

## Installation Guide Ethernet 10Base2 Transceiver

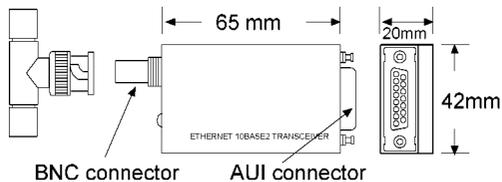
Model: KT-10B

DOC. G509281-KT10B

### General Description

The KT-10B Ethernet transceiver complies with IEEE 802.3 transceiver specifications and 10Mbps Ethernet CSMA/CD operation to provide a connection interface to thin Ethernet coaxial cable.

The transceiver is attached to the AUI connector of an Ethernet device via standard AUI cable.



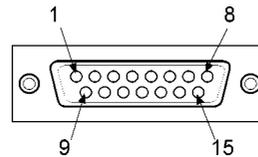
### Features

- Provides a complete AUI to thin Ethernet (10Base2) interface including:
  - Transmit function
  - Receive function
  - Collision presence function
  - Jabber function
  - SQE (Signal\_Quality\_Error) test
- Supports data transfer rate of 10Mbps
- Capability for driving the coaxial trunk cable segment up to 185M (600 ft.) without a repeater
- CSMA/CD access mechanism
- Selectable SQE test
- Power LED indication
- Dimension: 42mm x 65mm x 20mm
- Input voltage: 10.2 to 15.75 VDC
- Input current: 250mA @12 VDC (typical)

### Connectors & Cables

**BNC connection:** BNC female connector  
RG-58A/U thin coaxial cable

**AUI connection:** D-sub 15 pin male connector  
AUI drop cable (50 meters max.)

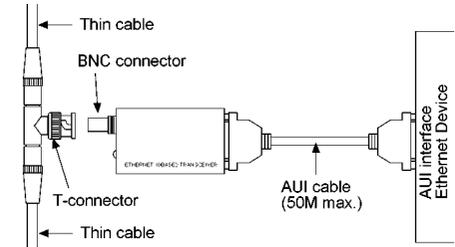


#### Pin Assignments of the AUI (DB15) Connector

Pin	Name	Pairs	Use
3	DO +	Transmit	Data Out (+)
10	DO -	Pair	Data Out (-)
11	DO S		Data Out Shield
5	DI +	Receive	Data In +
12	DI -	Pair	Data In -
4	DI S		Data In Shield
7	CO +	Optional	Control Out +
15	CO -	Pair	Control Out -
8	CO S		Control Shield
2	CI +	Collision	Control In +
9	CI -	Pair	Control In -
1	CI S		Control Shield
6	VC	Power	Voltage Common
13	VP	Pair	Voltage Plus
14	VS		Voltage Shield

### Installation

1. Connect a BNC T-connector to the BNC female connector on the transceiver, then connect thin coaxial cable to the T-connector. If the T-connector is located at the end of the cable segment, plug a 50 ohm BNC terminator onto another female end of the T-connector.



2. A standard AUI cable (50M max.) is required to connect the transceiver to the AUI port of Ethernet device. Or, you may directly mount the transceiver to the AUI port.

### Setting Switches

Switch Setting	Function
SW1 ON	Enable 50ohm cable terminator
SW1 OFF	Disable 50ohm cable terminator
SW2 ON	Enable SQE test
SW2 OFF	Disable SQE test

The 50ohm cable terminator is built in the transceiver. If the transceiver is located at the end of a thin coaxial cable, the built-in terminator can be enabled to eliminate the need for plugging an external BNC terminator.

The transceiver is shipped from the factory with the SQE test enabled. Depending on the Ethernet device to which the AUI connector attaches, you can set the SW2 switch to "OFF" position to disable the SQE test function or set the switch to "ON" position to enable the SQE test function.

If the transceiver is connected to an Ethernet repeater, a 10Base-T hub, or a wiring concentrator, the SQE test function should be disabled.