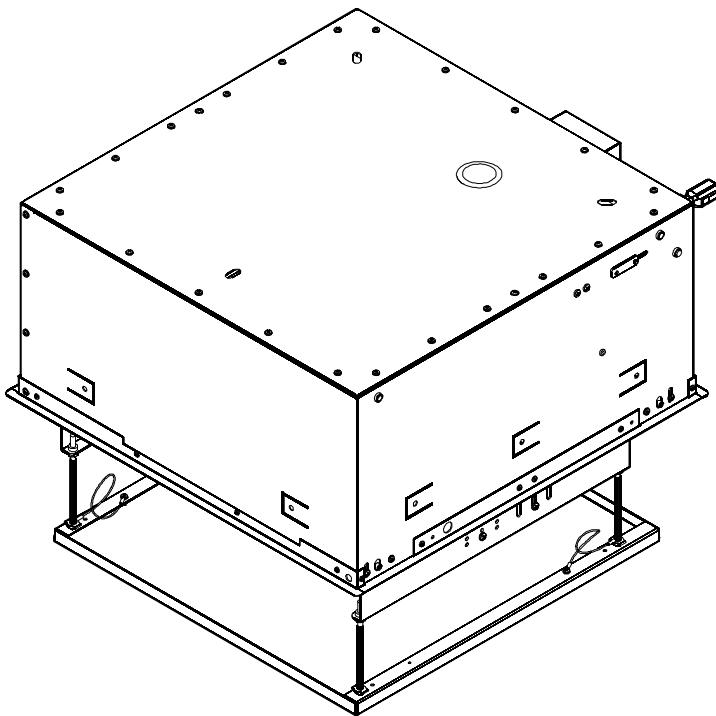


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# INSTALLATION INSTRUCTIONS

## INSTRUCCIONES DE INSTALACIÓN

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## SMART-LIFT™ Electric Ceiling Lift

## Elevador eléctrico de techo SMART-LIFT™

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This device complies with part 15 of the FCC rules. Operation is subject to the following 2 conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits of a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio or television communications. However, there is no guarantee that the interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment to an outlet on a circuit other than that to which the receiver is connected

Consult the dealer or an experienced radio/TV technician for help

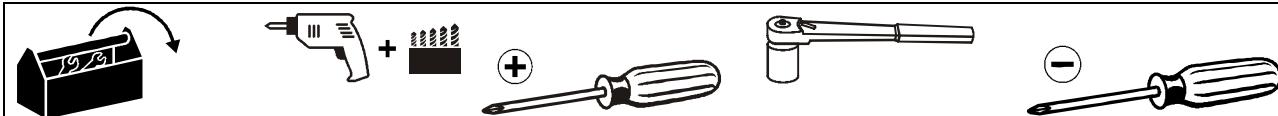


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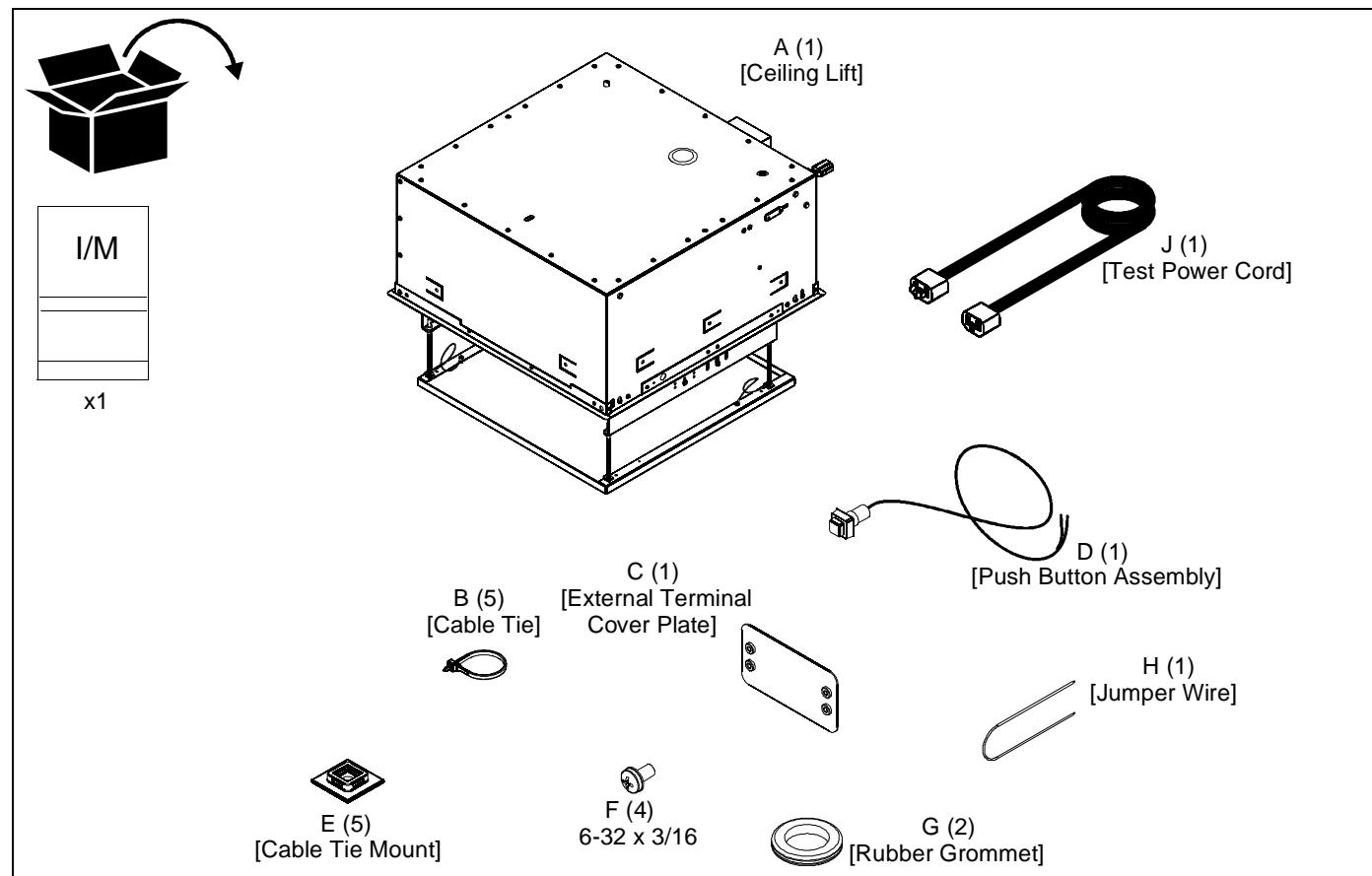
**SL151i**



