## INSTALLATION INSTRUCTIONS

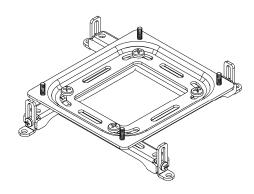
## SLBO / SLMO UNIVERSAL INTERFACE BRACKETS

The Universal Interface Bracket provides a solution for simplifying inventory of RPA and RPM series mounts and SLB/SLM projector brackets.

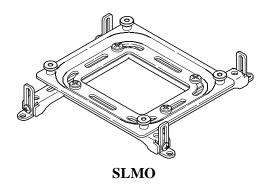
This bracket allows for exact alignment with the projector. The projector can be shifted around on the mounting plate until its weight is centered and balanced.

The SLBO/SLMO is equipped with adjustable legs and feet, which can be moved to any angle, depending on the mounting-hole pattern on the projector. Leg and foot length, width, and height can readily be adjusted.

The SLBO/SLMO is shipped with All-Points™ Security System hardware, which is designed to protect projectors from theft. Chief Manufacturing provides the security kit exclusively.



**SLBO** 



#### **BEFORE YOU BEGIN**

- CAUTION: To prevent damage to your monitor, which could affect or void the Factory warranty, thoroughly study all instructions and illustrations before you begin to install the mount brackets. Pay particular attention to the Warnings and Cautions in this document.
- If you have any questions about this installation, contact Chief Manufacturing.

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#### **IMPORTANT WARNINGS and CAUTIONS!**

WARNING	A WARNING alerts you to the possibility of serious injury or death if you do not follow the instructions.
CAUTION	A <b>CAUTION</b> alerts you to the possibility of damage or destruction of equipment if you do not follow the corresponding instructions.
• WARNING	Be aware of the potential for personal injury or damage to the equipment if it is not installed correctly. Consider the weight of the projector mount without the projector.
• WARNING	The installer is responsible for verifying that the projector to which the universal mount is fastened will safely support the combined load of all attached components or other equipment.
• WARNING	The combined weight of the projector placed on the universal mount must not exceed the maximum support weight of the projector.
• WARNING	Watch for pinch points. Do not put your fingers between movable parts.
• CAUTION	Check the unit for shipping damage before you begin the installation.

# TOOLS REQUIRED FOR INSTALLATION

- Phillips screwdriver
- 5/32" Allen Wrench
- Level

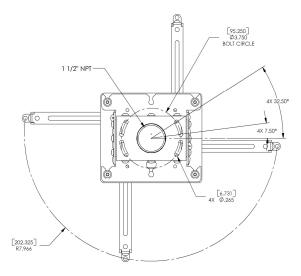
**NOTE:** Other tools may be required depending on your method of installation.

#### SHIPPING CONTENTS

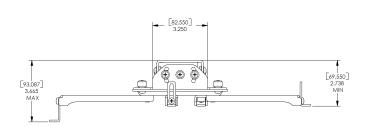
**BEFORE PROCEEDING:** Unpack the carton. Verify contents against items shown in the PARTS section below.

Read installation instructions completely. If you are missing any of the listed components, contact Chief Manufacturing Customer Service.

#### **DIMENSIONS**



Top View (SLBO Shown)



Front View (SLBO Shown)

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## **MOUNTING HARDWARE**

**Table 1. Mounting Hardware** 

ITEM	DESCRIPTION	QTY	NOTES	
10	SLBO/SLMO Assembly	1		
20	M6 x 12mm Phillips Pan Head Screw	4	Used with M6 Flat Washers	
30	M5 x 12mm Phillips Pan Head Screw	4	(70)	
40	M4 x 10mm Phillips Pan Head Screw	4		
50	M3 x 10mm Phillips Pan Head Screw	4	Used with M4 Flat Washers	
60	M2.5 x 10mm Phillips Pan Head Screw	4	(80)	
70	M6 Flat Washer Used with screws (20) and (30)	4		
80	M4 Flat Washer Used with screws (40) and (50)	4		
90	10-24 Thumb Nuts	4	Used to attach SLBO to RPA	

