# Installation Instructions MRS Flanged Cover





### Preface

#### **Important, Please Read Carefully**

Thank you for your purchase with Amico.

This unit is designed for long-lasting performance, provided the user complies with assembly and maintenance procedures. This instruction manual is your guide to ensuring that you get the best performance out of your equipment. Amico Accessories is not responsible for any damage as a result of (but not limited to) abuse and other malfunctions that may be a direct or indirect result of failure to comply with the instructions provided in this manual.

#### **Glossary of Warning Symbols**

The meaning of symbols appearing in this guide, on the product are shown on the chart below. These symbols alert you to safety conditions that demands your attention. You should take proper precaution and follow the instruction on the label and/or this guide to minimize the risk of injury or damaging the equipment

Symbol	Signal Word/Colour	Level of Hazard	
WARNING		Indicates a potentially hazardous situation which, if not avoid, could result in death or serious injury.	
i	NOTE	Follow operating instructions.	

#### **Medical Facility Responsibilities**

Preventive maintenance checks must be performed regularly to maintain the quality and performance of this product. Any parts that may be broken, missing, worn, distorted, or contaminated in any way should not be used and all affected parts should be replaced immediately. Should the necessity of any repair be suspected; please contact your local distributor or call 877-264-2697.

### Table of Contents

Section 1: Product Specifications	4
Features	4
Section 2: Installation Preparation	4
Installation Tools	4
Typical Installation Reference	4
Section 3: Installation of Device	5
Section 4: Installation of Wires	7
Section 5: Installation onto Mounting Platform	8
Attaching the Cover	8
Cutting the Cover	10
Finalizing Setup and Wiring	12
Installing End Cap	14
Section 6: Adjustment	15
Add/Remove Wires	15
Method 1	15
Method 2	15
Add/Remove MRS Cover for Custom Spacing	17
Section 7: Troubleshooting, Preventative Maintenance & Cleaning	18
Troubleshooting	18
Preventative Maintenance	18
Cleaning	18
Section 8: Warranty	19

### Section 1: Product Specifications

#### **Features**

- Easy to clean wrap around cover with robust non-porous material
- Concealing wires and cables to minimize trip hazards or prevent accidental damage to medical equipment.
- Offer a clean and organized appearance.
- Simplifies cleaning process and provide easy access for maintenance, and quick and efficient repair/upgrade.
- Standard in black or white colour with grey end caps.

Part Number	Compatible Amico Monitor Arms/Covers	Colour	Physical Dimensions	Physical Weight
MRS-CVR-19-AHM-W	AHM, LIT, RIT, APM	White	4.4" x 1.1" x 22" (11.2 cm x 2.8 cm x 55.9 cm)	0.4 lbs (0.2 kg)
MRS-CVR-19-LMA-W	SSM, LMA	White	4.4" x 1.1" x 22" (11.2 cm x 2.8 cm x 55.9 cm)	0.6 lbs (0.3 kg)
MRS-CVR-19-AHM-B	AHM, LIT, RIT, APM	Black	4.4" x 1.1" x 22" (11.2 cm x 2.8 cm x 55.9 cm)	0.4 lbs (0.2 kg)
MRS-CVR-19-LMA-B	SSM, LMA	Black	4.4" x 1.1" x 22" (11.2 cm x 2.8 cm x 55.9 cm)	0.6 lbs (0.3 kg)
MRS-CVR-34-AHM-W	AHM, LIT, RIT, APM	White	4.4" x 1.1" x 37" (11.2 cm x 2.8 cm x 94.0 cm)	0.6 lbs (0.3 kg)
MRS-CVR-34-LMA-W	SSM, LMA	White	4.4" x 1.1" x 37" (11.2 cm x 2.8 cm x 94.0 cm)	0.8 lbs (0.4 kg)
MRS-CVR-34-AHM-B	AHM, LIT, RIT, APM	Black	4.4" x 1.1" x 37" (11.2 cm x 2.8 cm x 94.0 cm)	0.6 lbs (0.3 kg)
MRS-CVR-34-LMA-B	SSM, LMA	Black	4.4" x 1.1" x 37" (11.2 cm x 2.8 cm x 94.0 cm)	0.8 lbs (0.4 kg)
MRS-CVR-48-AHM-W	AHM, LIT, RIT, APM	White	4.4" x 1.1" x 51" (11.2 cm x 2.8 cm x 129.5 cm)	0.9 lbs (0.4 kg)
MRS-CVR-48-LMA-W	SSM, LMA	White	4.4" x 1.1" x 51" (11.2 cm x 2.8 cm x 129.5 cm)	1.1 lbs (0.5 kg)
MRS-CVR-48-AHM-B	AHM, LIT, RIT, APM	Black	4.4" x 1.1" x 51" (11.2 cm x 2.8 cm x 129.5 cm)	0.9 lbs (0.4 kg)
MRS-CVR-48-LMA-B	SSM, LMA	Black	4.4" x 1.1" x 51" (11.2 cm x 2.8 cm x 129.5 cm)	1.1 lbs (0.5 kg)
MRS-CVR-ENDCAP-G	MRS-CVRW	Grey	4.6 x 1.3 x 1.2" (11.7 cm x 3.3 cm x 3.1 cm)	0.04 lbs (0.02 kg)
MRS-CVR-ENDCAP-B	MRS-CVRB	Black	4.6 x 1.3 x 1.2" (11.7 cm x 3.3 cm x 3.1 cm)	0.04 lbs (0.02 kg)

