Installation Instructions

**CAUTION** - Risk of Damage. Handle carefully.
1. **Do not** twist, bend, fold or crease Tivotape™.
2. **Do not** attempt to remove Tivotape™ once it has been installed. Attempting to pull Tivotape™ away from mounting surface after it has been adhered will cause damage to the product.
3. **Do not** use chemical solvents on Tivotape™ during routine maintenance.
4. **Do not** use chemical solvents on Tivotape™ during routine maintenance.

**Failure to comply will damage the product and void the warranty.**

**Option 1: Direct to Surface**

**Note:** Use in clean, smooth, surface applications. Attaching to textured surfaces without the use of a mounting channel is not recommended.

**Step 1:** Unwind Tivotape™ from roll and cut to length according to project layout.

**Step 2:** Trim off excess length at cutoff zones only.

**Step 3:** Make sure surface where Tivotape™ is to be installed is smooth, clean, free of dirt, oil and debris.

**Note:** For backing tape to remain permanently attached, mounting surface must be clean and free of oil and debris.

**Caution:** Do not attempt to remove Tivotape™ once it has been adhered to surface. Stick down once to avoid damage to the product. If there is a misapplication, remove the Tivotape™, clean off all adhesive from the mounting surface and start over with a new strip of Tivotape™ on a clean surface.

**Make Connections Using Tivotape™ Connectors**

Use the included Connectors to connect Tivotape™ to power source and to interconnect segments of Tivotape™

**Step 4:** Locate the Wire Lead and pull open the locking face, as shown.

**Step 5:** **IMPORTANT!** Use a small utility knife to scrape the eXoShield™ coating from each of the Pads and peel away the 3M VHB backing tape just from the end of the Tivotape™.

**WARNING!** Risk of product failure.
The eXoShield™ coating must be scraped away from the contact pads in order to create a solid electrical connection.

**Step 6:** Connect a wire Lead to the Lead End of the run.

**Caution:** Orient the Connector so the small white Contact Plate at the opening of the Connector is facing up.

**Step 7:** Continue to peel away the backing tape as the Tivotape™ is applied to a clean, smooth, surface area.

**Step 8:** Press firmly with hand along the entire length of Tivotape™ to ensure a strong bond to the mounting surface.

**Step 9:** Connect additional segments of Tivotape™ using supplied connectors. It is recommended that all connectors are attached to Tivotape™ before applying it to surface as described in Steps 5 through 8.

**Step 10:** Make electrical connections.
Installation Instructions (Continued)

Option 2: Mounting Channel
Mounting channels are recommended for most applications to create a smooth, flat adhesion surface and also to create different visual effects. Some styles of Channel may require a different installation method than described below. Consult factory for details.

Step 1: Measure and cut mounting channel from supplied lengths to fit full length of mounting surface and drill countersunk mounting holes every 24" along channel.

Step 2: Attach mounting channel using No. 6 Flat Head screws (supplied by others) appropriate for mounting surface, ie: wood screws for wood.

Step 3: Make sure channel surface where Tivotape™ is to be installed is smooth, clean, free of all dirt, oil and debris. Note: Cleaning the channel mounting surface with alcohol is recommended.

Make Connections Using Tivotape™ Connectors
Use the included Connectors to connect Tivotape™ to power source and to interconnect segments of Tivotape™

Step 4: Locate the Wire Lead and pull open the locking face, as shown.

Note: Ten each of five Connector options are included with your Tivotape™ order.

Warning: Do not exceed the maximum linear run length per circuit. Max run lengths vary based on power Supply. See page 4 for details.

Step 5: IMPORTANT! Use a small utility knife to scrape the eXoShield™ coating from each of the Pads and peel away the 3M VHB backing tape just from the end of the Tivotape™.

WARNING! Risk of product failure. The eXoShield™ coating must be scraped away from the contact pads in order to create a solid electrical connection.

Step 6: Connect a Wire Lead to the Lead End of the run.

Caution: Orient the Connector so the small white Contact Plate at the opening of the Connector is facing up.

Step 7: Press the Locking Face all the way in to lock the Connector onto the Tivotape™.

Step 8: Continue to peel away the backing tape as the Tivotape™ is applied to a clean, smooth channel surface.

Warning: Do not exceed the maximum linear run length per circuit. Max run lengths vary based on power Supply. See page 4 for details.

Step 9: Install Lens and End Caps as required for application.

Step 10: Connect additional segments of Tivotape™ using supplied connectors. It is recommended that all connectors are attached to Tivotape™ before applying it to surface as described in Steps 5 through 8.

Step 11: Make electrical connections.

Note: Use the included connector options to run Tivotape™ around corners and to join multiple segments of Tivotape™ together.

Power Leads and Jumper Connectors
Compatible Channels*

*Lenses and End Caps available separately. Refer to Tivotape™ specification sheets for details.

DOME-CHAN-SLV-6.5®
Anodized Aluminum Extrusion, available in 6.5’ lengths.

EDGE-CHAN-WHT-6.5 (WHITE)*
EDGE-CHAN-SLV-6.5 (SLIVER)*
Aluminum Ceiling Edge Lit Channel with flush frosted lens (included), Finish options in white and silver, available in 6.5’ lengths.

LOKM-CHAN-6.5®
Anodized Channel with flush lens, clips into TKUS channel (optional) available in 6.5’ lengths.

KOZL-CHAN-6.5®
Aluminum channel with flush lens, available in 6.5’ length

TPL-AL-CHAN-1A-8®
AL Series Aluminum Channel with Mounting Carrier Base. Available in 8 ft standard lengths.
Electrical Connections for Variable Indoor Tivota™

Step 1: Turn power off before beginning electrical installation.

