



## STSM240 Monitor

Installation Guide and User Manual

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Specifications and details are subject to change without prior notice.  
Patent Pending

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## **IMPORTANT**

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<http://www.adobe.com/support/downloads/product.jsp?platform=windows&product=10>

# Introduction

Rosco Vision Systems introduces a revolutionary new monitor system for small to medium vehicles. The STSM240 MOR-Vision® Mirror / Monitor utilizes an interior rearview mirror to display a 4.3" LCD monitor with two input channels and audio. Both inputs can be triggered manually by pressing touch buttons on the mirror or via 12-24 volt triggers from reverse, turn signal, or any other analog source within the vehicle.

# Features

- 4.3" monitor display mounted in 10" mirror
- Anti-glare coating
- Auto-dimming in low light
- Two camera inputs
- Audio on both channels
- Fits standard rearview mirror mount
- Can trigger cameras by pressing touch buttons or by 12V-24V DC trigger signal from reverse, turn signal, etc.
- Controls for volume, brightness, contrast, color, and sharpness.
- Features reset to set controls back to default settings

# Contents

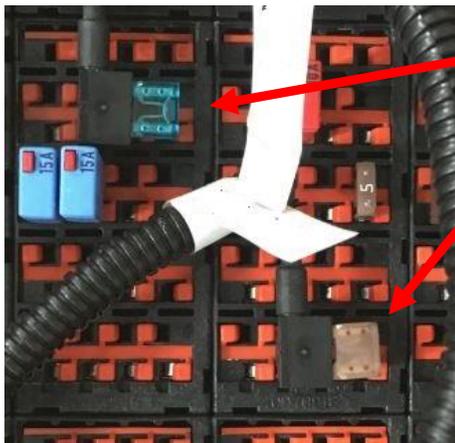
- A. STSM240MO - Mirror/Monitor
- B. STSM240/PHAR - Power/video input harness
- C. Allen Wrench
- D. Windshield Mounting Button
- E. Cable Raceway



# Installation

## General Wiring Guidelines

- Please read the entirety of this manual before beginning installation.
- Double-check all measurements before drilling any holes or making any other vehicle modifications.
- Each vehicle has its own system and features. Please refer to your vehicle's manual for details.
- Turn the ignition key off while installing system.
- Make sure to connect Ground wire first!
- Remove fuse from fuse holder during installation. Replacing fuse should be the last step.
- Keep protective films in place during installation to prevent scratches, especially on monitor.
- Use caution when removing and replacing interior panels.
- Read wiring diagrams carefully before connecting wires.
- Gather and prepare all tools prior to installation.
- Minimum cable bend radius is two inches (2").
- DO NOT attempt to disassemble, repair, or modify the products.
- Make sure the red wire from the power harness (STSM240/PHAR) is secured to the vehicle fuse block at terminals which will be at zero-voltage state when the vehicle ignition key is OFF. A typical location on a fuse block would be the ACC port for cigarette-lighter power. Zero-voltage state should be verified using a voltmeter prior to installation.
- Please refer to vehicle manual and fuse block diagram to identify best location for power, ignition, and ground wire connection points.
- It is essential that appropriate external fuses be used.
- Terminate any unused wires.



