Welcome!

We greatly appreciate your purchase of the Tilt 'N Plug. We are sure you will find it reliable and simple to use. Superior performance for the right price, backed by solid technical and customer support is what ALTINEX has to offer.

We are committed to providing our customers with Signal Management Solutions® to the most demanding audiovisual installations at very competitive pricing and we welcome you to join the ranks of our many satisfied customers throughout the world.

1. Precautions and Safety Warnings

Please read this manual carefully before using your TNP510/TNP512 Interconnect. Keep this manual handy for future reference. These safety instructions are to ensure the long life of your TNP510/TNP512 and to prevent fire and shock hazards. Please read them carefully and heed all warnings.

1.1 General

- Qualified ALTINEX service personnel or their authorized representatives must perform all service.

1.2 Installation Precautions

- For best results, place the TNP510/TNP512 Interconnect Box in a dry area away from dust.

- To prevent fire or shock, do not expose this unit to water or moisture. Do not place it in direct sunlight, near heaters or heat-radiating appliances, or near any liquid. Exposure to direct sunlight, smoke, or steam can harm internal components.

- Handle the unit carefully. Dropping or jarring can damage the bezel.

- Never place fingers inside the opening on either side of the unit. This action could cause injury due sharp edges inside.

- Do not place heavy objects on top of the TNP510/TNP512. Do not use excessive force to push down on the top of the unit.

- Disconnect the power cord to turn off the main power. This supplies power to the power socket on the pop-up panel. The power outlet should be installed near the equipment and should be easily accessible.

- We recommend using wall outlets with a Ground Fault Circuit Interrupter (GFCI) for maximum protection.

- Install all cables according to the instructions found herein. Do not force or pull out any cable or power cord attached to the unit.

1.3 Cleaning

- Surfaces should be cleaned with a dry cloth. Never use strong detergents or solvents such as alcohol or thinner. Do not use a wet cloth or water to clean the unit.

1.4 FCC Notice

- This device complies with Part 15 of the FCC Rules. Operation is subject to the following two 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 for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions found herein, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his expense.

- Any changes or modifications to the unit not expressly approved by ALTINEX, Inc. could void the user's authority to operate the equipment.

2. Installation Procedures

Step 1. Cut an opening into the table's surface. Refer to the ALTINEX website at www.altinex.com for table cutout requirements.

Note: The table can be 2.50 in (64 mm) or less in thickness. Always confirm dimensions before cutting to insure that specifications have not changed.

Step 2. Insert the TNP510/TNP512 into the table cutout.

Step 3. Place the support brackets under the table and place them between the support mount grooves on the side of the unit. Attach the brackets to the groove at the desired height and secure them to the bottom of the table using the thumb screws provided. See Diagram 5 for details.

Step 4. To lower the unit, push on the top cover until it locks into place.

If Custom Plates are Installed

Step 5. Secure all cables to the underside of the table using the cable clamps and screws included with the TNP510/TNP512. Pass the power cord from the bottom of the housing and attach it to the table separate from the signal cables.

Leave enough slack in the service loop to allow for easy opening and closing, but not too much as to cause excess drooping of the service loop.

Step 6. Connect the appropriate cables with the correct input connectors on the bottom of the unit.

Step 7. Once you have applied power and connected the proper cables on the bottom of the unit you may raise the unit. To raise the unit into position, push down on the front of the top cover; the latching mechanism will then release, allowing the pneumatic spring to raise it into position.

NOTE: It may be necessary to adjust the service loop of the cables for optimal performance.

3. Limited Warranty/Return policies

Please see the ALTINEX website at www.altinex.com for details on warranty and return policies.

4. Technical Specifications

Specifications are subject to change. See www.altinex.com for up-to-date information.