### Section 2: Installation Preparation

#### **Installation Tools**



(NOT INCLUDED)



Shears (NOT INCLUDED)

### **Typical Installation Reference**

The pictures below illustrate the components of the product. The product names along with their product number are given below.



Cover (X-MRS-CVR-19-AHM-W is used as a typical example for illustration purposes only.)



**Pre-cut Middle Cover** (M-MRS-CVR-LMA-MID is used as a typical example for illustration purposes only.)



**Finger Sleeves** (X-MRS-CVR-FNGR-SLV)





**Top End Cap** Instruction Label (H-MRS-CVR-INST-LBL)

(MRS-CVR-ENDCAP-B / MRS-CVR-ENDCAP-G. MRS-CVR-ENDCAP-G is used as a typical example for illustration purposes only.)

### Section 3: Installation of Device

- NOTE: X-MRS-CVR-\_\_-\_ SHOULD ONLY BE INSTALLED AFTER ALL THE REQUIRED AMICO WORKSTATION/ ARMS (DEVICES) HAVE BEEN INSTALLED ONTO THE MRS RAIL. IT IS THE RESPONSIBILITY OF THE CUSTOMERS TO VERIFY THAT MRS RAILS HAVE BEEN INSTALLED IN ACCORDANCE WITH AMICO RAIL INSTALLATION INSTRUCTIONS. RAIL FAILURE WITH DEVICES MOUNTED CAN CAUSE SERIOUS INJURY AND EQUIPMENT DAMAGE.
- 1. Remove H-MRS-CVR-INST-LBL from X-MRS-CVR-\_\_-\_ by sliding it out (**Figure 1**). Carefully read all Instructions. More detailed instructions are given in the customer manual.
- 2. Install the workstation/monitor arm onto the MRS Rail using the instructions provided from its corresponding manual.

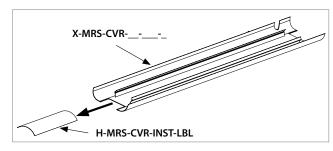


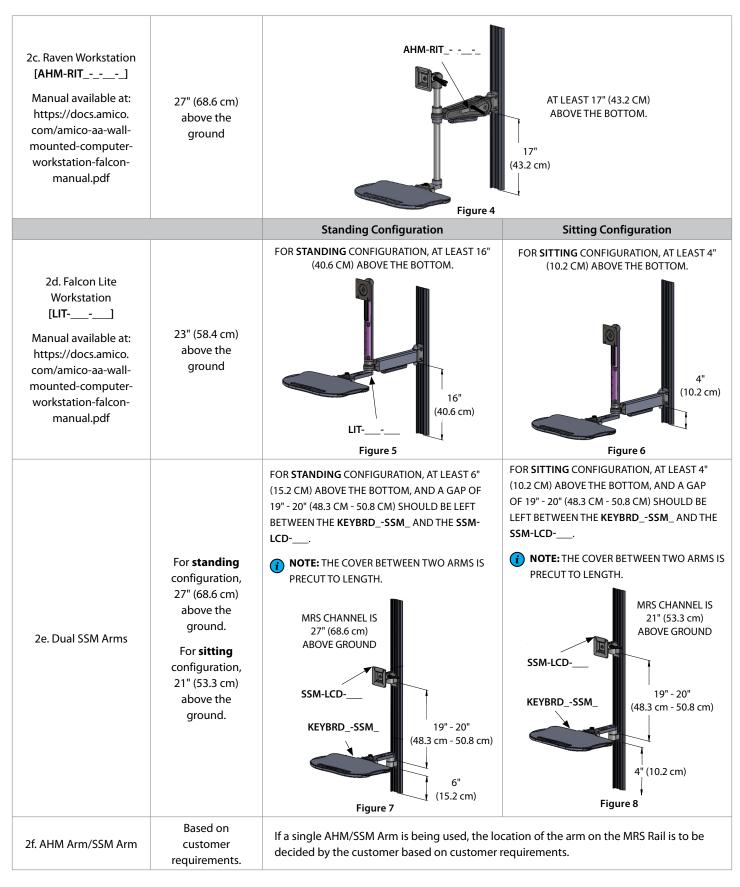
Figure 1



NOTE: INSTALLATION HEIGHTS OF THE WORKSTATION/MONITOR ARM SHOULD BE IN ACCORDANCE WITH AMICO GUIDELINES. PLEASE REFER TO THE CUSTOMER MANUAL BY APPLICATION FOR MORE DETAILS.