## TOOLS REQUIRED FOR INSTALLATION



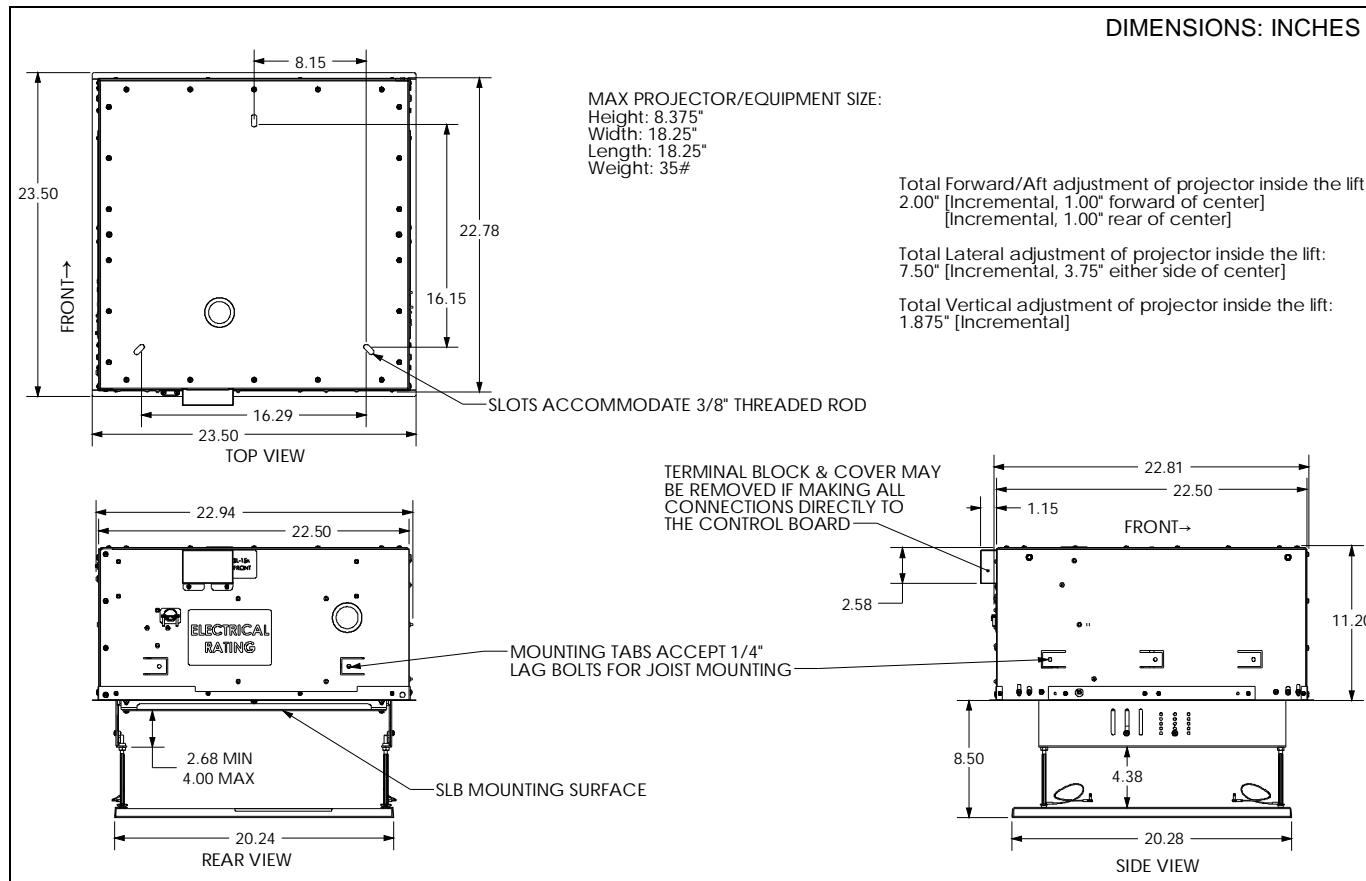
## PARTS



## LEGEND

	Tighten Fastener Apretar elemento de fijación Befestigungsteil festziehen Apertar fixador Serrare il fissaggio Bevestiging vastdraaien Serrez les fixations		Phillips Screwdriver Destornillador Phillips Kreuzschlitzschraubendreher Chave de fendas Phillips Cacciavite a stella Kruiskopschroevendraaier Tournevis à pointe cruciforme
	Loosen Fastener Aflojar elemento de fijación Befestigungsteil lösen Desapertar fixador Allentare il fissaggio Bevestiging losdraaien Desserrez les fixations		Adjust Ajustar Einstellen Ajustar Regolare Afstellen Ajuster

## DIMENSIONS



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## INSTALLATION REQUIREMENTS

The SL151i has been designed to be mounted either recessed into a ceiling, or flush-mounted in a finished ceiling.

### Power Requirements

- 230VAC, 50Hz, 2 amps (if NOT installing an internal outlet for projector).
- 230VAC, 50Hz, 12 amps (if installing an internal outlet [not provided] for projector).

**IMPORTANT !** : Installation and maintenance of this product must be completed by a qualified service technician.

### Pre-Test Lift before Installation

1. Carefully inspect the SL151i for any shipping damage. If any damage is apparent, do NOT continue with the installation. Instead, contact Chief for further instructions.
2. Place SL151i upside down on clean surface. (See Figure 1)

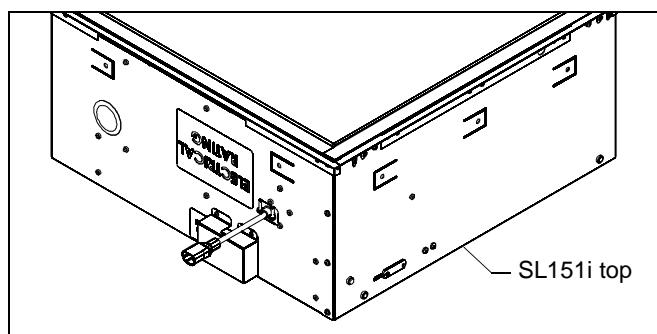


Figure 1

3. Remove and save two screws holding side electrical cover in place. (See Figure 2)
4. Remove electrical cover. (See Figure 2)

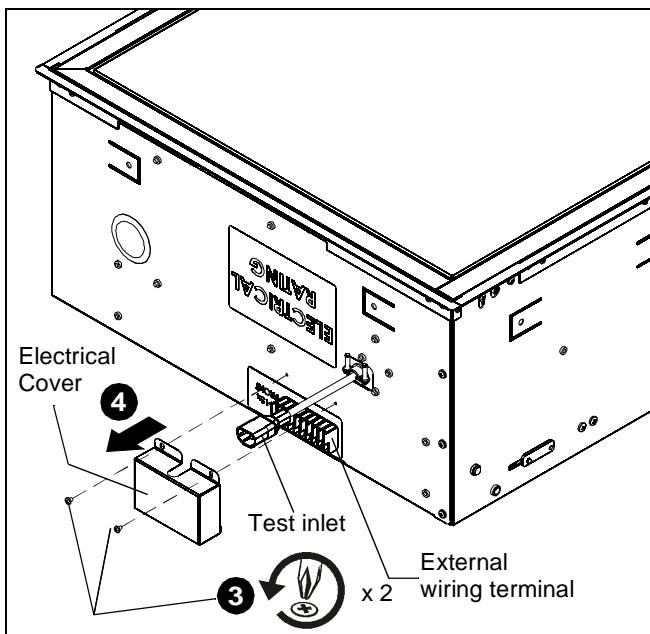


Figure 2

5. Place the jumper wire (H) on the external wiring terminal contacts labeled **2** and **5**, and wire the push button

assembly (D) to contacts **1 (red)** and **6 (black)**. (See Figure 3).

