

# Charles Fiber Storage Enclosure CFIT-FC24D0-003 and CFIT-FC24D0-RJ

# **General Description and Installation**

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Figure 1 Front View of the CFIT

#### 1. GENERAL INTRODUCTION

#### 1.1. Document Purpose

This document provides general information for the CFIT-FC24D0-003 and CFIT-FC24D0-RJ fiber storage enclosures. Figure 1 shows the front view of the enclosure.

-NOTE-

Hereafter, the Charles CFIT-FC24D0-003 and CFIT-FC24D0-RJ will be referred to as the "CFIT."

# 1.2. Product Purpose

The CFIT consists of an enclosure with 24 LC/UPC adapter ports. The FC24D0-RJ model also includes four RJ45 ports. Fiber cables and CAT-5 cables are routed through grommets on the bottom of the CFIT.

#### 1.3. Product Mounting and Location

The CFIT is intended for wall or pole mounting. CFIT dimensions are shown in Figure 2. CFIT components are shown in Figure 3.



# 2. SAFETY PRECAUTIONS



Risk of serious eye damage! Never look into the end of a fiber optic line or use a magnifier in the presence of laser light or radiation. Exercise caution when installing, testing or maintaining live circuits. If eyes are exposed to laser light or radiation occurs, immediately seek treatment by a medical professional.



Cable and fiber cleaning solvents may contain hazardous or harmful materials. Maintain good housekeeping practices and refer to the SDS when working with cleaning solvents or similar products.

Shards and cleaved glass fibers are very sharp and can easily pierce the skin. Use tweezers to pick up cut glass fibers and place them in a specifically designated container. Do not consume any food products near the cable installation site.

Corrugated metal or armor in feed cables is very sharp when cut or exposed. Exercise extreme caution to prevent personal injury. Use protective work gloves when handling armored cable.



Perform all bonding and grounding prior to making any electrical and communications connections.

Be careful not to damage any buried cables or service wires while digging either to expose cables or to prepare a hole or trench, or while driving stakes. Buffer tubes and fibers are sensitive to excessive bending, pulling, and crushing forces. To avoid kinking of buffer tubes and fiber damage or breakage, exercise great care when working with fiber, and do not exceed or violate minimum bend radius requirements for fibers, buffer tubes, and cables.

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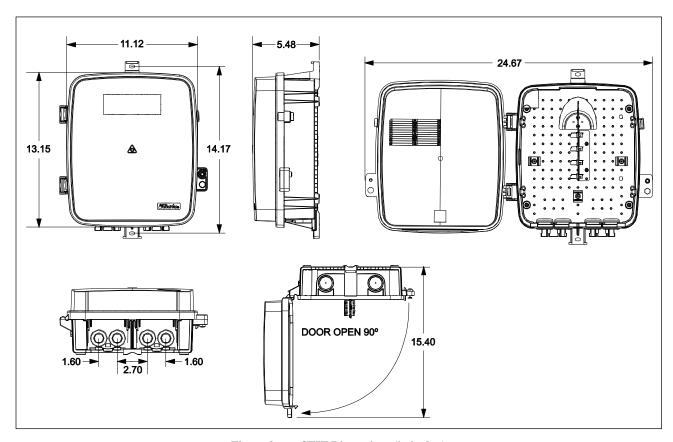


Figure 2 CFIT Dimensions (in inches)

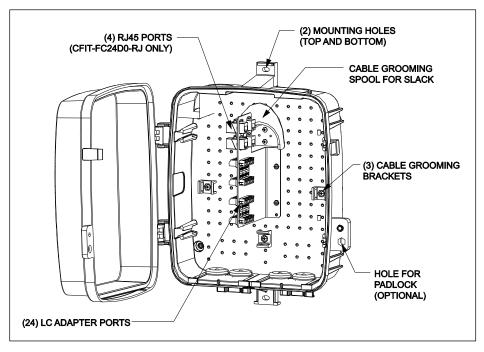


Figure 3 CFIT Components

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# 3. INSTALLATION

# 3.1. Inspecting the Product

The CFIT is shipped in a carton. Unpack the unit, and dispose of the packaging material.

#### -INSPECTION NOTE-

Visually inspect the unit for damages prior to installation. If the equipment was damaged in transit, immediately report the extent of the damage to the transportation company.

## 3.2. Following and Using Safety Precautions

Read the following site and safety tips, cautions, and warnings, then proceed with the paragraphs that follow.

