Tilt 'N Plug® Jr. Interconnect Boxes

Welcome!

We greatly appreciate your purchase of the TNP124, TNP152, TNP162, TNP421, TNP431, TNP441, or TNP451 Tilt 'N Plug Jr. Interconnect Boxes. 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 Tilt 'N Plug Jr. Keep this manual handy for future reference. These safety instructions are to ensure the long life of your Tilt 'N Plug Jr. 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 Tilt 'N Plug Jr. in a dry area away from dust.

- To prevent fire or shock, do not expose this unit to water or moisture. Do not place the Tilt 'N Plug Jr. 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 Tilt 'N Plug Jr. 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 to sharp edges inside.

- Do not place heavy objects on top of the Tilt 'N Plug Jr. 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 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 any cables or power cords attached to the Tilt 'N Plug Jr.

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 own 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 2.25" or less in thickness. Always confirm dimensions before cutting to insure that specifications have not changed.

Step 2.   Insert the Tilt 'N Plug Jr. 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 Tilt 'N Plug Jr. Attach the brackets to the groove at the desired height and secure them to the bottom of the table using the thumb screws provided.

Step 4.   Secure the cables by using the provided cable clamps and screws included with the unit. Pass the power cord from the bottom of the housing and attach it to the table using the cable clamp and screw supplied with the Tilt 'N Plug Jr.

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

Step 6.   Once you have applied power and connected the proper cables on the bottom of the unit you may raise the unit. To raise the Tilt 'N Plug Jr. 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.

Step 7.   To lower the unit, push on the top of the Tilt 'N Plug Jr. until it locks into place.

3. Limited Warranty/Return policies

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

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4. Technical Specifications

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

Features/Description	TNP Jrs.
	TNP124
AC Power 110 VAC, 60 Hz, 5 A	NEMA F-M (4F to 4M)
Computer Video	15-pin HD F-M (4)
Computer Audio	3.5mm F-M (4)
Modem	RJ-11 F-M (4)
CAT-6 Network	RJ-45 F-M (4)
Compatibility	United States
	TNP152
AC Power 110 VAC, 60 Hz	NEMA F-M (4F to 2M)
CAT-6 Network	RJ-45 F-M (4)
Compatibility	United States
	TNP162
AC Power 110 VAC, 60 Hz	NEMA F-M (3F to 2M)
Computer Video	15-pin HD F-M (1)
Computer Audio	3.5mm F-M (1)
Modem	RJ-11 F-M (1)
CAT-6 Network	RJ-45 F-M (3)
Compatibility	United States
	TNP421/431/441/451
AC Power 220-240 VAC, 50/60 Hz	International F-M
Computer Video	15-pin HD F-M (1)
Computer Audio	3.5mm F-M (1)
CAT-6 Network	RJ-45 F-M (2)
Compatibility TNP421 TNP431 TNP441 TNP451	Germany England Australia South Africa
	ALL
Audio, Video, Comm. Cables	6 ft (2 m)
AC Power Cord	10 ft (3 m)
Accessories Included	Mounting screws, cable clamps

Table 1. TNP Jr. General

Mechanical	TNP Jrs.
	TNP124
Width	8.7 in (221 mm)
Height, opened	5.5 in (140 mm)
Depth	9.3 in (236 mm)
Net Weight (approx.)	11.0 lb (5.0 kg)
Shipping Weight	13.0 lb (5.9 kg)
	TNP152/162
Width	8.7 in (221 mm)
Height, opened	5.5 in (140 mm)
Depth	4.9 in (124 mm)
Net Weight (approx.)	5.1 lb (2.3 kg)
Shipping Weight	6.8 lb (3.1 kg)
	TNP421/431/441/451
Width	5.7 in (145 mm)
Height, opened	6.4 in (163 mm)
Depth	5.2 in (132 mm)
Net Weight (approx.)	3.2 lb (1.5 kg)
Shipping Weight	3.7 lb (1.7 kg)
	ALL
Max. Table Thickness	2.25 in (57 mm)
T° Operating	10°C-35°C
T° Maximum	40°C
Humidity	90% non-condensing
Finish	Matte Black