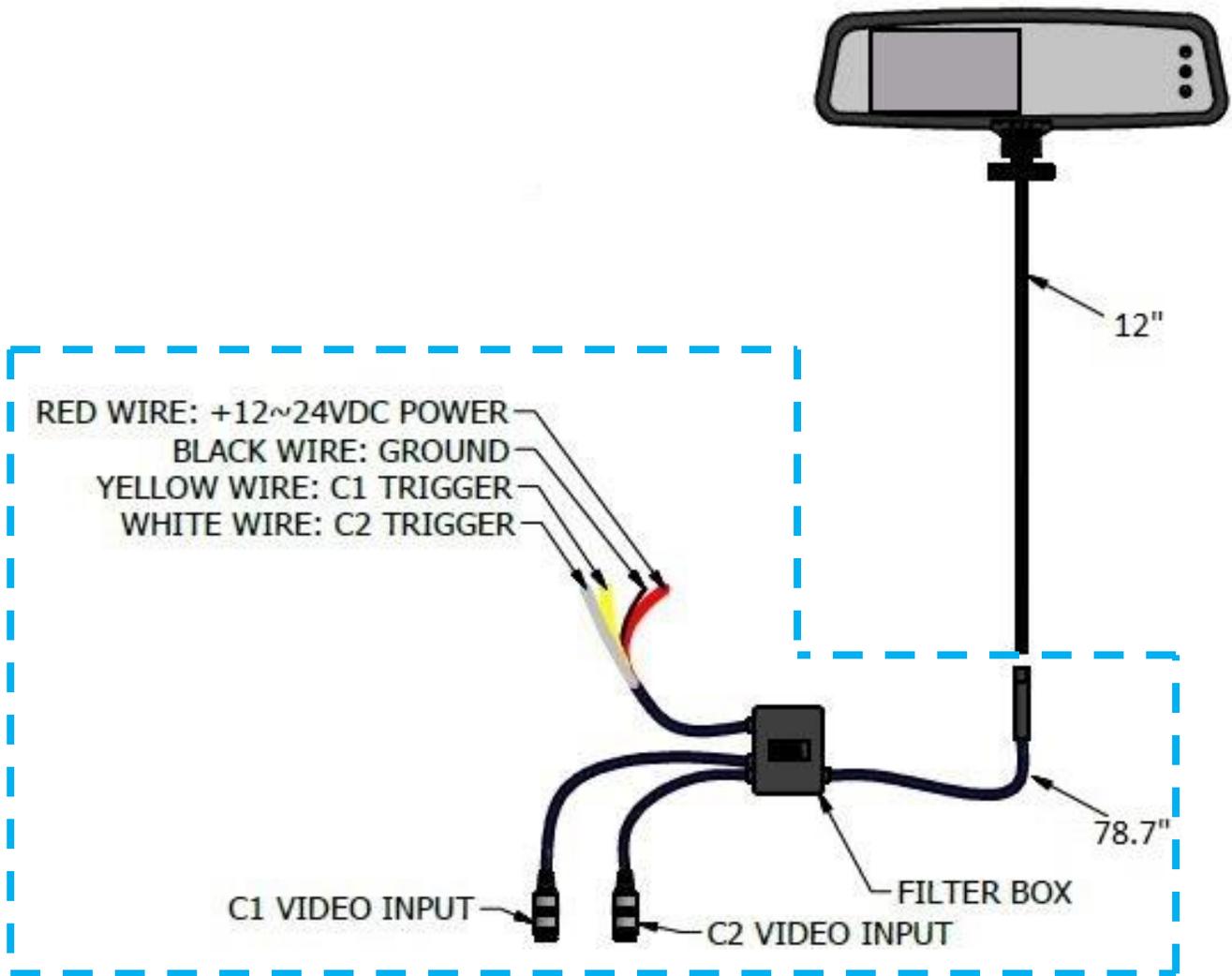
**EXAMPLE:** Fuse Holder/Add-a-Fuse for Ignition (ACC) Connection

