Port and Cable Assignments

RJ-45 Port Description

RJ-45 station ports (MDI-X) can be attached to any devices which use a standard network interface (e.g., a workstation, server, bridge or router). RJ-45 daisy-chain ports (MDI) can be cascaded to a station port on similar networking devices (e.g., another switch or hub). Use unshielded twisted-pair (UTP) or shielded twisted-pair (STP) cable for RJ-45 connections: 100Ω Category 3, 4 or 5 cable for 10Mbps connections or 100Ω Category 5 cable for 100Mbps connections. Also be sure that the length of any twisted-pair connection does not exceed 100 meters (328 feet).

Pin	Assignments (Station Ports 1-8)	Assignment (Daisy-Chain Port, other device)
1	Input Receive Data +	Output Transmit Data +
2	Input Receive Data -	Output Transmit Data -
3	Output Transmit Data +	Input Receive Data +
6	Output Transmit Data -	Input Receive Data -
4,5,7,8	Not Used	Not Used

Schematics for both straight and crossover twisted-pair cable are shown below.

Straight-Through		Crossover	
(Switch)	(Adapter)	(Switch)	(Switch)
1 IRD + ————————	1 OTD +	1 IRD +	1 IRD +
2 IRD - ————————	2 OTD -	2 IRD -	2 IRD -
3 OTD + ————————	3 IRD +	3 OTD +	3 OTD +
6 OTD - ————————	6 IRD -	6 OTD -	6 OTD -