Welcome!

We greatly appreciate your purchase of the TNP461. 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 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 TNP461. Keep this manual handy for future reference. These safety instructions are to ensure the long life of your TNP461 and 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

- Place the Tilt 'N Plug Jr. in a dry area away from dust.
- Handle the TNP Jr. carefully. Dropping or jarring can damage the bezel.

- To prevent fire or shock, do not expose this unit to water or moisture. Do not place in direct sunlight, near heaters or heat-radiating appliances, or near any liquid. Exposure to direct sunlight, smoke, or steam can harm internal components.
- Never place fingers inside the opening on either side of the unit. This could cause injury due to sharp edges.
- Do not place heavy objects on top of the TNP 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 cables or power cords.

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.

2. Installation Procedures

- Step 1. Download and read the entire online manual to become familiar with the TNP461 and for detailed installation.
- Step 2. 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 3. Insert the TNP461 into the cutout. Under the table, place the support brackets into the grooves on the side of the unit at the desired height and secure using the knurled thumb screws. Tighten wing nuts to set screws in place. See Diagram 3 of online manual for details. To lower the unit, push on the top cover until it locks into place.
- Step 4. Secure cables to the underside of the table using the hardware provided. Secure the power cord to the table separate from the signal cables. Leave enough slack in the power cord service loop to allow for easy opening and closing, but not too much as to cause excess drooping of the service loop. Adjust loop for best opening and closing of unit.
- OPERATOR
 INTERFACE

 TABLETOP

 SUPPORT
 BRACKETS(2)

 THUMB SCREWS (2)
 WITH WING NUTS(2)
- Step 5. Connect your cables to their corresponding input connectors on the bottom of the unit. Raise the unit into position, push down on the front of the top cover; the latching mechanism will then release, allowing the spring to raise it into position.



Step 6. 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 http://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 | TNP461 Description |
|--------------------------------|--|
| General | |
| Audio/Video/Communication | 6 ft. (2m) |
| Video, VGA | 15-pin HD F-M (1) |
| Video, HDMI* | HDMI F-M (1) |
| Computer Audio | 3.5mm F-M (1) |
| CAT-6 Network | RJ-45 F-M (1) |
| USB | USB Type A F-M (1) |
| Pass-Through AC Power | 1.5 ft. (0.46 m) |
| AC Power User Side Supply Side | Universal Receptacle IEC 60320 C14 (male) |
| Accessories Included | |
| Hardware | -Mounting screws/brackets -Cable clamps/screws |

Table 1. TNP461 General

| Mechanical | TNP461 Description |
|------------------------------|--------------------|
| Max. Table Thickness | 2.25 in (57 mm) |
| Width | 5.7 in (145 mm) |
| Height, opened (above table) | 2.5 in (64 mm) |
| Height, below table | 3.9 in (99 mm) |
| Depth | 5.2 in (132 mm) |
| Finish | Matte Black |
| Net Weight (approx.) | 3.2 lb (1.5 kg) |
| Shipping Weight | 3.7 lb (1.7 kg) |
| T° Operating | 10°C-35°C |
| T° Maximum | 40°C |
| Humidity | 90% non-condensing |

Table 2. TNP 461 Mechanical

| Electrical | TNP461 Description |
|--------------------------------------|-------------------------------------|
| Power Rating (pass-through AC Power) | 220-240VAC, 50/60Hz, 5 A maximum |

Table 3. TNP 461 Electrical

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^{*} HDMI, the HDMI Logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.

5. About Your Tilt 'N Plug Jr.

- Semi-compact enclosure
- Mounts into tabletop
- Offers single input plate
- Opens/closes by pressing on top cover
- India compatible power connectors
- All signals pass through to the underside of the table

The TNP461 belongs to the family of International Tilt 'N Plug Jr. series. It is a compact interconnection solution designed for installation into a table as part of a presentation system. The TNP461 is 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.

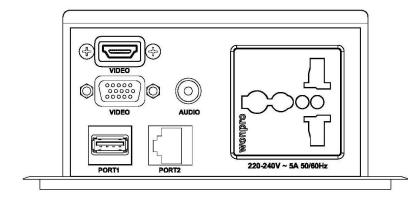
The core element of the TNP461 is a multimedia input plate that can be "tilted" open when needed and pushed closed when not needed.

The TNP461 is an international model with power connectors designed for India. The TNP461 has a universal power receptacle for the user input and is connected to a supply side cable terminated in an IEC60320 C14 connector, with 1.5 ft. cable length.

The TNP461 is a pre-configured, compact hybrid interconnect solution that includes audio, network, USB and video (VGA and HDMI) ports. 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.



