

# SAFE-T-SCOPE® REARVIEW BACKUP CAMERA SYSTEMS



STSK7965

## INSTALLATION/USER'S MANUAL

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## STSK7965 SAFE-T-SCOPE® 7" COLOR BACKUP CAMERA SYSTEM

Rosco Vision Systems introduces a revolutionary new backup camera system for commercial vehicles. The STSK7965 Safe-T-Scope® backup camera system utilizes a 7" inch monitor to display a 16:9 LCD screen when the vehicle shifts into reverse. This monitor allows the driver to see obstructions behind the vehicle for added convenience and safety.

The camera has an advanced CCD image sensor able to process excellent views under dark and light conditions. A 120° diagonal field of vision yields superb coverage behind the vehicle, and complies with the latest U.S. DOT guidelines when installed properly.

# **COMPONENT LIST AND DESCRIPTION**

PART NO.

**DESCRIPTION** 

**STSM251** 



7" MONITOR KIT







INCLUDES: STSK5465/PHAR POWER HARNESS SUN SHIELD

MONITOR

**DUCK FOOT** MOUNT

STSC141



120° REARVIEW CAMERA

**STSH341** 



4 PIN 65FT. **EXTENSION CABLE** 

ADDITIONAL CABLE **LENGTHS AVAILABLE** 

STSU1002



U-BRACKET (OPTIONAL)

#### STSK7965

## **CAMERA INSTALLATION**

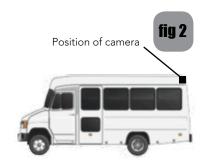
 Select a high and centered location at the rear of the vehicle to mount the STSC141 camera

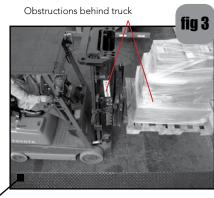
#### **IMPORTANT**

- When mounting your new backup camera, it is highly recommended that the image transmitted by the camera show the rear bumper and area behind the vehicle.
- 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.
- Once the location for the camera is chosen, using a 3/16 drill bit, drill four holes into the vehicle using the bracket as a guid. Be sure to clear any obstacles before drilling holes.
- Using a 5/8 drill bit, drill a hole into the vehicle. Insert wire gramment and safely pass the camera wire through and mount securely in place.
- To finalize the camera installation, hand tighten the camera wire to your extension cable. Make sure male pins are inserted into female adaptor correctly. You are ready to conceal your extension cable.



Mount camera assembly high. (Centered)





Vehicle Rear Bumper

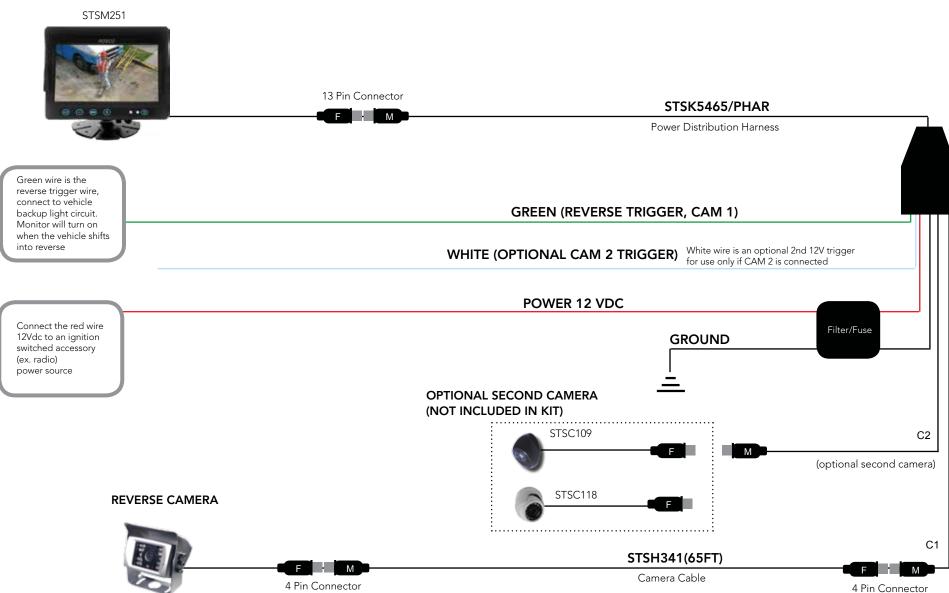
Typical monitor image of view from properly installed camera

## **MONITOR INSTALLATION**

- Connect the red wire to an ignition switched accessory (ex. radio) power source, and connect the black wire to chassis ground. See wiring diagram for connections.
- Attach monitor inside vehicle in a location convenient to the driver (ex. center of dash, overhead, or flush-mounted in dash).
- Attach the "duckfoot" bracket to the dashboard or to the headline using self-tapping screws and/or adhesive pad.
- Fasten monitor to "duckfoot" and adjust mounting angle to allow optimum driver viewing comfort.
- The monitor terminates in a 13-pin connector, which should be connected to the mating 13-pin receptacle end of the power/video/audio distribution harness.
- Connect the camera extension cable from the rear-view camera to the power/video/audio distribution wire connector. The camera to cable connection is waterproof. Be sure to position the cable properly. The male end attaches to the camera. The female end attaches to the power/video/ audio distribution harness, typically located under the dashboard.
- The green wire is the REVERSE trigger wire. In typical rear-view installations, connecting this wire to the vehicle's backup light circuit will activate the rear-view image whenever the vehicle shifts into reverse.
- Feed as much cable as possible into vehicle and clamp securely. This reduces the possibility of it being hooked or snagged.
- Keep all cables away from HOT, ROTATING and ELECTRICALLY NOISY components.
- FUEL TANKERS & OTHER SPECIALTY VEHICLES: All electrical equipment fitted to petroleum vehicles must be connected via battery master switch and must be isolated from the battery while the vehicles are loading and unloading. For other specialty vehicles, please check applicable code and regulations prior to installation.
- Always consult your dealer when fitting any electrical or electronic equipment to a vehicle fitted with a CAN-bus multiplex system.

