#### P/N 92243701 • Rev A • ECN 15-115 • 4/8/2015

Warranty: If this unit fails during the warranty period, contact til customer service to authorize return. Unit may be returned prepaid.



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Models IHD025PFNOPGxxx IHD100PFNOPGxxx IHD050PFNOPGxxx IHD100RFNOPGxxx IHD100VFNOPGxxx

INDOOR HIGH DENSITY BET

Installation Note

#### NOTE:

To ensure the proper fusing integrity to maintain the UL Listing, only use No 22 or 24 AWG incoming wire.

Use and Location Selection

Tii's IHD Series BETs are intended for indoor use only and should be located:

1. Inside a building or other suitable shelter.

2. Mounted on a suitable vertical surface that is firm and screw holding power is adequate.

3. Where easily accessible and where maintenance will not block a passageway.

4. Where there is no risk of severe moisture.

5. With adequate clearance from electric light fixtures, equipment and power circuits and where there is no risk of damage by moving machinery, hoists and doors etc.

6. With provisions for adequate space around the unit for cables and/or splices.

7. Near a suitable earth ground.

#### Installation

1. Align unit in desired location on a vertical mounting surface.

2. Affix unit securely with four #10 x  $\frac{3}{4}$ " wood screws or other hardware suitable for use on the mounting surface.

3. Connect a #6 AWG ground wire from the ground termination point on the BET to a suitable earth ground.

(See recommended grounding section below). 4. If the unit is being installed in a cascade configuration with other BET, connect a #6 AWG ground wire from the ground termination point on the unit to a ground point on an adjacent BET. Make sure that all other BET are correctly connected to ground per instruction three above. 5. All connections made to the IDC termination blocks must be of #22 AWG or #24 AWG. IHD BETs are equipped with #26 AWG fuse wires on the unprotected ("IN") side of the BET; the stub cable is part of the fuse link for BET equipped with stub cable, wiring to the equipment to be protected is done from the ("OUT") side of the BET.

# Cautions and Warnings

• Use all applicable safety equipment and practices for installation and operation, including company, local NEC and ANSI/NFPA 70.

• For proper operation, the unit must be grounded using a minimum 6 AWG wire.

• A minimum of 2 feet of 26 AWG input wire must be maintained to the 5 pin protector block as a fuse link. The central office cable must be physically larger than 24 AWG.

All wires must be solid conductor, no stranded wire, and the customer equipment wire must be 22 and 24 AWG.
To reduce the risk of shock do not install product during lightning storms. Do not contact exposed wires of termination points.

• The BET will accept five pin protector modules. Protector modules must be listed for primary protection per UL497 in order to maintain the UL listing of the BET. The BET and Protector Modules shall be installed and connected to earth ground in accordance with the instructions contained herein and the applicable requirements of the National Electric Code, ANSI/NFPA-70, Article 800 and any applicable local codes.

• Recommended tightening torque for all grounding hardware is 40 inch-pounds.

• A front cover is required when the product is not installed in a telecom closet.

# **Recommended Grounding**

Utilize the best grounding available. Connecting to a poor ground will reduce the effectiveness of the protection device. Never use excess wire that will result in looping, gathering, or winding of the ground wire. Use the shortest ground wire that is practical. If you are uncertain of proper grounding for your BET, consult a licensed electrician.

# Additional Required Materials

- Screwdriver that matches the mounting hardware
- Bond Clamp
- #6 ground wire
- Listed 5 pin protector (unless factory installed)
- Level (for mounting)

# Installation

#### Grounding

1. Ground the terminal using approved practices by attaching a minimum #6 AWG ground wire, (not supplied), to any of the grounding points.

Connect ground to Telco approved ground/shield.
 For stacking, use #6 AWG ground wire to attach

ground bars from adjacent units.

4. All ground wire runs should be made as short and straight as possible.

### **Tooless IDC Connectors**

IHD Series Tooless IDC Connectors are used to join Twisted Pair Telecom Cables. They consist of two rows of contacts, the back row for permanent connection, the front row for jumper wires. Each wire pair provides a permanent link between the equipment and jumper side, allowing 'listen' access via the test probe ports.

#### Termination

1. Straighten the last 1-2 inches of wire. Trim tips evenly.

 Pinch, then pull back the appropriate IDC Rocker.
 Insert wire into ports. Note ports are identified "T" (for Tip) and "R" (for Ring). Wire should insert approximately 3/8" before bottoming out.
 Holding wire into IDC Rocker, push down rocker

until locking mechanism "locks" into place. 5. Tug gently on each individual wire to verify connection. If connection was not made, remove wire

connection. If connection was not made, remove wire pair, straighten, trim evenly, and reconnect.

#### Disconnection

1. Pinch then pull back the appropriate IDC Rocker.

2. Remove wire from IDC Rocker.

# (Note: Scored area of wire must be trimmed away prior to being reconnected.)

#### Testing

1. Place the test probe into the test port of the 65-10 connector.

2. Attach test equipment leads to test clip leads and perform test.

3. When testing is completed, remove the test clip from the connector test port.