3

Section 3 - Installation

This section describes the considerations for installing the ICM. Typical pinout information is provided.

3.1 ICM Pinout Information

The following chart provides the pinout information for the ICM field wiring.

Figure 3-1. ICM-4020 Pinout Information

	d	b	Z	
2	V-Sync	V-Sync Ground	V-Sync	
4	MP Network +	MP Network Shield	MP Network -	
6	Port 2, Clear to Send, in	Port 2, Receive Data, in	Port 2, Ground	
8	Port 2, Transmit Data, out	Port 2, Request to Send, out	Port 2, DSR / +12 / DTR	
10	Port 3, Clear to Send, in	Port 3, Receive Data, in	Port 3, Ground	
12	Port 3, Transmit Data, out	Port 3, Request to Send, out	Port 3, DSR / +12 / DTR	
14	Port 1 {Maint}, CTS, in	Port 1 {Maint}, RD, in	Port 1 {Maint}, Gnd	
16	Port 1 {Maint}, TD, out	Port 1 {Maint}, RTS, out	Port 1 (Maint), DSR / +12 / DTR	
18				
20				
22				
24				
26				
28				
30				
32				
	Rear View, Looking a ICM-4020 Male Pins			

3.1.1 Media Pro® Network Connection

The Media Pro® Network is connected to the backplane of the ICM. It is hard-wired to the 48 pin backplane connector. The Racks and APC need to be addressed correctly in order for them to communicate. See the Jumpers Section (section 2.3.2), and the Rack Module User Manual for details.

It is recommended to implement a quick disconnect for the APC, so the unit can be disconnected when not being used. Refer to the following diagram for an example setup using an Animation Program Controller. Notice that Rack 0 of this example is in the middle of the net and *does not* have a terminating Resistor.

APC-4020 Back Panel MP Net Belden 9463 Blue Hose or Category 5 TP Male 3-pin Mini Phoenix Connector on the cable plugs into a Female 3-Pin Mini Connector on the back panel of the APC. User configured quick disconnect. When the APC-4020 is attached to MP Net, there is no terminator resistor installed. When the APC-4020 is removed from the MP Net, a terminator resistor must be installed in the quick disconnect (if it is the end of the MP Net, as shown in this

diagram).

Figure 3-2a. MP Net Connections

- ❖ There are some important considerations when connecting the APC to the Media Pro® Net:
 - ➤ A 150 Ohm Terminating Resistor should be across the MP Net connector (+) and (-) pins at both *ends* of the network.
 - ➤ No Terminating Resistor on Racks in the *middle* of the Network.
 - ➤ When the APC is removed from the MP Net, a terminating resistor must be placed in the Rack at the <u>end</u> of the Network. (In the example diagram, Figure 3-2a, the resistor would be placed in Rack 0.)
 - ➤ The APC may be connected to any rack in the network, but the network may NOT be starred. The Media Pro® Net topography must be maintained. When a animation console is used with a rack in the middle of a net, the APC must be connected with a rack on both sides, having the net flowing through the APC.
 - ➤ The total network, including the connection to all racks may be up to 3000' of cable.
 - ➤ The connector for the APC end of the quick disconnect is supplied with the unit. Refer to figure 3-2c for details.

Figure 3-2b. APC-4020 to MP Net Wiring Pinout

Rack0 Din48F	Rackn Din48F	APC	Wire color
pin d4 (+)	d4 (+)	(+)	Clear
pin b4 (shld)	b4 (shld)	(shld)	Un-sleeved
pin z4 (-)	z4 (-)	(-)	Blue

Figure 3-2c. APC-4020 Connectors for Media Pro® Network

