

FNet Repeater

Installation & Operator's Instruction Manual



CTB Inc. Warranty

CTB Inc. warrants each new Chore-Tronics® product manufactured by it to be free from defects in material or workmanship for one year from and after the date of initial installation by or for the original purchaser. If such a defect is found by the Manufacturer to exist within the one-year period, the Manufacturer will, at its option, (a) repair or replace such product free of charge, F.O.B. the factory of manufacture, or (b) refund to the original purchaser the original purchase price, in lieu of such repair or replacement. Labor costs associated with the replacement or repair of the product are not covered by the Manufacturer.

Conditions and Limitations

1. The product must be installed by and operated in accordance with the instructions published by the **Manufacturer or Warranty will be void.**
2. Warranty is void if **all components** of the system are not original equipment supplied by the **Manufacturer.**
3. This product must be purchased from and installed by an authorized distributor or certified representative thereof or the Warranty will be void.
4. Malfunctions or failure resulting from misuse, abuse, negligence, alteration, accident, or lack of proper maintenance shall not be considered defects under the Warranty.
5. This Warranty applies only to systems for the care of poultry and livestock. Other applications in industry or commerce are not covered by this Warranty.

The **Manufacturer** shall not be liable for any **Consequential or Special Damage** which any purchaser may suffer or claim to suffer as a result of any defect in the product. **“Consequential” or “Special Damages” as used herein include, but are not limited to, lost or damaged products or goods, costs of transportation, lost sales, lost orders, lost income, increased overhead, labor and incidental costs and operational inefficiencies.**

THIS WARRANTY CONSTITUTES THE MANUFACTURER’S ENTIRE AND SOLE WARRANTY AND THIS MANUFACTURER EXPRESSLY DISCLAIMS ANY AND ALL OTHER WARRANTIES, INCLUDING, BUT NOT LIMITED TO, EXPRESS AND IMPLIED WARRANTIES AS TO MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSES SOLD AND DESCRIPTION OR QUALITY OF THE PRODUCT FURNISHED HEREUNDER.

Chore-Tronics® Distributors are not authorized to modify or extend the terms and conditions of this Warranty in any manner or to offer or grant any other warranties for Chore-Tronics® products in addition to those terms expressly stated above. An officer of CTB, Inc. must authorize any exceptions to this Warranty in writing. The Manufacturer reserves the right to change models and specifications at any time without notice or obligation to improve previous models.

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Thank You

The employees of CTB Inc. would like to thank your for your recent Chore-Tronics® purchase. If a problem should arise, your Chore-Tronics® distributor can supply the necessary information to help you.

General

Support Information

The Chore-Tronics® FNET Repeater box can be used to increase the total number of controls on a C-Central network, increase the maximum distance of the C-Central network (signal boost), or to properly wire a C-Central network that has been wired as a "T" network instead of string. Using this equipment for any other purpose or in a way not within the operating recommendations specified in this manual will void the warranty and may cause personal injury. This manual is designed to provide comprehensive planning, installation, safety, operation, and parts listing information. The Table of Contents provides a convenient overview of the information in this manual. The Table of Contents also specifies which pages contain information for the sales personnel, installer, and consumer (end user).

Safety Information

Caution, Warning and Danger Decals have been placed on the equipment to warn of potentially dangerous situations. Care should be taken to keep this information intact and easy to read at all times. Replace missing or damaged safety decals immediately.

Using the equipment for purposes other than specified in this manual may cause personal injury and/or damage to the equipment.

Follow Safety Instructions

Carefully read all safety messages in this manual and on your equipment safety signs. Follow recommended precautions and safe operating practices.

Keep safety signs in good condition. Replace missing or damaged safety signs.

Decal Descriptions

DANGER: Electrical Hazard



Disconnect electrical power before inspecting or servicing equipment unless maintenance instructions specifically state otherwise.

Ground all electrical equipment for safety.

All electrical wiring must be done by a qualified electrician in accordance with local and national electric codes.

Ground all non-current carrying metal parts to guard against electrical shock.

With the exception of motor overload protection, electrical disconnects and over current protection are not supplied with the equipment.

Introduction to Control

The FNET Repeater Box can be used to increase the total number of controls on a C-Central network, increase the maximum distance of the C-Central network (signal boost), or to properly wire a C-Central network that has been wired as a "T" network instead of string (See Figure 1).

