1. SCOPE

This specification describes termination procedures of Cat. 6 Shielded Patch Panel with AMPTRAC application:

PN 1644042-1 (as shown) AMPTRAC PANEL Cat. 6 STP Black.
PN 1644042-2 AMPTRAC READY PANEL Cat. 6 STP Black.
PN 1644042-3 AMPTRAC READY PANEL Cat. 6 STP Grey.
PN 1711147-1 AMPTRAC PANEL Cat. 6 UTP Black.
PN 1711147-2 AMPTRAC READY PANEL Cat. 6 UTP Black.
PN 1711147-3 AMPTRAC READY PANEL Cat. 6 UTP Grey.
PN 1711148-X AMPTRAC UPGRADE KIT Universal.
PN 1644050-X INTERCHANGEABLE CASSETTE KIT Universal.

This specification also describes termination procedures of Flush Mount Patch Panels with AMPTRAC application (see point 7.3. on page 8 of 9):

PN 1711685-1 AMPTRAC READY SL PANEL Black.
PN 1711685-2 AMPTRAC READY SL PANEL Grey.

National and local earthing (grounding) bonding and EMC regulations and procedures shall be followed.

Cat. 6 System
Used for cables, with Ø 5-10mm, wire insulation range Ø 0.8-1.6mm, wire conductor range Ø 0.50-0.65mm for LAN System. For other specific cable refer to your local CommScope provider.
For further information you can see the appropriate customer drawing.

AMPTRAC System
For AMPTRAC Connectivity Management contact to your local CommScope provider.

2. PRODUCT FEATURES

Cover (for shielded version)
Cat. 6 System
AMPTRAC System (1711148-1 as shown)
SET
Metric screws
Tapping screws
Grounding clamps (shielded version)
Ties
Labels
3. LAYOUT LABELS PREPARATION FOR Cat. 6 SYSTEM

Choose EIA/TIA 568 type connection A or B and locate colour code label as picture indicates.

4. CABLE PREPARATION

<table>
<thead>
<tr>
<th>Cable type</th>
<th>PREPARATION</th>
<th>Steps</th>
</tr>
</thead>
</table>
| F/UTP      | ![Diagram](image) | 1. Strip cable jacket back 70-90 mm.  
2. Cut foil partially leaving at 10 mm and fold metal foil back over from the 10 mm.  
3. Wrap drain wire around the metal foil, a minimum of 360°, full length of drain wire is used, upon the metal foil to a length of at least 10 mm.  
4. Remove clear wrapping from twisted-pair wires. |

1. **Drain wire**  
2. **Metal foil**  
3. **Drain wire**  
4. **70-90 mm**
**F/FTP (Compact)**

1. Strip cable jacket back 100-110 mm.
2. Fold the metal braid back over jacket.
3. Trim metal foil leaving 50 mm.

**SF/UTP**

1. Strip cable jacket back 100-110 mm.
2. Fold metal braid back over jacket.
3. Trim metal foil leaving 50 mm.

**Note:** Do not cut the drain wire.
4. Remove clear wrapping from twisted-pair wires.
5. Wrap drain wire around the metal foil, a minimum of 360°, full length of drain wire is used, upon the metal foil to a length of at least 10 mm.
1. Strip cable jacket back 100-110 mm.
2. Fold metal braid back over jacketed.
3. Wrap drain wire around the metal foil, a minimum of 360°, full length of drain wire is used, upon the metal foil to a length of at least 10 mm. **Note: Do not cut drain wire.**
4. Trim metal foil leaving 50 mm.

**NOTE**
Be careful when cutting the cable jacket in order to avoid damaging the PiMF foils.

PiMF Compact (F/FTP): Under the cable jacket there is a foil screen instead of a metal braid. The cable preparation process is the same as that for PiMF cable but using the foil screen instead of the metal braid. **Important:** When folding back the foil screen, the non conductive surface has to be in contact with cable jacket and the conductive surface has to be visible.

<table>
<thead>
<tr>
<th>Cable type</th>
<th>Preparation</th>
<th>Steps</th>
</tr>
</thead>
</table>
| UTP        | ![Diagram](image) | 1. Strip cable jacket back 70-90 mm  
2. Remove clear wrapping from twisted-pair wires. |

**NOTE**
Remove dielectric X pair separator if exists, contact your sales representative if you have any doubt about cable preparation and/or compatibility.
5. TERMINATION OF SHIELDED SYSTEM

5.1. Fix the prepared cables in position with the cable ties.

5.2. Use CommScope 110 Impact tools PN 1375308-1, 1583608-1 (not shown) or 449526-000.
5.3. Arrange the pairs as colour code label indicates and punch them down. For a better performance the foil (if any) in each twisted pair has to arrive to the white block and untwist the cable only the necessary length.

![Image of cable arrangement](image1)

![Image of cable untwisting](image2)

**NOTE**

Keeping the individual foils close the block (as shown) is required for Class EA requirements.

The use of inappropriate tool can cause cable or connection damage.

![Image of cable clamp](image3)

5.4. Connect the cable shield with the cable clamp.

![Image of cable clamp installation](image4)

Assemble one of the included cable clamps according to the diameter of the cable used.
5.5. Cover mounting.

When using small diameter cables, snap the latch into the lower cover locking hole. When using standard diameter cables, snap the latch into the upper cover locking hole.

5.6. Ground clamp mounted on left or right side.

6. TERMINATION OF UNSHIELDED VERSION

6.1. Use the same procedure described on 5.1., 5.2. and 5.3.
7. AMPTRAC READY UPGRADE KIT

7.1. Remove the cover plate.
7.2. Locate the front sensor with the Interchangeable Cassette onto the Patch Panel and fix it with the snap fits.
7.3. Bolt the 6 screws (see table and pictures) into the panel to fix the front sensor.

<table>
<thead>
<tr>
<th>Patch Panel PN</th>
<th>Screws to use</th>
</tr>
</thead>
<tbody>
<tr>
<td>1644042-X</td>
<td>Metric screws</td>
</tr>
<tr>
<td>1711147-X</td>
<td>(see Picture 1)</td>
</tr>
<tr>
<td>1711685-X</td>
<td>Tapping screws</td>
</tr>
<tr>
<td></td>
<td>(see Picture 2)</td>
</tr>
</tbody>
</table>

Picture 1: Patch Panels 1644042-X and 1711147-X

Picture 2: Patch Panels 1711685-X
8. AMPTRAC ANALYZER I/O CABLE CONNECTION

The Interchangeable Cassette Kit may be either connected to a cable assembly using the rear AMPMODU type connector or the front AMPLIMITE HD-22 type connector.

9. AMPTRAC ANALYZER I/O CABLE

Contact your sales representative to provide your i/o cable assembly and/or if you need another type of connection.

10. CABLE MANAGEMENT BAR

CommScope strongly recommends to use the Cable Management Bar (PN 1711344-1), to keep AMPTRAC patchcords in correct position.