- Read all instructions, warnings and cautions on the equipment and in the documentation shipped with the product.
- Do not place this product on weak or unstable surfaces which may allow the product to fall, resulting in potentially serious damage(s) to persons or product.
- Only authorized trained personnel shall install the CFIT.

#### 3.3. Obtaining Tools and Equipment

Obtain the following recommended or needed items for installing the CFIT.

- Sufficient length and quantities of fiber cable (or pigtails)
- Cable, tube, wire, and fiber cleaning materials
- Protective and/or insulated work gloves
- Safety glasses
- Marking utensil
- #6 ground wire or rod and earth ground materials
- Any exterior cable strain relief, per company practice
- Phillips screwdriver
- Assorted cable ties, clips, or fasteners (optional)

## 3.4. Mounting the CFIT

Mount the CFIT on a wall or pole. Refer to Figure 2 for mounting dimensions for positioning mounting hardware. Charles recommends using a minimum SAE Grade 2, 1/4" diameter, corrosion-resistant bolts, washers and nuts for all mounting applications. Bolts need to be of sufficient length depending on the wall or pole used. A minimum of 3/4" thick plywood or similar surface is required for wall mounting. Ensure that the unit is level.

#### 3.5. Fiber Routing

- 1. To route fiber through the bottom panel, cut slits in the outer pair of grommets.
- 2. To route fiber through the top panel, open the knockouts by piercing the outer edge of the knockout with a pocketknife or similar tool. Make several cuts along the knockout circumference, perforating the knockout, until the knockout can be pushed out of the housing. Fit a grommet into this hole, and cut a slit in the grommet.
- 3. Insert connectorized buffer tubes through the grommets.
- 4. Route buffer tubes around the inside of the CFIT, using the included Velcro strips to groom the cable at each of the cable grooming brackets.
- Insert the connectors into the LC adapters (Figure 4). Insert feed fiber into the left side and drop fiber into the right side.

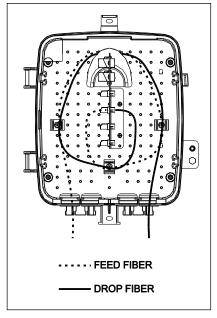


Figure 4 Fiber Routing

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# 3.6. CAT-5 Cable Routing (CFIT-FC24D0-RJ Only)

- 1. To route CAT-5 cable into the CFIT, cut slits in the inner pair of grommets.
- 2. Insert connectorized CAT-5 cable through the grommets.
- Route cable around the inside of the CFIT, using the included Velcro strips to groom the cable at each of the cable grooming brackets.
- 4. Insert the connectors into the RJ45 adapters (Figure 4). Insert feed fiber into the left side and drop fiber into the right side.

#### 3.7. Securing the CFIT

The CFIT has holes in the latch that are intended for an optional, customer supplied padlock.

#### 4. TECHNICAL ASSISTANCE AND REPAIR SERVICE

For questions on product repair or if technical assistance is required, contact Charles Technical Support.

847-806-8500

techserv@charlesindustries.com (email)

http://www.charlesindustries.com/techserv.htm

#### 5. WARRANTY & CUSTOMER SERVICE

Charles Industries LLC offers a one-year warranty on the CFIT product. The Charles warranty is limited to the operation of the CFIT hardware as described in this documentation and does not cover equipment which may be integrated by a third party. The terms and conditions applicable to any specific sale of product shall be defined in the resulting sales contract. For questions on warranty or other customer service assistance, contact your Charles Customer Service Representative.

847-806-6300

mktserv@charlesindustries.com (email)

http://www.charlesindustries.com/main/telecom\_sales\_support.htm

#### 6. SPECIFICATIONS

Physical			
Dimensions and Weight	13"Hx11"Wx6"D; Approx. 4.1 lbs. as shipped		
Materials	Plastic enclosure		
Color	Gray		
Environmental			
Operating Temp Range, Inside Enclosure	-40° to +149°F, -40° to 65°C		
Humidity	0 to 95% (non-condensing)		

Table 1 CFIT Specifications

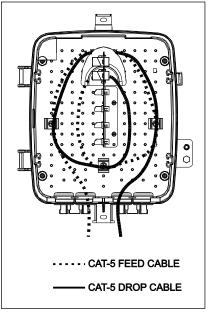


Figure 5 CAT-5 Cable Routing

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