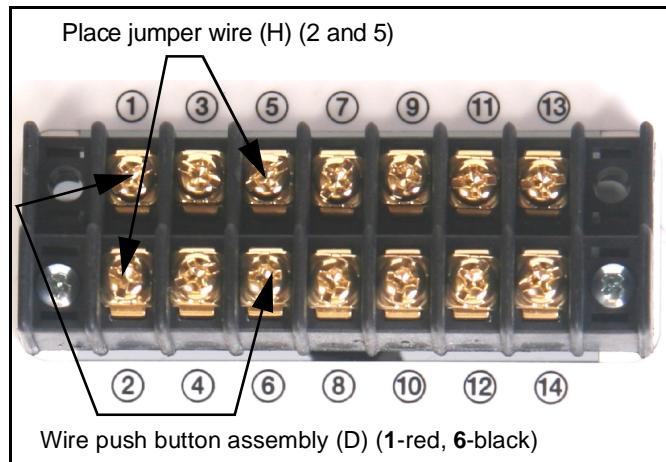


Figure 3

6. Plug the SL151i test inlet in using the supplied test power cord (J).

**NOTE:** The supplied test power cord (J) may not work in all countries, and the user may need to supply an appropriate cord for the country of use.

**NOTE:** (See Figure 2) for location of external wiring terminal. (See Figure 4) for location of internal wiring terminal.

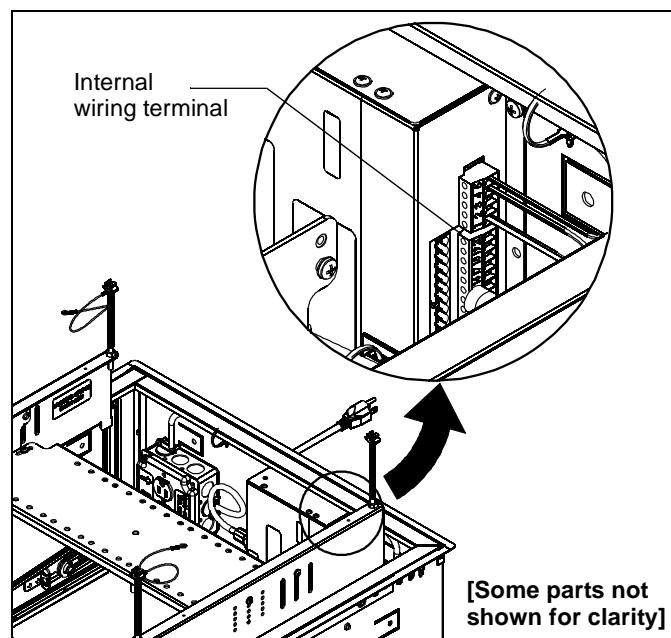


Figure 4

### Power Requirements and Wiring

The SL151i requires 230VAC, 50 Hz and 2 amps power to operate.

**NOTE:** A 6 ft. long power cord is provided with the mount. This supplied power cord should be used for testing only, and not for the permanent installation. (The SL151i will be hard-wired at installation.)

**IMPORTANT ! :** This product must be grounded. If it should malfunction or break down, grounding provides a path of least resistance for electric current to reduce the risk of electric shock.

### Grounding Instructions

This product is equipped with a test cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.



**WARNING:** RISK OF ELECTROCUTION! All electrical wiring required for installation should be installed by a qualified electrician.



**WARNING:** PINCH HAZARD! FINGERS OR HANDS BETWEEN MOVING PARTS CAN LEAD TO SEVERE PERSONAL INJURY! Keep fingers and hands away from mount when operating.

7. Press the push button to test the SL151i while it is still in the pre-test position.
  - Press when the lift is at its extended position and it will retract.
  - Press when the lift is at its retracted position and it will extend.
  - Press while the lift is moving and it will stop.
  - Leave SL151i in the open position.

### Removing Ceiling Panel

1. Remove and save screws attaching guide wires to ceiling panel. (See Figure 5)

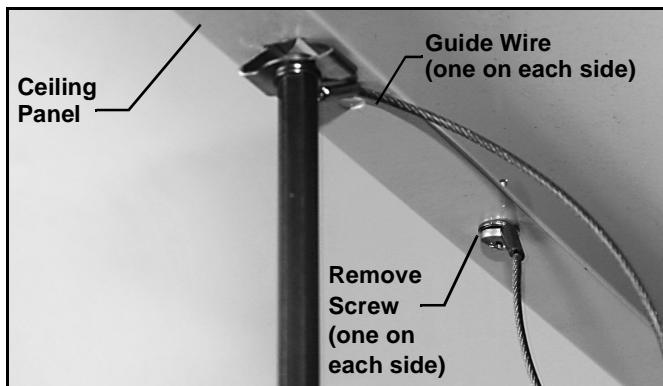


Figure 5

2. Lift up on each corner of ceiling panel to remove panel from clips. (See Figure 6) and (See Figure 7)

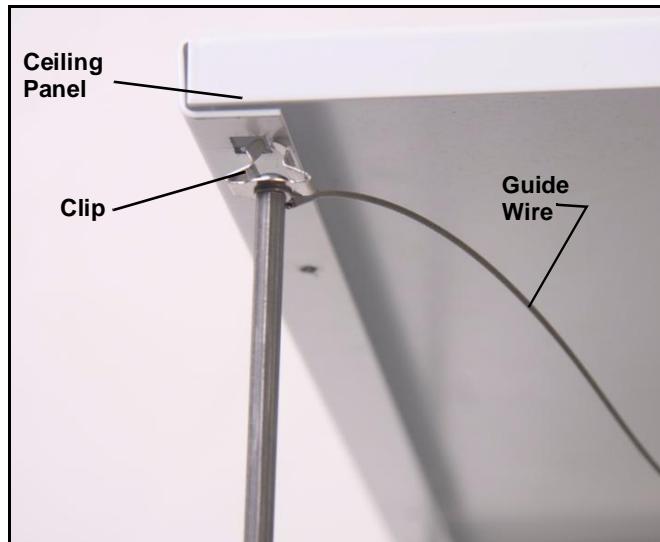


Figure 6



Figure 7

### INSTALLING IN CEILING



**WARNING:** IMPROPER INSTALLATION CAN LEAD TO LIFT FALLING CAUSING SEVERE PERSONAL INJURY OR DAMAGE TO EQUIPMENT! It is the installers responsibility to make certain the structure to which the lift is being mounted is capable of supporting five times the weight of the lift and all attached equipment. Reinforce the structure as required before installing the lift.

The following instructions assume a suitable mounting structure and surface exists prior to installation and all power and signal wires and cables have been properly installed.