Table 2. TNP Jr. Mechanical

Electrical	TNP Jrs.
	TNP124
Single Outlet Panel Pass-through Power Rating	5 A per connector max. 10 VAC, 60 Hz
	TNP152/162
TNP152 Dual Outlet Panel Pass-through Power Rating	2.5 A per connector max. 110 VAC, 60 Hz
TNP162 Dual Outlet Panel Pass-through Power Rating	Dual AC Tilt-Up Module: 2.5 A per connector max. 110 VAC, 60 Hz Single AC Tilt-Up Module: 5 A max. 110 VAC, 60 Hz
	TNP421/431/441/451
Single Outlet Panels Pass-through Power Rating	5 A max. 220-240VAC, 50/60Hz

Table 3. TNP Jr. Electrical

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5. About Your Tilt 'N Plug Jr.

All Tilt 'N Plug Jrs. belong to a family of compact interconnection solutions designed for installation into a table as part of a presentation system. They are designed for mounting into a table, podium, or other furniture to provide a way of connecting audiovisual equipment on top of the furniture to a presentation system below the furniture.

All use the same core element; a multimedia input plate that can be "tilted" open when needed and pushed closed when not needed.

The TNP152 and TNP162 incorporate two tower modules, and the TNP124 incorporates four individual modules. Each module can be operated independently; the TNP124 and TNP152 can service from one to four users simultaneously. During installation of the TNP152/162, the individual tower modules can be reversed to face opposite directions through a simple field modification to the bezel. This alternative configuration is handy for applications in which the TNP152/162 needs to service two sides of a table simultaneously.

The TNP162 is a dual module configuration with a TNP121 module and a TNP151 module side by side. The TNP124 is a quad TNP121 with two rows of twin modules facing in opposite directions; the modules in the TNP124 cannot be reversed.

The TNP421, TNP431, TNP441, and TNP451 are international models with power connectors for specific countries. The TNP421 has a standard "Schuko" receptacle for most European countries. The TNP431 is for the U.K., Singapore and Hong Kong, the TNP441 is for Australia and New Zealand, and the TNP451 is for South Africa. Versions of the TNP121/122/124/131/142 with a universal IEC320 connector instead of the U.S. power connector are also available.
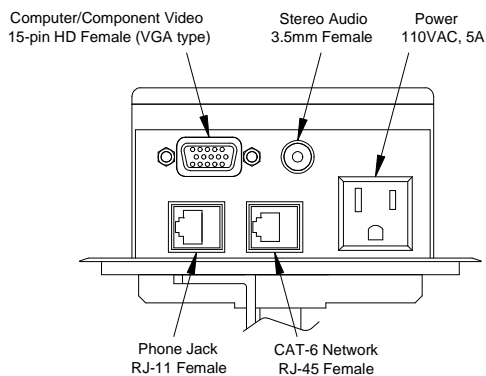
All signals pass through the input plate directly to cables on the underside of the table with no intervening circuitry. The use of additional ALTINEX Signal Management Solutions® such as computer video interfaces, distribution amplifiers, and switchers may be desirable.

