Crestron **MSMK-4SM**
Multi-Surface Mount Kit
for TPMC-4SM(D) & TPCS-4SM(D)
Installation Guide

CRESTRON

This document was prepared and written by the Technical Documentation department at:

CRESTRON.

Regulatory Compliance

As of the date of manufacture, the MSMK-4SM has been tested and found to comply with specifications for CE marking and standards per EMC and Radiocommunications Compliance Labelling.

CE

Contents

Multi-Surface Mount Kit for TPMC-4SM(D) & TPCS-4SM(D): MSMK-4SM

Introduction

The Crestron® MSMK-4SM provides a very versatile surface mounting solution for a TPMC-4SM or TPMC-4SMD Touch Screen. It is also compatible with TPCS-4SM and TPCS-4SMD Touch Screen Control Systems. Using the MSMK-4SM, the touch screen device can be mounted directly onto glass, granite, marble, plaster, smooth stone and masonry or virtually any other flat surface using either the self-adhering mounting plate or screws. An optional angle bracket is included to allow the touch screen to be mounted at a fixed tilt of 20 degrees up or down.

An adhesive backed raceway is also provided for use on smooth surfaces to conceal wires running to the touch screen from the floor or ceiling. The raceway is paintable and is composed of three 3 foot (0.91 meter) sections plus an assortment of elbows and couplings.

Models

DESCRIPTION	MODEL NUMBER	COLOR
Multi-Surface Mount Kit	MSMK-4SM-B-S	Black Smooth
	MSMK-4SM-W-S	White Smooth

For simplicity within this guide the color and texture designation are omitted and the term "MSMK-4SM" is used, unless otherwise noted.

Setup

Supplied Hardware

The MSMK-4SM consists of a plastic surface mount enclosure, metal mounting plate with adhesive backing, angled mounting bracket, plastic covers to protect cabling openings, raceway and appropriate screws and nuts for mounting.

The multi-surface mounting option provides the necessary support and accessories for post-construction applications. The table below lists all parts included with the MSMK-4SM.

Supplied Hardware for the MSMK-4SM

DESCRIPTION	PART NUMBER	COLOR	QUANTITY
Metal, Plate, Glass Mount, Foam with Adhesive	4509195	White	1
	4509522	Black	1
Plastic Enclosure, Surface Mount	2024381	White	1
	2024382	Black	1
Bracket, 20 Degree Mount	2024621	White	1
	2024622	Black	1
Plastic Cover	2024491	White	2
	2024492	Black	2
Raceway	2024932	White	1
Nut, #04-40, External, Hex	2004878	N/A	4
Screw, #04-40 1/4", Steel, Pan Head, Phillips	2007161	N/A	4

The dimensions of the MSMK-4SM are shown below and on the next page.

Glass Mounting Plate Overall Dimensions
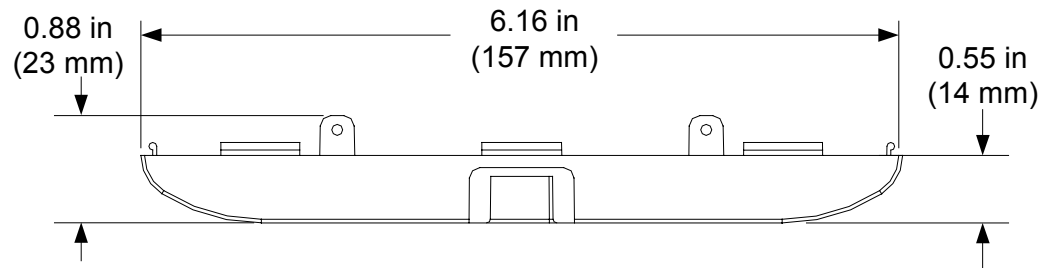
4.50 in
(115 mm)
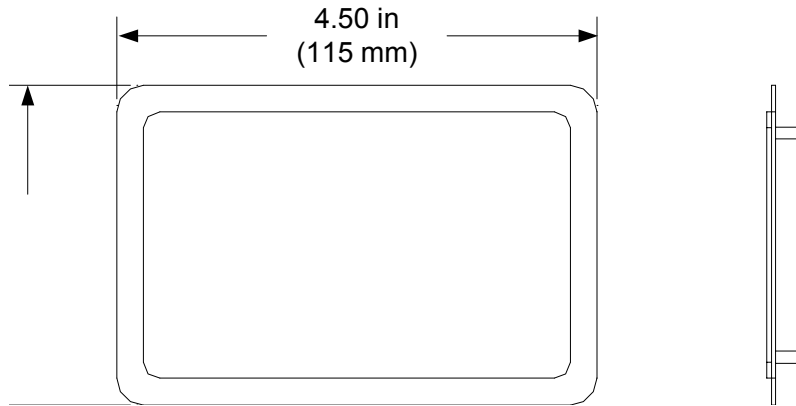
Angle Mounting Bracket Overall Dimensions

4.25 in
(108 mm)

2.72 in
(69 mm)

0.23 in
(6 mm)

1.12 in
(29 mm)
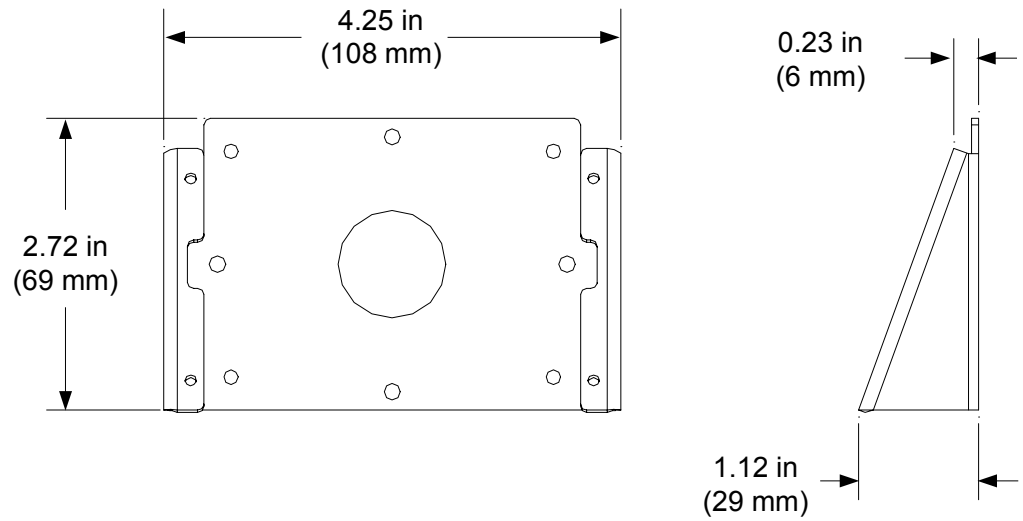
Plastic Enclosure Overall Dimensions (Rear View)
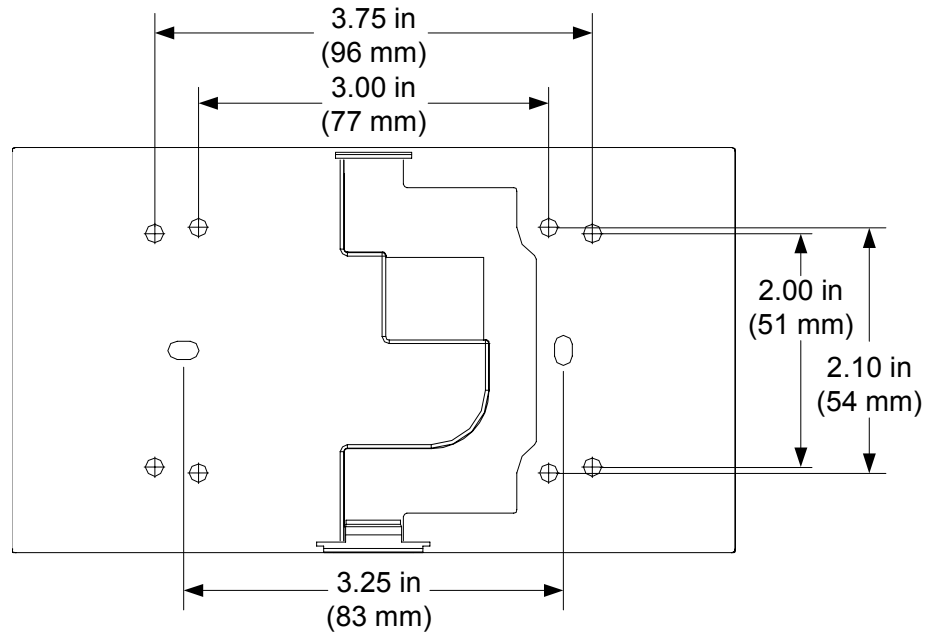
Plastic Enclosure Overall Dimensions (Bottom View)