### Installing in a Suspended Ceiling

**NOTE:** The SL151i may be suspended from three 3/8 in. diameter x 8 in. length (minimum) Grade 2 or better threaded rods (not provided) which are secured to a 1-5/8" x 1-5/8" 12ga metal framing channel (spanning a maximum of 5 feet--not provided) by Grade 2 or better 3/8" channel nuts (not provided).

1. Turn SL-151i over and place onto threaded rods, inserting the rods into the three slots on top of the SL-151i housing. (See Figure 8)
2. Secure the threaded rods to the SL-151i with Grade 2 or better 3/8 in. jam nuts and washers (one of each on inside and one of each on outside-not provided).

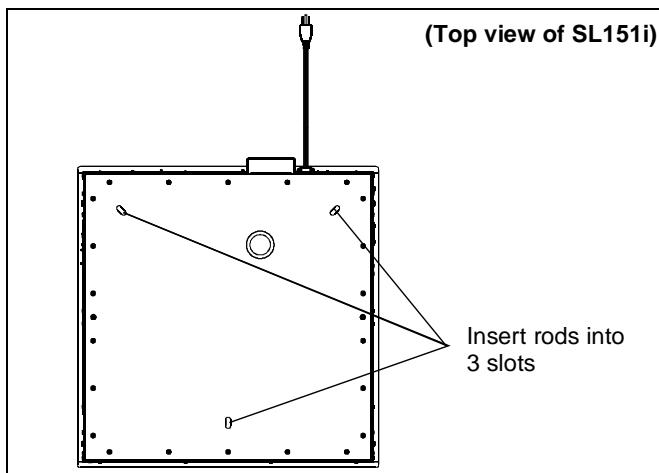


Figure 8

**NOTE:** The side trim may need to be removed to properly fit the lift into a 600x600mm suspended ceiling. Remove and discard retaining screws and trim pieces from each of the four sides. (See Figure 9)

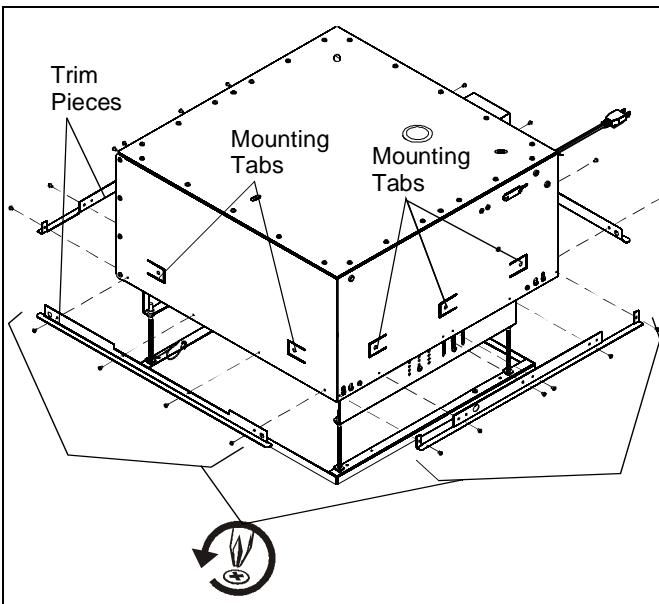


Figure 9

### Installing in a Wood Framework (Joists)

1. Use 1/4" x 1-1/2" (minimum) Grade 2 lag screws (not provided) to secure SL151i to the joists or wood framework, using the mounting tabs located on the sides of the SL151i housing. (See Figure 9)

**NOTE:** There are mounting tabs on each side and end of the SL-151i. The SL-151i only requires support on two opposing sides.

**IMPORTANT ! :** Wood framework must be constructed of nothing larger than 2x6 wood studs across the rear of the SL151i. **The rear of the SL151i is the side with the test cord.** There are no size limitations for the wood framework on the other three sides of the SL151i.



**CAUTION:** The lift MUST be installed square and parallel. Avoid stressing or bending the lift during installation.

2. Use the provided push button (D) to operate the SL151i up and down, ensuring that all clearances are adequate.

### Installing Projector on SL151i

**NOTE:** The projector is secured from the top by an SLB bracket (a Listed accessory).

1. Attach the SLB bracket to the projector following the instructions included with the bracket.
2. Attach the bracket with the projector to the SL151i, adjusting left or right by using the various attachment points in the SL151i. (See Figure 10)

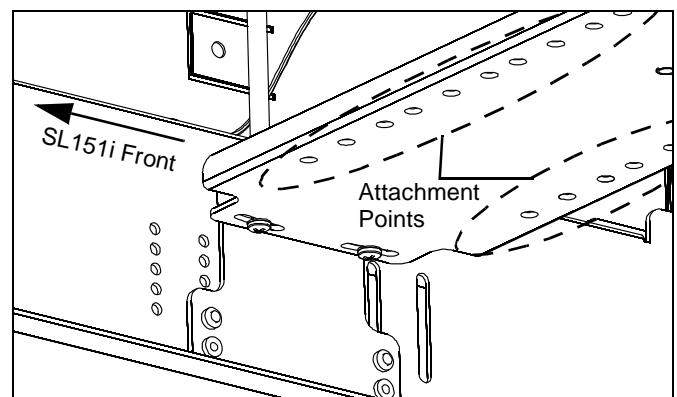


Figure 10

### Adjustments

1. FORWARD/BACKWARD
  - To shift projector mounting bracket backward or forward, remove and save two screws on each side.
  - Move mounting bracket forward or backward as required.
  - Reinstall and tighten screws. (See Figure 11)

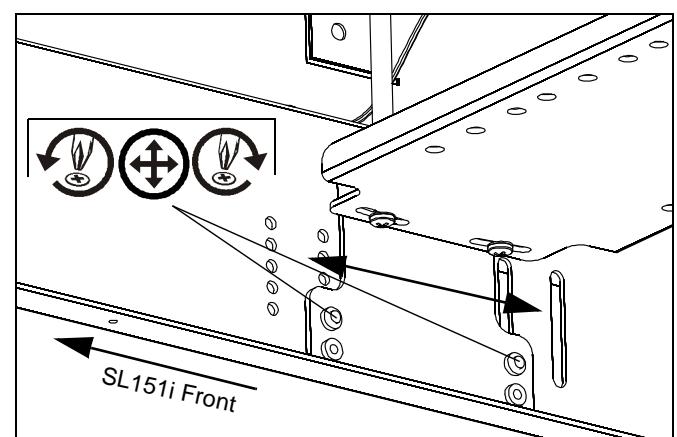


Figure 11



**NOTE:** If installing the SL151i in a drywall ceiling, remove the outside terminal block and cover with plate (C), using four 6-32 x 3/16" Phillips pan head screws (F).

### Wiring Options

**NOTE:** Refer to Table 1: Wiring Table and (See Figure 16) for information on all wiring options.

**NOTE:** Refer to Table 2: Terminal Descriptions and (See Figure 16) for terminal descriptions, functions and wiring options.