**Table 2. Direct Mounting (without foot brackets)** 

ITEM	DESCRIPTION	QTY	NOTES	
1200	M6 x 20mm Phillips Pan Head Screw	4	Used with M6 Flat Washers	
110	M5 x 20mm Phillips Pan Head Screw	4	(70)	
120	M4 x 20mm Phillips Pan Head Screw	4	Used with M4 Flat Washers	
130	M3 x 20mm Phillips Pan Head Screw	4	(80)	

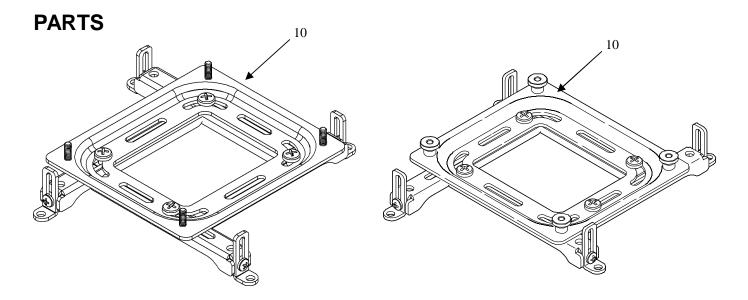


Figure 1. SLBO Assembly

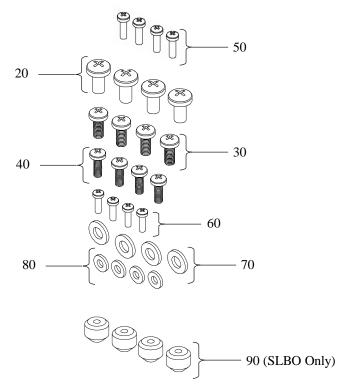
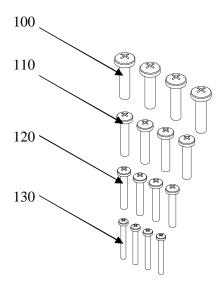


Figure 3. Mounting Hardware Kit

Figure 2. SLMO Assembly



**Figure 4. Direct Mounting (without foot brackets)** 

# **INSTALLATION INSTRUCTIONS STEP 1 (Optional)**

# Measuring the Mounting Hole Dimensions On the Projector

To minimize error, perform the following steps to measure the approximate width and length between the mounting holes on your projector.

- 1. Determine the width and length between the mounting holes on your projector. If necessary, use a tape measure.
  - a. If your projector is equipped with four mounting holes, measure the width and length between the mounting holes (see Figure 5.
  - b. If your projector is equipped with three mounting holes, measure the width and length between the mounting holes (see Figure 6).
- 2. Record the dimensions taken in step 1 for later use in the next procedure.

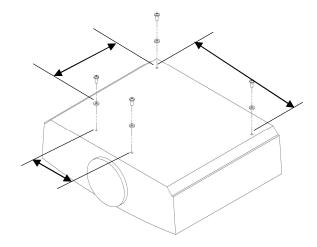


Figure 5. Measure Width and Length Between Mounting Holes in 4-Hole Projector (Example)

OR

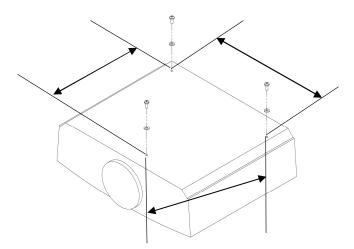


Figure 6. Measure Width and Length Between Mounting Holes in 3-Hole Projector (Example)

#### STEP 2

### Adjusting the Legs on Bracket

The mounting holes on projectors are supplied in a variety of different patterns. There is no standard mounting-hole configuration pattern for projectors.

The SLBO/SLMO will generally accommodate the mounting-hole pattern on most projectors, providing that the SLBO/SLMO adjustable legs can be configured to match the mounting holes on your projector.

Due to the number of configurations that the SLBO/SLMO can accommodate, this instruction guide only provides guidance for the three most commonly used SLBO/SLMO configurations on projectors. Select the applicable procedure to mount the SLBO/SLMO on your projector:

- Step 2 (Option A). Align the SLBO/SLMO on a projector with *4 mounting holes*.
- Step 2 (Option B). Align the SLBO/SLMO on a projector with *3 mounting holes*.
- Step 2 (Option C). Align the SLBO/SLMO on a projector *using horizontal slot and 3 mounting holes*.
- Step 2 (Option D). Align the SLBO/SLMO on a projector *using direct mounting option*.

