

4.12 Network Connections

While there are a number of optional networking products available for IRIS systems, this section will cover the four interfaces included with the systems - Ethernet AUI connection, ethernet 10Base-T connection, ethernet 10/100Base-T connection, and ISDN. The table below shows the systems that include these three interfaces as part of the base system.

Table 4-85 Network Connections on IRIS systems

System	Ethernet			ISDN
	AUI	10Base-T	10/100Base-T	
Twin Tower	X			
Single Tower (Diehard, Diehard2, Eveready)	X			
Rack (Predator & Terminator)	X			
Personal IRIS	X			
Indigo	X			
Indigo ²	X	X		
Indy	X	X		X
O2			X	
OCTANE			X	
Origin200			X	
Origin2000			X	
Onyx2			X	

4.12.1 Ethernet AUI Connection

This is the most common ethernet connection found on IRIS systems. It typically connects to some kind of transceiver box. This transceiver box could connect the system to a “thick ethernet” type of network, a “thin net” (i.e. coax) network, or a twisted pair network.

4.12.1.1 Connector Drawing

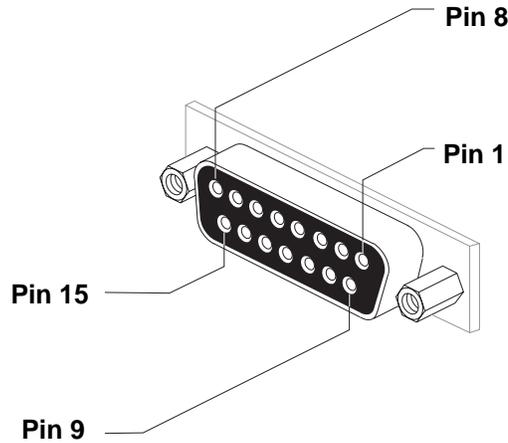


Figure 4-77 Ethernet AUI Connector

4.12.1.2 Pinout

Table 4-86 Ethernet AUI Connector Pinout

Pin	Signal Name	Pin	Signal Name
1	GND	9	COLLISION-
2	COLLISION+	10	TRANSMIT-
3	TRANSMIT+	11	GROUND
4	GROUND	12	RECEIVE-
5	RECEIVE+	13	+12V
6	GROUND	14	GROUND
7	(Reserved)	15	(Reserved)
8	GROUND		

4.12.2 Ethernet RJ-45 Connection

The same connector type and pinout is used for both the 10Base-T ethernet connections and the 10/100Base-T connections found on the newer systems.

On those systems with both the AUI and the RJ-45 ethernet connection (Indigo2 and Indy), this connector can be used instead of the ethernet AUI style connection. It cannot be used at the same time as the other ethernet connection.

4.12.2.1 Connector Drawing

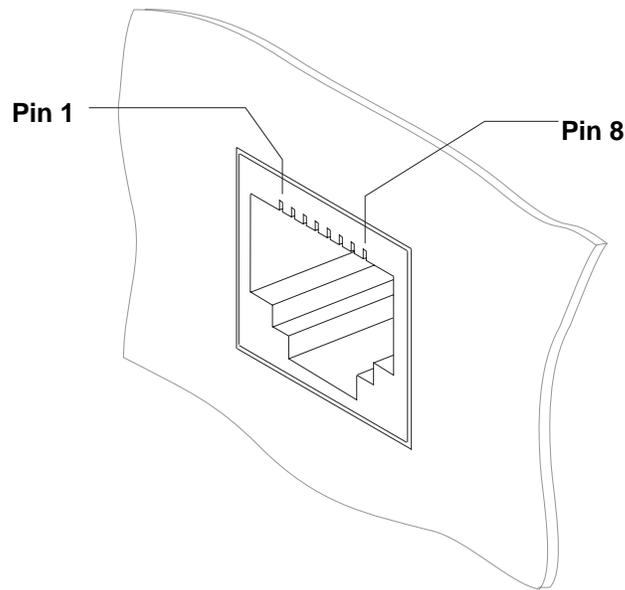


Figure 4-78 10-Base T Connector

4.12.2.2 Pinout

Table 4-87 Ethernet 10Base-T Connector Pinout

Pin	Signal Name	Pin	Signal Name
1	TRANSMIT+	5	(Reserved)
2	TRANSMIT-	6	RECEIVE-
3	RECEIVE+	7	(Reserved)
4	(Reserved)	8	(Reserved)

4.12.3 ISDN Connection (RJ-45)

4.12.3.1 Connector Drawing

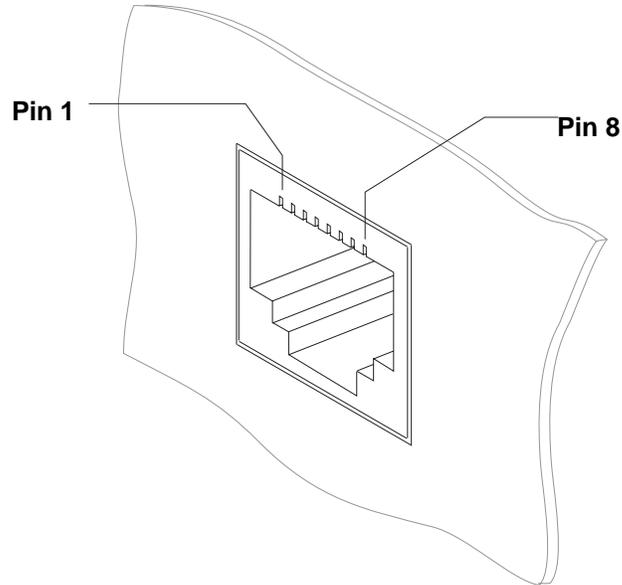


Figure 4-79 ISDN Connector

4.12.3.2 Pinout

Table 4-88 ISDN Port Connector Pinout

Pin	Signal Name	Pin	Signal Name
1	(Reserved)	5	RECEIVE-
2	(Reserved)	6	TRANSMIT-
3	TRANSMIT+	7	(Reserved)
4	RECEIVE+	8	(Reserved)

4.12.4 Craylink Interconnect

This interface is used in the Origin200, Origin2000 and Onyx2 systems for interconnecting nodes. The Craylink interface is very fast - either 800 MB/sec or 1600 MB/sec. It does not require arbitration and is not limited by contention. The Craylink interconnect offers very fast switching and can be configured as multiple point-to-point links in various topologies. This interface is proprietary to Silicon Graphics and Cray.