Installation

This section provides an installation procedure for each mounting scenario. "Glass Mounting" starts below, "Drywall, Paneling, Concrete or Brick Mounting" starts on page 11 and "Raceway Mounting" is on page 16. Be sure to review each procedure before starting.

Glass Mounting

The touch screen can be mounted onto a flat pane of glass or similar smooth surface (such as granite, marble, plaster, smooth stone or masonry) using the included glass mounting plate. The back of the plate has an adhesive tape that permanently attaches to the glass. The touch screen can be flat mounted or angle mounted to the glass mounting plate by following the appropriate procedure below. After installation is complete, the raceway kit may be installed on a smooth surface by following the "Raceway Mounting" procedure on page 16.

NOTE: Ensure the glass mounting surface is cleaned with a glass cleaning product that does not leave a film and is free of debris before mounting. Once glass mounting plate has been attached, it cannot be easily removed.

Flat Mounting

Complete the following procedure to attach the glass mounting plate. The only tools and supplies required and not supplied are a level, tape, #2 Phillips screwdriver, 1/4" hex driver and a glass cleaning product that does not leave a film. A T8 Torx bit is supplied with the touch screen.

1. Thoroughly clean and dry the glass mounting surface using a glass cleaning product that does not leave a film.

2. Using the level, carefully tape a horizontal reference line that coincides with the lower edge of the mounting bracket.

   CAUTION: Adhesive on glass mounting plate is a high strength bond. Once adhesive meets a surface, it cannot be easily removed or adjusted.

3. Remove the adhesive backing from the glass mounting plate.

4. Holding the glass mounting plate (4509195 or 4509522) at a 45 degree angle to the glass, carefully align the lower edge of the mounting plate with the level taped line. Do not allow adhesive backing to come in contact with the glass.

5. Once aligned with the level reference line, carefully tilt the glass mounting plate back until it is secured to the glass. Firmly press glass mounting plate to the glass to ensure proper adhesion and that any trapped air bubbles are removed.

6. Using a flathead screwdriver, carefully separate the back cover of the touch screen from the front of the unit. This part is not used. Refer to the following illustration.

Separate Back Cover of Touch Screen
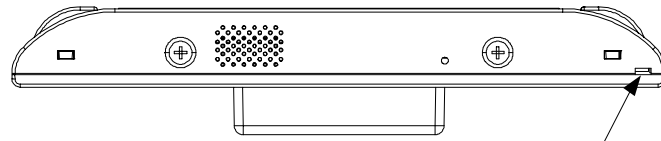
Insert screwdriver to separate back of touch screen

NOTE: If installed, the two security screws must be removed before separating the back cover of the touch screen.

7. Insert the plastic cover (2024491 or 2024492) into top or bottom of the plastic enclosure (2024381 or 2024382). Installation location of the plastic cover is determined through the location of the raceway. For example, if the raceway is to be run to the top of the plastic enclosure, install the plastic cover in the bottom of the plastic enclosure.

8. Run the network wiring through the hole in the back of the plastic enclosure.

9. Attach the plastic enclosure to the glass mounting plate using the 1/4" hex driver and the four included #04-40 hex nuts (2004878). Observe the orientation of the **TOP** screening to ensure proper installation of the plastic enclosure. Refer to the illustration below.

Plastic Enclosure Mounting Using Glass Mounting Plate
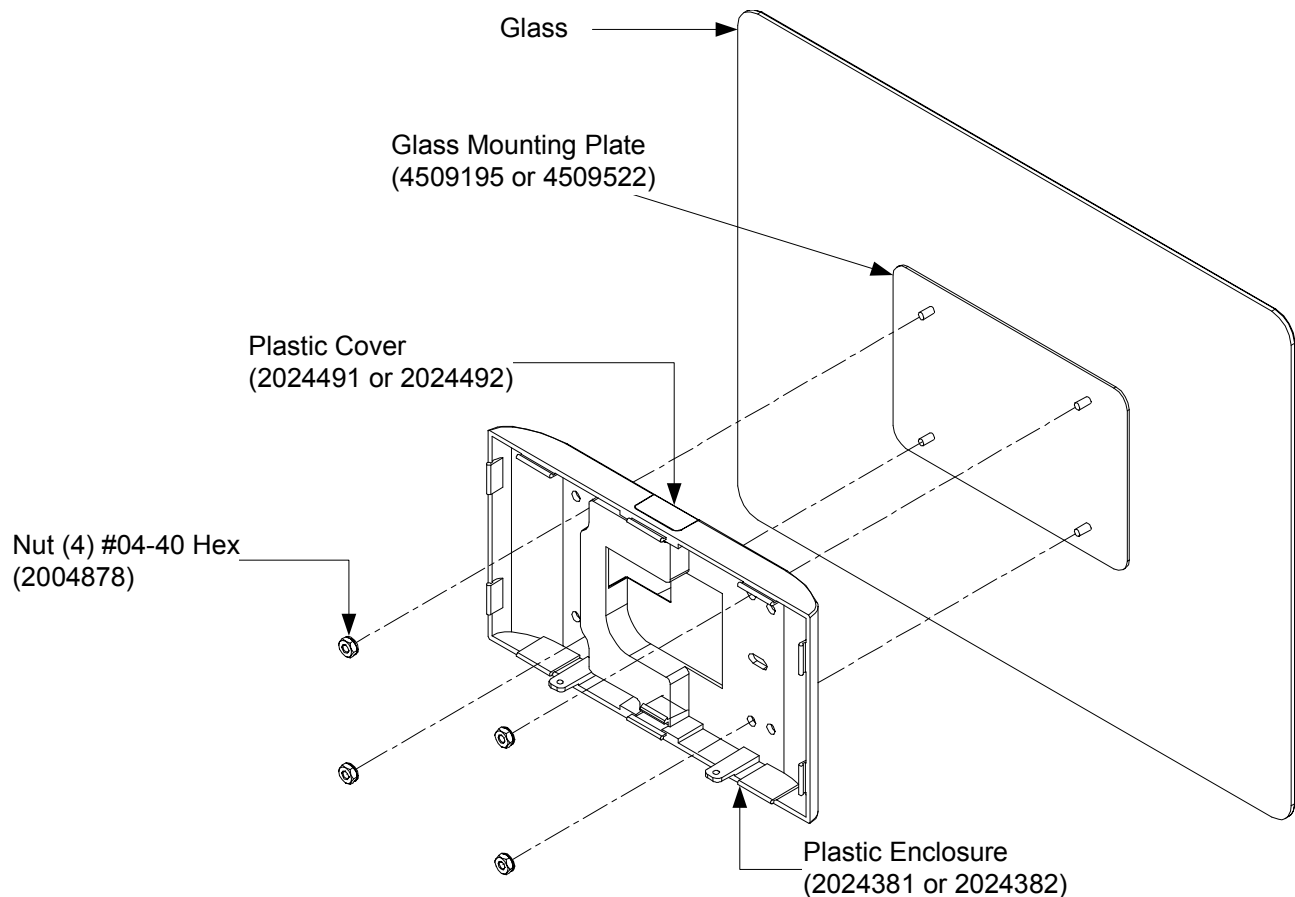
Glass