Applications	Recommended Height to Mount the MRS Rail	Recommended Height of the mounting adapter above the bottom of the MRS Rail
2a. Falcon Workstation [AHM-FIT]  Manual available at: https://docs.amico. com/amico-aa-wall- mounted-computer- workstation-falcon- manual.pdf	27" (68.6 cm) above the ground	AT LEAST 4" (10.2 CM) ABOVE THE BOTTOM.  AHM-FITW INSTALLED ONTO RAIL AT DESIRED HEIGHT  Figure 2
2b. Light-duty Monitor Arm [LMA()]  Manual available at: https://docs.amico. com/amico-aa-lma- light-duty-monitor- arm-manual.pdf	27" (68.6 cm) above the ground	AT LEAST 3" (7.6 CM) ABOVE THE BOTTOM, AND A GAP OF 12" (30.5 CM) SHOULD BE LEFT BETWEEN THE MOUNTING ADAPTERS OF THE KEYBOARD ARM AND THE LCD MONITOR ARM.  I NOTE: THE COVER BETWEEN TWO ARMS IS PRECUT TO FIT THE 12" (30.5 CM) GAP.  KEYBRD-LMA(MON-B/MON)-01  12" (30.5 cm)  12" (7.6 cm)  Figure 3

### Section 3: Installation of Device



### Section 4: Installation of Wires

3. Once the device has been installed, route wires through the cable management of the device and upwards from the right side of the MRS Rail and into the CPU and/or power outlet (Figure 9). Figure 10 shows this for a double arm configuration.

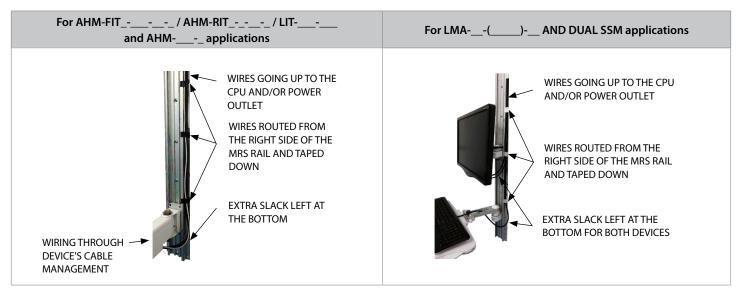


Figure 9 Figure 10

- NOTE: BEFORE PROCEEDING TO THE NEXT STEP, ENSURE ENOUGH SLACK IS GIVEN FOR THE WIRES TOWARDS THE BOTTOM OF THE MOUNTING ADAPTER FOR EVERY DEVICE ATTACHED TO THE MRS.
- 4. Tape down the wires onto the MRS to keep them in place as shown in Figures 9 and 10. Figure 11 shows a crosssectional top view.

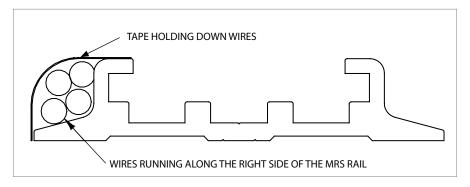


Figure 11 (Cross-sectional top view)

### **Attaching the Cover**

a. Once the device has been installed onto the MRS Rail, **X-MRS-CVR-\_\_-** will need to be attached and cut to the desired length.



**NOTE:** WHILE CARRYING OUT THE STEPS BELOW, ENSURE THE END WITH THE MOUSEHOLE IS AWAY FROM THE DEVICE\* AS PER **FIGURES 12 and 13**.

