

LC06

6 channel Digital I/O PL20 Transceiver

1. Description

The LC06 transceiver provides 6 digital input channels, as well as 6 digital output channels. Power and communications are distributed on the same wires using the Lonworks PL20 power line communication protocol.

2. Input Channels

The 6 (six) digital inputs are individually isolated using opto-isolator components. To activate the respective input, the two terminals of the input must be linked (short circuited). This type of input is ideal for monitoring a voltage free contact.

3. Output Channels

The 6 (six) digital outputs are of the open drain type. Each output provides up to 150mA at the available line voltage level. The line voltage is nominal 24VDC, but can be any voltage between 18VDC to 30VDC.

Activating an output causes the **SW** terminal of the respective output to be connected to 0V via an on-board MOSFET transistor. Each output circuit is protected by a resettable fuse.

This type of output can be used to control external relays, audio/ visual alarms, etc.

4. Lonworks Template Detail

Channel	Type	Network Variable	Signal -> Value		Signal -> Value	
I/O1	Digital Input	nvoDIn0	OPEN	ST_OFF	CLOSED	ST_ON
I/O2		nvoDIn1				
I/O3		nvoDIn2				
I/O4		nvoDIn3				
I/O5		nvoDIn4				
I/O6		nvoDIn5				

Channel	Type	Network Variable	Value -> Output		Value -> Output	
I/O1	Digital Output	nviDOut0	ST_OFF	Floating	ST_ON	Pulled low
I/O2		nviDOut1				
I/O3		nviDOut2				
I/O4		nviDOut3				
I/O5		nviDOut4				
I/O6		nviDOut5				

Line Voltage	Voltage input	nvoLV	LV = nvoLV x (30/4095)			
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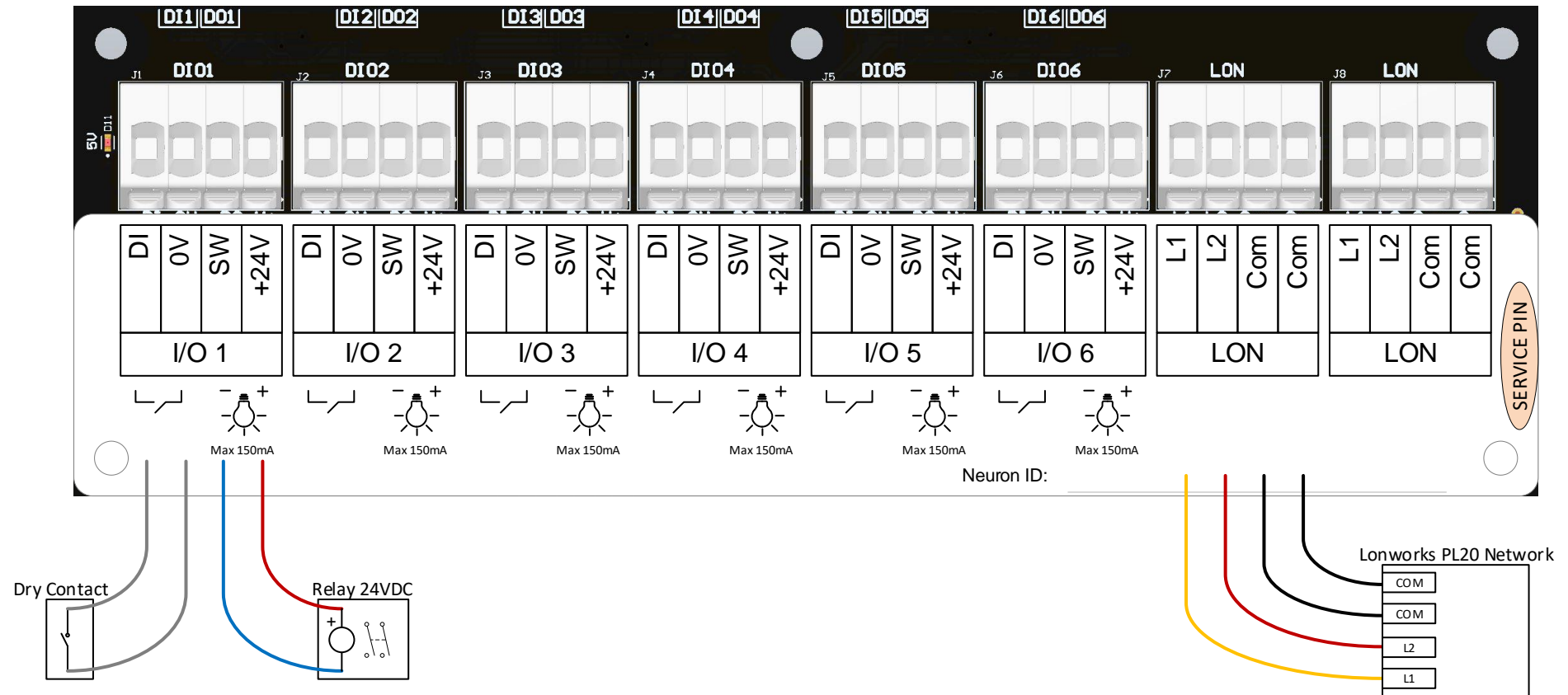
5. Power Requirements

- Supply Voltage: 18 to 30VDC
- Current consumption: 12mA @ 24VDC, no external loads

6. Environmental Specifications

- Ingress protection: IP65
- Operating temperature: -10 to 55°C

LC06 – 6 x Digital I/O



Open: nvoDIn0 = ST_OFF
 Closed: nvoDIn0 = ST_ON
 Opto-isolated Input
 LED DI1: ON when contact closed

nviDOut0 = ST_OFF: Relay OFF
 nviDOut0 = ST_ON: Relay ON
 Open Drain output at terminal **SW**
 LED DO1: ON when output active