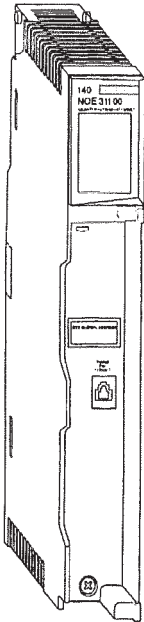


Modicon 140 NOE 311 00 and 140 NOE 351 00 Quantum- SY/MAX-Ethernet Modules

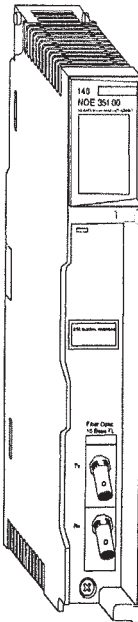
Publication # 043512117

NOE 311 00 and NOE 351 00 Front Panel Illustration

The following illustration shows the front panel of the NOE 311 00 and NOE 351 00.



140 NOE 311 00 Module
 with RJ45 Connector



140 NOE 351 00 Module
 with Fiber Connector



NOE 311 00 and NOE 351 00 Indicators and Descriptions

The following illustration and table shows the LED panel and LED descriptions.

	LEDs	Color	Indication when On
	Active	Green	Module is communicating with backplane.
	Ready	Green	Module has passed internal diagnostic tests.
	Run	Green	Flashes during normal operation.
	Link	Green	Ethernet connection is made.
	Kernel	Amber	On during download.
	Fault	Red	An error condition has occurred.
	Collision	Red	If steady, an error condition exists. If flashing, packet collisions are occurring on the network during data transmission.
	Appl	Amber	A fatal error has occurred.

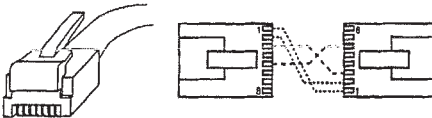
Cable Connector Pinouts and Connections

This section provides information about RJ45 pinouts and 10Base-2 connections.

RJ45 Pinouts

Pinouts for RJ45 connections are shown in the following table and illustration.

From RJ45 Pin	From Assignment	Color Code	To Assignment	To RJ45 Pin
1	Transmit (+)	White/Orange	Receive (+)	1
2	Transmit (-)	Orange/White	Receive (-)	2
3	Receive (+)	White/Green	Transmit (+)	3
4	Not Used	Blue/White	Not Used	4
5	Not Used	White/Blue	Not Used	5
6	Receive (-)	Green/White	Transmit (-)	6
7	Not Used	White/Brown	Not Used	7
8	Not Used	Brown/White	Not Used	8



continued

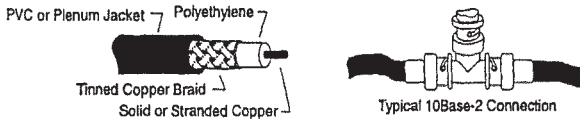
Cable Connector Pinouts and Connections (cont'd)

10Base-2 Cable and Connectors

Two 10Base-T Ethernet devices can only communicate if *transmit* pins on one device are connected to the *receive* pins on the other — this is called *crossover*. The crossover can be implemented either in the wiring or in the device itself. The IEEE 10Base-T specification recommends that crossover take place in the device. If both devices on each end of the cable uses crossover, the cable must also use crossover. The only instance where a straight-through cable would be used is when only one, not both, of the devices is using crossover.

Note: Telephone cabling is often installed with crossover implemented in wall plates. Check for this configuration if existing telephone cabling is going to be used for a 10Base-T Ethernet network.

The illustration below shows a 10Base-2 cable and a typical 10Base-2 connection.




NOE 311 00 and NOE 351 00 Specification Table

The following table provides you with the specifications for the NOE modules.

Specifications

Communication Ports	
NOE 311 00	1 10BASE-T Ethernet network (RJ-45) port
NOE 351 00	2 10BASE-FL Ethernet network (ST-style) ports
Cable Type	
10Base-2 or ThinWire Ethernet	2, 3, 4, or 6 twisted pairs with a solid copper core
10Base-T (twisted pair)	RG58a/u or RG58C/U coaxial (Belden 9907/82907 or equivalent)
Wire Size	
10Base-2 or ThinWire Ethernet	20 AWG
10Base-T (twisted pair)	22, 24, 26 AWG
Topology	
10Base-2 or ThinWire Ethernet	Bus
10Base-T (twisted pair)	Star
Connector	
10Base-2 or ThinWire Ethernet	BNC (UG-274)
10Base-T (twisted pair)	Modular RJ-45 (4 pins of 8 are used by 10Base-T)
Backplane Compatibility (Requires Quantum CPU)	
	3, 4, 6, 10, and 16 position backplanes
Compatible SY/MAX 802.3 Devices and Software	
	Model 450 Model 650 SF1160 SFW390-VAX Streamline Version 1.3
Bus Current Required	
	1 A

 **Note:** For detailed information concerning this module, refer to the *Quantum-SY/MAX-Ethernet Module User Guide* (840 USE 111 00).