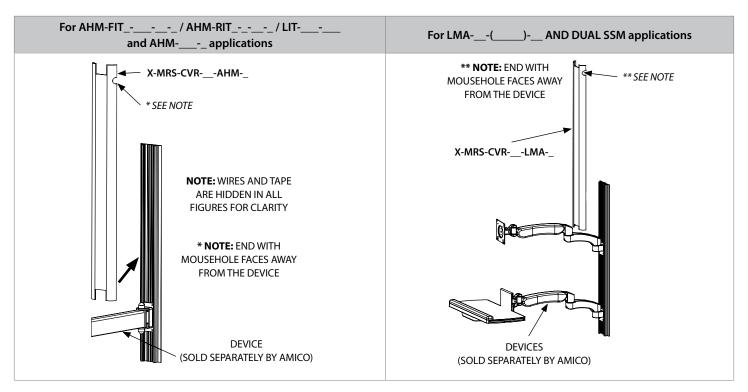


Figure 12 Figure 13

- b. Attach X-MRS-CVR-\_\_-\_\_onto the MRS Rail by aligning the legs towards the center of the cross section of the rail as shown in Figure 14.
- c. Apply slight pressure to the curved edges (from both sides) of X-MRS-CVR-\_\_- as shown by the arrows "A" and "B" in Figure 15. This will cause the legs to bend more inside towards the center of the rail.
- d. While applying pressure, press X-MRS-CVR-\_\_-\_\_- into the MRS Rail. Once engaged, release pressure from the sides as shown in Figure 15. Figure 16 shows the overall look for the setup.

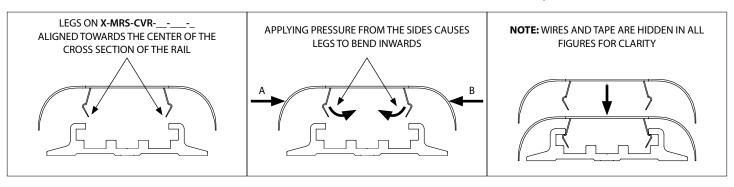


Figure 14 Figure 15 Figure 16

e. Gently press by hand on the flat-face of the X-MRS-\_\_\_-\_ at the start location\* pointed out in **Figures 17** and 18. Press on X-MRS-CVR-\_\_-\_ along the length of the cover in order to secure the whole cover in place.

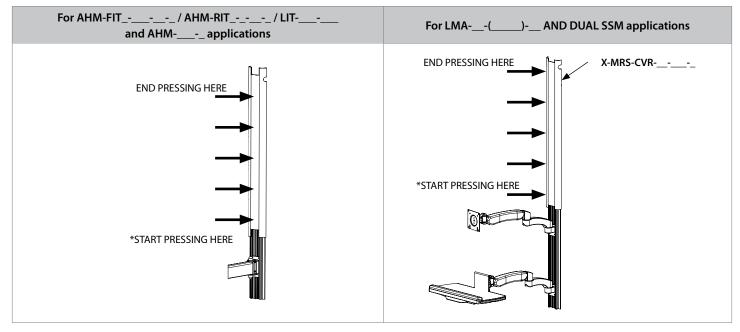


Figure 17 Figure 18

f. Once the whole cover is in place, slide it down until the cut out sits around the device as shown in **Figures 19 and 20** and in the detailed view.

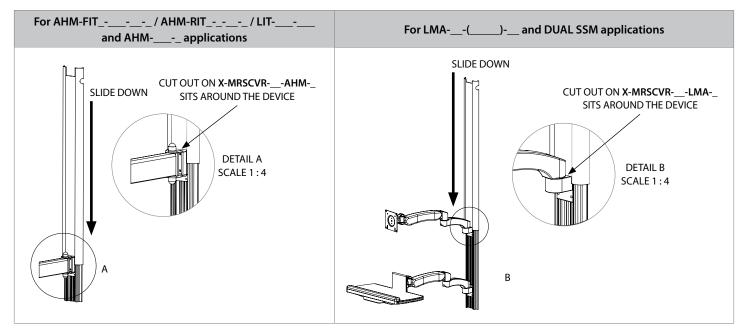


Figure 19 Figure 20

g. Next, cut the MRS cover to length based on the position of the device. Refer to section "Cutting the Cover" for details.

#### **Cutting the Cover**

- a. Once the X-MRS-CVR-\_\_-\_ is set in place, remove the remaining from the top and attach it to the bottom. **Figure 21** shows a quick version of this. More detail is given in the steps below.
- NOTE: FIGURE 21 SHOWS THE AHM-FIT\_-\_\_-\_ APPLICATION. IN CASE OF THE LMA OR SSM APPLICATION, USE THE CUT-OUT PIECE FROM THE TOP AND ATTACH IT ONTO THE MRS RAIL BELOW KEYBRD-LMA-\_\_-MON-\_\_ OR KEYBRD AS SHOWN IN FIGURE 31.
- b. Make a mark on X-MRS-CVR-\_\_-\_ at the location where the MRS Rail ends as shown in **Figure 22**.
- **NOTE:** IF A **CPUMNT** -M IS ALSO BEING ATTACHED TO MRS RAIL, THE MARKING CALLED OUT IN FIGURE 23 SHOULD BE MADE APPROXIMATELY 3.5" - 3.75" (8.9 cm - 9.5 cm) BELOW THE LOCATION WHERE THE MRS RAIL ENDS. THIS IS ASSUMING THE TOP OF THE CPUMNT\_-M ADAPTER IS FLUSH WITH THE TOP OF THE MRS CHANNEL AS SHOWN IN FIGURE 24.