Features/Description	TNP510
Pass-Through	
Sectional Plate Slots	6
Compatibility*	
AC Power (U.S.)	SP2102US, SP2107US
AC Power (International)	DS901-141, SP2201UK, SP2401AU, SP2301CE, and SP2501SA
Audio, Video, and Control	SP1500SC, SP3201AV, SP3202AV,SP3203AV, SP3204AV, SP3205AV, SP3206AV, SP3207AV, SP3208AV, and SP3209AV
Blank Slot Covers	SP1001BL, SP1002BL, SP1003BL, SP1004BL, SP1005BL, and SP1006BL
Customizable	SP3212AV, SP3102EP, SP3103EP, SP3104EP, SP3211NT, SP3408CR, SP3402AD, and SP3403AD
Accessories Included	
Miscellaneous	Mounting hardware

Table 1A. TNP510 Description

Features/Description	TNP512
Pass-Through	
AC Power	*10 ft (3 m)*
110 VAC	NEMA F-M (2 F to 1 M)
Audio/video	*6 ft (2 m)*
Computer Video	15-pin HD F-M (1)
Network	RJ-45 F-M (1)
Modem	RJ-11 F-M (1)
S-Video	4-pin Mini DIN F-M (1)
Composite Video	Yellow RCA F-F (1)
Control	DB-9 F-M (1)
Audio, Stereo	3.5 mm F-M (1)
Audio Left Channel	Red RCA F-F (1)
Audio Right Channel	Black RCA F-F (1)
Compatibility	
Tilt 'N Plugs	TNP510
Accessories Included	
Miscellaneous	Mounting hardware

Table 1B. TNP512 Description

* Visit the ALTINEX website at www.altinex.com for a complete listing and description of available plates, slot requirements, and connector options.

Mechanical	TNP510/TNP512
Max. Table Thickness	2.5 in (64 mm)
Min. Table Thickness	0.5 in (13 mm)
Height, opened	7.5 in (191 mm)
Height (above table surface)	3.3 in (83 mm)
Height (below table surface)	4.2 in (107 mm)
Width	7.9 in (200 mm)
Depth	6.5 in (166 mm)
Finish	Matte Black
T° Operating (T° Max)	10°C-35°C (40°C)
Humidity	90% non-condensing

Table 2. TNP510/TNP512 Mechanical

Electrical (Single outlet panel)	TNP510/TNP512
Pass-Through Signals	All standard audio, video, network, and modem signals are acceptable.
Pass-Through AC power (Power Rating)	600W maximum

Table 3. TNP510/TNP512 Electrical

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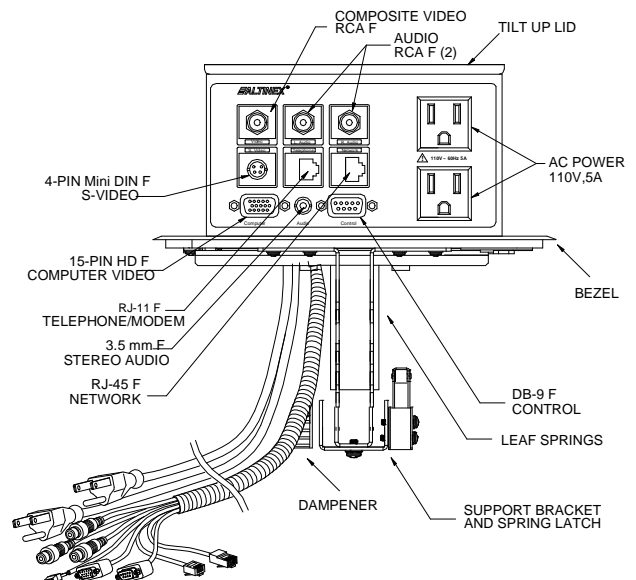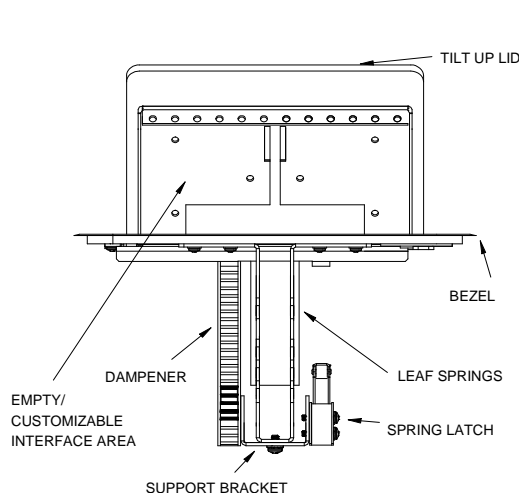
5. About Your Tilt 'N Plug

- New leaf-spring replaces gas shock
- Pop-up dampening for smooth operation
- Simple, drop-in installation

- Standard high-quality matte black finish
- Custom finishes available (contact ALTINEX for options and pricing)
- International power configurations available

The TNP510 and TNP512 are compact interconnect solutions designed for mounting into tables, podiums, or other furniture as part of a presentation system. Inputs are accessed by pushing down on the top cover allowing the units to "tilt" open. The inputs are hidden by pressing down on the top cover until the latching mechanism engages. In the closed positions, the top covers lie flush with the tabletop.