Glass Mounting Plate
(4509195 or 4509522)

Plastic Cover
(2024491 or 2024492)

Nut (4) #04-40 Hex
(2004878)

Plastic Enclosure
(2024381 or 2024382)

> **NOTE:** When raceway is run to the bottom of the touch screen, the plastic cover must be placed in the top of the plastic enclosure. When raceway is run to the top of the touch screen, the plastic cover must be placed in the bottom of the plastic enclosure.

10. Attach the RJ-45 connector of the network wiring to the touch screen and then install the touch screen by carefully pressing it into place. While snapping the unit into place, pull the network wiring to remove slack. Refer to the illustration below.

> **NOTE:** Use care when pulling plenum rated cable through the bottom of the plastic enclosure, the rigidity of the cable causes slight resistance.

Touch Screen Mounting Using Glass Mounting Plate (Exploded View)
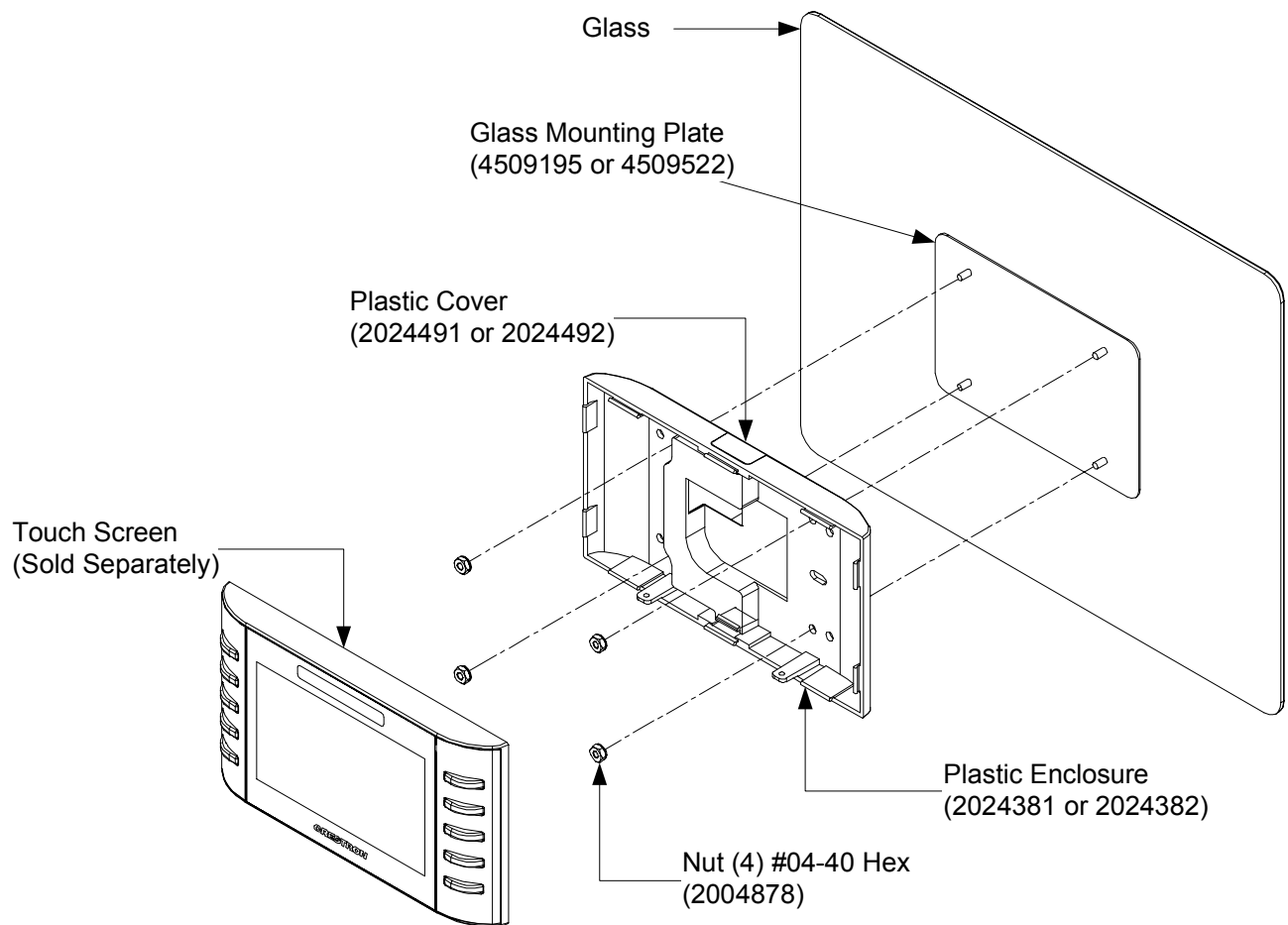
11. Secure the touch screen to the plastic enclosure with Phillips head screws. Alternatively, security Torx screws can be installed using a Torx screwdriver bit (both included with touch screen), as shown in the following illustration.

Secure Touch Screen with Screws (Mounting Surface Not Shown)
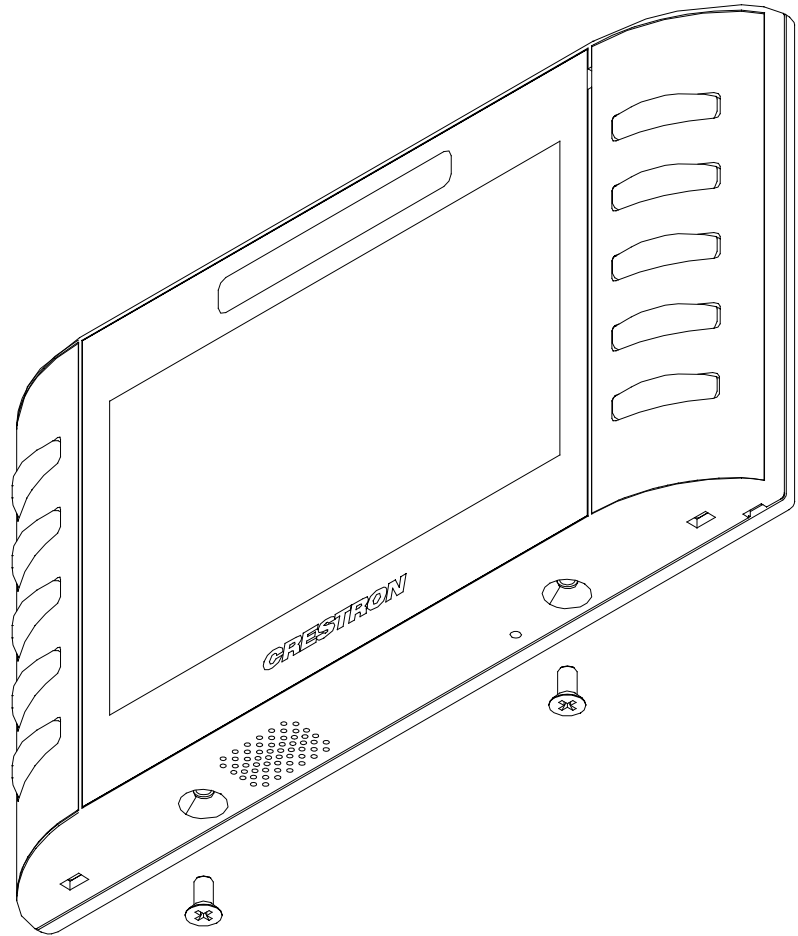
Angle Mounting