**NOTE:** The optional security kit hardware (included) may be used instead of the listed hardware.

#### **STEP 2 (OPTION A)**

Aligning the SLBO/SLMO (as shipped) on a Projector with 4 Mounting Holes

Align the SLBO/SLMO on the projector, as follows:

- 1. Locate the *four mounting holes* on your projector.
- 2. Using a Phillips screwdriver, loosen the four screws. Do not remove the screws.

NOTE: If necessary, use the measurements that you recorded when you completed Step 1, "Measuring the Mounting Holes On Projector" to help align the adjustable legs with the mountinghole pattern on the projector.

- 3. Align the SLBO/SLMO on projector, as follows:
  - a. Place the SLBO/SLMO (10) on your projector.
  - b. Adjust the legs on the SLBO/SLMO (10) as needed. Align the adjustable legs on the SLBO/SLMO with mounting holes on your projector.
- 4. Attach the SLBO/SLMO to the projector, as follows:
  - a. Select the screw size that fits the threaded inserts on your projector (see Table 3).
  - b. Select the washer that fits the selected screw.
  - c. Attach the SLBO/SLMO to the projector using the selected fasteners in accordance with Table 3. Do not tighten the screws at this time.
- 5. Attach the SLBO/SLMO to RPA/RPM (see Figure 2).

Table 3. SLBO/SLMO Mounting Hardware

ITEM	DESCRIPTION	QTY	NOTES
20	м6 x 12мм screw	4	USE ITEM 70 WITH
30	M5 x 12MM SCREW	4	ITEMS 20 AND 30
40	M4 x 10MM SCREW	4	USE ITEM 70 WITH
50	M3 x 10MM SCREW	4	ITEMS 40, 50 AND 60
70	M6 FLAT WASHER	4	
80	M4 FLAT WASHER	4	
90	10-24 THUMB NUT	4	USE TO ATTACH SLBO TO RPA
60	M2.5 x 10mm screw	4	USED WITH ITEM 80

Loosen screws. Adjust legs on bracket, as needed. Align legs with mounting holes on projector.

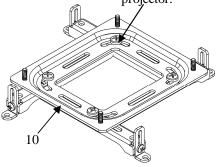


Figure 7. Align the SLBO/SLMO on 4-Hole Projector (SLBO Shown)

#### STEP 2 (OPTION B)

## Aligning the SLBO/SLMO (minus 1 adjustable leg) on a Projector with 3 Mounting Holes

Align the SLBO/SLMO on the projector, as follows:

- 1. Locate the *three mounting holes* on your projector.
- 2. Using a Phillips screwdriver, remove the screw, hex nut, and one adjustable leg from the SLBO/SLMO (10) (see Figure 8).

**NOTE:** Keep unused adjustable leg and attaching hardware in a safe for future use.

3. Loosen the three remaining screws. Do not remove the screws.

NOTE: If necessary, use the measurements that you recorded when you completed Step 1, "Measuring the Mounting Holes On Projector" to help align the adjustable legs with the mountinghole pattern on the projector.

- 4. Align the SLBO/SLMO on the projector, as follows:
  - a. Place the SLBO/SLMO (10) on your projector.
  - Adjust the legs on the SLBO/SLMO (10) as needed. Align the adjustable feet on the SLBO/SLMO with mounting holes on your projector.
- 5. Attach the SLBO/SLMO to the projector, as follows:
  - a. Select the screw size that fits the threaded inserts on your projector (see Table 4).
  - b. Select the washer that fits the selected screw.
  - c. Attach the SLBO/SLMO to the projector using the selected fasteners in accordance with Table 4. Do not tighten the screws at this time.

