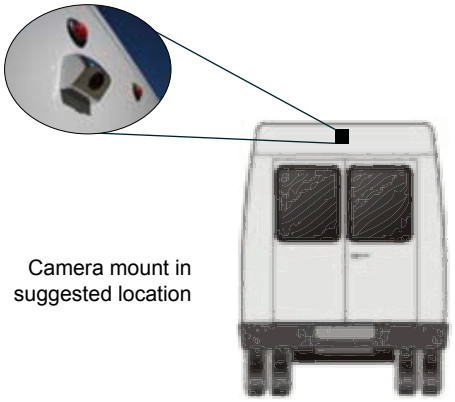
2. We do not recommend mounting the camera near the lower area of the vehicle (ex. bumper). This reduces the view of the camera and increases the chance of physical damage to the camera.

3. Once the location for the camera is chosen, drill the mounting hole to the inside of the vehicle using a 5/16 drill bit. Be sure to clear any obstacles before drilling hole.

4. Attach the provided 3M double sided tape to the back of the camera.

5. Insert camera wire through newly drilled hole and mount securely in place.

6. To finalize the camera installation, hand tighten the provided 5/16 nut to the back of the camera on the inside of the vehicle.




Mount camera assembly high. (Centered)

**Figure. 1**

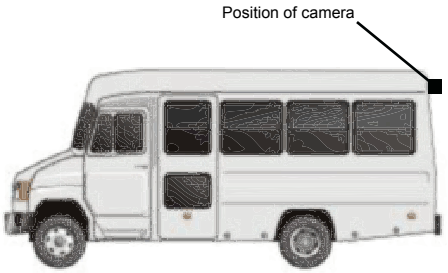
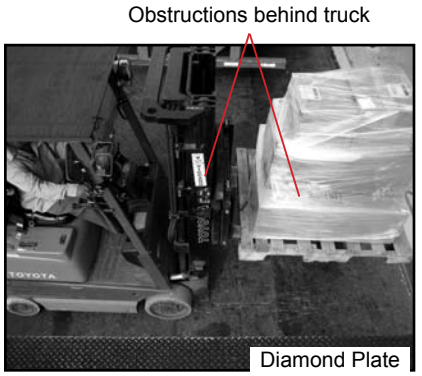



**Figure. 2**

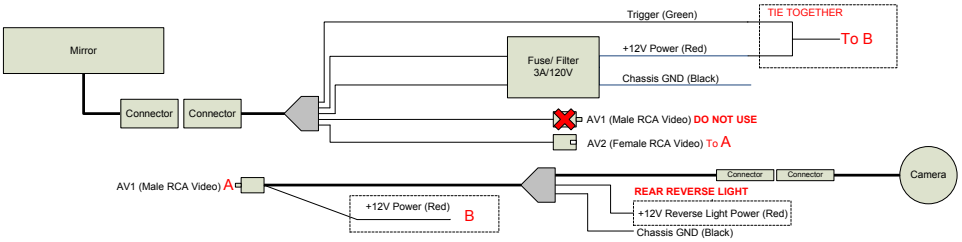



Typical monitor image of view from properly installed camera

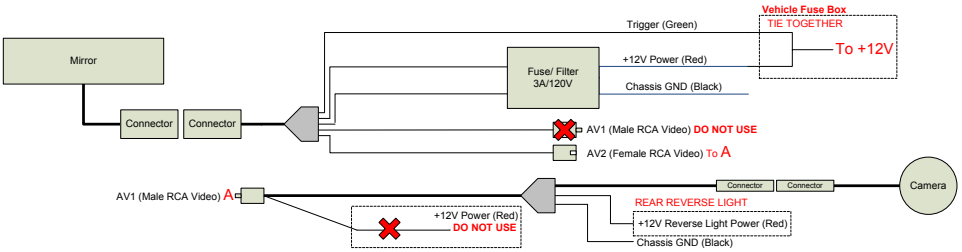
**Figure. 3**

# Wiring Diagrams

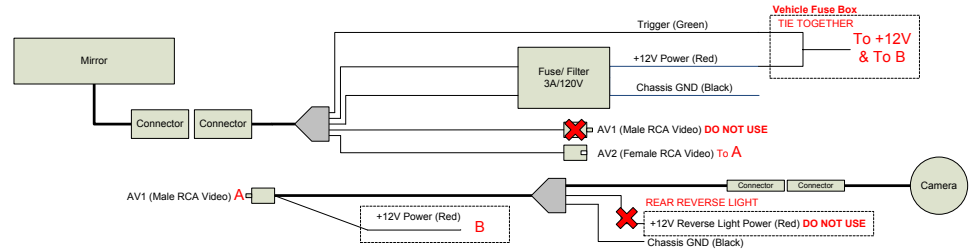
## *Option #1: Power Provided From Back of Vehicle (Most Common)*




## *Option #2: Power Provided From Front of Vehicle*




## *Option #3: Power Provided From Front and Back of Vehicle (Least Common)*



**How to Test:**

1. Apply the parking brakes.

2. Turn Ignition on.

3. Shift into reverse gear.

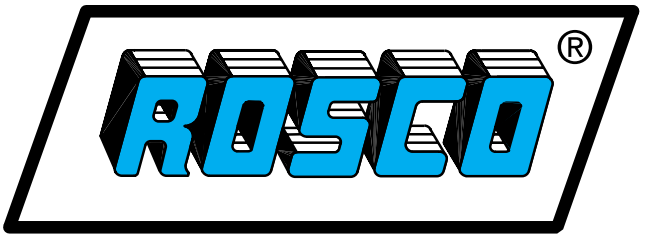
4. Image should appear on the monitor.

**Trouble Shooting:**

| Problem | Solution |
|---|---|
| No video signal appears while reversing the vehicle. | Check all camera connections (ex. Power, Ground, AV1, AV2)<br><br>Press AV1/AV2 button to change video inputs<br><br>Check the rearview camera wiring and connection. |
| Video image is not sharp. | Clean the lens of the camera. |

**Maintenance:**

Always keep camera clear from dirt, snow, and mud. Clean camera with a soft towel and low pressure water.




# Vision Systems

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