### Re-Attaching Ceiling Panel

1. Line up rectangular holes in ceiling panel with clips on ends of rods, and re-attach the ceiling panel. (See Figure 14)



**CAUTION:** Damage to equipment could result if clips are not lined up properly with rectangular holes.

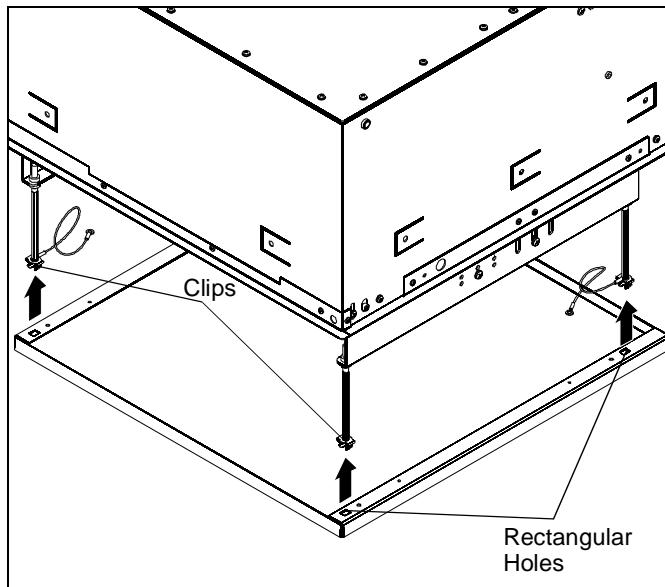


Figure 14

2. Carefully insert clips into rectangular holes in ceiling panel.
3. Reattach guide wires (two places) to ceiling panel, using screws removed earlier. (See Figure 15)

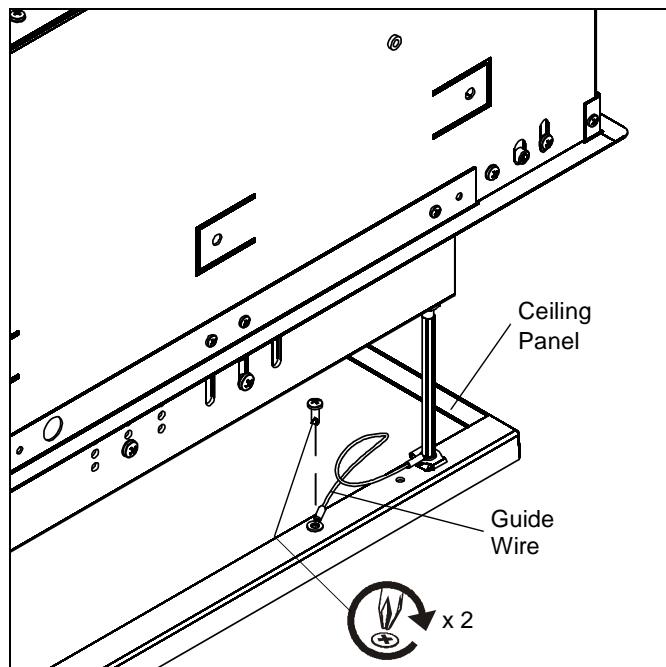


Figure 15



**Table 2: INTERNAL TERMINAL DESCRIPTIONS**

TERMINAL NUMBER	FUNCTION	DESCRIPTION	WIRING OPTIONS
1	24 VOLT AC	24 volt AC output	This is an internal power supply for powering external devices & Remote Controllers.
2	24 VOLT AC COMMON	24 volt AC common	
3	GROUND	Ground	
4	12 VOLT DC	12 volt DC	This is an internal power supply for powering external devices &/or used for initiating specific functions
5	ISOLATED EXTEND/RETRACT +	Initiates movement if lift is static, or stops movement if lift is in motion. Direction of travel will be opposite of last direction of travel.	Operating range is 5 – 30 Volts AC or DC
6	ISOLATED EXTEND/RETRACT -	Used in conjunction with Extend/Retract when using an external power source to initiate movement.	NOT TO BE USED AS GROUND FOR FUNCTION OTHER THAN EXTEND/RETRACT TERMINAL 5.
7	ISOLATED VOLTAGE SENSE +	When control senses voltage, unit will extend. When control senses cessation of voltage, unit will retract.	Operating range is 5 – 30 Volts AC or DC
8	ISOLATED VOLTAGE SENSE -	Used in conjunction with Voltage Sensor when using an external power source to initiate movement.	NOT TO BE USED AS GROUND FOR FUNCTION OTHER THAN VOLTAGE SENSOR TERMINAL 7.
9	SERVICE EXTEND	Extends unit to maximum limit, bypassing normal-use travel setting. Often used for servicing projectors in ceiling lifts.	Feature not available on all models.
10	GROUND	Ground	
11	EXTEND	Extends unit to preset travel limit when momentarily connected to ground.	If using Latching Switch, be sure to disengage Switch prior to initiating any other function.
12	RETRACT	Retracts unit to preset travel limit when momentarily connected to ground.	If using Latching Switch, be sure to disengage Switch prior to initiating any other function.
13	GROUND	Ground	
14	EXTEND ERROR	Immediately reverses direction of travel when triggered while unit is extending.	momentary connection to ground initiates error mode
15	RETRACT ERROR	Immediately reverses direction of travel when triggered while unit is retracting.	momentary connection to ground initiates error mode
16	EXTEND LIMIT RELAY +	Closes set of internal dry contacts when unit reaches full extension.	
17	EXTEND LIMIT RELAY -		
18	RETRACT LIMIT RELAY +	Closes set of internal dry contacts when unit reaches full retraction.	
19	RETRACT LIMIT RELAY -		
20	GROUND	Ground	