Table 4. SLBO/SLMO Mounting Hardware

ITEM	DESCRIPTION	QTY	NOTES
20	м6 x 12мм screw	4	USE ITEM 70 WITH
30	M5 x 12MM SCREW	4	ITEMS 20 AND 30
40	M4 x 10MM SCREW	4	USE ITEM 70 WITH
50	M3 x 10MM SCREW	4	ITEMS 40, 50 AND 60
70	M6 FLAT WASHER	4	
80	M4 FLAT WASHER	4	
90	10-24 THUMB NUT	4	USE TO ATTACH SLBO TO RPA
60	M2.5 x 10mm screw	4	USED WITH ITEM 80

6. Attach the SLBO/SLMO to RPA/RPM (see Figure 2).

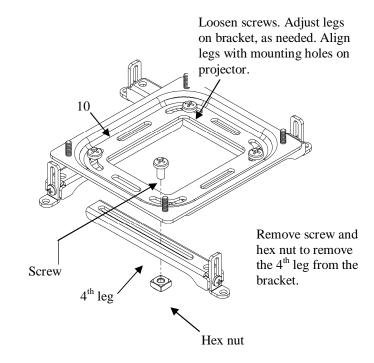


Figure 8. Align the SLBO/SLMO on 3-Hole Projector (SLBO Shown)

#### STEP 2 (OPTION C)

## Aligning the SLBO/SLMO (using horizontal slot) on a Projector with 3 Mounting Holes

Align the SLBO/SLMO on the projector, as follows:

- 1. Locate the *three mounting holes* on your projector.
- 2. Using a Phillips screwdriver, remove two screws, hex nuts, and two adjustable legs from the SLBO/SLMO (10) (see Figure 9).

**NOTE:** Keep unused adjustable leg and attaching hardware in a safe for future use.

- 3. Select the applicable horizontal slot to install the adjustable leg (see Figure 9 and Figure 10).
- 4. Loosen the three remaining head screws. Do not remove the screws.

NOTE: If necessary, use the measurements that you recorded when you completed Step 1, "Measuring the Mounting Holes On Projector" to help align the adjustable legs with the mountinghole pattern on the projector.

- 5. Align the SLBO/SLMO on the projector, as follows:
  - a. Place the SLBO/SLMO (10) on your projector.
  - b. Adjust the legs on the SLBO/SLMO (10) as needed. Align the adjustable feet on the SLBO/SLMO with mounting holes on your projector.
- 6. Attach the SLBO/SLMO to the projector, as follows:
  - c. Select the screw size that fits the threaded inserts on your projector (see Table 5).
  - d. Select the washer that fits the selected screw.
  - e. Attach the SLBO/SLMO to the projector using the selected fasteners in accordance with Table 5. Do not tighten the screws at this time.

**Table 5. SLBO/SLMO Mounting Hardware** 

ITEM	DESCRIPTION	QTY	NOTES
20	M6 x 12MM SCREW	4	USE ITEM 70 WITH
30	M5 x 12MM SCREW	4	ITEMS 20 AND 30
40	M4 x 10MM SCREW	4	USE ITEM 70 WITH
50	M3 x 10MM SCREW	4	ITEMS 40, 50 AND 60
70	M6 FLAT WASHER	4	
80	M4 FLAT WASHER	4	
90	10-24 THUMB NUT	4	USE TO ATTACH SLBO TO RPA
60	M2.5 x 10mm screw	4	USED WITH ITEM 80

7. Attach the SLBO/SLMO to RPA/RPM (see Figure 2).

Loosen screws. Adjust legs

on bracket, as needed. Align

legs with mounting holes on projector.

Figure 9. Align the SLBO/SLMO on 3-Hole Projector Using Horizontal Slots (SLBO Shown)

Hex nut

Install adjustable leg in horizontal slot.

### OR

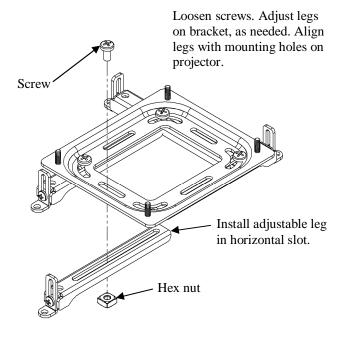


Figure 10. Align the SLBO/SLMO on 3-Hole Projector Using Horizontal Slots (SLBO Shown)

#### STEP 2 (OPTION D)

# Aligning the SLBO/SLMO on a Projector using direct mounting option

Align the SLBO/SLMO on the projector, as follows:

- 1. Locate the *mounting holes* on your projector.
- 2. Using a Phillips screwdriver, remove foot bracket screws and foot brackets (see Figure 11).