The input plate of the Tilt 'N Plug Jr. is accessible by pushing down on the top cover. The unit then auto tilts open with help from an internal pneumatic spring. Once open, the input plate remains securely in place. The input plate is hidden by pressing down on the top cover until the latching mechanism engages. In its closed position, the top panel lies flush with the table's top, held in place by the latching mechanism.
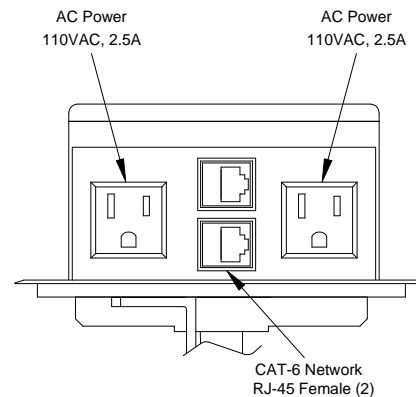
All Tilt 'N Plug Jr. Signal Management Solutions come with a standard top and bezel offering a high quality matte black finish. Other finishes or special bezel configurations are available upon request. Please contact an ALTINEX representative to discuss custom options.
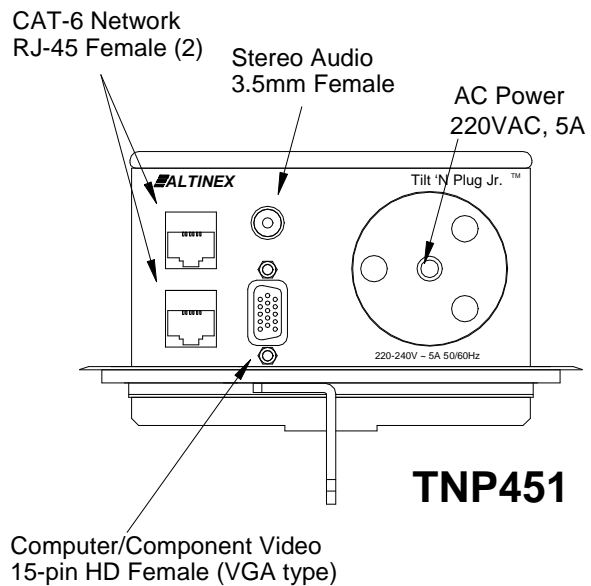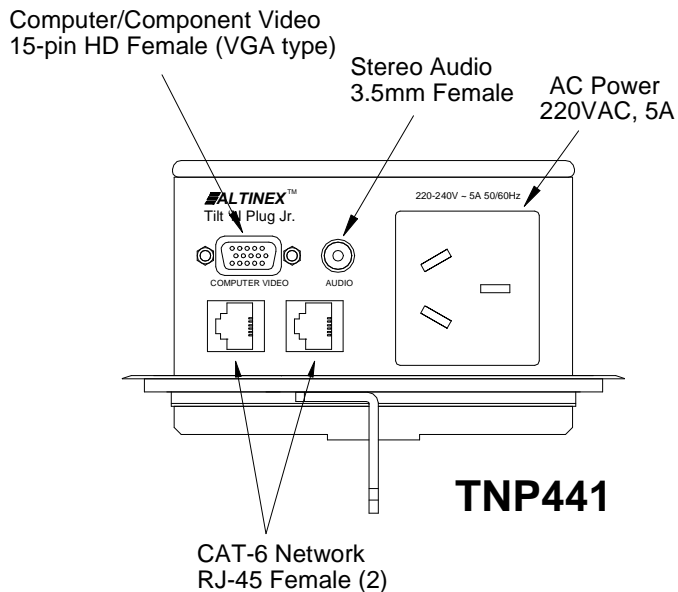

Standard Faceplate Features – TNP124 and TNP162

Computer/Component Video
15-pin HD Female (VGA type)

Stereo Audio
3.5mm Female

Power
110VAC, 5A

Phone Jack
RJ-11 Female

CAT-6 Network
RJ-45 Female

Standard Faceplate Features – TNP124 and TNP162

AC Power
110VAC, 2.5A

AC Power
110VAC, 2.5A

CAT-6 Network
RJ-45 Female (2)

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Standard Faceplate Features – International

Computer/Component Video
15-pin HD Female (VGA type)

AC Power
220VAC, 5A

Stereo Audio
3.5mm Female

ALTINEX™
Tilt 'N Plug Jr.

220-240V ~ 5A 50/60Hz

COMPUTER VIDEO   AUDIO

TNP421

CAT-6 Network
RJ-45 Female (2)

Computer/Component Video
15-pin HD Female (VGA type)

AC Power
220VAC, 5A

Stereo Audio
3.5mm Female

ALTINEX™
Tilt 'N Plug Jr.

