

Installation Instructions

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Mini Rapid Distribution Terminal (RDT) With External Spool

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1 PRODUCT DESCRIPTION

The Mini RDT, shown in Figure 1, is a wall-mount terminal used to deploy and manage fiber optic networks in a small to mid-sized multiple dwelling unit (MDU) or multiple tenant unit (MTU). Installation can be completed by one person. The Mini RDT contains an internal fiber spool loaded with a 12-fiber Indoor/Outdoor MPO cable and an external spool holding an extension of the cable beyond what the inner spool can hold.



Figure 1. Mini RDT Components and Optional Inner Cover

Within the RDT, the cable is pre-terminated to an adapter pack with SC adapters used to connect patch cord drops to subscribers. The Mini RDT is available with an inner cover. If the unit being installed has an inner cover, there is no need to remove it during installation. The inner cover is only removed for cleaning when desired.

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2 DETERMINING WHERE TO MOUNT THE MINI-RDT

Danger: Infrared radiation is invisible and can seriously damage the retina of the eye. Do not look into the ends of any optical fiber. Do not look directly into the optical adapters of the adapter packs. Exposure to invisible laser radiation may result. A protective cap or hood MUST be immediately placed over any radiating adapter or optical fiber connector to avoid the potential of dangerous amounts of radiation exposure. This practice also prevents dirt particles from entering the connector and adapter.

The mini-RDT should be mounted in the MDU or MTU near the entry to the conduit or duct that the cable will be routed through to the local hub. Figure 2 shows the mini-RDT dimensions.



Note: The mini-RDT should be merely positioned, not mounted, at this time.



Figure 2. Mini-RDT dimensions

3 UNPACKING THE MINI-RDT AND PAYING OUT THE CABLE



Caution: Cable is not designed for outdoor direct burial or outdoor aerial applications. Do not pull fiber perpendicular from RDT. Pull fiber (Do not exceed 40 lbs. of force.) parallel with wall and route to equipment.

- 1. Remove the foam spool from the shipping box.
- 2. Remove the shrink wrap from the foam spool.
- **Note:** This procedure assumes use of a pulling swivel and pulling cord to pull the connector through to the termination point.
- 3. Insert the leading connector pulling eye (installed in the factory) into the pulling swivel mesh as shown in Figure. (If only one connector is present, insert it alone in the mesh.)



Figure 3. Inserting Leading Connector Pulling Eye(s) into Pulling Swivel Mesh

- **Note:** Do not pull on the connector directly. Use either the pulling swivel mesh as shown or wrap the lead end of the cable around your hand as described in Figure 7 on Page 5.
- 4. Wrap several layers of vinyl tape around the pulling swivel and trailing connector (if any) as shown in Figure 4.



Figure 4. Vinyl Tape and Conduit

5. Tie a pulling cord to the swivel and guide the pulling cord into the conduit or duct as shown in Figure 4 and Figure 5.



Figure 5. Routing Pulling Cord Through Conduit or Duct

6. Insert a broomstick, pipe, or etc., into the center hole in the foam spool to serve as an axle when unwinding the spool, as shown in Figure 6.



Figure 6. Using a Broomstick or Pipe for an Axle

7. At the conduit exit location, remove the tape, mesh, and pulling swivel from the leading connector pulling eye(s), and use the hand-wrap method shown in Figure 7 to pull the cable to the point where the cable will be terminated.





Figure 7. Hand-Wrap Method

4 MOUNTING THE MINI-RDT

- 1. Remove the mini-RDT from the foam spool as shown in Figure 8.
- **Note:** To remove the mini-RDT, you must first remove the foam cover (shown in Figure 8 directly behind the red arrow) and must then unwind the loop of cable within the lead loop holder next to the foam cover.
- 2. Use the mini-RDT as a template to mark the mounting screw locations on the wall selected for the installation location, as shown in Figure 9, then install the screws in the order described in the figure.
- Note: If necessary, reinforce the mounting surface with a 3/4" plywood panel as shown in Figure 9.



Warning: Wet conditions increase the potential for receiving an electrical shock when installing or using electrically-powered equipment. To prevent electrical shock, never install or use electrical equipment in a wet location or during a lightning storm.

Figure 9. Mounting the Mini-RDT



3. Remove the tape from the foam spool and cut the cable tie securing MPO to back of the mini-RDT, as shown in Figure 10.

Figure 10. Removing Tape



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LOOSEN SPOOL LOCK SCREW

4. Loosen the fiber spool, and lock and pull the MPO connector out, as shown in Figure 11.

Figure 11. Loosening Fiber Spool

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5. Unspool the MPO Cable and pay out any additional length of cable required at the termination point.

Note: After installing pulling eye, slide MPO between entrance foam at the bottom or left side of the RDT. Pull MPO cable with pulling eye to the termination location. RDT rotates clockwise as cable is payed out. See Figure 12.



Figure 12. Paying Out the MPO Cable

6. At the termination point, remove the pulling eye as shown in Figure 13, and connect the cable connector to the termination point adapter.







7. Position the spool and lock it in place as shown in Figure 14.

Figure 14. Locking the Spool

5 INSTALLING PATCH CORDS

- 1. Rotate the fiber spool so the SC connectors are positioned facing down. Slide spool lock into spool and tighten screw. Inspect and clean MPO connector per ADCP-96-150 instructions before terminating at the equipment.
- 2. Terminate the patchcords as shown in Figure 15.
- Remove dust cap from selected SC adapter and clean. The adapter pack is removable for connector cleaning by releasing tabs located at each end of the adapter pack retainer. Remove ferrule dust cap from one of the patch cord connectors and then clean connector as specified in the Optical Fiber Connector Wet and Dry Cleaning Instructions (ADCP-90-159) or by locally approved procedures.
- 4. Label the circuits. Record circuit information on label located inside cover (Figure 16).



Figure 15. Terminating the Patchcords



Figure 16. Circuit Labels

6 PRODUCT SUPPORT

http://www.commscope.com/SupportCenter