To install the angle mounting bracket, complete steps 1-7 of the "Flat Mounting" procedure which starts on page 5. Continue with this procedure to assemble the angle mounting bracket with the glass mounting plate.

1. Using a 1/4" hex driver, install the angle mounting bracket (2024621 or 2024622) onto the glass mounting plate with the four included hex nuts (2004878). Refer to the illustration on the following page.

   NOTE: Angle mounting bracket may be oriented to tilt the touch screen 20 degrees up or down, depending on the application.

Attach Angle Mounting Bracket

Glass

Glass Mounting Plate
(4509195 or 4509522)

Angle Mounting Bracket
(2024621 or 2024622)

Nut (4) #04-40 Hex
(2004878)
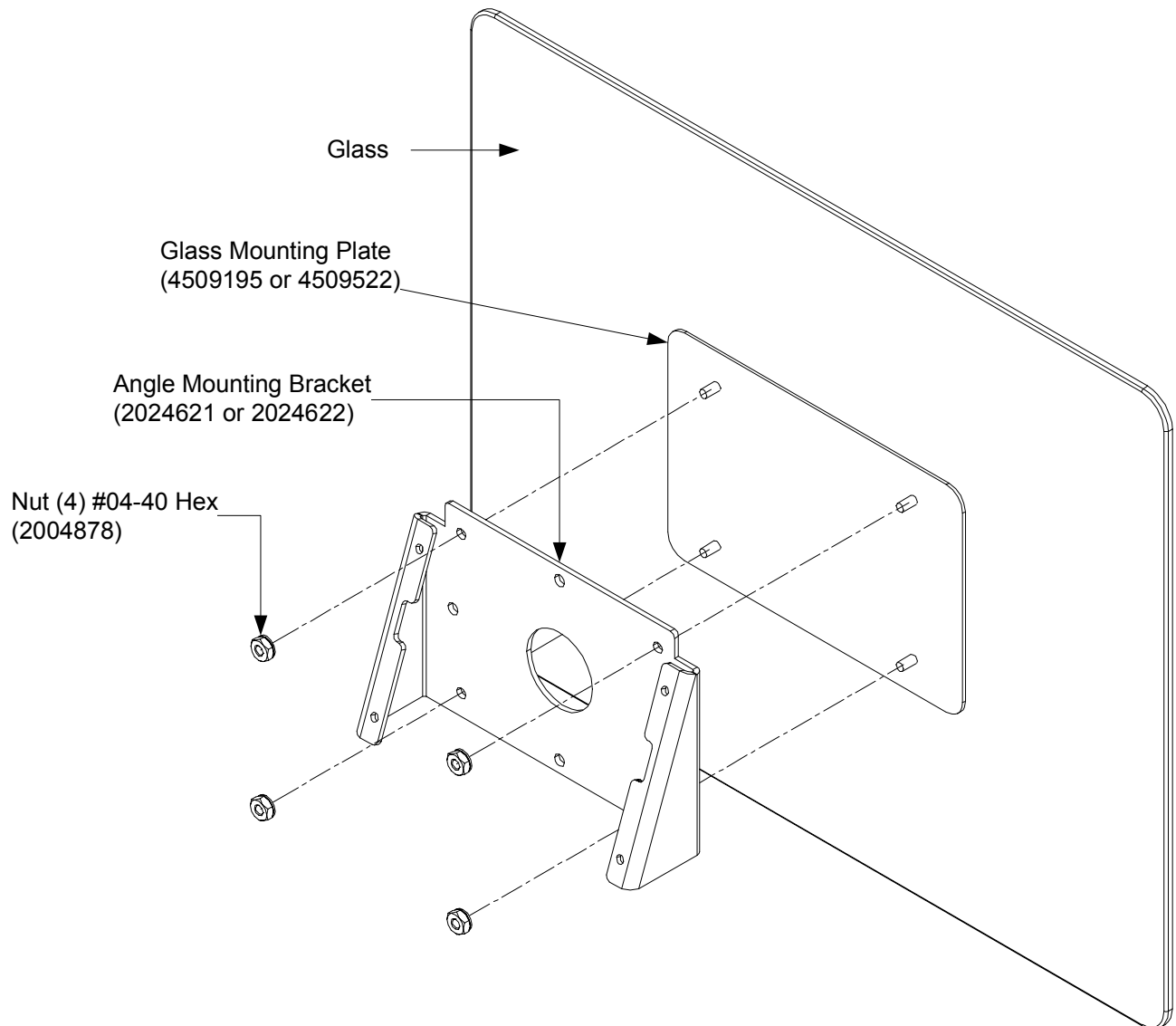
2. Run the network wiring through the hole in the back of the plastic enclosure.