Signals are passed through the TNP510 and TNP512 sectional plates to the underside of the table via cables with mating connectors on the opposite end. For example, an RJ-45 F input connector is terminated in an RJ-45 M connector at the end of a 6 ft (2 m) cable. The TNP510 is empty, but provides slots for 6 single-slot sectional plates that can be configured with various multimedia and power inputs. Many sectional plates are available for the TNP510 and ordered separately. See our website for all options.

The TNP512 is a "package" that covers the basic needs of many Tilt 'N Plug users. This unit ships as a completely assembled product made up of one TNP510 and one SP3500SC Sectional Plate. The SP3500SC is engraved, ready to go, and includes the following: 2 standard U.S. power receptacles, computer video (15-pin HD), COM Port/RS-232 (9-pin D), video (RCA), S-Video (4-pin mini DIN), audio (2-RCAs), computer audio (3.5 mm), modem (RJ-11), and network (RJ-45) input connectors. All connectors have 6 ft (2 m) cables attached that feed through to the bottom of the unit.

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6. Application Diagrams

Diagram 1: Typical Setup

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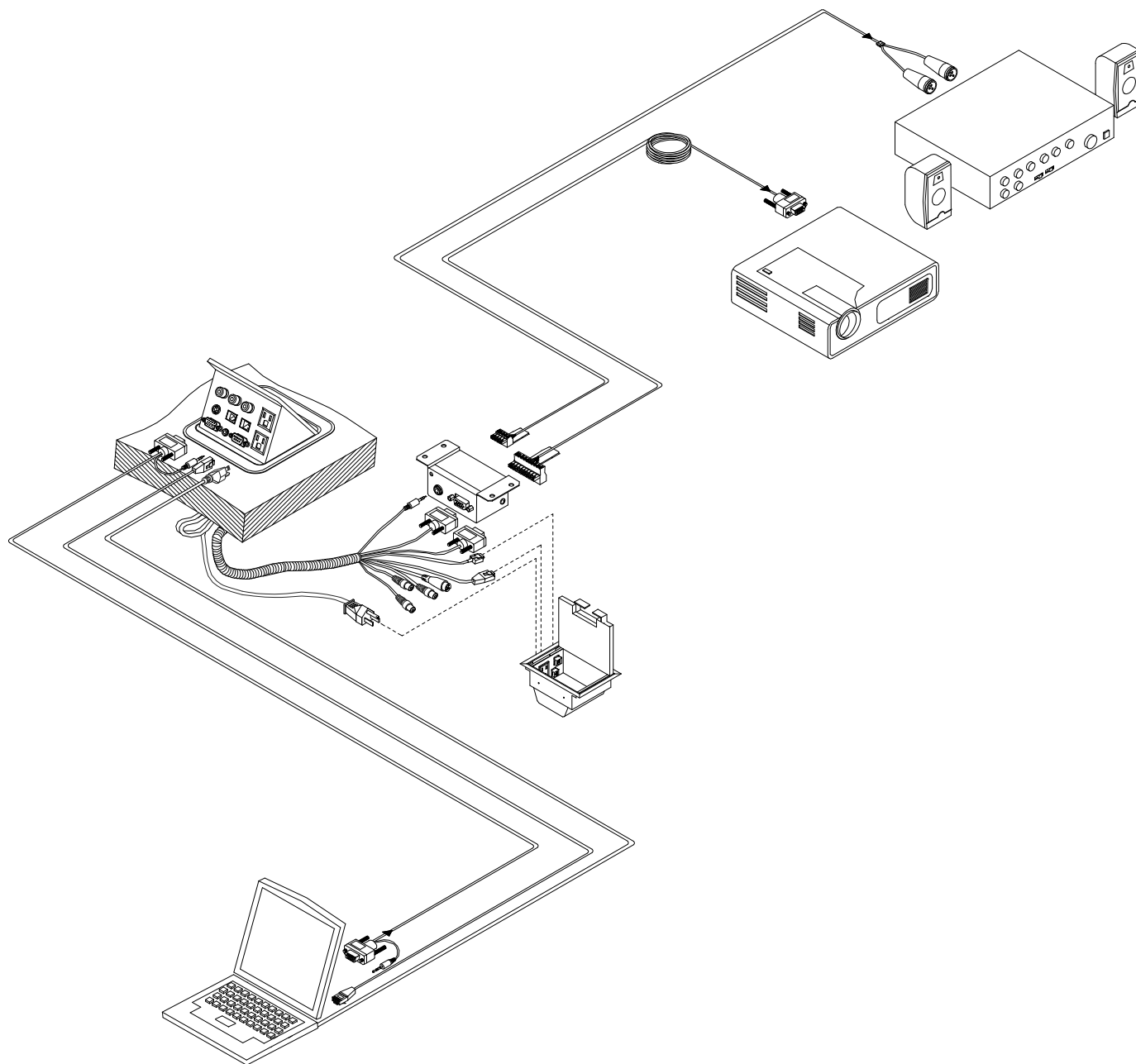
Diagram 2: Front Dimensions