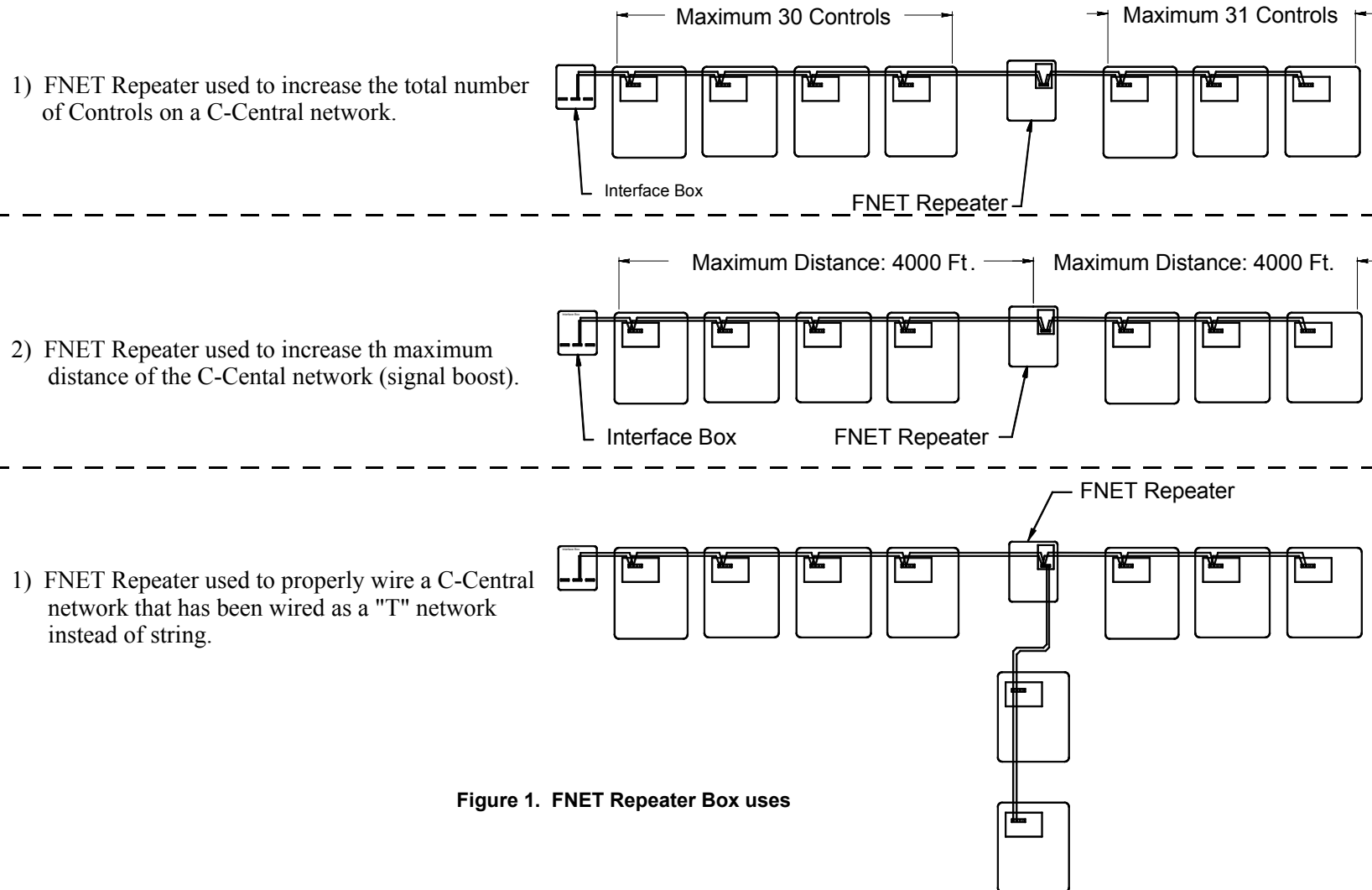