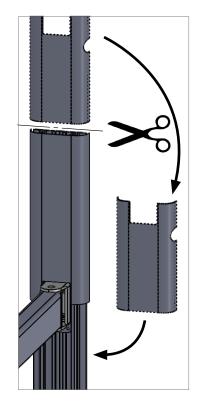
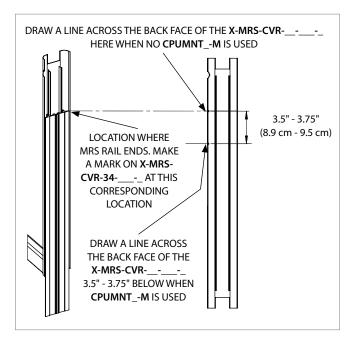


Figure 21



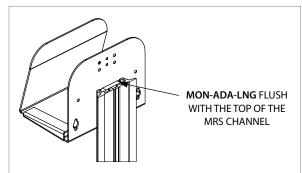


Figure 22 Figure 23 Figure 24

c. Once the marking has been done, remove the cover from the rail. Make a horizontal line across the back of the X-MRS-CVRin line with the mark made in the previous step as shown in Figure 23. Draw lines approximately 1/8" in either direction as shown in Figure 25.

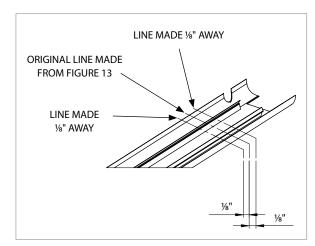


Figure 25

- d. Using scissors, cut ONLY THE LEGS along the lines shown in Figure 25. The cover should now resemble Figure 26.
- **CUT CREATES A 0.25" GAP**

Figure 26

ONLY THE LEGS ARE CUT OUT

e. Using shears cut off the X-MRS-CVR\_\_-\_\_\_- along the middle of the gap created by the cut in step d. Figure 27 shows the resulting two parts labeled as the TOP PIECE and BOTTOM PIECE.

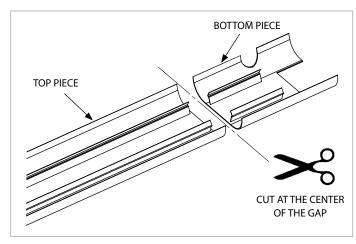


Figure 27

#### **Finalizing Setup and Wiring**

- - NOTE: IGNORE STEPS (a) AND (b) BELOW IF ONLY ONE ARM IS ATTACHED TO THE MRS RAIL INSTEAD OF A COMBINATION OF ARMS.
- a. Using 1/8" Allen key, loosen 2x H-SSCP-1420-05 on MON-ARM-ADA or MON-ADA-SM (a part of KEYBRD-LMA-MON- or KEYBRD -SSM ) or Standard MON Adapter on AHM arm and carefully move the assembly down about 2" (5.1 cm) after on the MRS Rail. Retighten 2x H-SSCP-1420-05.
- NOTE: AVOID MOVING THE ASSEMBLY MORE THAN 2" IN ORDER TO KEEP THE WIRING AND TAPE INTACT.
- NOTE: IF MOVING THE ASSEMBLY CAUSES WIRING TO SNAP OFF, REDO THE WIRING, WHILE LEAVING MORE SLACK. THESE DIMENSIONS ARE BASED ON AMICO INSTALLATION GUIDELINES AND MAY NOT WORK IN EVERY SCENARIO. (FIGURE 28)
- b. Attach X-MRS-CVR-LMA-MID-\_ to the MRS Rail between LMA-\_\_-(MON-B/MON)-01 and KEYBRD-LMA-\_\_-MON-\_\_ (or X-MRS-CVR-SSM-MID to the MRS Rail between SSM-LCD-\_\_\_ and KEYBRD\_-SSM\_) following instructions given in section "Attaching the Cover" for steps on page 9. Push X-MRSCVR-LMA-MID-\_ up on the rail until it hits the bottom of X-LMA-MON-ARM-EAR or MON-ARM-EAR (a part of LMA- -(MON-B/MON)-01 or a part of SSM-LCD-\_\_\_ respectively). Reverse the procedure in step a on page 12, and move the KEYBRD-LMA-\_\_-MON-\_\_ (or **KEYBRD\_-SSM\_**) assembly back upwards until the top of the mounting adapter touches the cut out on X-MRS-CVR-LMA-MID- . (Figure 29)