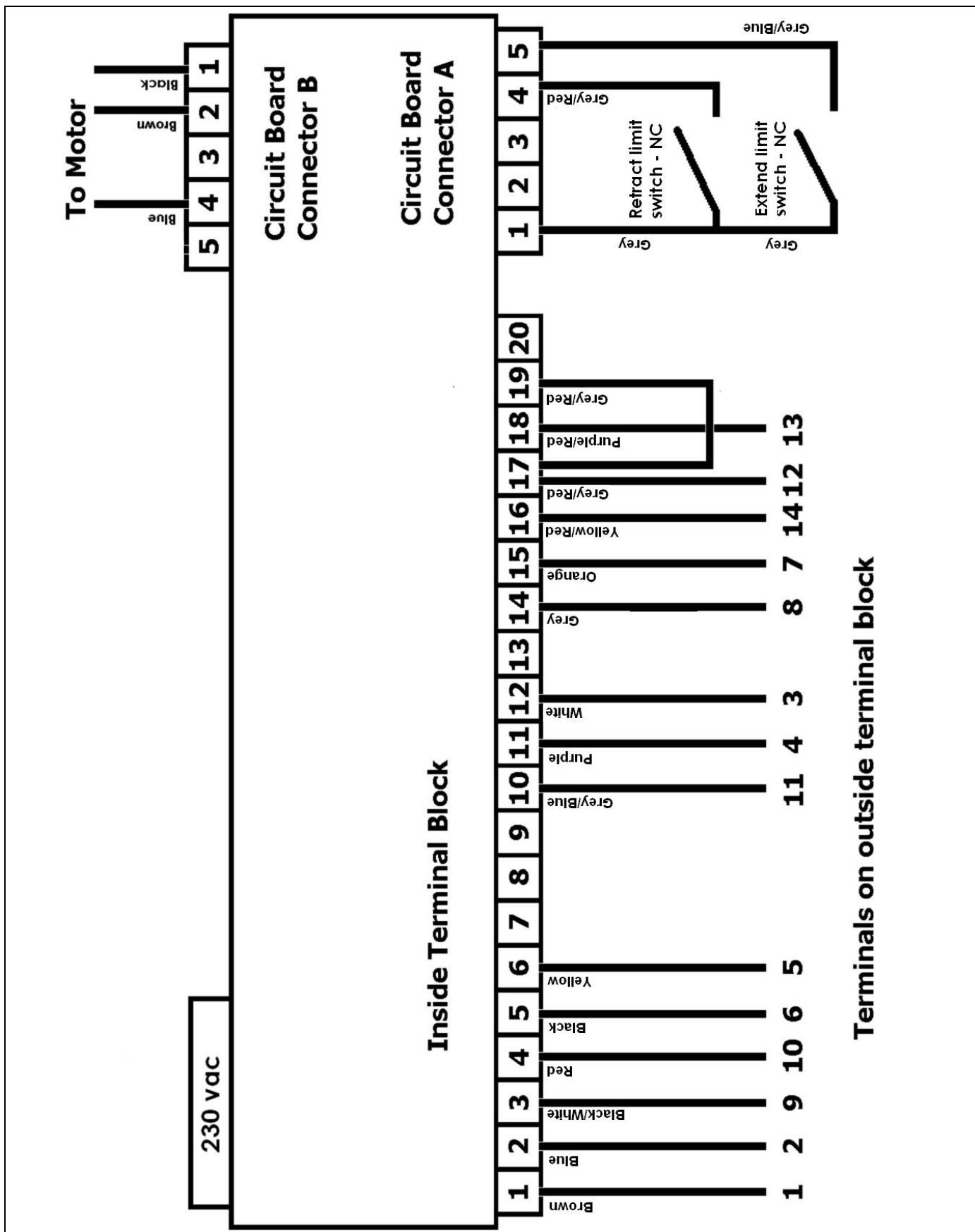


Figure 17



## MANUFACTURERS DECLARATION OF CONFORMITY

For

**Product identification:**

Model/type : SL151i  
Category (description) : Mounting devices, Stands and other Accessories, to be used with entertainment electronics  
Brand : Chief

**Manufacturer:** Milestone AV Technologies  
8401 Eagle Creek Parkway  
Savage, MN 55378

**EU Representative:** Milestone AV Technologies  
Fellenoord 130 5611  
ZB Eindhoven  
The Netherlands  
31 (0)20 5708923

Concerning			
	Immunity	EMC	Safety
A sample of the product has been tested by:	TUV SUD America	TUV SUD America	TUV SUD America
Test report reference	WC806633.1	WC806164	092-905575-000
Applied standards	EN55024:1998 +A1:2001 +A2:2003	EN55022 B	EN60065/A1:2006

**Means of conformity**

We declare under our sole responsibility that this product is in conformity with Directive 93/68/EEC (Marking), 98/37/EC (Machinery) 2001/95/EC (Safety) and/or complies to the essential requirements and all other relevant provisions of the based on test results using (non)harmonized standards in accordance with the Directives mentioned

Printed Name

Title

Signature

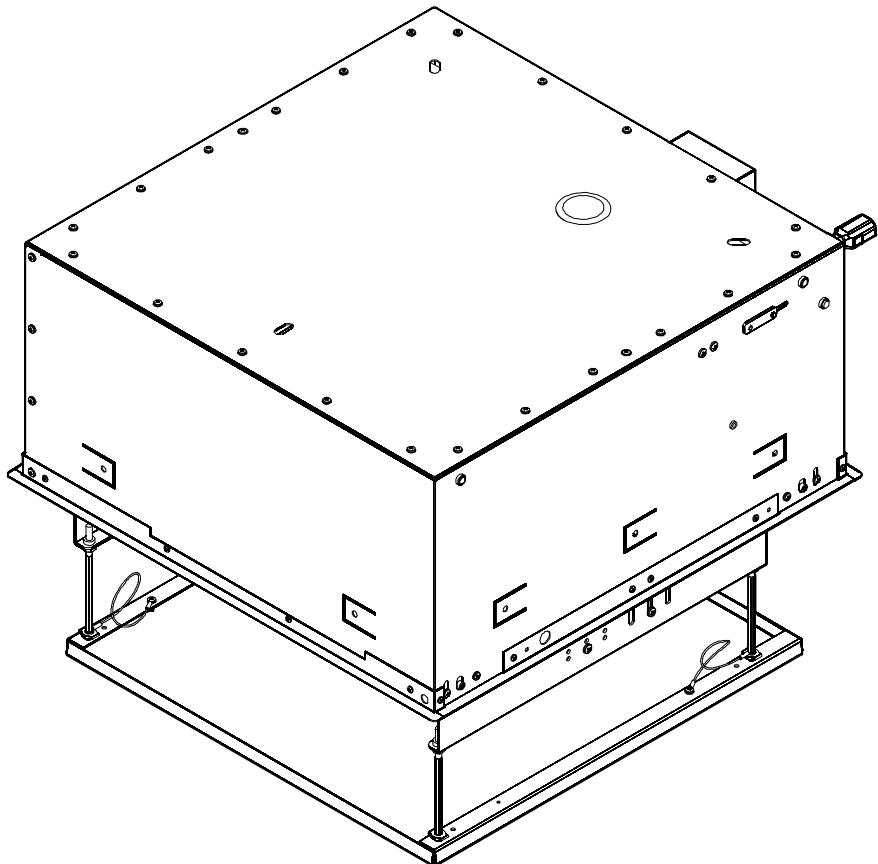
Date

Milestone AV Technologies  
Corporate Headquarters  
8401 Eagle Creek Parkway  
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F 877.894.6918 | 952.894.6918  
[www.milestone.com](http://www.milestone.com)

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# INSTRUCCIONES DE INSTALACIÓN