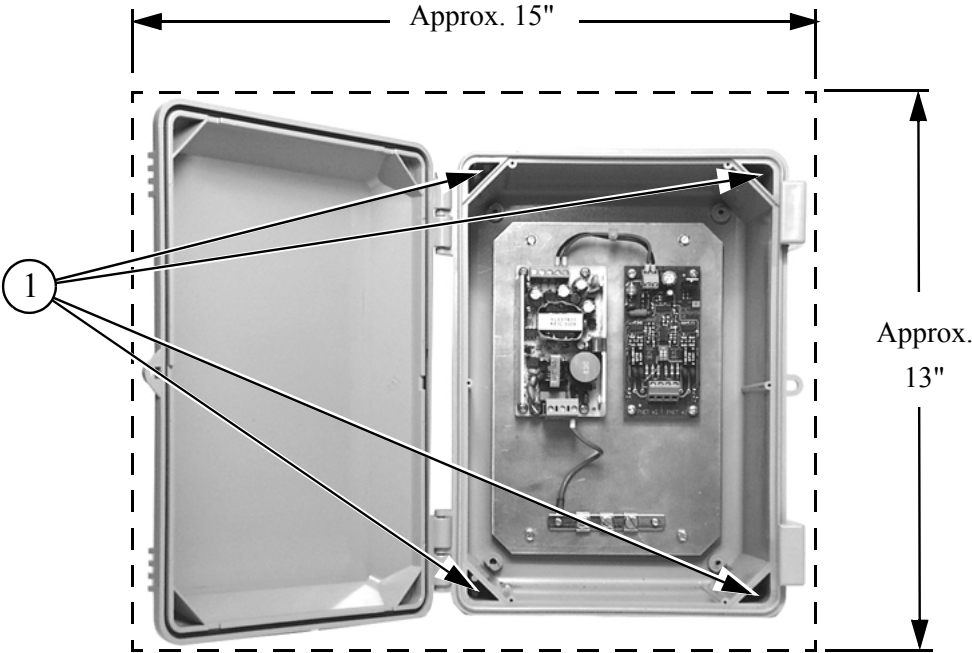


