

LMR8TT
Mini 10BASE-T
Hub/ Repeater



LMR8TT Ethernet Mini Hub/Repeater Installation Guide

The Lantronix LMR8TT is a 10BASE-T Mini hub that provides wiring connections for up to eight unshielded twisted pair (UTP) ports. An uplink port is provided for cascading two hubs.

The LMR8TT constantly monitors each port for signal quality and will automatically disconnect a device producing noise or excessive collisions. The device will automatically be reconnected when the error condition has cleared.

Data packets that exceed the maximum legal length for IEEE 802.3 Ethernet packets are automatically truncated. This prevents a device from blocking the network by transmitting a continuous data stream or extra long packet. The LMR8TT retimes and restores full amplitude wave forms for each retransmitted packet. A full length preamble is also generated ensuring packet integrity across the network.

Compact, light and robust, the LMR8TT provides the ideal solution for small and medium 10BASE-T LAN environments.

Features

- ▼ The LMR8TT is a cost-effective unmanaged repeater that allows the interconnection of 10BASE-T segments.
- ▼ The LMR8TT provides an additional UTP uplink port to enable LMR8TT hubs to be cascaded together using a standard 'straight' cable.
- ▼ The LMR8TT accommodates cascaded bus or daisy-chain topologies. Up to 98 ports can be easily daisy-chained per Ethernet segment
- ▼ The LMR8TT includes preamble regeneration, signal retiming and restoration, extension of fragmented packets and jabber function for automatic partitioning.
- ▼ Power, collision, activity LEDs and individual port link LEDs aid network diagnosis and management
- ▼ The LMR8TT complies with IEEE 802.3 10BASE-T twisted pair standards.
- ▼ The LMR8TT comes with a 5 year warranty.

Cable Requirements

The LMR8TT is for use with standard EIA/TIA category 3, 4, or 5 10BASE-T cable with an RJ45 connector.

Power Requirements

The LMR8TT comes with a 5VAC external power adapter with a frequency range of 47Hz to 63Hz.

Installation

Connecting a 10BASE-T Device

1. Verify that the straight-through cable distance between the LMR8TT and the device is not greater than 100 meters, including all patch cables and cross connect wires.
2. Connect one end of the straight-through cable to the RJ45 connector on the LMR8TT and the other end of the cable to the station.

Cascading the LMR8TT

1. A straight-through cable may be used to interconnect two LMR8TTs as long as the cable distance between the two LMR8TT repeaters is not be greater than 100 meters.
2. The LMR8TT may be interconnected as long as the path between any two network stations does not exceed four repeaters and five cable segments. The diagram below demonstrates two cascaded LMR8TTs.

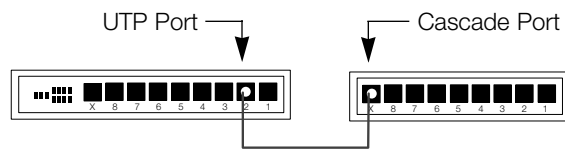


Fig. 1.1 LMR8TTs in cascade configuration.

Modular Jack Pinout			
Pin	Signal	Pin	Signal
1	TD+	5	No Connection
2	TD-	6	RD-
3	RD+	7	No Connection
4	No Connection	8	No Connection

LED Explanation

The LMR8TT has 10 LEDs that are visible from the front of the unit. The following chart explains their meanings.

LED Color	LED Name	Meaning When Lit
Green	Power	Lit solidly when LMR8TT is receiving power.
Yellow	Collision	Lit when a collision occurs
Green	Activity/Link	Lit when normal data packets are received or when link-integrity pulse is detected

Agency Approvals

FCC Class A, TÜV, UL, CSA, CE

Warranty Information

The LMR8TT comes with a limited 5-year warranty. If you experience problems with your unit, check our website (www.lantronix.com) or call Lantronix for assistance.

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WARNING!

This device complies with part 15 of the FCC rules. Operation is subject to the following conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including that which may cause undesired operation. Operation of this equipment in a residential area is likely to cause interference in which case the user, at his or her own expense, will be required to take whatever measures may be required to correct the interference.

Note: The RJ45 port is not for telephone use.

CAUTION:

Not for installation in air ducts or plenums or other environmental air handling spaces. Changes or modifications to this device not explicitly approved by Lantronix will void the user's authority to operate this device.

Declaration of Conformity
(according to ISO/IEC Guide 22 and EN 45014)

Manufacturer's Name: Lantronix
Manufacturer's Address: 15353 Barranca Parkway
Irvine, CA 92618 USA

declares, that the product:

Product Name: Ethernet Repeater
Model Number(s): LMR8TT

conforms to the following standards:

EMC Directive 89/336/ECC as attested by conformity with the following harmonized standards:

EN 55022: Class A, 1986: Limits and Methods of Measurement of Radio Interference characteristics of Information Technology Equipment and

EN 50082/1: 1992: Generic Immunity Standard - Part 1: Domestic Commercial and Light Industry.

Manufacturer's Contact: Director of Quality Assurance
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The logo for Lantronix, featuring the word "LANTRONIX" in a bold, sans-serif font. The letters are white with a dark, textured shadow behind them, giving it a three-dimensional appearance. The shadow is most prominent under the "A" and "N"s.

Part No. 900-124

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