## Elevador eléctrico de techo SMART-LIFT™

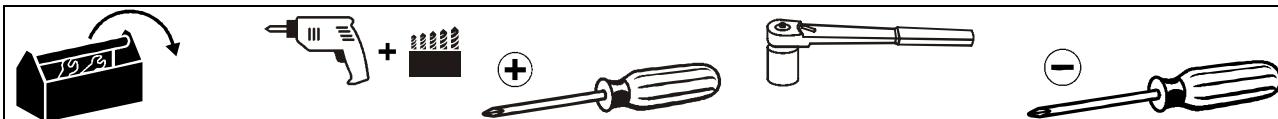
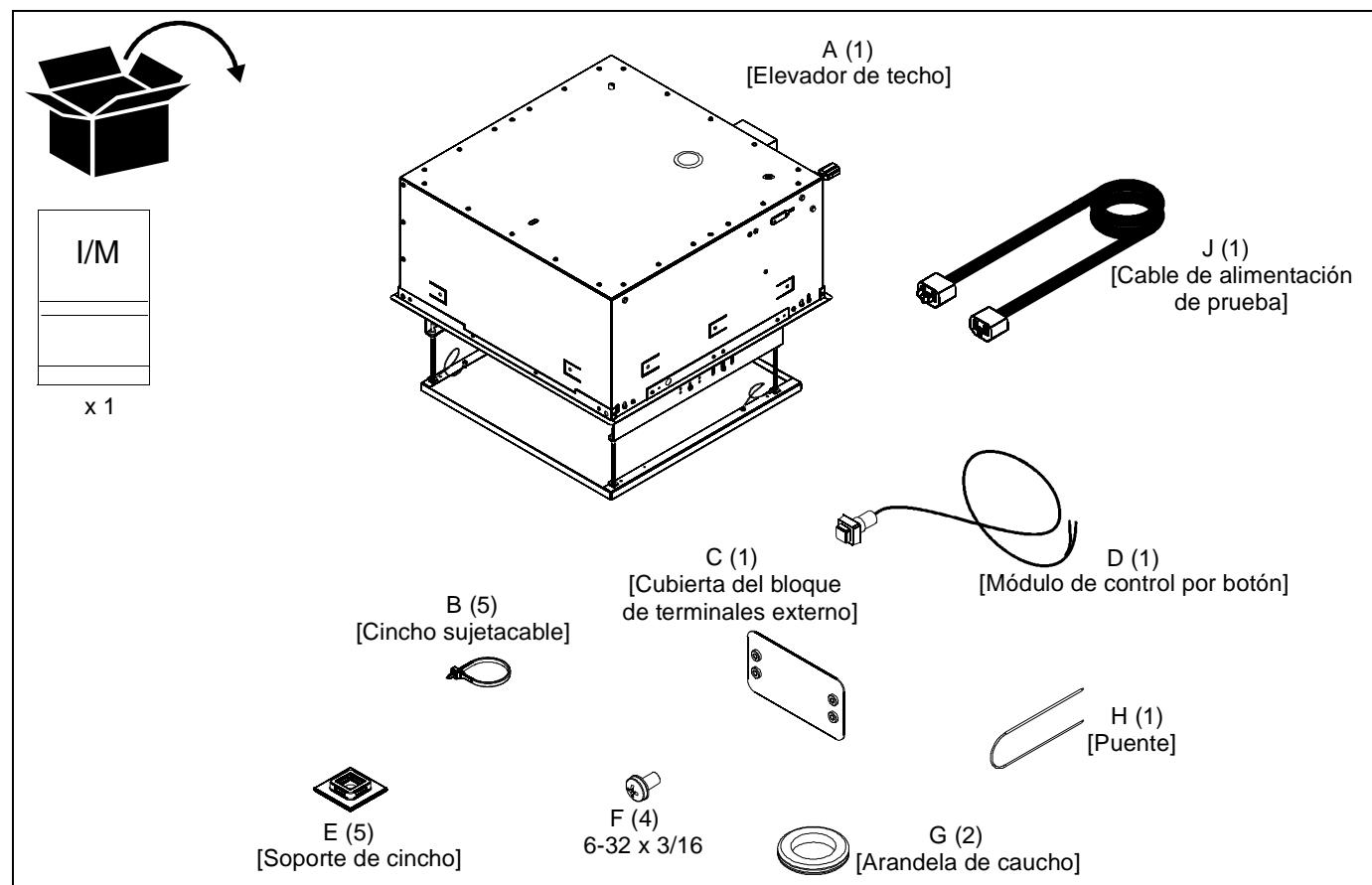
Este dispositivo cumple con la Sección 15 de las normas de la Comisión Federal de Comunicaciones (FCC, por sus siglas en inglés) de los Estados Unidos. Su operación se encuentra sujeta a las dos condiciones siguientes: (1) este dispositivo no debe causar interferencias nocivas y (2) debe aceptar toda interferencia recibida, incluida aquella que pudiera provocar efectos indeseados en la operación.

Sobre la base de pruebas realizadas, se ha determinado que este equipo cumple con los límites establecidos para los dispositivos digitales de Clase B, en un todo de acuerdo con la Sección 15 de las normas de la FCC. Dichos límites tienen por objetivo brindar protección razonable contra interferencias nocivas en instalaciones residenciales. Este equipo genera, emplea y puede emitir ondas de radiofrecuencia. Si no se instala y utiliza de acuerdo con las instrucciones, puede causar interferencias nocivas a comunicaciones de radio o de televisión. No obstante, no es posible garantizar que no habrá interferencias en una instalación en particular. Si el dispositivo causara interferencias nocivas a la recepción de radio o de televisión, lo cual puede determinarse encendiendo y apagando el equipo, el usuario puede corregir dicha interferencia mediante alguna de las siguientes acciones:

- Cambiar la orientación o la ubicación de la antena receptora.
- Incrementar la separación entre el equipo y el receptor.
- Enchufar el equipo en un tomacorriente de un circuito distinto del circuito en que se encuentra conectado el receptor.