220-240V ~ 5A 50/60Hz

COMPUTER VIDEO   AUDIO

TNP431

CAT-6 Network
RJ-45 Female (2)

Computer/Component Video
15-pin HD Female (VGA type)

Stereo Audio
3.5mm Female

AC Power
220VAC, 5A

ALTINEX™
Tilt 'N Plug Jr.

220-240V ~ 5A 50/60Hz

COMPUTER VIDEO   AUDIO

TNP441

CAT-6 Network
RJ-45 Female (2)

CAT-6 Network
RJ-45 Female (2)

Stereo Audio
3.5mm Female

AC Power
220VAC, 5A

ALTINEX
Tilt 'N Plug Jr. ™

220-240V ~ 5A 50/60Hz

TNP451

Computer/Component Video
15-pin HD Female (VGA type)

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6. Application Diagrams
Diagram 1: TNP124 Dimensions

8.7"
[221 mm]

9.3"
[236 mm]

2.0"
[50 mm]

3.5"
[90 mm]

5.5"
[140 mm]
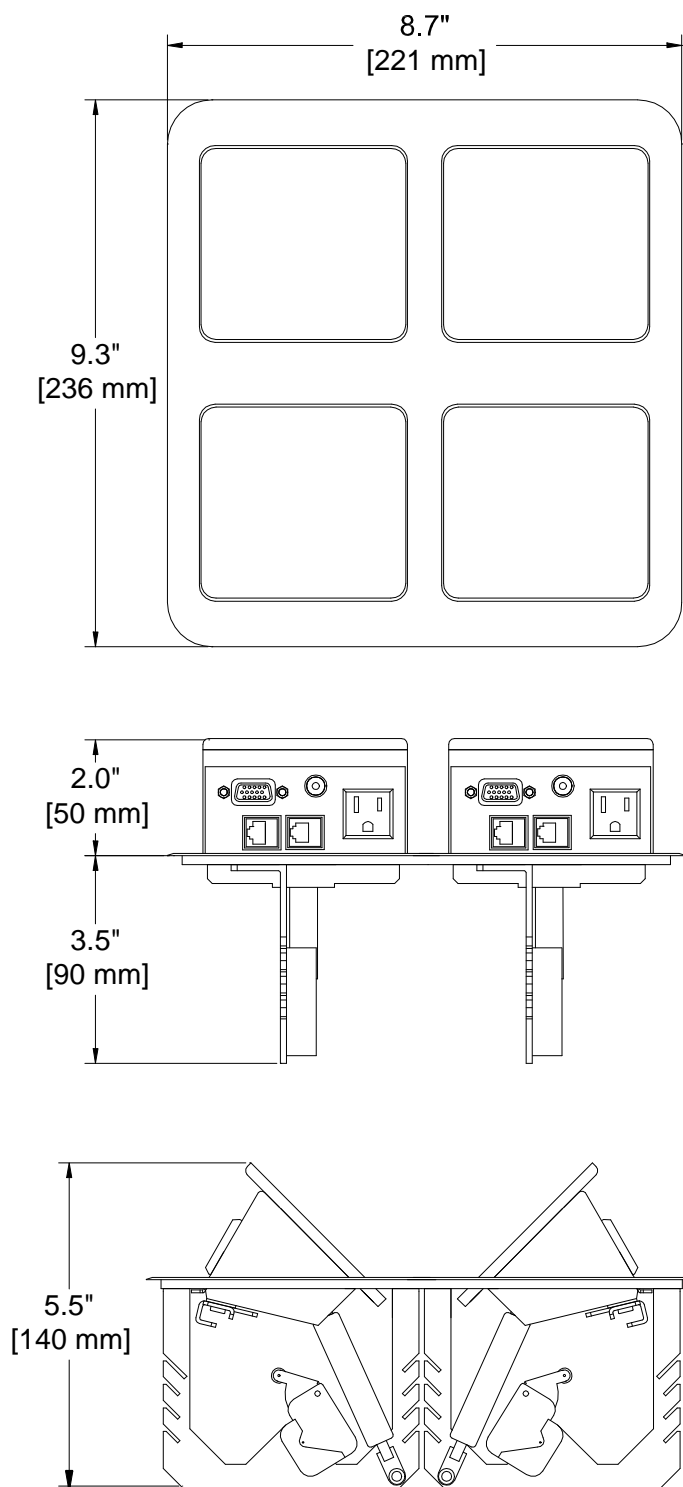
Diagram 2: TNP152 Dimensions