**EXAMPLE:** Ground Wire Ring Terminal connected to the vehicle chassis



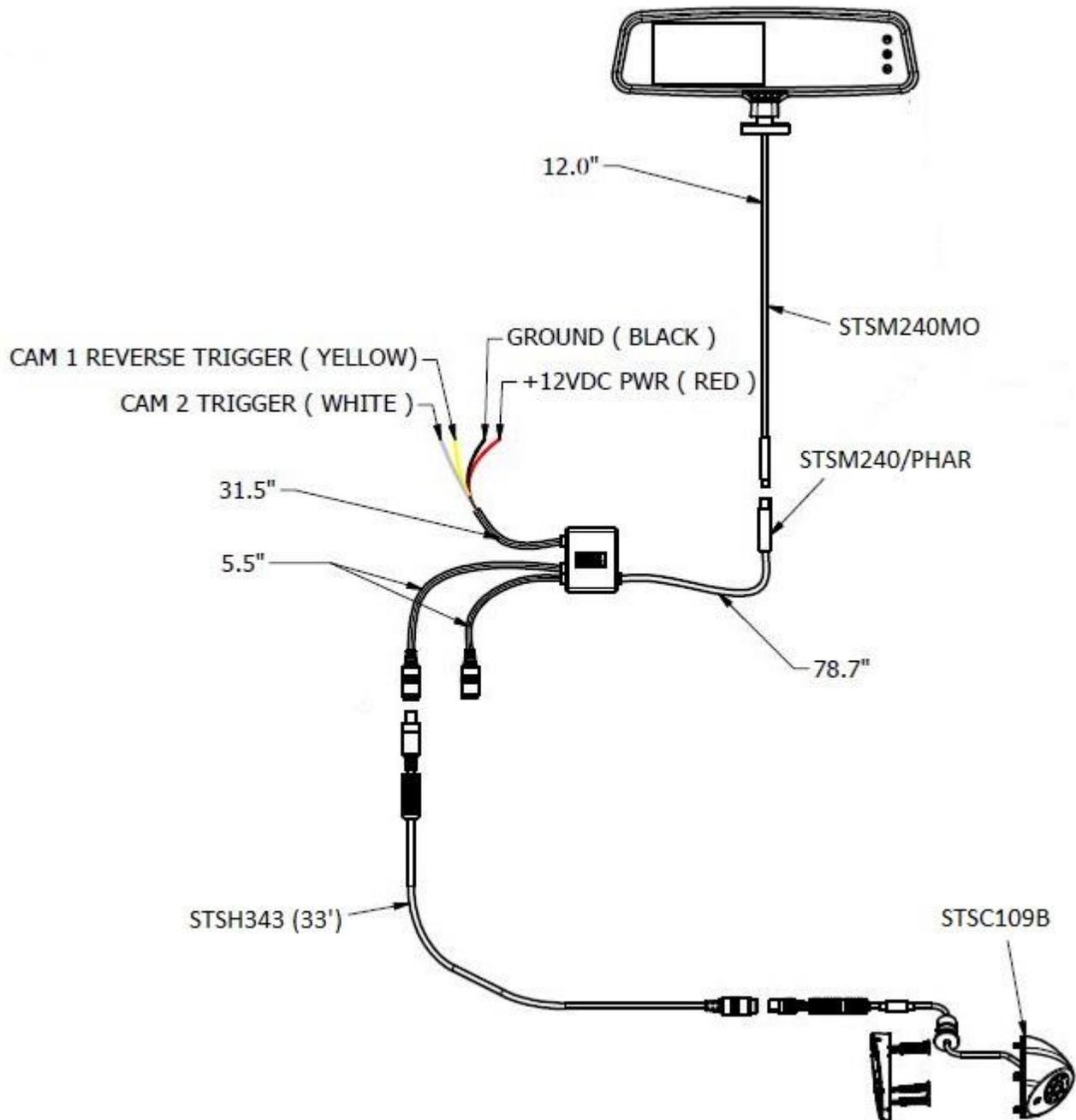
# STSM240/PHAR

- The monitor is connected to vehicle power, input triggers, and video inputs via the STSM240/PHAR harness, shown below.