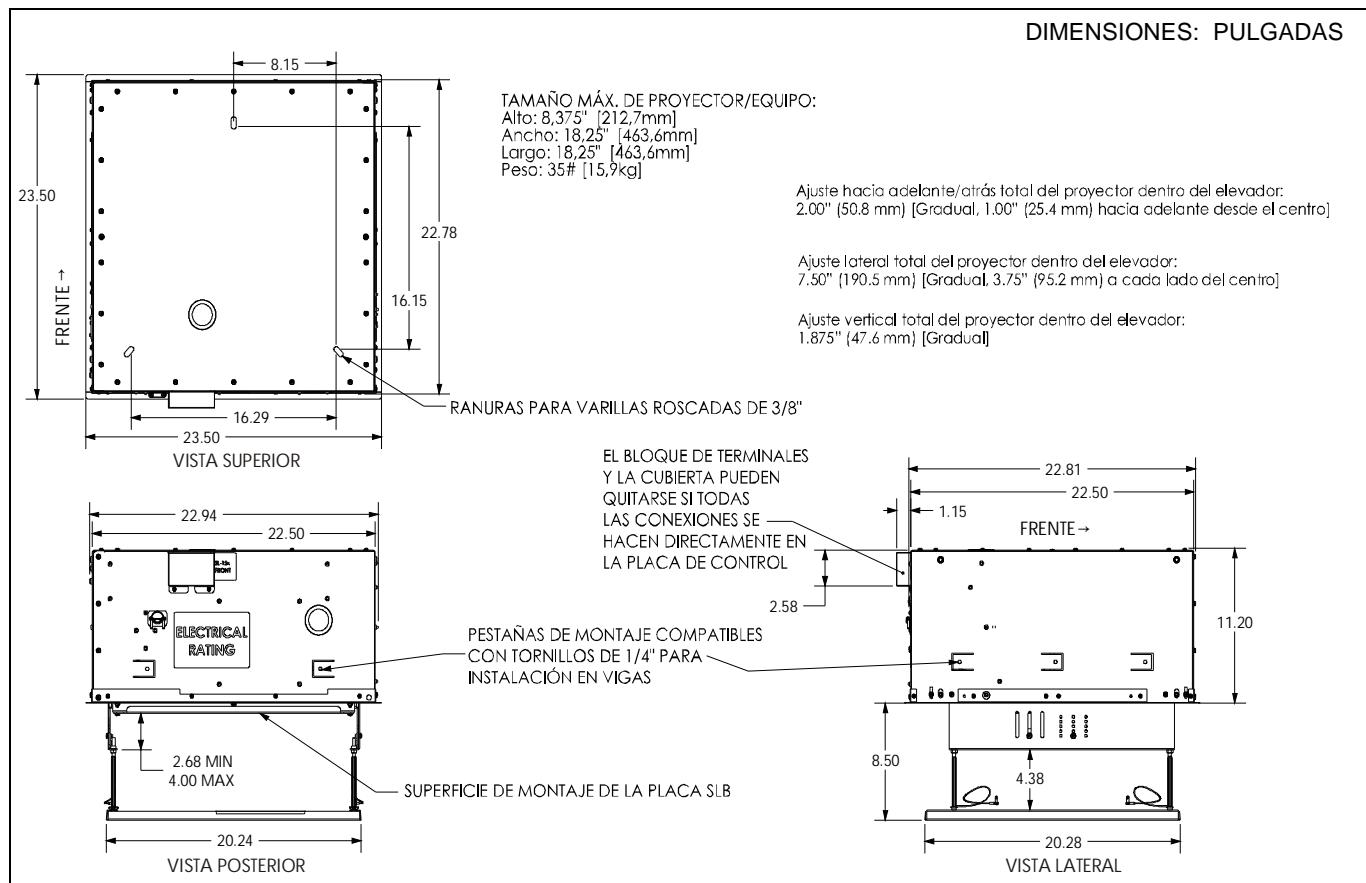
Solicite asistencia al distribuidor o a un técnico de radio o de televisión experimentado.



**HERRAMIENTAS NECESARIAS PARA LA INSTALACIÓN****PIEZAS****REFERENCIAS**

	Tighten Fastener Apretar elemento de fijación Befestigungsteil festziehen Apertar fixador Serrare il fissaggio Bevestiging vastdraaien Serrez les fixations		Phillips Screwdriver Destornillador Phillips Kreuzschlitzschraubendreher Chave de fendas Phillips Cacciavite a stella Kruiskopschroevendraaier Tournevis à pointe cruciforme
	Loosen Fastener Aflojar elemento de fijación Befestigungsteil lösen Desapertar fixador Allentare il fissaggio Bevestiging losdraaien Desserrez les fixations		Adjust Ajustar Einstellen Ajustar Regolare Afstellen Ajuster

## DIMENSIONES



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**NOTA:** Esta unidad está diseñada para que el conducto portacable ingrese directamente en la parte posterior de la caja de conexiones interna.

**NOTA:** Si va a instalar el SL151i en un cielorraso de yeso, quite el bloque de terminales externo y cubra el espacio fijando la cubierta (C) con los cuatro tornillos Phillips 6-32 de 3/16" (F) provistos.

### Opciones de cableado

**NOTA:** Consulte la Tabla 1: Tabla de cableado y la Figura 16 para conocer las opciones disponibles.

**NOTA:** Consulte la Tabla 2: Descripción del bloque de terminales interno y la Figura 16 para conocer las descripciones, funciones y opciones de cableado.

### Colocación del panel de techo

1. Alinee los orificios rectangulares del panel de techo con los clips ubicados en el extremo de las varillas y coloque el panel de techo. (Consulte la Figura 14).



**PRECAUCIÓN:** Si los clips no están bien alineados con los orificios rectangulares, el equipo podría dañarse.

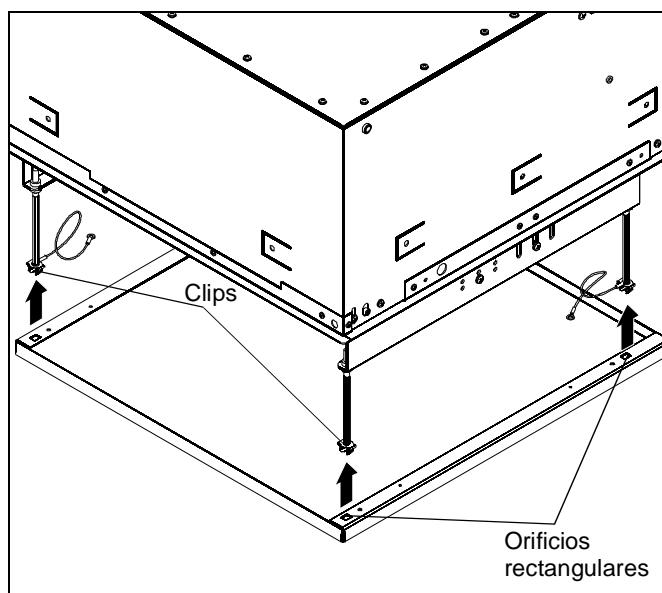


Figura 14

2. Con cuidado, inserte los clips en los orificios rectangulares del panel de techo.
3. Fije los cables guía (en dos lugares) al panel de techo con los tornillos que extrajo antes. (Consulte la Figura 15).

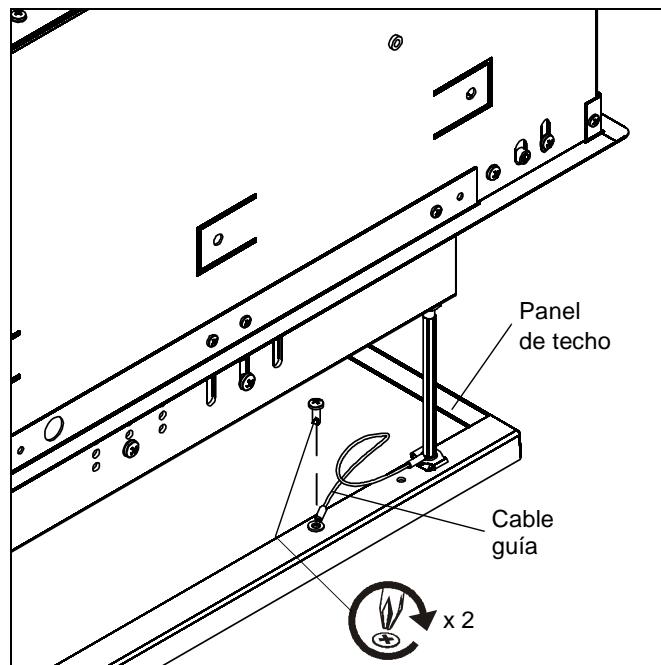


Figura 15











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