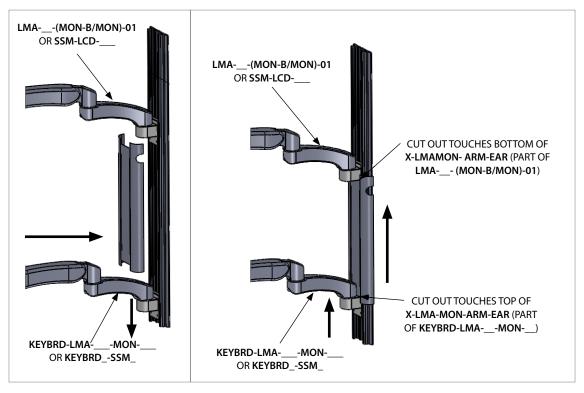


Figure 28 Figure 29

c. The TOP PIECE and BOTTOM PIECES created in the "Cutting the Cover" section need to be attached to the MRS Rail. (Figures 30 and 31). Follow instructions in the "Attaching the Cover" section on page 9 to install the top piece to the MRS Rail.

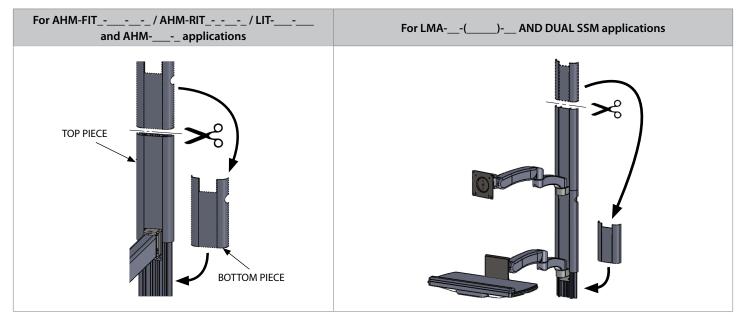


Figure 30 Figure 31

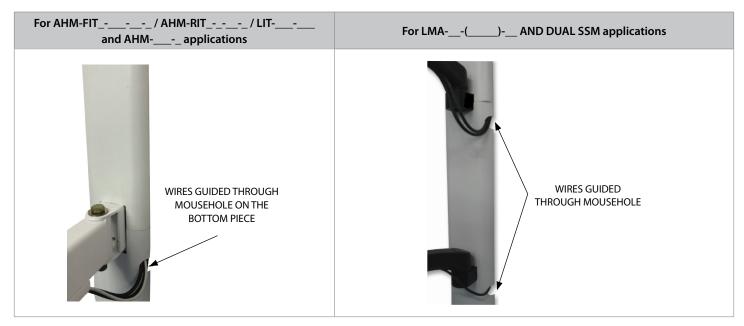


Figure 32 Figure 33

d. Repeat steps to install the BOTTOM PIECE onto the MRS Rail. Ensure to guide the wires (with slack) through the mousehole on the BOTTOM PIECE as shown in Figures 32 and 33.

#### **Installing End Cap** (MRS-CVR-ENDCAP-G/MRS-CVR-ENDCAP-B)

a. Align the top End Cap with MRS Cover on one side to engage as shown in Figure 34.

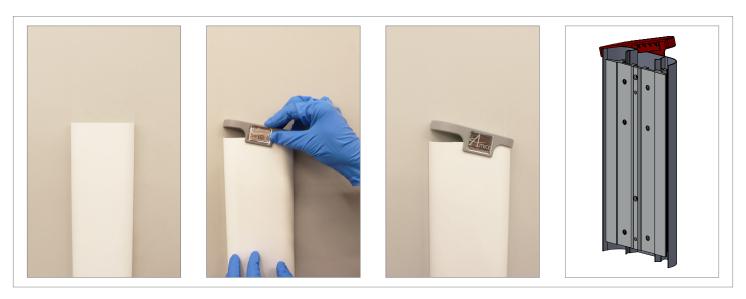


Figure 34

b. Push down on the other side of the End Cap and press firmly to engage fully as shown in **Figure 35**.



Figure 35

### Section 6: Adjustment

Once X-MRS-CVR-\_\_-\_\_\_- has been set up, adjustments can be made in order to add/remove wires. In the case of Dual LMA and Dual SSM applications, if the spacing between the arms is not kept as recommended, adjustments can also be made by adding MRS cover to fill the empty space.