3. Attach the plastic enclosure (2024381 or 2024382) to the angle mounting bracket with the four included #04-40 x 1/4" Phillips head screws (2007161), as shown in the illustration on the following page. Observe the orientation of the **TOP** screening to ensure proper installation of the plastic enclosure.
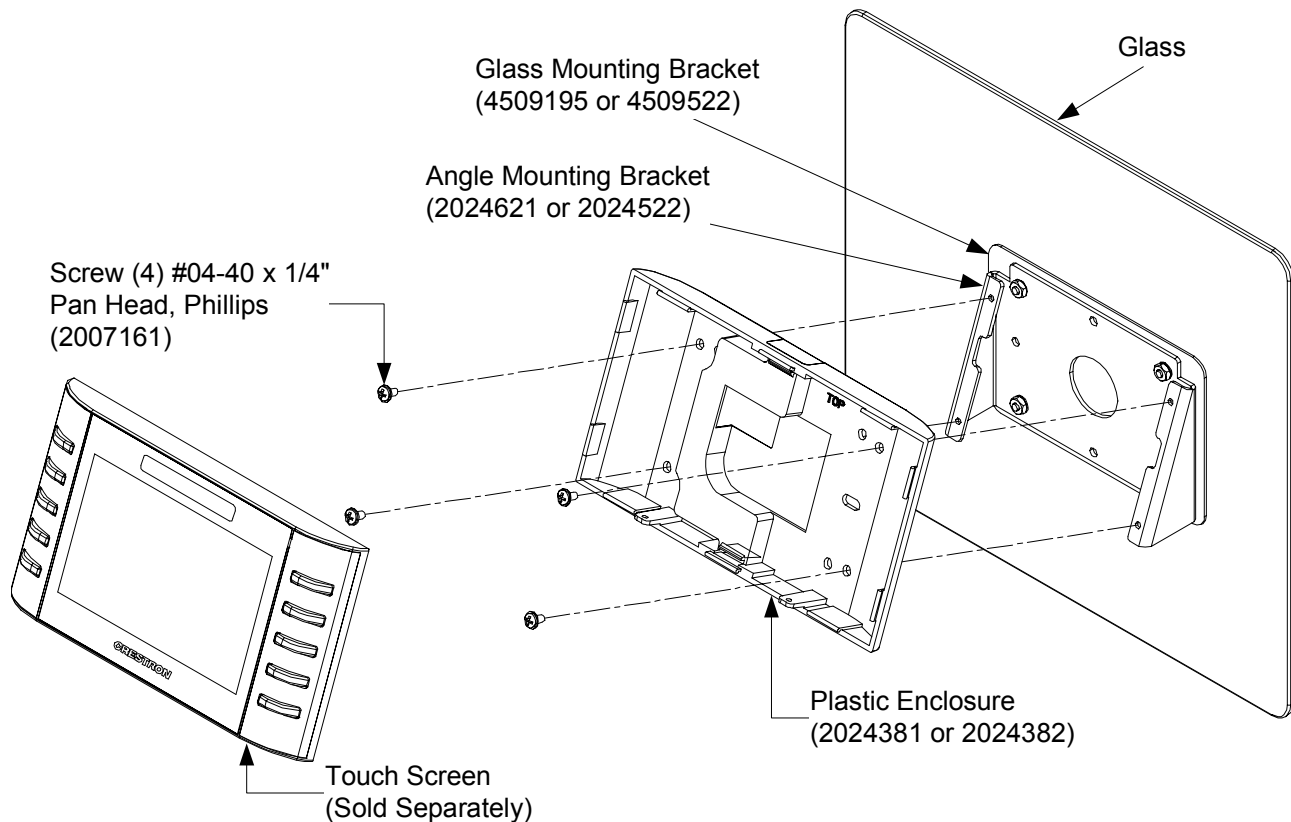
Attach Plastic Enclosure to Angle Mounting Bracket
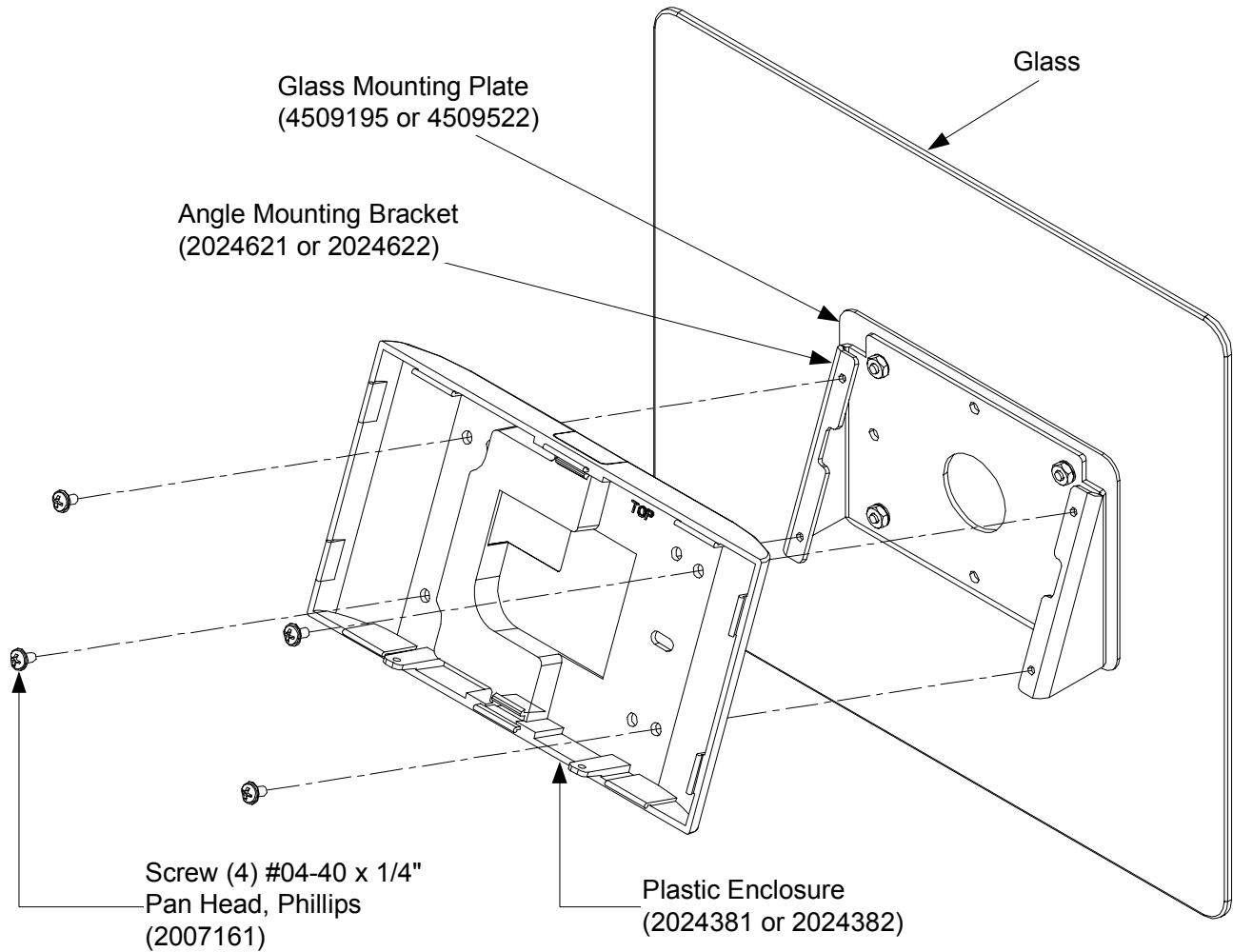
Glass

Glass Mounting Plate
(4509195 or 4509522)

Angle Mounting Bracket
(2024621 or 2024622)

TOP

Screw (4) #04-40 x 1/4"
Pan Head, Phillips
(2007161)

Plastic Enclosure
(2024381 or 2024382)

NOTE: When raceway is run to the bottom of the touch screen, the plastic cover must be placed in the top of the plastic enclosure. When raceway is run to the top of the touch screen, the plastic cover must be placed in the bottom of the plastic enclosure.

4. Attach the RJ-45 connector of the network wiring to the touch screen and then install the touch screen by carefully pressing it into place. While snapping the unit into place, pull the network wiring to remove slack. Refer to the illustration on the following page.

Touch Screen Mounting Using MSMK-4SM and Angle Mounting Bracket (Exploded View)

Glass

Glass Mounting Bracket
(4509195 or 4509522)

Angle Mounting Bracket
(2024621 or 2024522)

Screw (4) #04-40 x 1/4"
Pan Head, Phillips
(2007161)

Plastic Enclosure
(2024381 or 2024382)

Touch Screen
(Sold Separately)

5. Secure the touch screen to the plastic enclosure with Phillip head screws.
    Alternatively, security Torx screws can be installed using a Torx
    screwdriver bit (both included with touch screen), as shown in the
    illustration on page 8.