Figure 1. FNET Repeater Box uses

Mounting the Control

The space required to mount the box, so that the lid can be opened, is approximately 13" x 15". This dimension is allowing extra room for the lid to open. The box should be mounted level on a solid backing using the mounting holes provided (See Figure 2).



Item	Description
1	Mounting Holes

Figure 2. Mounting

Wiring the Control

When wiring the FNET Repeater Box it is recommended that the 240 Vac power supply be brought on the lower left side of the box, and the low voltage FNET twisted pair wires be brought in on the lower right side of the box (See **Figure 3**). The Ground Rail, is only to be used to connect the FNET Repeater box to Earth Ground. It is recommended that a ground rod be located no more than 8-10' away from the box. The FNET Repeater box should be connected to ground using a 12 gauge wire or larger. As always, check the local electric code for additional requirements.

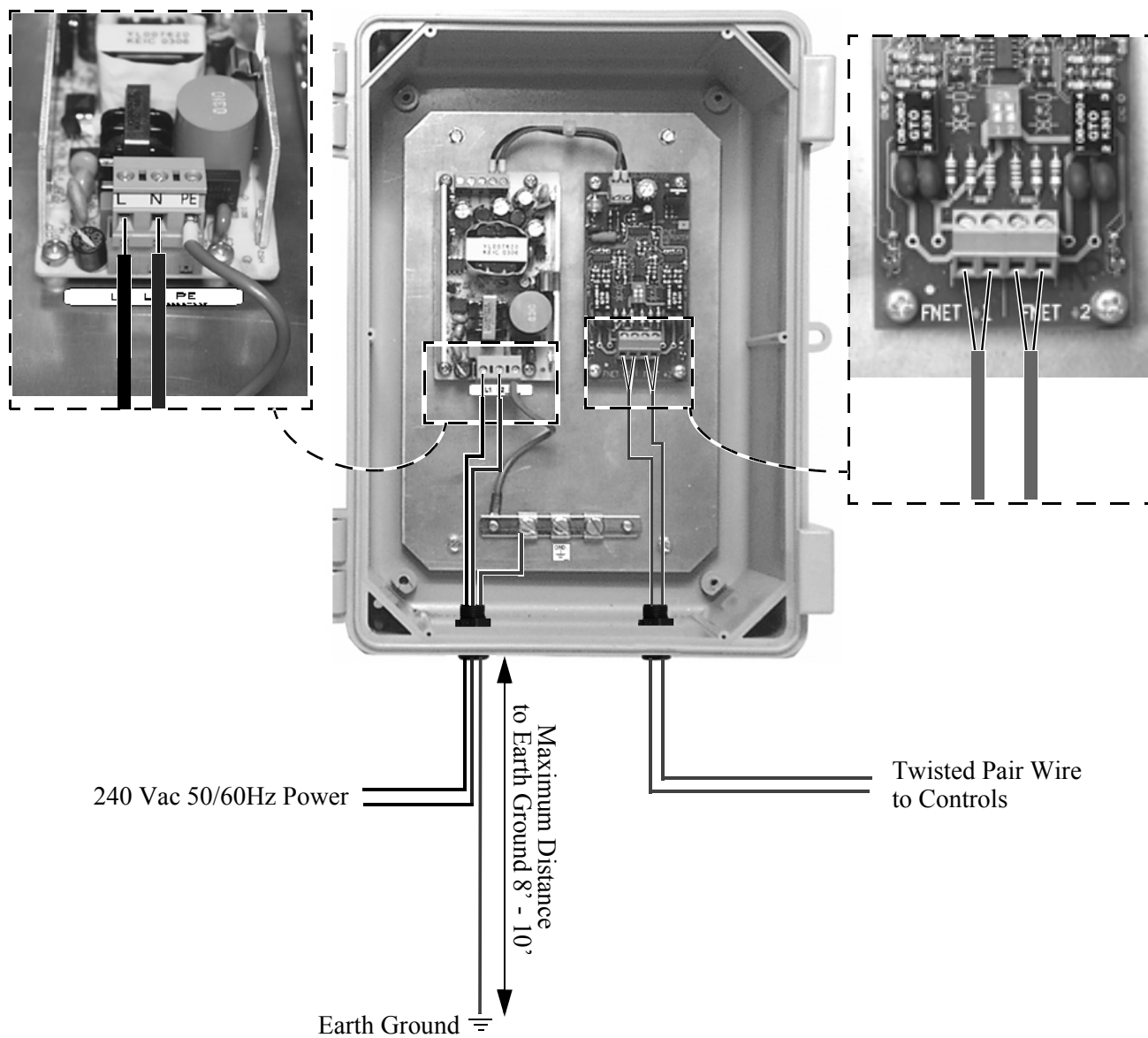


Figure 3. Wiring

Uses for Control

Using the FNET Repeater box to add more than 31 Controls to the network

If more than 31 controls need to be connected to the C-Central network, then the repeater box should be placed in the network after control #30 (See Figure 4). The twisted pair wire coming from control #30 to the FNET Repeater box should be connected to the terminals labeled FNET1 and DIP switch #1 should be placed in the ON position. A second twisted pair should then be connected to the terminals labeled FNET2 and DIP switch #2 should be in the ON position. The second twisted pair then continues on to control #31 and greater (*maximum 61*).