8.7"
[221 mm]

4.9"
[124 mm]

2.0"
[50 mm]

3.5"
[90 mm]

5.5"
[140 mm]

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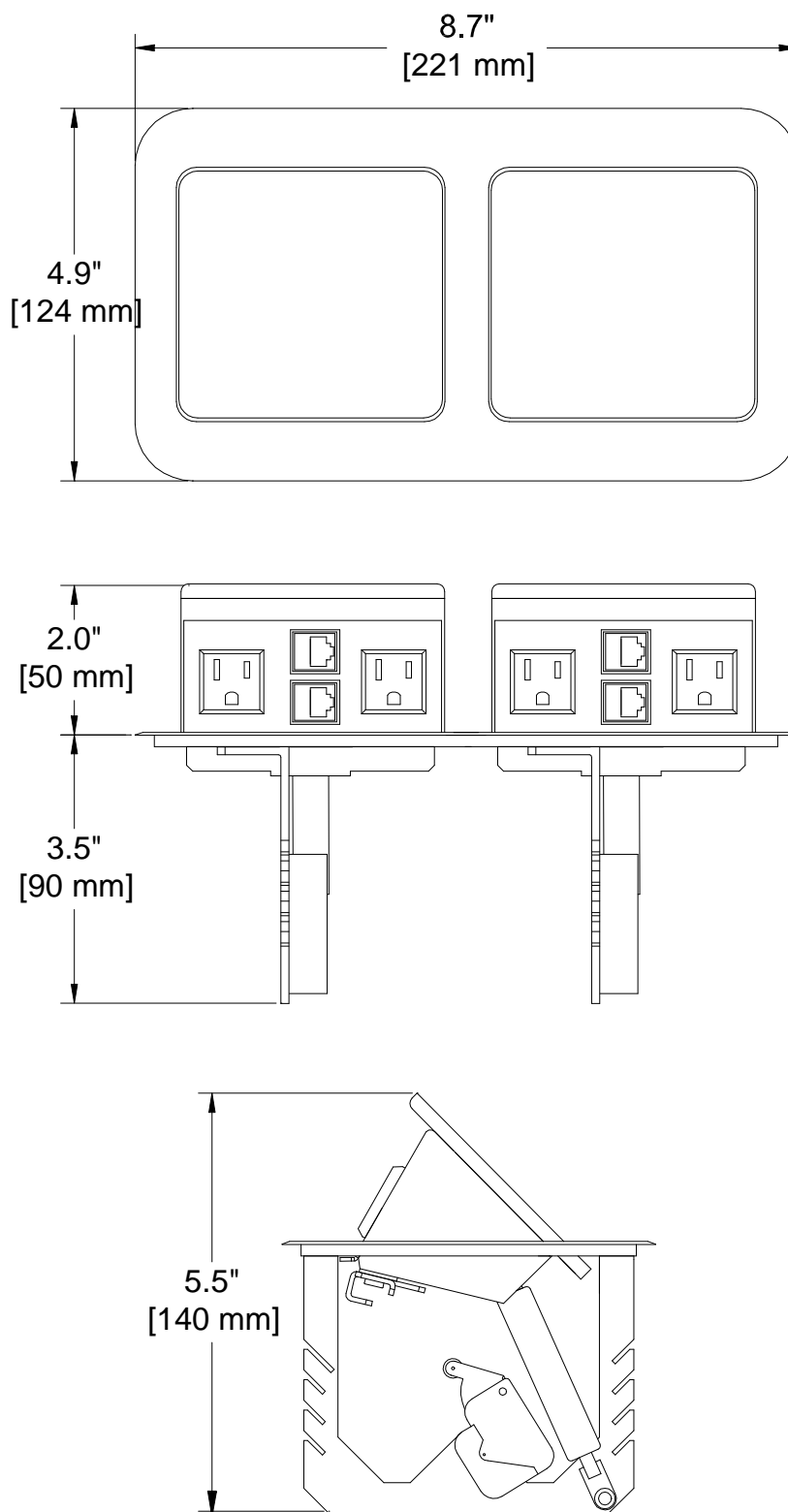
Diagram 3: International Dimensions