Drywall, Paneling, Concrete or Brick Mounting

This section provides the steps required for assembly and installation of the
MSMK-4SM onto drywall, paneling, concrete or brick. The touch screen can be flat
mounted or angle mounted onto the surface by following the appropriate procedure
below. After installation is complete, the raceway may be installed following the
"Raceway Mounting" procedure on page 16.

Flat Mounting

Review the procedure and complete the steps in the order provided. The only tools
or materials required and not supplied are appropriate drywall or concrete screws,
#2 Phillips screwdriver, T8 Torx bit, 1/4" hex driver and a level. A T8 Torx bit is
supplied with the touch screen.

1. Insert the plastic cover (2024491 or 2024492) into the top or bottom of the
    plastic enclosure (2024381 or 2024382). Installation location of the plastic
    cover is determined by the location of the raceway. For example, if the
    raceway is to be run to the top of the plastic enclosure, install the plastic
    cover in the bottom of the plastic enclosure.

2. Run the network wiring through the hole in the back of the plastic
    enclosure.

3. Using the level and appropriate screws, mount the plastic enclosure (2024381 or 2024382). Observe the orientation of the **TOP** screening to ensure proper installation of the plastic enclosure.

4. Using a flathead screwdriver, carefully separate the back cover of the touch screen from the front of the unit. This part is not used.

5. Attach the RJ-45 connector of the network wiring to the touch screen and then install the touch screen by carefully pressing it into place. While snapping the unit into place, pull the network wiring to remove slack. Refer to the illustration below.

NOTE: Use care when pulling plenum rated cable through the bottom of the plastic enclosure, the rigidity of the cable causes slight resistance.

Mount Touch Screen to Drywall with Raceway
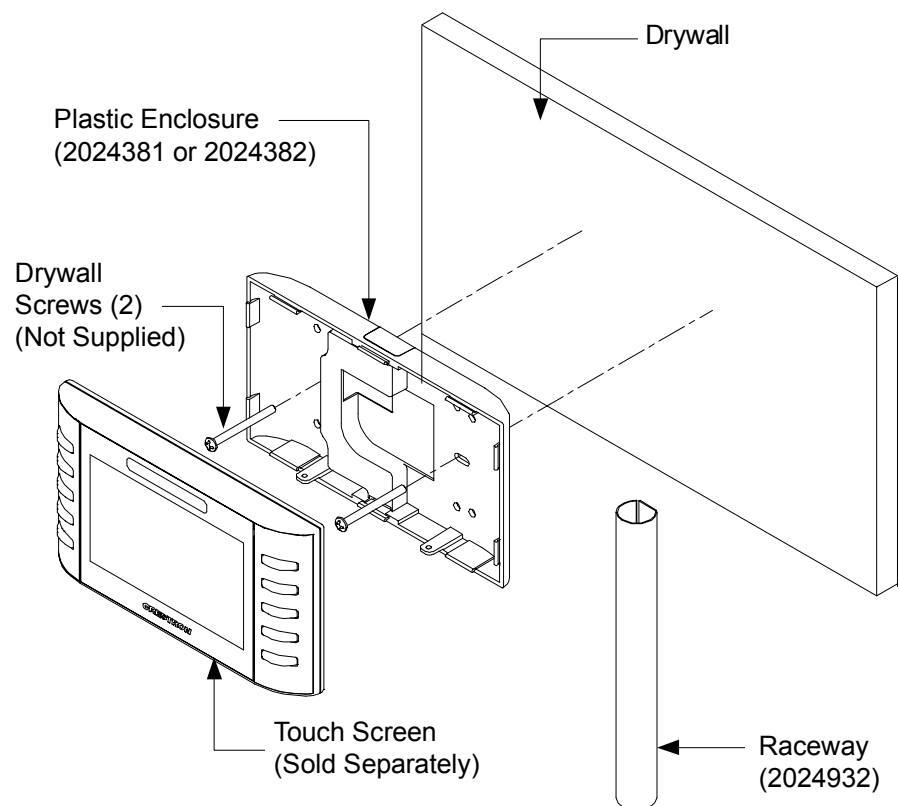
NOTE: Raceway can be run to the top or bottom of the touch screen. When raceway is run to the bottom of the touch screen, the plastic cover must be placed in the top of the plastic enclosure. When raceway is run to the top of the touch screen, the plastic cover must be placed in the bottom of the plastic enclosure.

NOTE: The raceway is intended for installation on smooth surfaces such as glass, drywall or paneling.

6. Secure the touch screen to the plastic enclosure with Phillip head screws. Alternatively, security Torx screws can be installed using a Torx screwdriver bit (both included with touch screen), as shown in illustration on page 8.

Angle Mounting

1. Using the level and appropriate screws, mount the angle mounting bracket (2024621 or 2024622), as shown in the illustration below.

Mount Angle Mounting Bracket to Mounting Surface
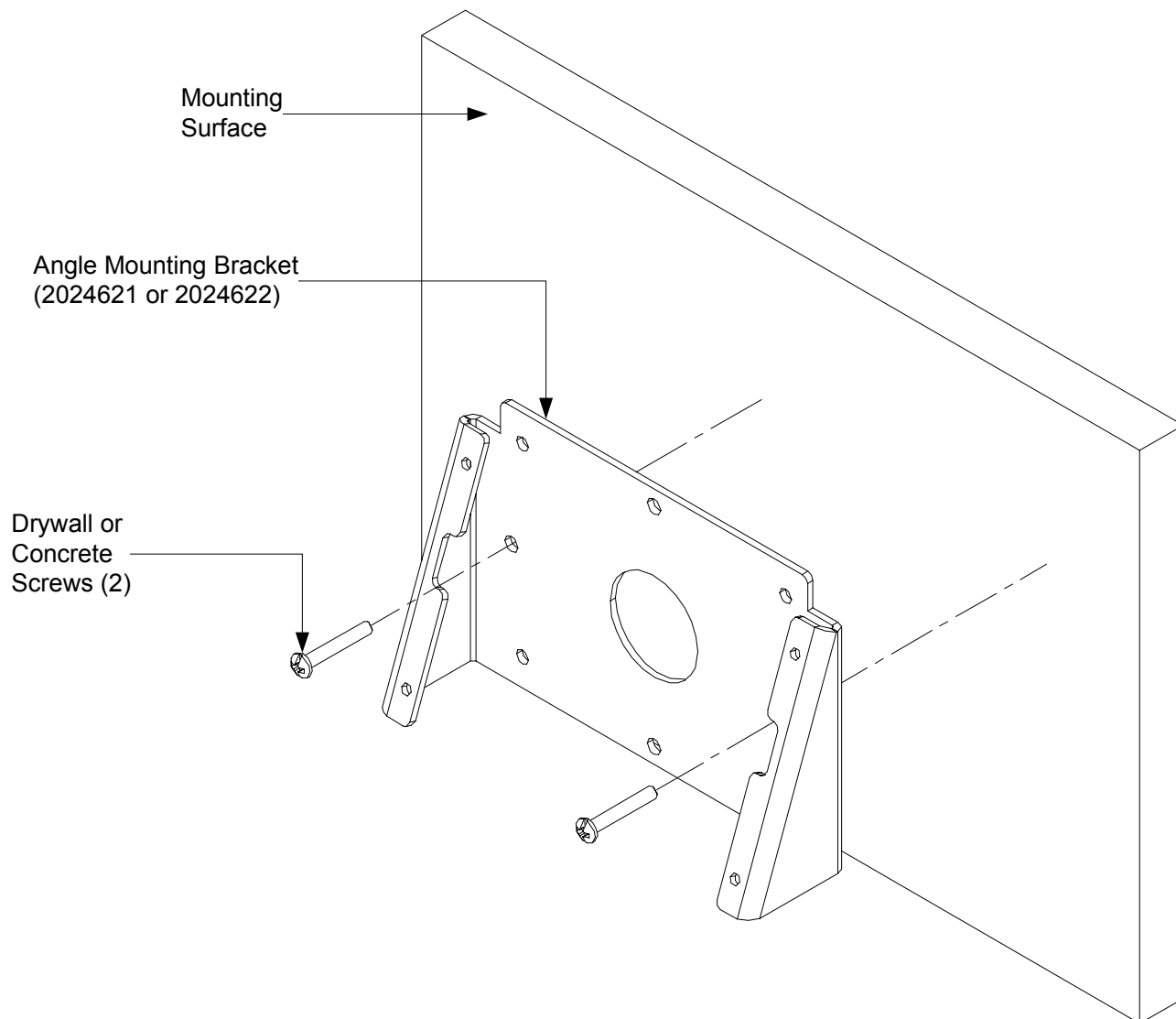
Mounting Surface