#### **Add/Remove Wires**

1. Remove the End Cap by pushing with thumb from the side bottom of the End Cap if needed.



Figure 36

#### Method 1

- 1. Remove TOP PIECE and BOTTOM PIECES of X-MRS-CVR-\_\_-\_ off the MRS Rail. Follow instructions in section "Installation of Wires" on page 8 to attach more wires. If wires need to be removed, undo the tape and remove the desired wire. Ensure to tape the wires back onto the MRS Rail.
- 2. Install both pieces of **X-MRS-CVR-** back onto the MRS by following "Finalizing Setup and Wiring" section, and "Installing End Cap" section on page 12 - 15.

#### Method 2



NOTE: THIS METHOD IS PREFERRED ONLY FOR ADDING WIRES, NOT FOR REMOVING THEM.

1. Wear 4x H-MRS-CVR-FNGR-SLV on the index and middle fingers of both hands. (Figure 37)



Figure 37



NOTE: BE CAREFUL WHILE CARRYING OUT THE NEXT STEP. EDGES AND CORNERS ON X-MRS-CVR-\_\_-\_\_\_- MAY BE SHARP. IT SHOULD ALSO BE NOTED THAT CHOICE OF HAND USED FOR THE NEXT STEP IS UP TO THE USER. THE INSTRUCTIONS BELOW ARE RECOMMENDED FOR A RIGHT-HANDED PERSON.

### Section 6: Adjustment

2. Slide the index and middle fingers of the left hand behind the curved edge of the X-MRS-CVR-\_\_-\_ (Figure 38). Once done, lift the edge of X-MRS-CVR-\_\_- and let the edge rest flat on fingers.

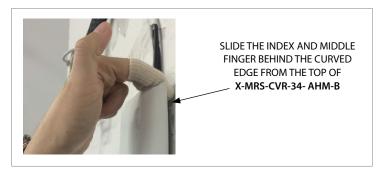


Figure 38

3. Lifting the edge will create an opening between X-MRS-CVR-\_\_- and the wall. Use the index and middle fingers of the right hand to insert/push wires into the MRS rail through the created opening (Figure 39) while keeping the edge of X-MRS-CVR-\_\_-\_ lifted, slowly run the fingers down along the length of the channel by repeating the same act.

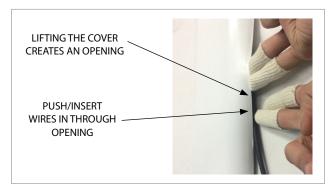
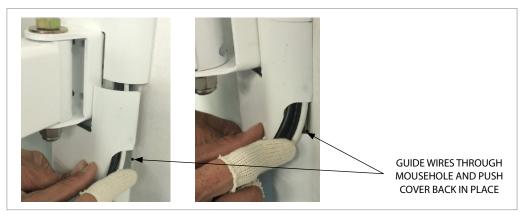


Figure 39

4. Once the wires have been inserted into the top piece, lift the bottom piece slightly and guide the wires through the mousehole, then push the bottom piece of X-MRS-CVR-\_\_-\_ in place (Figure 40).

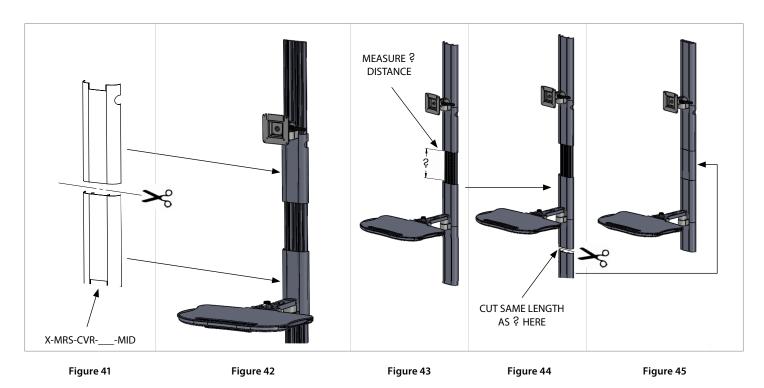


### Section 6: Adjustment

#### Add/Remove MRS Cover for Custom Spacing

This is applicable only when multiple arms are being attached to the same MRS rail.

- 1. Install the arms (SSM or LMA) at the desired height along the MRS Rail.
- 2. Follow instructions in the "Cutting the Cover" section, cut X-MRS-CVR-\_\_\_-MID into two halves as shown in Figure 41. Attach these halves in to the MRS Rail as shown in Figure 42.
- NOTE: CUSTOM SPACING WILL LEAD TO EXTRA LENGTH ON THE BOTTOM PIECE WHILE CARRYING OUT STEPS IN THE "CUTTING THE COVER" SECTION. THE NEXT STEP REQUIRES CUTTING THIS ADDITIONAL LENGTH.
- 3. Carry out steps in the "Finalizing Setup and Wiring" section. The set up will now resemble Figure 43. Measure the remaining length between the two halves.
- 4. Cut the same length from the bottom piece as shown in **Figure 44** and attach to the empty space between the two arms as shown in Figure 45.