**NOTE:** Keep unused adjustable foot brackets and attaching hardware in a safe for future use.

- 3. Align the SLBO/SLMO on the projector, as follows:
  - a. Place the SLBO/SLMO (10) on your projector.
  - b. Adjust the legs on the SLBO/SLMO (10) as needed. Align the legs on the SLBO/SLMO with mounting holes on your projector.
- 4. Attach the SLBO/SLMO to the projector, as follows:
  - a. Select the screw size that fits the threaded inserts on your projector (see Table 6).
  - b. Select the washer that fits the selected screw.
  - c. Attach the SLBO/SLMO to the projector using the selected fasteners in accordance with Table 6 (see Figure 12). Do not tighten the screws at this time.

Table 6. SLBO/SLMO Mounting Hardware

ITEM	DESCRIPTION	QTY	NOTES
100	M6 x 20mm Phillips Pan Head Screw	4	Used with M6 Flat Washers (70)
110	M5 x 20mm PHILLIPS PAN HEAD SCREW	4	
120	M4 x 20mm Phillips Pan Head Screw	4	Used with M4 Flat Washers (80)
130	M3 x 20mm PHILLIPS PAN HEAD SCREW	4	

5. Attach the SLBO/SLMO to RPA/RPM (see Figure 2).

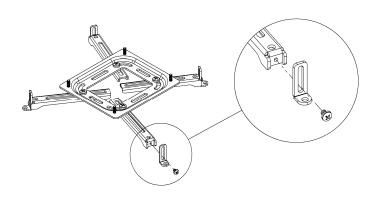


Figure 11. Remove Feet (SLBO Shown)

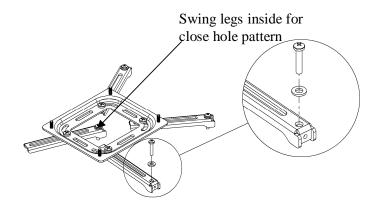


Figure 12. Install the SLBO/SLMO on Projector (SLBO Shown)

#### STEP 3

### **Adjusting Foot Height on Bracket**

Adjust the feet on the SLBO/SLMO for height, as follows:

**NOTE:** Foot height is adjusted for a variety of reasons, which includes, but is not limited to, ventilation, uneven projector surface, and to level the RPA/RPM/RPM mounting plate.

- 1. Visually check the height of the RPA/RPM mounting plate on the SLBO. Review the reasons for foot height adjustment, noted above.
- 2. Loosen the screw and adjust the foot that is attached to the adjustable leg on the SLBO/SLMO (see Figure 13).
- 3. Adjust foot height as needed. If necessary, use a level to verify that the RPA/RPM/RPM mounting plate is level.
- 4. Tighten the screw.
- Repeat procedure for each foot as needed until the feet on the SLBO/SLMO are adjusted to your satisfaction.

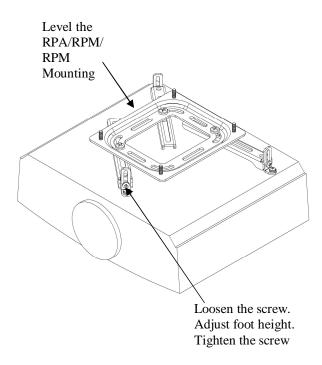


Figure 13. Adjust Leg Height (SLBO Shown)

Position bracket on the

#### STEP 4

# Positioning the SLBO/SLMO on the Projector

Position the on the SLBO/SLMO on your projector, as follows:

**NOTE:** When positioning the SLBO/SLMO on your projector, take into consideration the weight of the projector and its center of gravity.

1. Slide the SLBO/SLMO into the position that you want on your projector.

#### WARNING

Failure to tighten the screws after positioning the SLBO/SLMO on your projector could result in damage to your projector.

2. Tighten the screws shown in Figure 14.

**NOTE:** For further instructions, see the applicable RPA/RPM and/or Smart-lift<sup>TM</sup> instruction manuals.

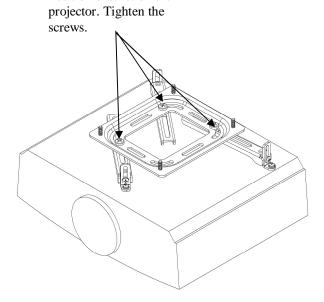


Figure 14. Position the SLBO/SLMO and Tighten the Screws (SLBO Shown)