TNP461

- RJ-45 F Network (x1) –Snap in port
- USB F (x1)-Snap in port
- 3.5 mm F Audio (x1)
- 15-pin HD F Video(x1)
- HDMI F Video (x1)
- AC Power (x1)

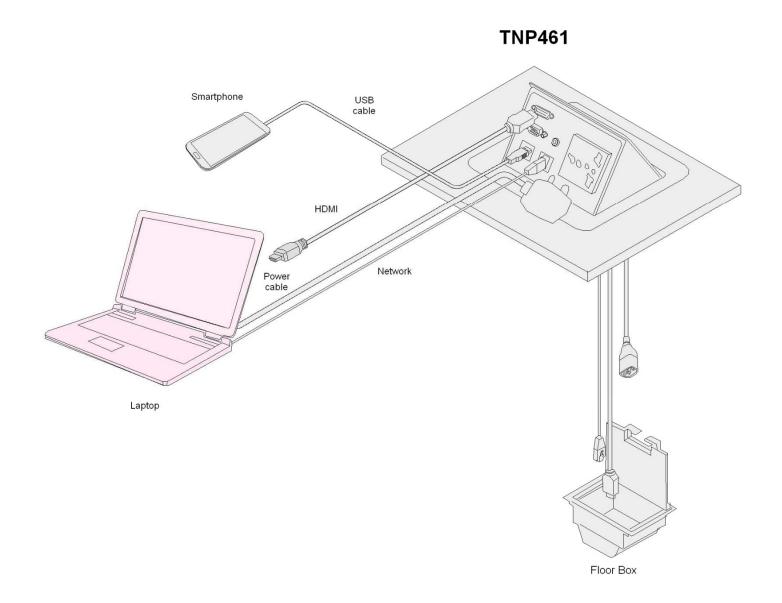
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6. Application Diagrams

Diagram 1: Application Diagram

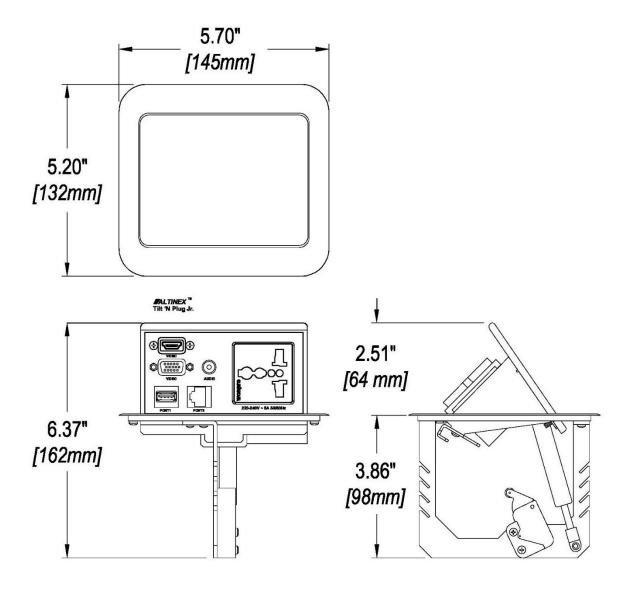


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Diagram 2: TNP 461 Dimensions



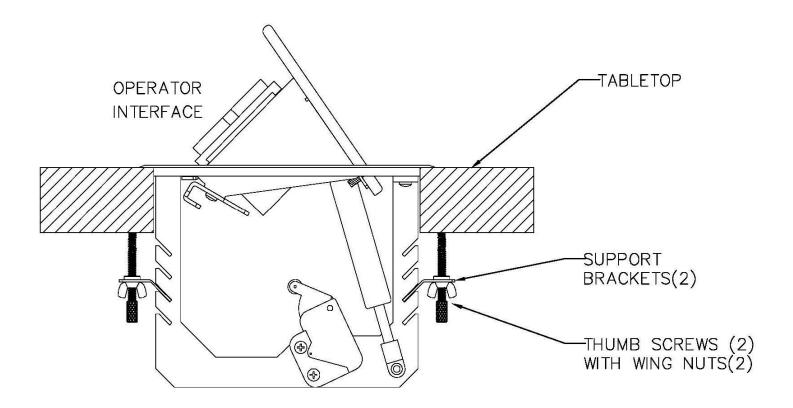
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Diagram 3: TNP461 Mounting



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7. Operation

7.1 Opening and Closing the Tilt 'N Plug

The Tilt 'N Plug Jr. will open easily when the top is pressed down and then released.

When the Tilt 'N Plug Jr. 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 Tilt 'N Plug Jr. Remember, the devices plugged into the AC power connectors should not draw more than 5A AC.

8. Troubleshooting Guide

The Tilt 'N Plug Jr. supplied was carefully tested and no problems were detected. However, we would like to offer the following suggestions:

| Symptom | Resolution |
|---------------------------------|--|
| Signal quality is poor. | Please make sure that the highest quality cables are used. The TNP is a passive unit and does not alter signals in any way. If there is suspected problem with the signal quality, check the quality of the cables coming into the TNP and connecting to the output of the TNP. If they are of low quality or improperly assembled, this will affect the overall quality of the signal. |
| Damaged power cord | Make sure that no cable or power cord is damaged or pinched. If there has been damage, do not use the Tilt 'N Plug. Please call the Altinex Customer Service Department at (714) 990-2300 to have the unit repaired. |
| Unit raises too slowly | 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. If the service loop is too small, the cables will counteract the spring trying to raise the unit into position. |
| Unit tilts up too fast | If the unit rises into position too fast, check the service loops for the signal and power cords on the bottom of the unit. If the service loop is too large and the cables are putting upward pressure on the unit, the unit will tilt up too fast. |
| Unit does not close all the way | If the unit does not close flush with the bezel, check the service loops for the signal and power cords on the bottom of the unit. If the service loop is putting upward pressure in the unit, the unit will not be able to seat all the way down. |

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