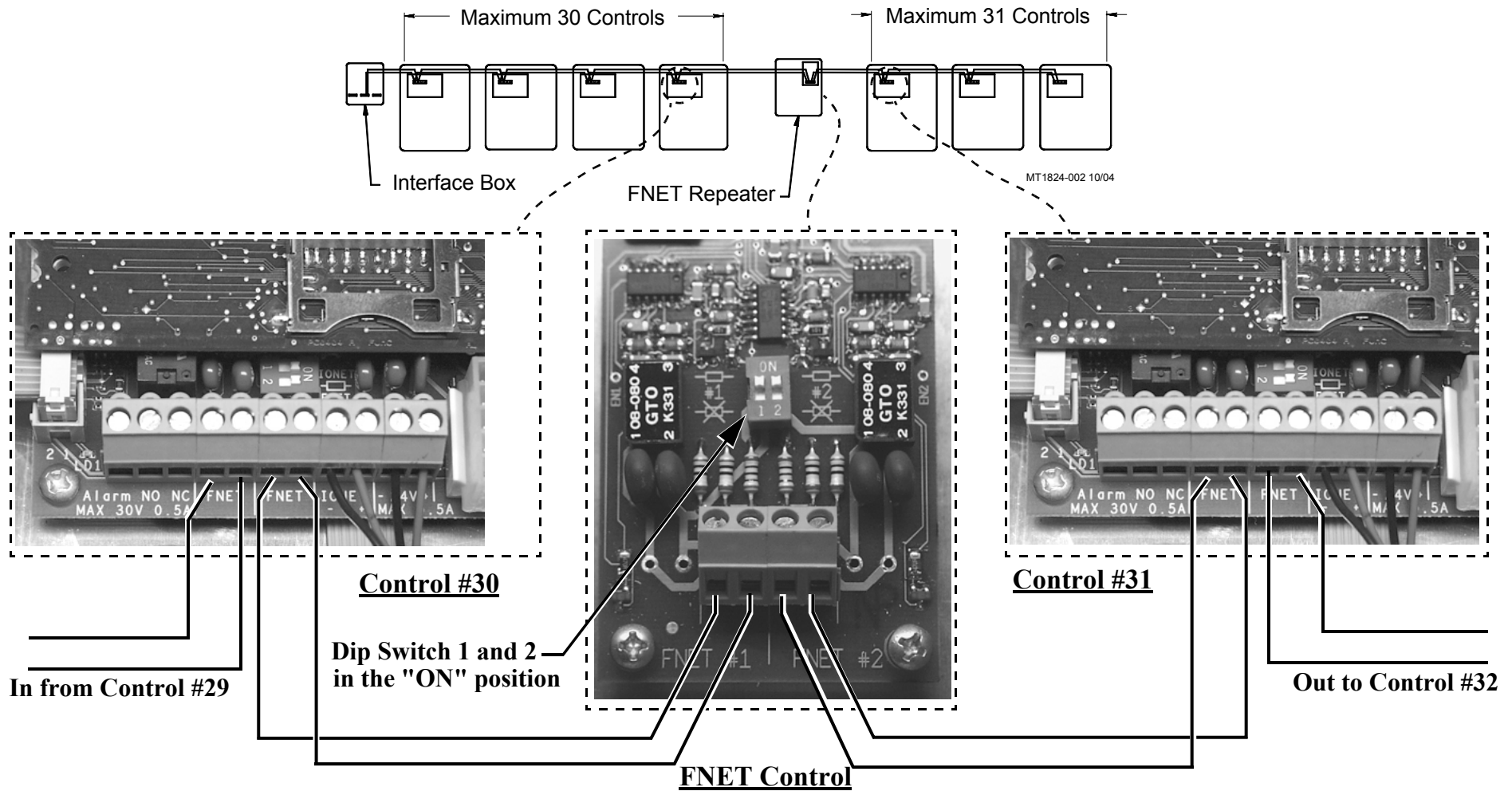


Figure 4. Adding more than 30 Controls

Using the FNET Repeater box to increase the maximum distance of the network

If it is desired to have a twisted pair network length between 4000 ft. and 8000 ft., then the FNET repeater box should be placed at the half way point of the network (See Figure 5). The twisted pair coming from the first half of the network to the FNET Repeater box should be connected to the terminals labeled FNET1 and DIP switch #1 should be in the ON position. The second half of the network should then continue with a second twisted pair wire connected to the terminals labeled FNET2 and DIP switch #2 should be in the ON position. The twisted pair then continues to the controls on the second half of the network.