## STSK7965 Wiring Diagram

STSC141



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#### STSK7965

## **FUNCTIONS AND OPERATION**

#### **MONITOR**

#### POWER

When the ignition is switched on, the monitor will be in standby mode (a steady red light will indicate that the monitor is energized, no image will appear on the screen until triggered or manually turned on. The trigger wire is energized by 12VDC power from a backup light or circuit. A steady green light will appear on your monitor. The image captured by the selected camera will appear on the monitor.

• Pressing the power switch will change the monitor status from standby to steady-on.

Steady-on mode status will show camera view depending on user selection

#### VOLUME +/-

Adjust Speaker Volume

These buttons are also used to adjust the values within selected setting of menu option

#### • 'MENU' BUTTON (See p. 9)

Press the MENU bottom to open on screen options.

Press Menu to cycle through choices and +/- to change your settings

#### C1/C2 (NOT APPLICABLE FOR STSK7465)

Switched from Camera 1 to Camera 2 and vice-versa

## SYSTEM TECHNICAL SPECIFICATIONS:

#### STSM251: (Includes STSK5465/PHAR, BAS4515, STSDF1000)

Screen size (diagonal): 7"

Maximum No. of cameras: 2 Inputs/Channels

Screen ratio: 16:9
Contrast ratio: 500:1
Video system: NTSC
Voltage input: 12 ~32 Vdc

Operating temperature  $^{\circ}F$  (C°): 5° to 149° (-15° to +65°) Storage temperature: -4° to +158° (-20° to + 70°)

Shock rating:100gVibration Rating:6gSpeaker Impedance:8 OhmsWeight:0.9 Lb.

Dimensions W x H x D: 5.7" x 4.9" x 1"

#### STSC141: (Includes Sunshade and Mounting Hardware)

 Image device:
 Sony ¼" CCD

 Pixels:
 270,000

 TV lines:
 420

InfraRed LED's: 18 High-Output

Minimum illumination: 0 Lux (infrared LED's on)

Night vision range: 30 feet

Video Output: 1.0 Vp-p, 75 Ohm

Shock rating: 100G
Vibration rating: 15G
Field of view: 120°

Operating temperature °F (°C):  $-4^{\circ}$  to  $+140^{\circ}$  (-20° to  $+60^{\circ}$ ) Storage temperature °F (°C):  $-40^{\circ}$  to  $+176^{\circ}$  (-40° to  $+80^{\circ}$ )

Weight: .6 lb. Dimensions  $W \times H \times D$ :  $3" \times 2" \times 2"$ 

#### STSH341: (Included in Kit)

65' Heavy Duty w/ Twist - Lock Connectors



#### 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.

#### WIRING 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.
- Keep all cables AWAY from rotating and electrically noisy components.
- Make sure all cables are fastened properly so that you can prevent wire chafing, kinks, cuts, etc...
- Always consult your dealer when fitting any electrical or electronic equipment to a vehicle fitted with a CAN-bus or multiple system.

## **HOW TO SET UP YOUR SYSTEM REQUIREMENTS**



## NOTE

- No changes can be made to the monitor while the vehicle is in reverse.
   Never change settings while the vehicle is in operation.
- Press the MENU button once to set desired brightness. Press +/- to increase/reduce the brightness. Wait 3 seconds to exit setup mode.
- Press the MENU button twice to set desired contrast. Press +/- to increase/reduce the contrast. Wait 3 seconds to exit setup mode.
- Press the MENU button three times to set desired color. Press +/- to increase/reduce the color. Wait 3 seconds to exit setup mode.
- Press the MENU button four times to set desired tint. Press +/- to increase/reduce the tint. Wait 3 seconds to exit setup mode.
- Press the MENU button five times to set desired language. Press +/- to select English/French/Spanish. Wait 3 seconds to exit setup mode.
- Press the MENU button six times to reset. Press +/- to store factory defaults.
   Wait 3 seconds to exit setup mode.
- Press the MENU button seven times to set CAM1. Press +/- to select Normal/Mirror mode. Wait 3 seconds to exit setup mode.
- Press the MENU button eight times to set CAM2. Press +/- to select Normal/Mirror mode.
   Wait 3 seconds to exit setup mode.
- Press the MENU button nine times to set Vertical. Press +/- to select Auto/Day/Night.
   Wait 3 seconds to exit setup mode.
- Press the MENU button ten times to set Dimmer. Press +/- to select Auto/Day/Night. Wait 3 seconds to exit setup mode.
- Press the MENU button eleven times to set Scale. Press +/- to select On/Off.
   Wait 3 seconds to exit setup mode
- Press the MENU button twelve times to set Scale Adjustment. Press to change selected.

## NOTES

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