Note: Contacting hot wires against the Tivota™ leads may damage the product and void the warranty.

Step 2: Connect Tivota™ lead wires to RGBW-Sub-Controller, or if using our ADUL-DIN series transformers, connect to pre-wired terminal blocks which are found inside the power supply box. Refer to diagram below. Make sure each lead wire is connected to the correct terminal, as follows:

<table>
<thead>
<tr>
<th>TIVOTAPE™ PAD DESIGNATION</th>
<th>FULL ROLL CONNECTOR WIRE COLOR</th>
<th>SUB-CONTROLLER TERMINAL OR ADUL-DIN CONNECTOR WIRE COLOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>Green (+)</td>
<td>Black (+)</td>
</tr>
<tr>
<td>-</td>
<td>Red</td>
<td>Red</td>
</tr>
<tr>
<td>+</td>
<td>Blue (+)</td>
<td>Black (+)</td>
</tr>
<tr>
<td>-</td>
<td>Black</td>
<td>Green</td>
</tr>
</tbody>
</table>

Step 3: Connect to a listed Class 2, 24V DC transformer only. See list of approved transformers.

Step 4: Optionally, Variable Tivota™ may be dimmed using an MLV or ELV dimmer that is suitable for the power supply. Please contact our technical support staff for more information.

Basic Sub-Controller

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>CAT NO</th>
<th>MODES</th>
<th>OUTPUT POWER</th>
<th>PRIMARY VOLTAGE</th>
<th>DIMENSION</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMX Subcontroller</td>
<td>TPL-RGBW-180-24</td>
<td>Subcontroller only</td>
<td>5X(96-192)W</td>
<td>24V DC</td>
<td>2.85” W X 6.45” L X 1.5” H</td>
</tr>
</tbody>
</table>

- DMX512 RDM decoder, RDM function can provide the interface between DMX master and decoder. For example, DMX decoder’s address may be set from DMX master console.
- Multiple kinds of DMX in/out ports: RJ 45, XLR, normal screws.
- Total 5 PWM output channels, common anode. DMX channel quantity from 1CH~5CH programmable
- PWM output resolution ratio 8bit, 16bit settable.
- Output PWM frequency from 500HZ ~ 9K HZ settable.
- Output dimming curve gamma value from 0.1 ~ 9.9 settable.
- Programmable Decoding mode.

Safety and Warnings:
- Do not install with power applied to device.
- Do not expose to moisture.

Note: The Installation Instructions for your power supply includes DMX programming instructions.
There are many possible options for controlling Variable Tivotape™. See the specification Sheet for more information. The following wiring diagram is for reference only. Please refer to the Installation Instruction for the Power Supply you choose for detailed wiring instructions.
Install Transformer Enclosure
Step 1: Locate Transformer enclosure in a suitable indoor or outdoor location. Power supply enclosure is water-tight and may be installed in outdoor wet environments.

Step 2: Connect Transformer input to 120-277V AC line voltage.

Step 3: Connect each luminaire linear run to one on the 3 circuit connectors. Installer is responsible to select the right size wire for run length and total wattage for each circuit. Do not exceed 90 watts per circuit.

<table>
<thead>
<tr>
<th>TIVOTAPE™ PAD DESIGNATION</th>
<th>LEAD WIRE COLOR</th>
<th>SUB-CONTROLLER TERMINAL OR ADNM-DIN CONNECTOR WIRE COLOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>Green (+)</td>
<td>Black (+)</td>
</tr>
<tr>
<td>-</td>
<td>Red</td>
<td>Red</td>
</tr>
<tr>
<td>+</td>
<td>Blue (+)</td>
<td>Black (+)</td>
</tr>
<tr>
<td>-</td>
<td>Black</td>
<td>Green</td>
</tr>
</tbody>
</table>

DMX-512 Address Code Setting

This sub-controller has a total of 512 address codes. 1 represents the least significant byte (LSB) and 9 is most significant byte (MSB). The initial address code is the DMX signal received by Channel 1 of the decoder. Channel 2 will receive data on the initial address code + 1 and Channel 3 will receive data on the initial address code + 2. The initial address code is the sum of DIP switches 1-9 in the “On” position. The 10th switch is not used.

Move a switch up to turn it on and leave it in the down position to achieve a “0” value.

Value of each DIP Switch

<table>
<thead>
<tr>
<th>DIP</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>16</td>
</tr>
<tr>
<td>6</td>
<td>32</td>
</tr>
<tr>
<td>7</td>
<td>64</td>
</tr>
<tr>
<td>8</td>
<td>128</td>
</tr>
<tr>
<td>9</td>
<td>256</td>
</tr>
</tbody>
</table>

Example: Set to 38
Set the 2nd, 3rd and 6th switch to “1” and set the rest to “0”. The sum of the switches is 2+4+32 for an address of 38.

Connect RGB Controller to Sub-Controller
Step 1: Interconnect RGB controller (DMX512 signal) to Sub-Controller using CATS Cable with RJ45 connectors. Refer to the diagram for custom wiring applications. Be sure to maintain corect polarity if custom wiring is required.

Basic Programming Codes:
RED: 1 off, 2 through 9 on
BLUE: 1 and 2 off, 3 through 9 on
GREEN: 2 off, 1 and 3 through 9 on
WHITE: 3 off, 1, 2 and 4 through 9 on
DMX SIGNAL: 1 on, 2 through 9 off
Power Supply Wiring Diagram with 3 Channel DMX Sub-Controller

**TIVOTAPE™ VARIABLE INDOOR**
32’ Max Continuous Run Length

ADNM-90-1-4-24-VW
Outdoor (NEMA 3 Rated)
90W / 1 Circuit X 4A
Box Size: 6.00”W X 8.25”L X 4.50”D