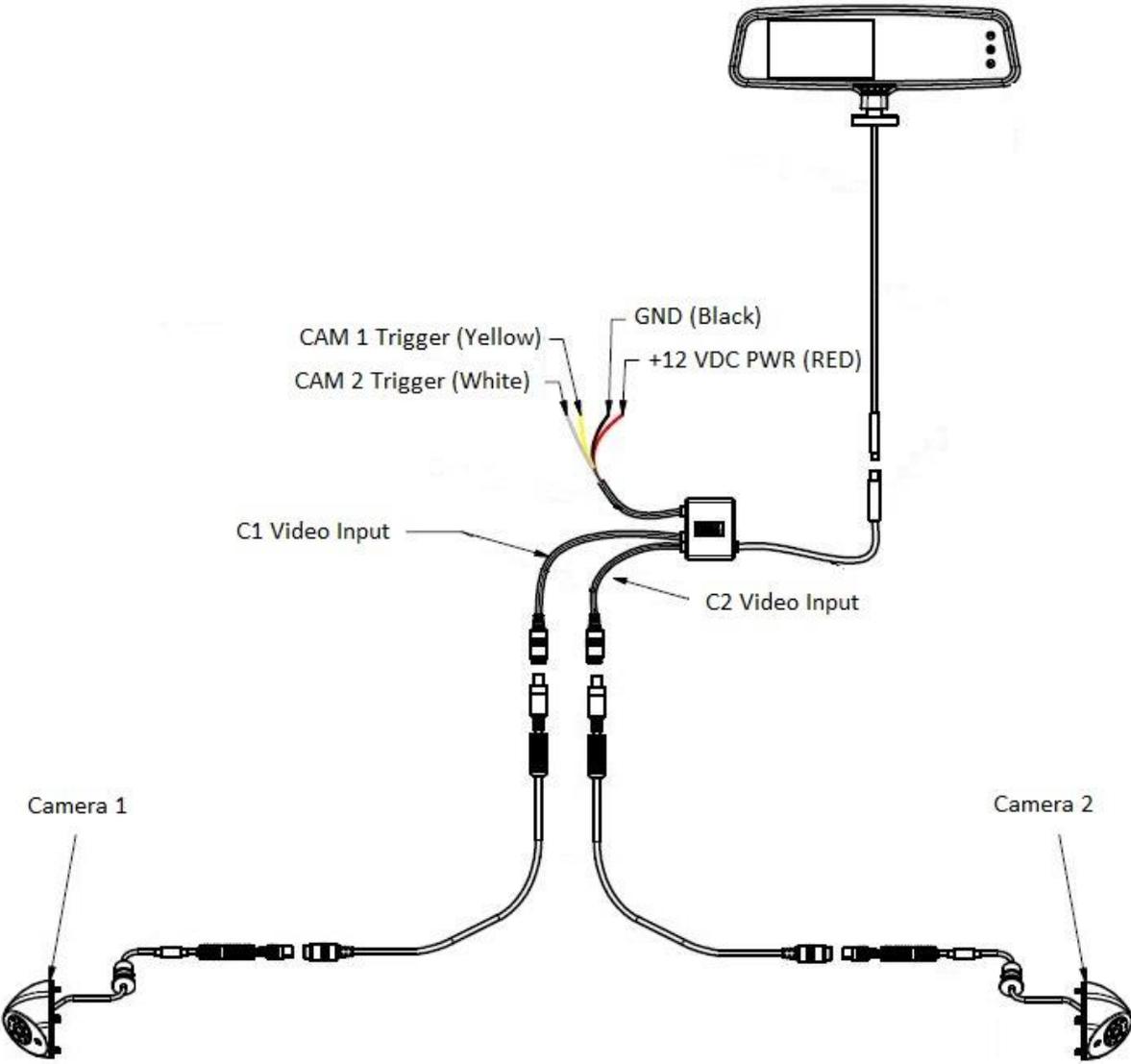


# Installation Examples

## One Camera System (STSK4642B)



# Two Camera System



# Device Setup and Operation

## Monitor Operation

- To manually activate/deactivate inputs: press “up” or “down” arrow on right side of mirror.
- Down arrow activates camera 1, up arrow activates camera 2. Pressing arrow again will deactivate input.

## Monitor Setup

- All settings are universal: settings apply to both channels.
- Press “M” button to access setup menu (note: menu not accessible unless a camera is active. Press up or down arrow to activate a camera).
- Press “M” button repeatedly to scroll through available settings (Volume, Brightness, Contrast, Color, Sharpness, and Reset)
- Use up and down arrows to adjust settings.
- To reset to default settings: scroll to “Reset” and press up or down arrow. When “OK” is displayed, settings have been reset. NOTE: volume setting is maintained.

## Triggering

- Common triggers include reverse gear, turn signals, and door switches.
- Channel 1 is higher priority: if trigger signals are received on both C1 and C2, Channel 1 will be displayed.