5.7"
[145 mm]

5.2"
[132 mm]
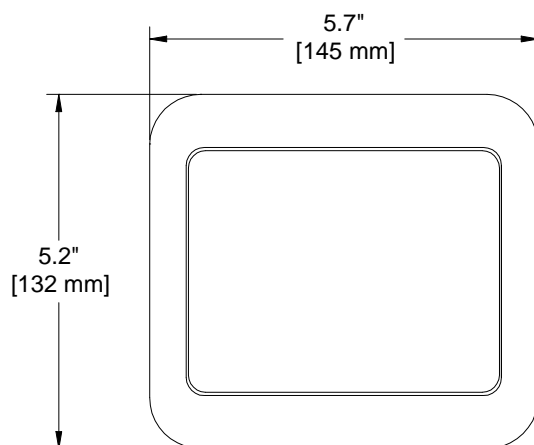
**TNP421, TNP431,
TNP441, TNP451
Dimensions**

6.4"
[162 mm]

2.5"
[64 mm]

3.9"
[98 mm]

Diagram 4: TNP Mounting

Tabletop

Support
Bracket

Support
Bracket

Table
Securing
Screw

Table
Securing
Screw

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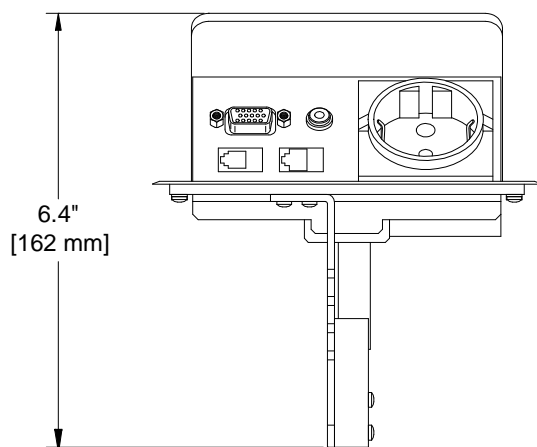Tel: 714-990-2300 • Toll-Free: 1-800-ALTINEX • FAX: 714-990-3303 • E-mail: solutions@altinex.com • Web: www.altinex.com
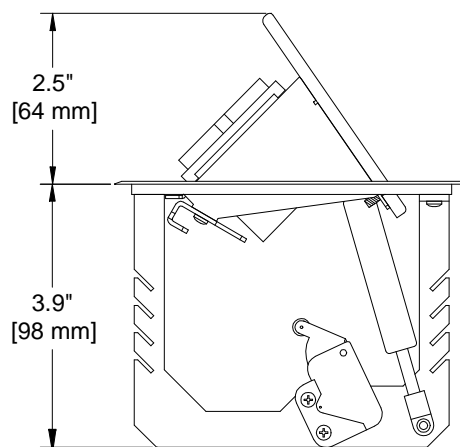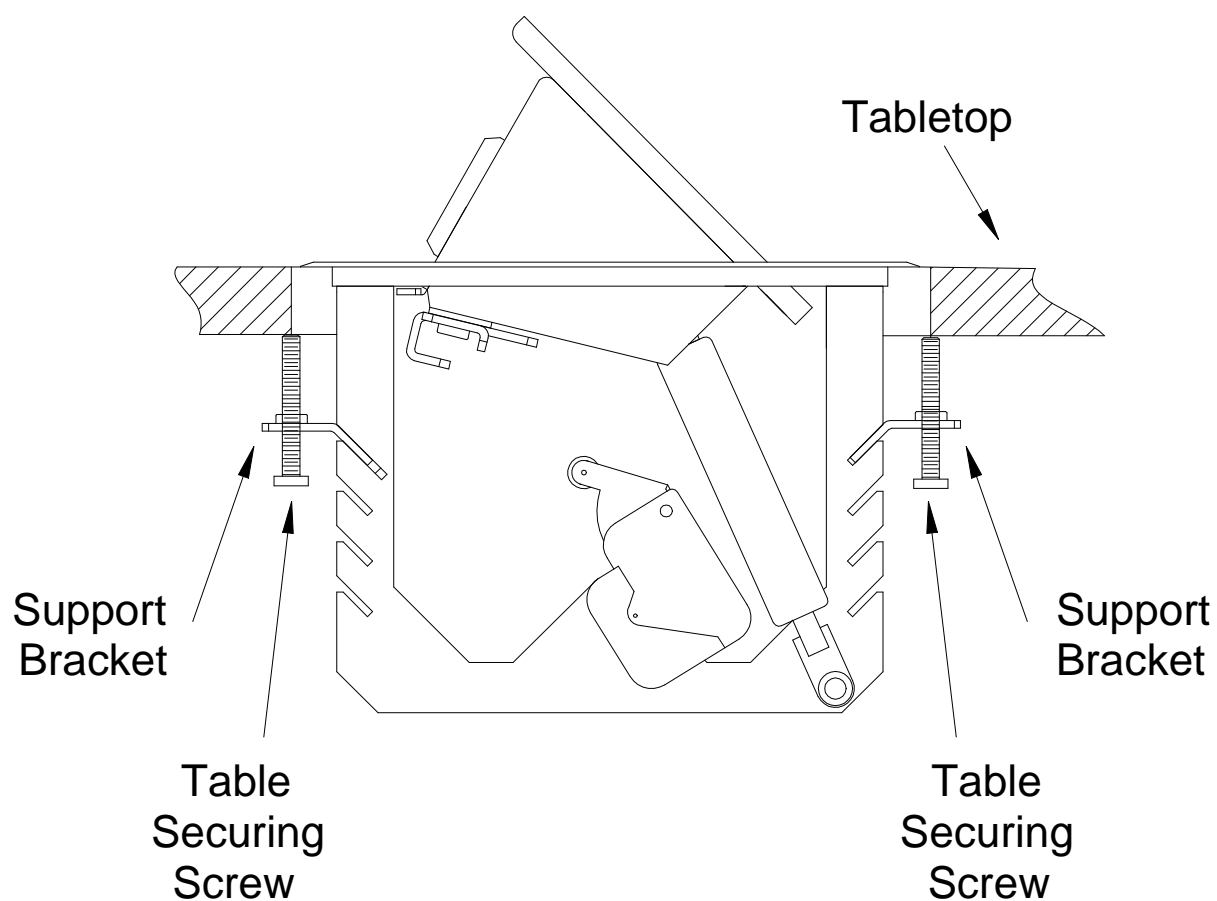
7. Operation

7.1 Opening and Closing the TNP

The TNP will open easily when the top is pressed down and then released.

When the TNP 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 TNP. Remember, the devices plugged into the AC power connectors should not draw more than 5A AC for any individual tilt-up module.

8. Troubleshooting Guide

The Tilt 'N Plug Jr. supplied unit 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, then do not use the Tilt 'N Plug Jr. Immediately contact the ALTINEX Customer Service Department to have the unit repaired.