

ADTRAN TECHNICAL SUPPORT NOTE

Loopback Adapters and Crossover Cables for T1 and DDS Circuits

Survey: Does this Technical Support Note answer your question?	Yes	No
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Introduction

Loopback adapters and crossover cables are useful tools for troubleshooting both DDS & T1 circuits. This document shows the necessary pinout for building them.

Where is Pin 1?

Figure 1 shows a how to orient a standard RJ-45 to RJ-45 silver satin cable to determine pin 1. There are eight pins total in a RJ-45 connector.

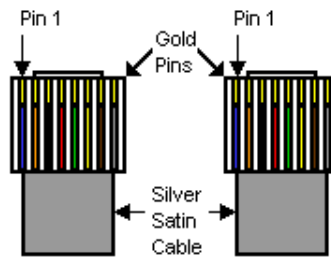


Figure 1

T1 Loopback Adapter

Figure 2 shows the pinout for building a T1 loopback adapter. This pinout is the same for both a RJ-45 plug and RJ-45 jack.

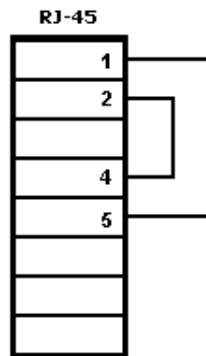


Figure 2

T1 Crossover Cable

Figure 3 shows the pinout for building a T1 crossover cable. This cable can be used to connect two T1 CSU/DSU (i.e.,TSU) products in a back-to-back configuration.

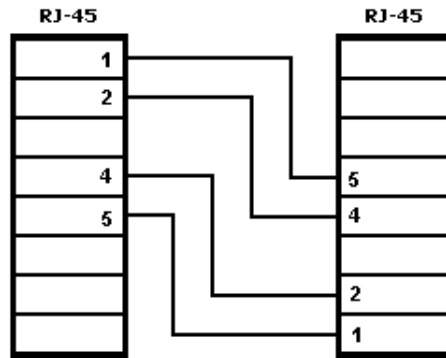


Figure 3

DDS Loopback Adapter

Figure 4 shows the pinout for building a DDS loopback adapter. This pinout is the same for both a RJ-45 plug and RJ-45 jack.

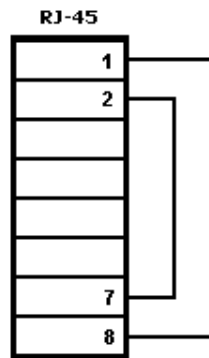


Figure 4

DDS Crossover Cable

Figure 5 shows the pinout for building a DDS crossover cable. This cable can be used to connect two DDS CSU/DSU (i.e., DSU) products in a back-to-back configuration.

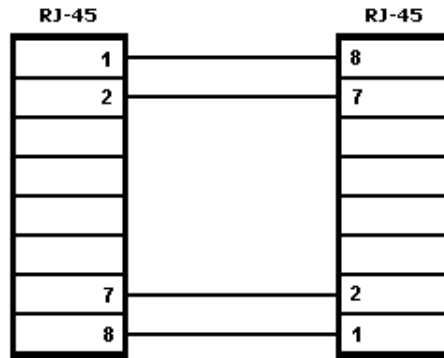


Figure 5

If you experience any problems using your ADTRAN product, please contact ADTRAN Technical Support.

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