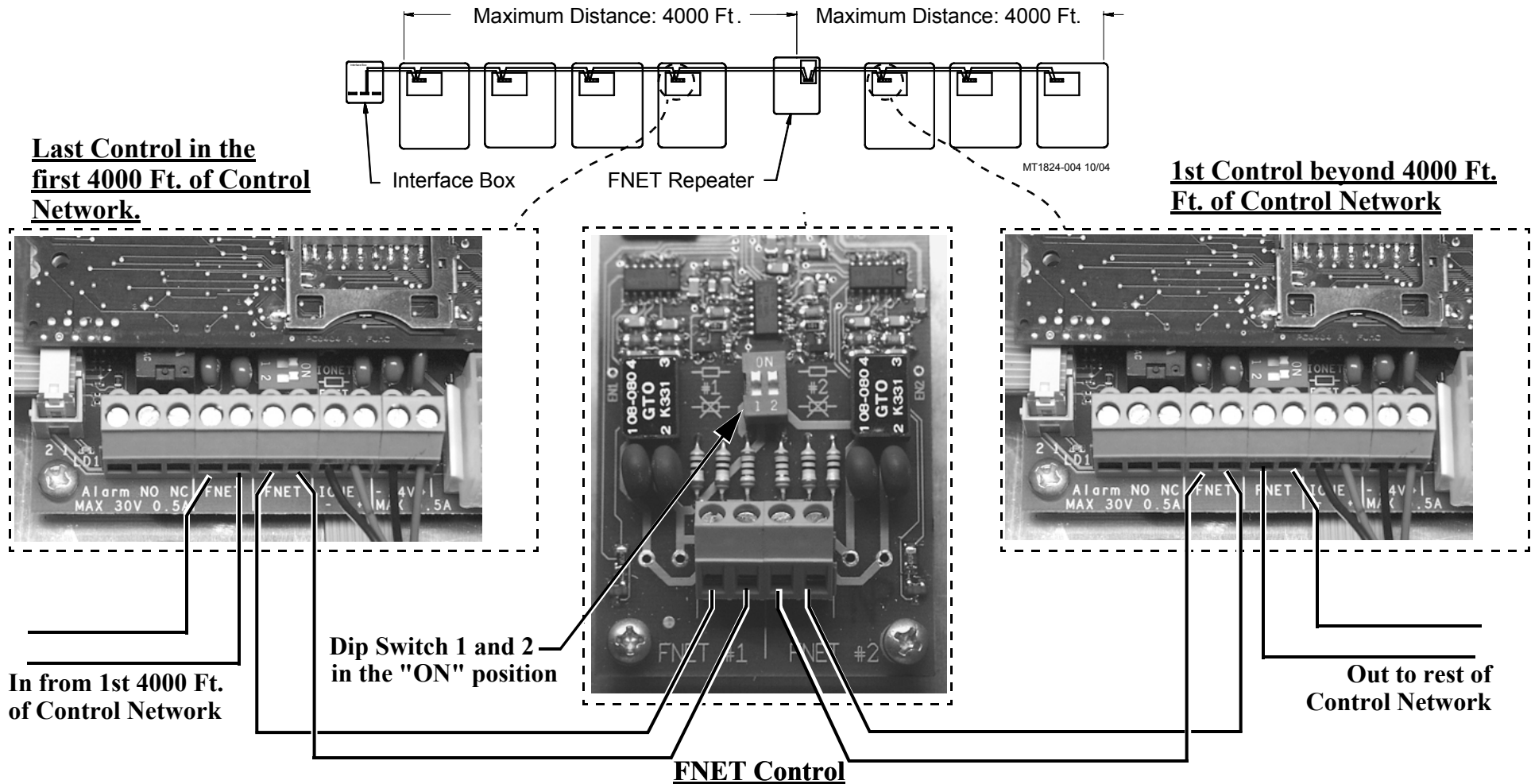


Figure 4. Adding more than 30 Controls

Using the FNET Repeater box to bring a branch ("T") into the network.

If a branch or "T" network needs to be run instead of a string network, then the FNET Repeater box should be placed at the point where the branch enters the remaining string network (See Figure 5). The in and out twisted pair for the string portion of the network should be connected to the FNET Repeater box at the terminals labeled FNET1 and DIP switch #1 should be in the OFF position. The twisted pair coming from the branch network should be connected to the FNET repeater box at the terminals labeled FNET2 and DIP switch #2 should be in the ON position.