7.5"
[191 mm]

0.25" [6 mm]

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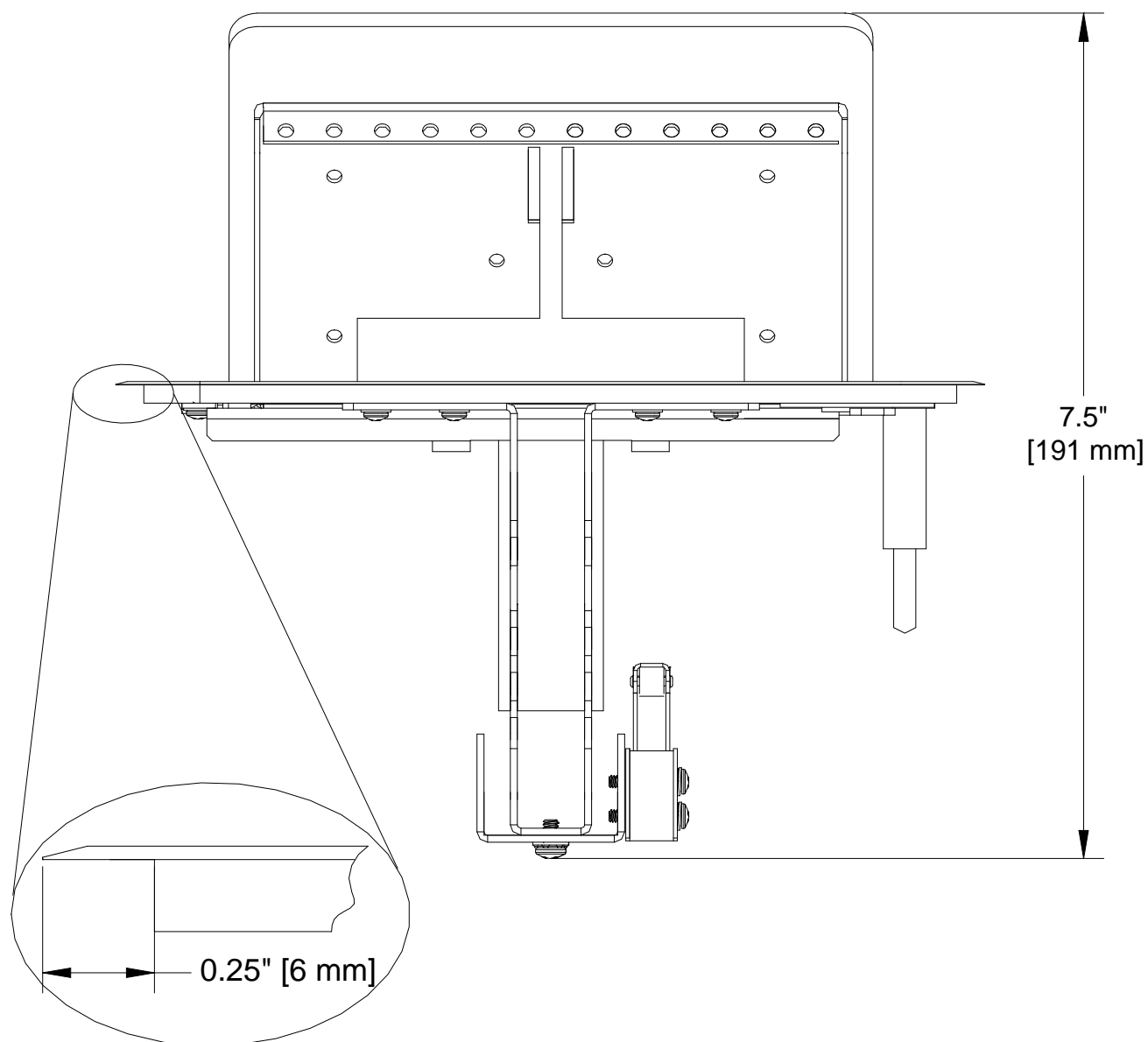
Diagram 3: Side Dimensions

