

Encore® HD Controller Installation Diagram for 2-Spray Gun Robot Systems



WARNING: Allow only qualified personnel to perform the following tasks. Follow the safety instructions in this document and all other related documentation.



WARNING: This diagram does not show system grounds. All conductive equipment in the spray area must be connected to a true earth ground.

NOTE: Refer to manual 1604870, *Encore*® *HD and XT Manual Powder Spray System Controller* for more information about the controller.

Figure 1 shows a typical dual robot spray gun system and the connections required for CAN communication between the Encore controller interface and the customer PLC.

Configuration of the Encore controller interface and the iFlow® module PCA inside the Encore HD pump control unit must be completed during system installation.

See the Parts section for system component part numbers.

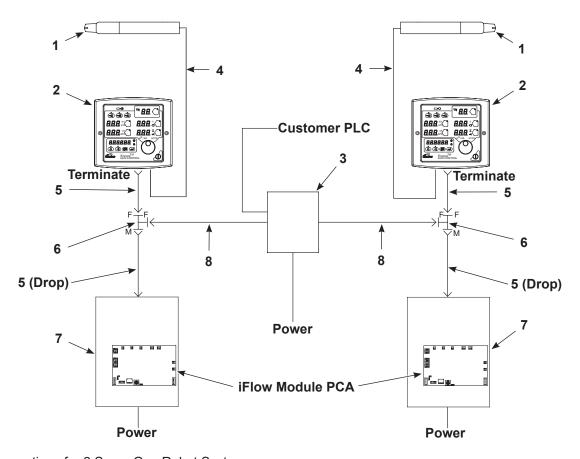


Figure 1 Connections for 2 Spray Gun Robot Systems

- 1. Encore robot spray gun
- 2. Encore controller interface
- 3. Control unit, PLC gateway
- 4. Encore robot cable
- 5. Controller interface cable
- 6. DeviceNet 5-pin cable Tee
- 7. Encore HD pump control unit
- 8. Network cable

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Encore Controller Interface Configuration Settings

See Figure 1. Each Encore controller interface (2) must be configured with the function codes set to the values listed in Table 1 for each spray gun in a dual robot spray gun system.

Table 1 Encore Controller Function Code Values

Spray Gun 1	Spray Gun 2	Note
02 (Robot)	02 (Robot)	
10 (Presets)	10 (Presets)	А
01 (HDLV)	01 (HDLV)	
01 (EXT)	01 (EXT)	
01 (GUN)	02 (GUN)	
	02 (Robot) 10 (Presets) 01 (HDLV) 01 (EXT)	02 (Robot) 02 (Robot) 10 (Presets) 10 (Presets) 01 (HDLV) 01 (HDLV) 01 (EXT) 01 (EXT)

NOTE: A. When Gateway is in analog mode, only one preset is allowed. Set F17 = 01 for all guns.

iFlow® PCA Configuration Settings

The following switch settings and CAN network jumper settings must be set to the values listed in Table 2 for each of the spray guns in a dual robot spray gun system.

Table 2 Encore Controller Address Switch Values

Robot Spray Gun	Address Switch Value	
Spray Gun 1	SW2=1	
Spray Gun 2	SW2=2	

- 1. See Figure 1. Access the iFlow PCA inside the Encore HD pump control unit (7).
- 2. See Figure 2. The address switch SW2 must be set to the spray gun number that it is supplying.
- 3. If the Encore HD Pump control unit (7) is connected to the Nordson CAN network on the drop, then the network terminator on JP1 must be removed on each of the pump control units.

NOTE: Each drop on the CAN network is limited to 6 m (20 ft) maximum.

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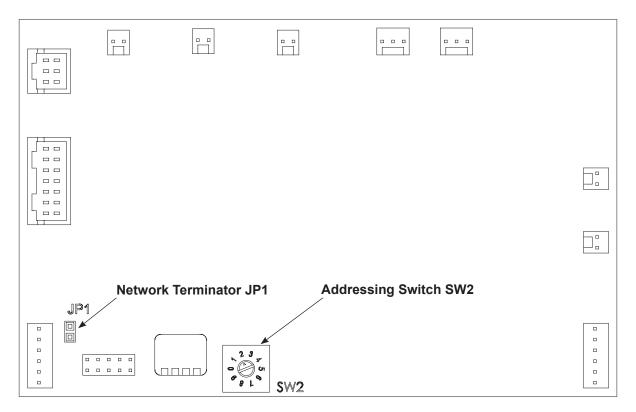


Figure 2 iFlow Module PCA

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Parts

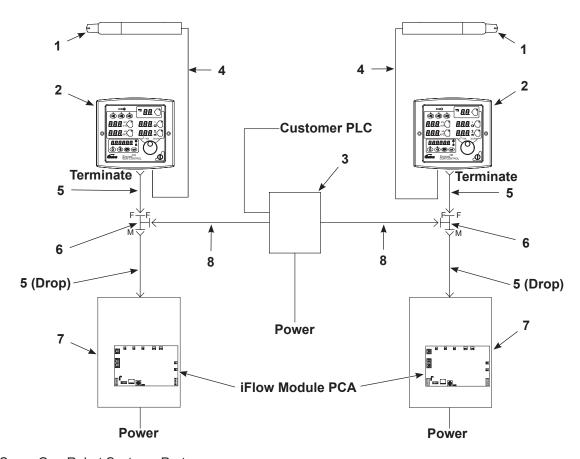


Figure 3 2 Spray Gun Robot Systems Parts

Item	Part	Description	Note
1	1606969	Encore HD bar-mount spray gun	Α
1	1620076	Encore Select HD robot spray gun	В
2	1604125	Encore XT/HD controller interface	
3	1101422	Control unit, Prodigy® Gen III, PLC gateway	
4	1605436	Encore robot cable, 8m	Α
4	1620523	Encore robot cable, 20m	В
5	1080718	Controller interface cable, 10 ft	
6	1046746	DeviceNet 5-pin cable Tee	
7	1605584	Encore HD pump control unit, 115 V	A, B
8	1062373	Prodigy Network Cable, 50 ft	

NOTE: A. This part included in these standalone systems.

1611087: Single robot, Encore HD 1611088: Dual robot, Encore HD

B. This part included in these standalone systems.

1621197: Single robot, Encore Select HD 1621198: Dual robot, Encore Select HD

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