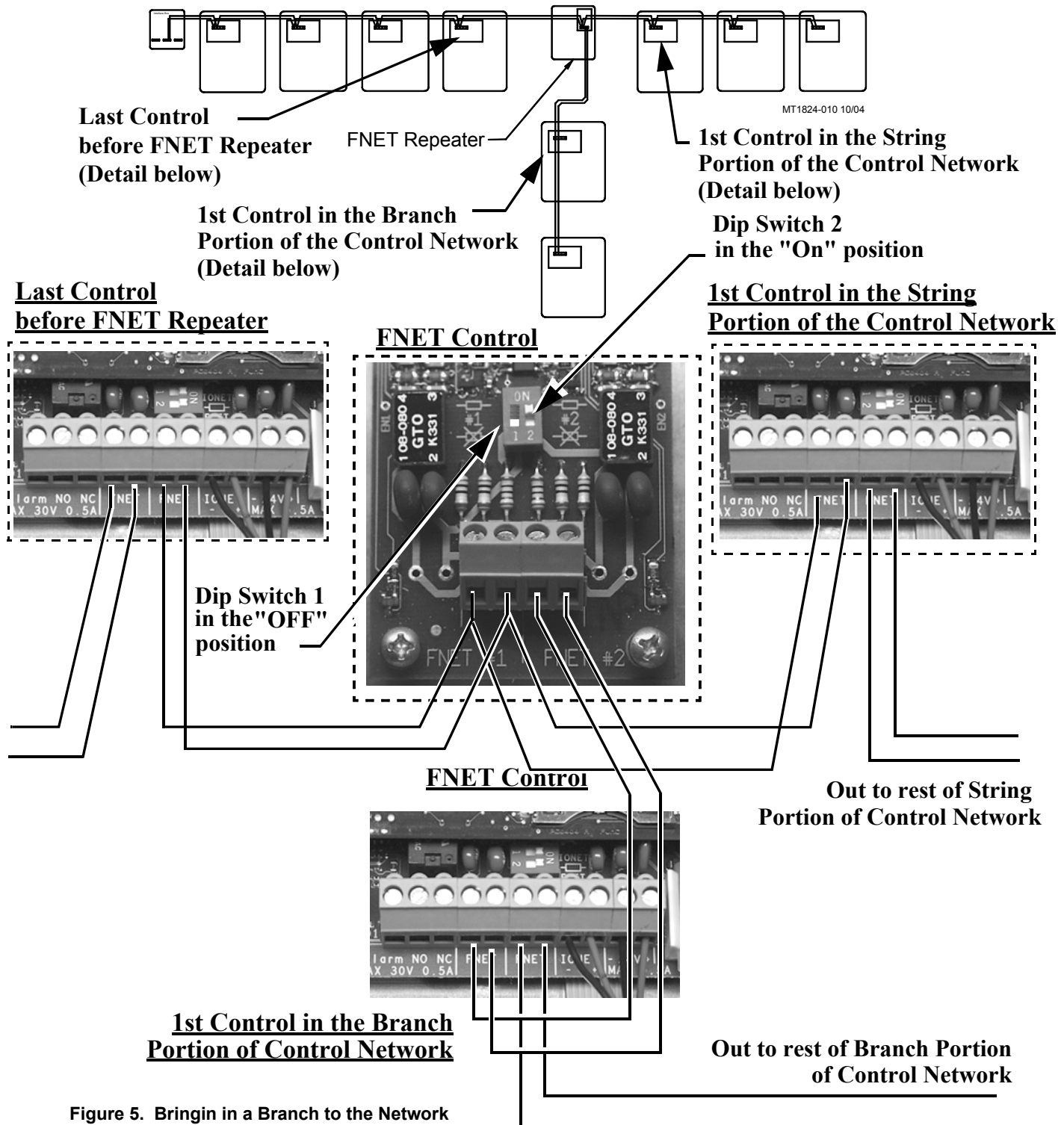


Figure 5. Bringin a Branch to the Network

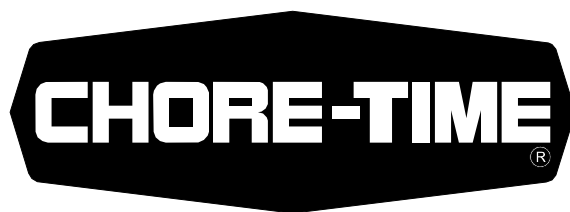
Part Numbers for 49369 FNET Repeater Control



Item	Description	Part No.
1	Front FNET Repeater Decal	2529-835
2	FNET Repeater Bottom Plate	49371
3	Body, Enclosure	30860-3
4	Lid, Enclosure	30859-2
5	Hinge Pivot	30863
6	Hinge Latch	30862
7	FNET Repeater Board	49370
8	SRS 6-4-01 Board Spacer (Behind Board)	48742
9	3.15" Grounding Rail	43384-2
10	25W Power Supply	48861

Figure 6. Part Numbers

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Revisions to this Manual

Page No.	Description of Change
	New Book

Contact your nearby Chore-Tronics[®] distributor or representative for additional parts and information.

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