### Section 7: Troubleshooting, Preventative Maintenance & Cleaning

#### **Troubleshooting**

Symptoms	Possible Cause	Solution
Cover feels loose.	Cover not engaged into MRS fully.	Follow steps in the "Attaching the Cover" section. If problem still persist, please contact Amico Accessories.
Top End Cap falls.	End Cap is not engaged properly.	Make sure the engaging tab of the MRS End Cap slides inside of the channel cover and pressed all the way down.

#### **Preventative Maintenance**

Area	Maintenance	Period
Mousehole	Check that wires are not pinched	2 weeks

#### Cleaning



WARNING: THE CLEANING CHEMICALS AND METHODS BELOW ARE NOT MEANT FOR CONTROLLING ANY INFECTIONS. IT SHALL BE THE RESPONSIBILITY OF THE HOSPITAL OR THE HOSPITAL'S INFECTION CONTROL OFFICER TO SANITIZE THE EQUIPMENT.



WARNING: PLEASE DO NOT SPRAY ANY CHEMICAL DIRECTLY ONTO THE PRODUCT. APPLY ONTO A SOFT CLOTH AND WIPE CLEAN TO PREVENT CHEMICALS GETTING INTO THE PRODUCT.

The mounting assembly may be cleaned with most mild, non-abrasive solutions commonly used in the hospital environment (e.g. diluted bleach, ammonia, or alcohol solutions). The surface finish will be permanently damaged by strong chemical and solvent such as acetone and trichloroethylene. Steel wool or other abrasive material should never be used. Damage caused by the use of unapproved substances or processes will not be warranted. It is recommended that you test any cleaning solution on a small area of the product that is not visible to verify compatibility. Never submerge the product and do not allow liquids to enter it. Wipe any cleaning agents off the product immediately using a water-dampened cloth. Dry the product thoroughly after cleaning.



#### No Acetone

Acetone is a colorless, mobile, flammable liquid



#### No Trichloroethylene

Trichloroethylene is a chlorinated hydrocarbon commonly used as an industrial solvent

Figure 46

Figure 47

### Section 8: Warranty

Amico Accessories Inc. warrants all mounting accessories to be free from defects in material and workmanship for a period of twelve (12) months from the date of shipment. Within this period Amico Accessories Inc. will repair or replace any part which is proven to be defective.

Amico Accessories Inc. will warrant its materials to be free from defect for an additional period of four (4) years, (five [5] years from the date of shipment). Within this period, Amico Accessories Inc. will replace any part which is proven to be defective, at no charge. Shipping and Installation costs after the first twelve (12) months will be borne by the Customer.

This warranty is valid only when the product has been properly installed according to Amico Accessories Inc. specifications, used in a normal manner and serviced according to factory recommendations. It does not cover products that are not manufactured by Amico Accessories Inc. It does not cover failures due to damage which occurs in shipments or failures which result from accidents, misuse, abuse, neglect, mishandling, alteration, misapplication or damage that may be attributable to acts of God.

Amico Accessories Inc. shall not be liable for incidental or consequential damages resulting from use of equipment.

All claims for warranty must first be approved by Amico Accessories Inc. A valid Return Goods Authorization (RGA) number must be obtained from Amico Accessories Inc. prior to commencement of any service work. Warranty work, which has not been pre-authorized by Amico Accessories Inc., will not be reimbursed.

#### AMICO ACCESSORIES INC. DOES NOT HONOR VERBAL STATEMENTS CONCERNING THE WARRANTY.

The distributor and/or dealer are not sanctioned to create verbal warranties about the product described in this agreement. Any statements will not be honored or be made part of the agreement of sale. This document is the final complete and exclusive terms of the agreement.

#### THIS WARRANTY IS INCLUSIVE AND REPLACES ALL OTHER WARRANTIES.

Amico Accessories Inc. shall not, under any circumstances be liable for incidental or consequential damages including, but not limited to, profit, loss of sales or injuries to person(s) or property. Correction of noncompliance as noted above will result in completion of all liabilities of Amico Accessories Inc., whether based on agreement, neglect or changed materials, designs or specifications without notice.

All claims for warranty must first be approved by Amico Accessories Inc. Service Department: accessories@amico.com or 1.877.264.2697. A valid Return Goods Authorization number must be obtained from Amico Accessories Inc. prior to commencement of any warranty claim.

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