OPERATOR
INTERFACE

3.3"
[83 mm]

4.2"
[107 mm]

5.9"
[150 mm]
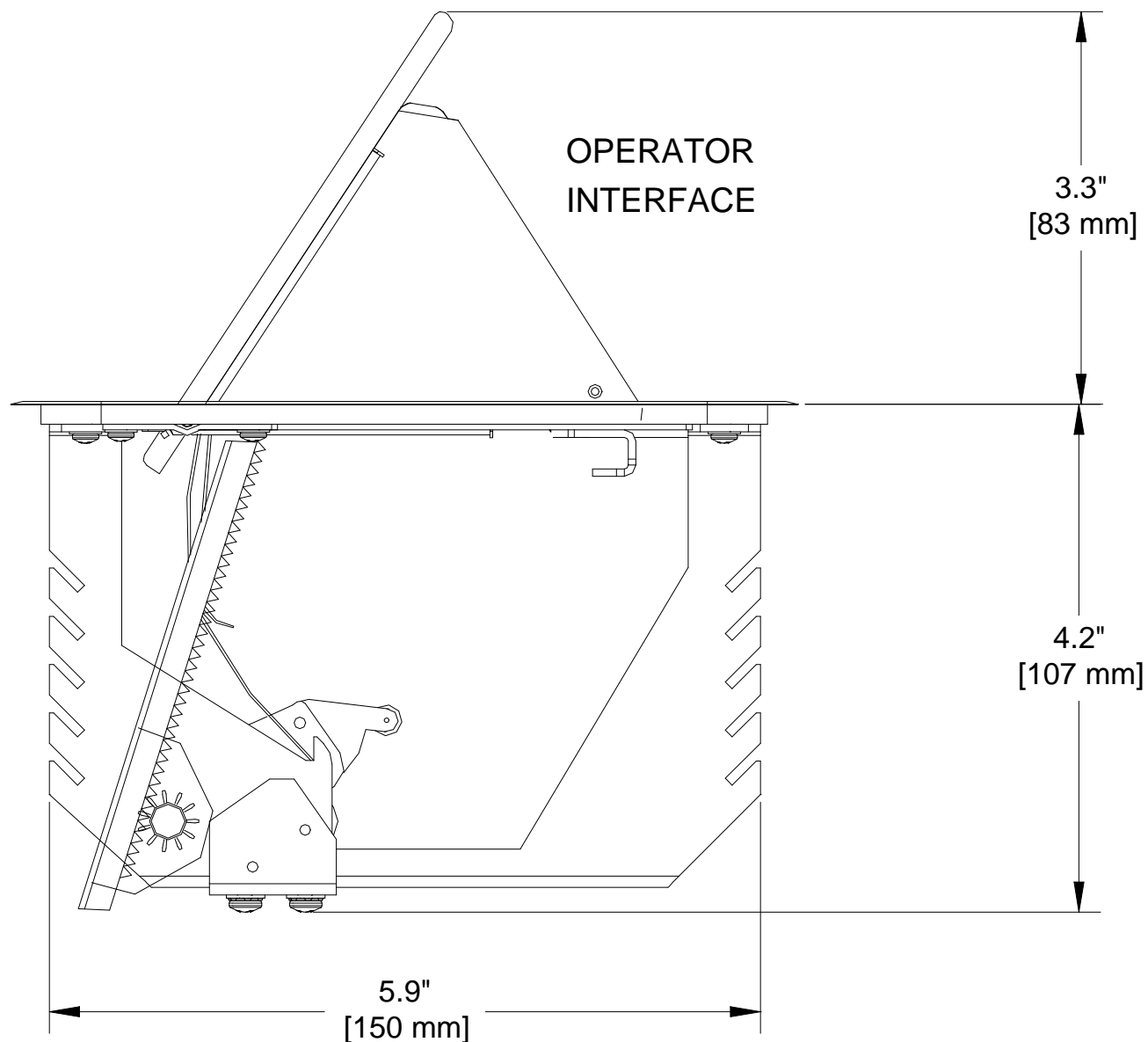