# Technical Specifications

## SYSTEM SPECIFICATIONS

<b>Screen Size</b>	4.3"
<b>Screen Type</b>	TFT LCD
<b>Display Resolution</b>	480 x 272
<b>Aspect Ratio</b>	16:9
<b>Input Voltage</b>	12 VDC to 24 VDC
<b>Audio/Video Input</b>	Composite Video & Mono Audio; 2 Channels
<b>Power Output to Cameras</b>	12VDC
<b>Operational Environment</b>	-4°F to 149°F (-20°C to 65°C)

# Compatible Hardware

Rosco Sales Part Number	Description
STSC109	Adjustable CMOS Camera with IR LED's, Audio, 105° Horizontal viewing angle
STSC122	180° Field of View HD Camera, 960H Resolution, Flat Mount, IP68
STSC167/STSC168	Side Cameras, Silver, IR LED's, 960H Resolution, IP69K
STSC141	CCD Camera/Mounting Kit w/ Night Vision, Silver, IR LED, Audio, 120° Horizontal Angle
STSC169/STSC170	Interior Dome Camera, IR LED's, Black, 960H Resolution, Audio
STSC118	Interior Mini Dome Camera, 960H Resolution, IR LED's, Audio
STSC132/STSC133	Side cameras, IP67, Stud mount w/ hardware, 4-pin adapter
STSC152	Rearview Camera, Heated, IR LED's, Audio
STSC101	Rearview Camera, IP69K, IR LED's, Audio, 960H resolution
STSC156/STSC157	Side Bullet Camera, IP69K, 92° Horizontal Angle of View
STSC106	Bullet Camera, IP69K, 150° Horizontal Angle, IR LED's
STSH341	4 PIN Extension Harness (65 FT) (Grey)
STSH343	4 PIN Extension Harness (33 FT) (Grey)
STSH304	4 PIN Extension Harness (16.5 FT) (Black)
STSH301	4 PIN Extension Harness (65 FT) (Black)
STSH303	4 PIN Extension Harness (33 FT) (Black)
STSH496	4 PIN Male to "Y" 4 PIN Female
DV440	4 Channel HD DVR

# Complete Kits Containing STSM240

Rosco Sales Part Number	Description
STSK4640	STSM240 WITH STSC141 BACKUP CAMERA AND EXTENSION HARNESS
STSK4642B	STSM240 WITH STSC109B BACKUP CAMERA AND EXTENSION HARNESS
STSK4540	STSM240 WITH STSC149A BRAKELIGHT CAMERA, FORD TRANSIT MODEL YEAR 2016-

# Commercial Warranty



We warrant that all ROSCO mirror, camera, sun visor, and electronic vision products are free from defects in workmanship and materials for a period of ONE (1) YEAR from the date of receipt of the product. During the warranty period, we agree to provide a replacement for (or at our option, repair) the ROSCO product and/or any one or more component parts of a ROSCO product which malfunctions under normal use and service.

Upon discovering a defect, the customer must contact ROSCO for a return authorization and then must return the product, and/or component part, together with proof of date of receipt of the product, to ROSCO INC. 144-31 91st Ave. Jamaica, New York 11435. The customer and not ROSCO will be responsible for the payment of all removal, installation and transportation charges for return of defective products or components to ROSCO. Transportation charges for such return must be prepaid. The repaired or replaced equipment will be returned to the customer with transportation charges prepaid by ROSCO. Replacement (or repaired) products and/or component parts are warranted only for the unexpired term of the original warranty.

This warranty does not cover defects caused by neglect, misuse, incorrect application, incorrect installation, water damage, vehicle wash facilities, alteration or repair in any manner outside ROSCO's factory. Damage caused by the return shipment due to inadequate packaging or mishandling will not be covered. If the alleged defect is due to any of these causes, the customer will be advised of the findings and asked what action is to be taken. If ROSCO is requested to repair the product, a repair charge estimate will be prepared and the customer's written permission (purchase order, repair, etc.) will be necessary to proceed with the repair of the product and/or component part. Transportation charges for such returns will be the responsibility of the customer.

This warranty may not be expanded by oral representation, written sales information, and drawings or otherwise. Repair or replacement is the exclusive remedy for defective products under this warranty. This warranty is expressly in lieu of all other warranties, including any implied warranty of merchantability or any implied warranty of fitness for a particular purpose on any ROSCO product. ROSCO shall not be liable for any consequential or incidental damages for breach of any express or implied warranty on any ROSCO product.