Angle Mounting Bracket (2024621 or 2024622)

Drywall or Concrete Screws (2)

2. Insert the plastic cover (2024491 or 2024492) into the top or bottom of the plastic enclosure (2024381 or 2024382). Installation location of the plastic cover is determined by the location of the raceway. For example, if the raceway is to be run to the top of the plastic enclosure, install the plastic cover in the bottom of the plastic enclosure.

3. Run the network wiring through the hole in the back of the plastic enclosure.

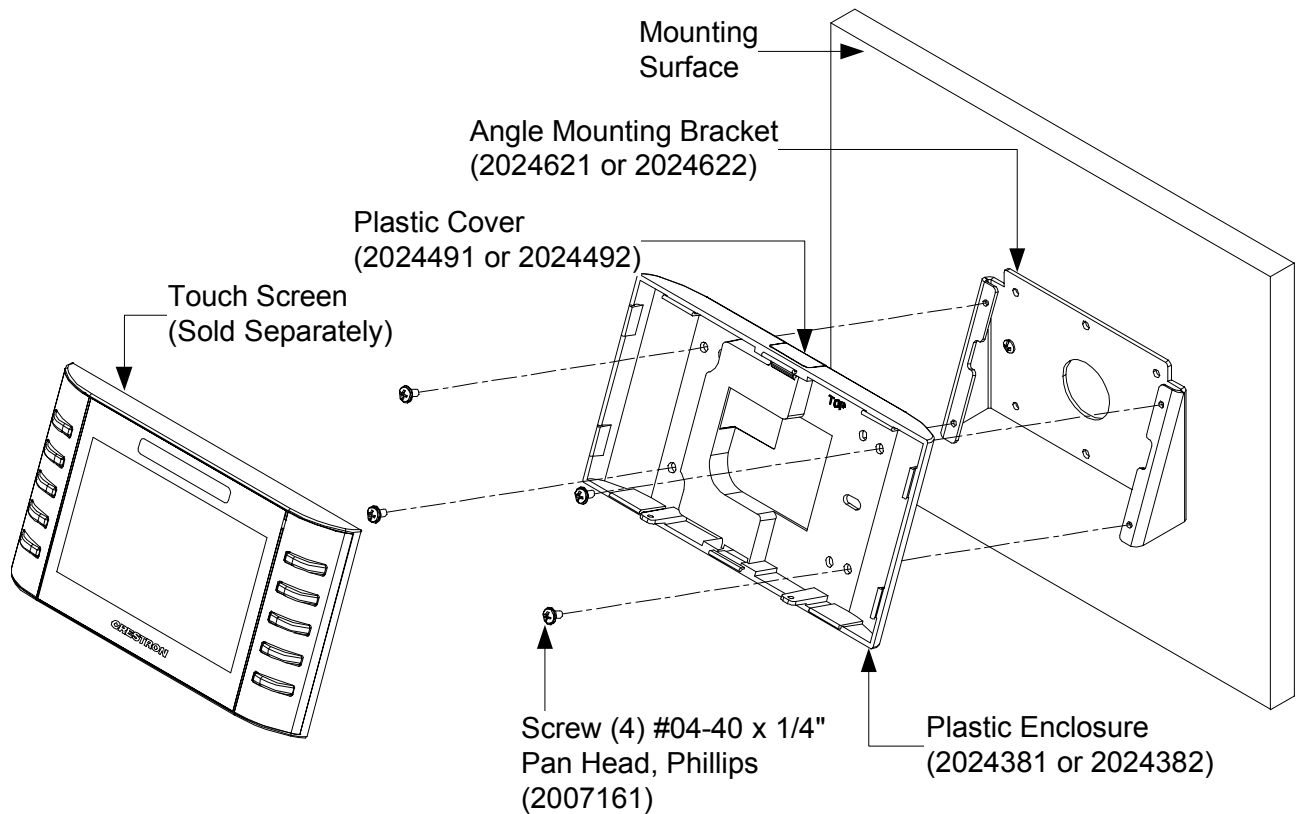4. Attach the plastic enclosure to the angle mounting bracket with the four included #04-40 x 1/4" Phillips head screws (2007161). Observe the orientation of the **TOP** screening to ensure proper installation of the plastic enclosure. Refer to the following illustration.

Attach Plastic Enclosure to Angle Mounting Bracket

Glass

Glass Mounting Plate
(4509195 or 4509522)

Angle Mounting Bracket
(2024621 or 2024622)

TOP

Screw (4) #04-40 x 1/4"
Pan Head, Phillips
(2007161)