Diagram 4: Top Dimensions

6.5"
[166 mm]

7.9"
[200 mm]
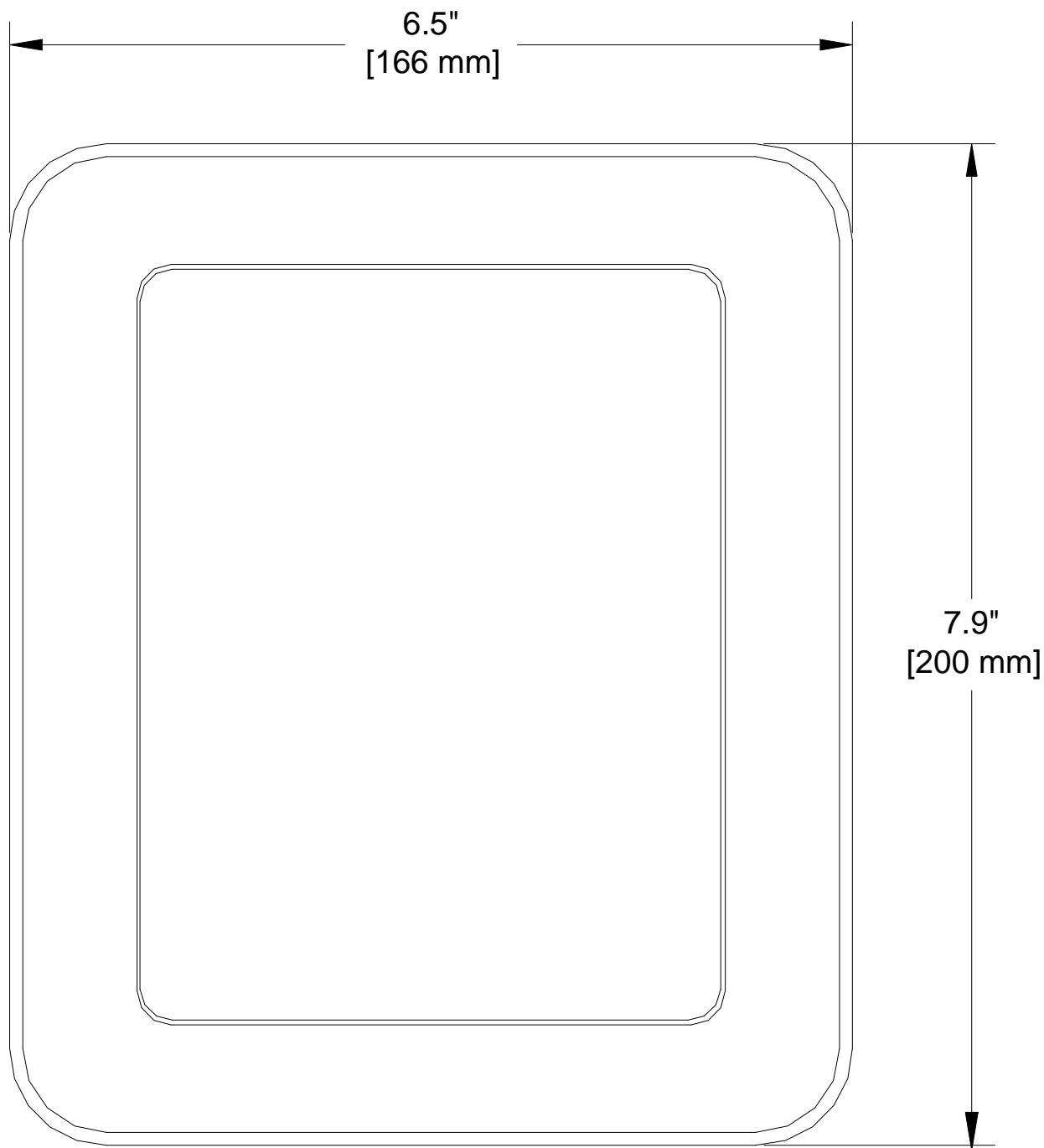
Diagram 5: Mounting Sample