Plastic Enclosure
(2024381 or 2024382)
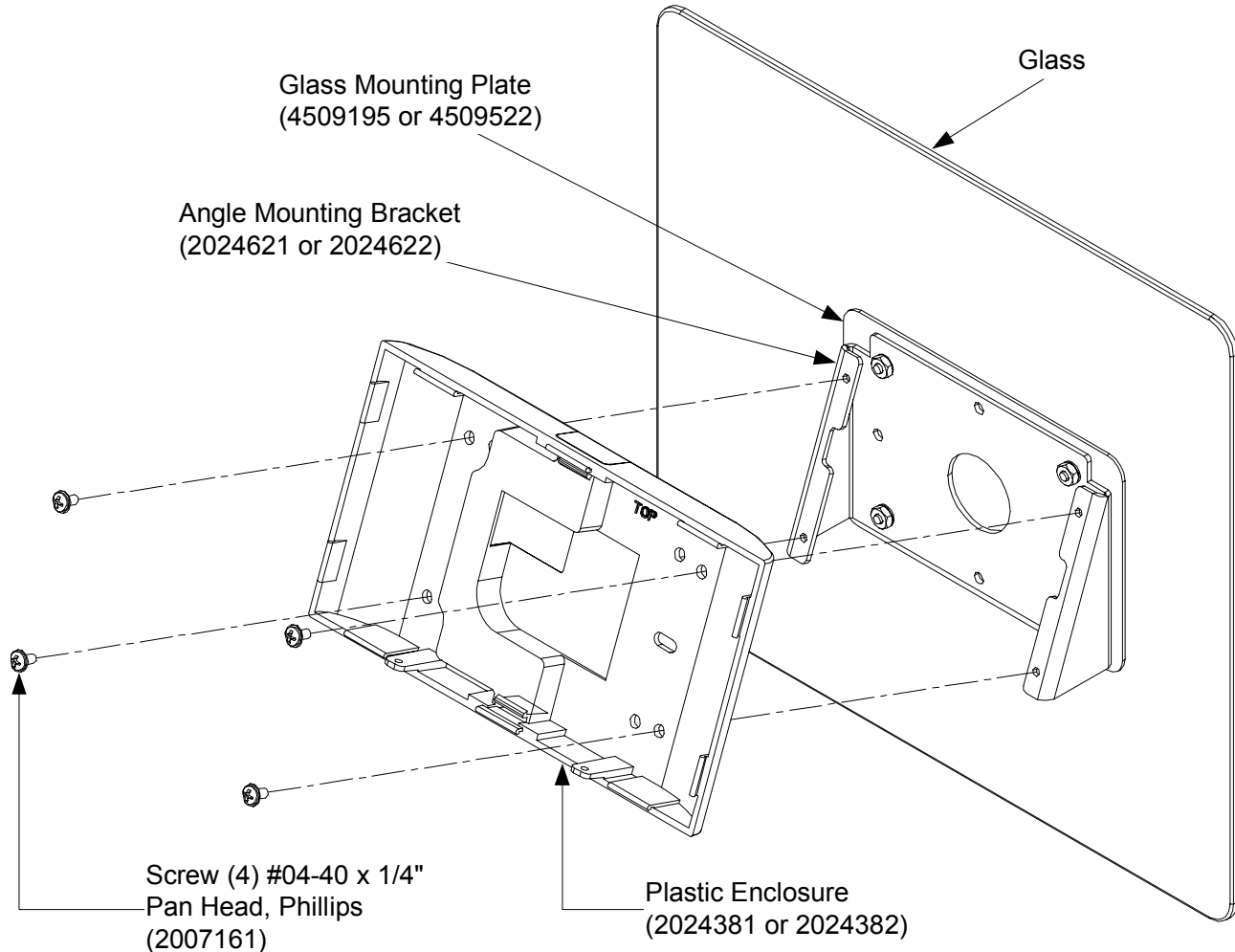
5. Using a flathead screwdriver, carefully separate the back plastic of the touch screen from the front of the unit. This part is not used.

6. Attach the RJ-45 connector of the network wiring to the touch screen and then install the touch screen by carefully pressing it into place. While snapping the unit into place, pull the network wiring to remove slack. Refer to the illustration on the following page.

Touch Screen Mounting Using MSMK-4SM and Angle Mounting Bracket (Exploded View)

Mounting
Surface

Angle Mounting Bracket
(2024621 or 2024622)

Plastic Cover
(2024491 or 2024492)

Touch Screen
(Sold Separately)

Screw (4) #04-40 x 1/4"
Pan Head, Phillips
(2007161)

Plastic Enclosure
(2024381 or 2024382)

7. Secure the touch screen to the plastic enclosure with Phillip head screws.
    Alternatively, security Torx screws can be installed using a Torx
    screwdriver bit (both included with touch screen), as shown in illustration
    on page 8.

Raceway Mounting

This section provides the steps required for assembly and installation of the raceway to conceal and organize cabling to the touch screen. The kit contains three cable channels, two flat elbows, one inside elbow, one outside elbow and two couplings.

The raceway may be run to either the top or the bottom of the touch screen. Review the procedure and complete the steps in the order provided. After installation, the raceway can be painted.

NOTE: Surface must be clean before installation.

NOTE: Do not use on textured surfaces.

NOTE: The raceway is intended for installation on smooth surfaces, such as glass, drywall or paneling.

1. Cut raceway to desired length.
2. Insert cables into raceway and press to snap shut.
3. Peel liner from the back of the raceway to expose adhesive strip.
4. Press firmly against wall. Use elbows and couplings as necessary.

Resources

Further Inquiries

To locate specific information or resolve questions after reviewing this guide, contact Crestron's True Blue Support at 1-888-CRESTRON [1-888-273-7876] or refer to the listing of Crestron worldwide offices on the Crestron Web site (www.crestron.com/offices) for assistance within a particular geographic region.

To post a question about Crestron products, log onto the Online Help section of the Crestron Web site (www.crestron.com/onlinehelp). First-time users must establish a user account to fully benefit from all available features.

Future Updates

As Crestron improves functions, adds new features and extends the capabilities of the MSMK-4SM, additional information may be made available as manual updates. These updates are solely electronic and serve as intermediary supplements prior to the release of a complete technical documentation revision.

Check the Crestron Web site periodically for manual update availability and its relevance. Updates are identified as an "Addendum" in the Download column.

Return and Warranty Policies

Merchandise Returns / Repair Service

1. No merchandise may be returned for credit, exchange or service without prior authorization from Crestron. To obtain warranty service for Crestron products, contact an authorized Crestron dealer. Only authorized Crestron dealers may contact the factory and request an RMA (Return Merchandise Authorization) number. Enclose a note specifying the nature of the problem, name and phone number of contact person, RMA number and return address.

2. Products may be returned for credit, exchange or service with a Crestron Return Merchandise Authorization (RMA) number. Authorized returns must be shipped freight prepaid to Crestron, 6 Volvo Drive, Rockleigh, N.J. or its authorized subsidiaries, with RMA number clearly marked on the outside of all cartons. Shipments arriving freight collect or without an RMA number shall be subject to refusal. Crestron reserves the right in its sole and absolute discretion to charge a 15% restocking fee plus shipping costs on any products returned with an RMA.

3. Return freight charges following repair of items under warranty shall be paid by Crestron, shipping by standard ground carrier. In the event repairs are found to be non-warranty, return freight costs shall be paid by the purchaser.

Crestron Limited Warranty

Crestron Electronics, Inc. warrants its products to be free from manufacturing defects in materials and workmanship under normal use for a period of three (3) years from the date of purchase from Crestron, with the following exceptions: disk drives and any other moving or rotating mechanical parts, pan/tilt heads and power supplies are covered for a period of one (1) year; touch screen display and overlay components are covered for 90 days; batteries and incandescent lamps are not covered.

This warranty extends to products purchased directly from Crestron or an authorized Crestron dealer. Purchasers should inquire of the dealer regarding the nature and extent of the dealer's warranty, if any.

Crestron shall not be liable to honor the terms of this warranty if the product has been used in any application other than that for which it was intended or if it has been subjected to misuse, accidental damage, modification or improper installation procedures. Furthermore, this warranty does not cover any product that has had the serial number altered, defaced or removed.

This warranty shall be the sole and exclusive remedy to the original purchaser. In no event shall Crestron be liable for incidental or consequential damages of any kind (property or economic damages inclusive) arising from the sale or use of this equipment. Crestron is not liable for any claim made by a third party or made by the purchaser for a third party.

Crestron shall, at its option, repair or replace any product found defective, without charge for parts or labor. Repaired or replaced equipment and parts supplied under this warranty shall be covered only by the unexpired portion of the warranty.

Except as expressly set forth in this warranty, Crestron makes no other warranties, expressed or implied, nor authorizes any other party to offer any warranty, including any implied warranties of merchantability or fitness for a particular purpose. Any implied warranties that may be imposed by law are limited to the terms of this limited warranty. This warranty statement supersedes all previous warranties.

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