OPERATOR
INTERFACE

TABLETOP

SUPPORT
BRACKETS (2)

THUMBSCREWS (2)

Diagram 6: Popular Section Plates

1 SLOT PLATES

2 SLOT PLATES

3 SLOT PLATES

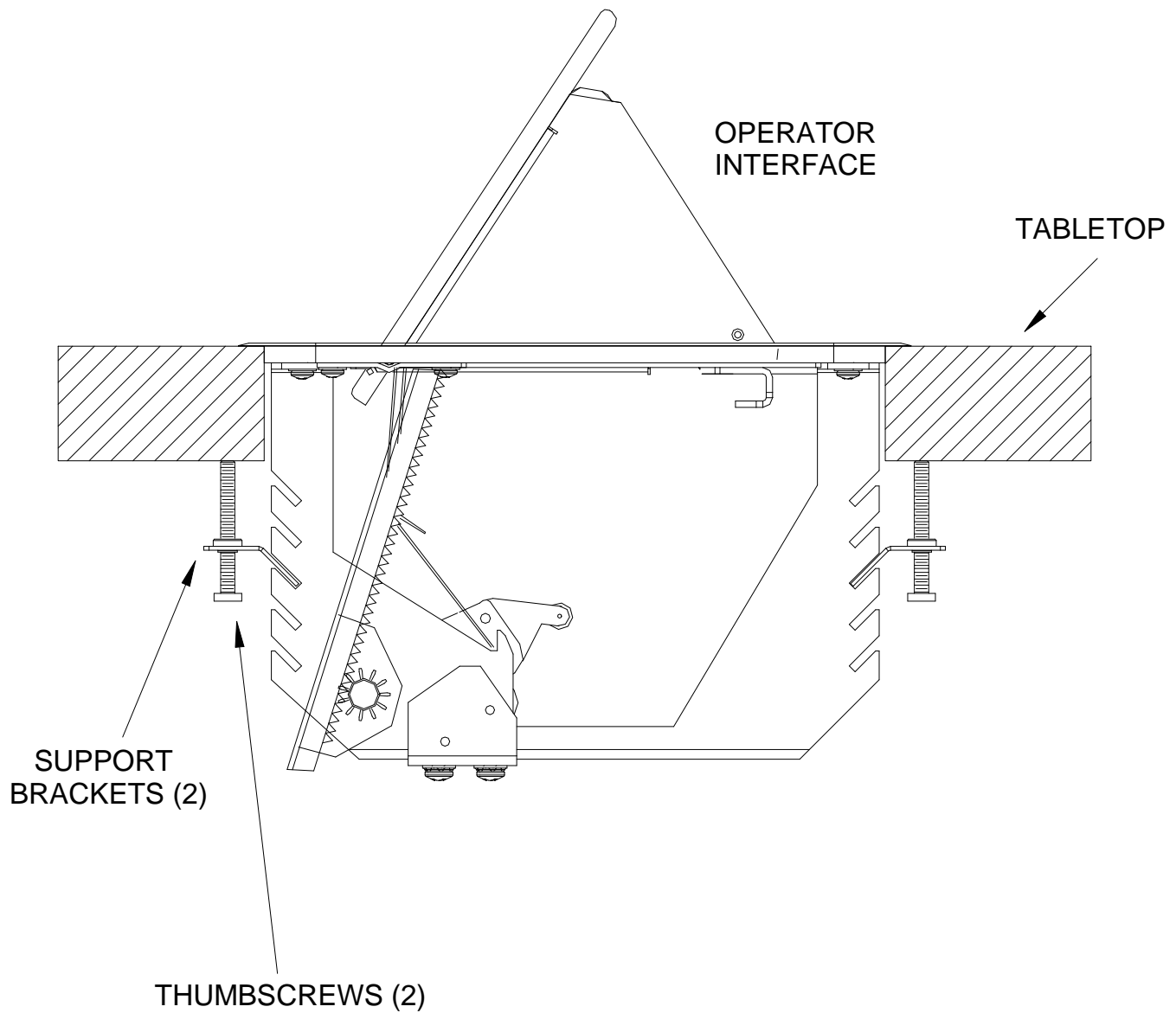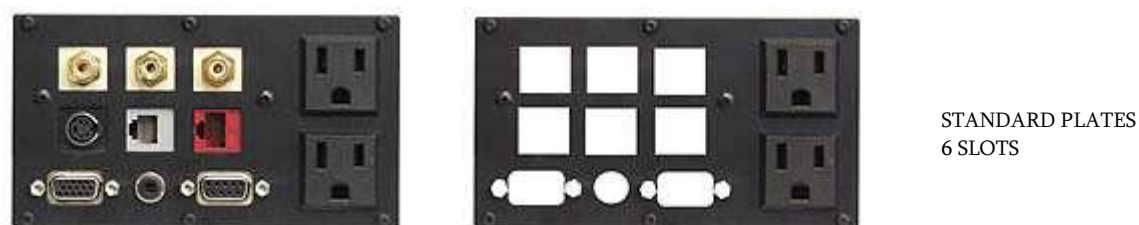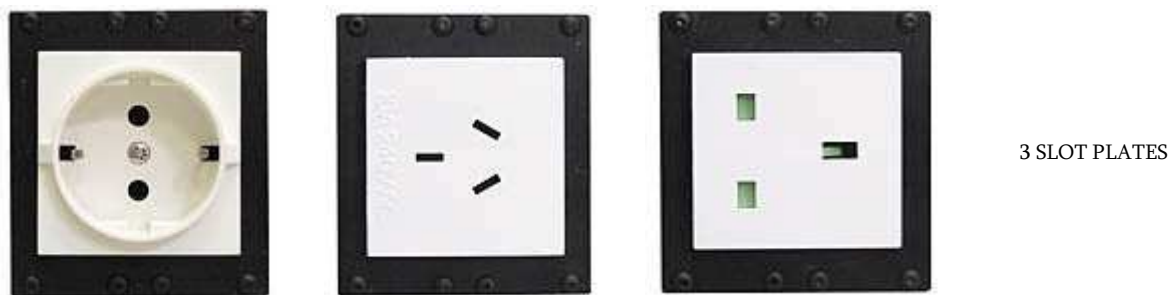STANDARD PLATES
6 SLOTS

Many different plates can be installed on the TNP510 using up to 6 slots total. In addition to standard plates, custom plates can be made using blank plates available. For a complete listing and detailed descriptions, see the ALTINEX web site at www.altinex.com.

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7. Operation

7.1 Opening and Closing the TNP

The TNP510/TNP512 will open easily when the top is pressed down and then released.

When the TNP510/TNP512 is not in use, simply press the top down until it is level with the surface of the table and then release. The unit will remain hidden until needed again.

7.2 Power/Signal Connections

Connect external devices to the appropriate connector on the TNP510/TNP512. Remember, the devices plugged into the AC power connectors should not draw more than 600W of power.

8. Troubleshooting Guide

The TNP510/TNP512 supplied was carefully tested and no problems were detected. However, we would like to offer the following suggestions:

- Please make sure that the highest quality network cables are used.

- Make sure that no cable or power cord is damaged or pinched. If there has been damage, do not use the TNP510/TNP512. Please call the ALTINEX Customer Service Department at (714) 990-2300 to have the unit repaired.

- If the unit does not rise into position correctly, check the service loops for the signal and power cords on the bottom of the unit.

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