TXP-16 Operation

I/O Channels

Each I/O channel can be configured to operate as an output or input and to connect to a wet or dry circuit. LEDs for each I/O channel indicate whether the channel is active, the channel direction, and whether the circuit is wet or dry.

The channel outputs use relays to isolate the binding posts from the TXP-16. Each output can be configured to drive the external circuit as either wet or dry. When configured to drive the external circuit as a dry circuit, the output relay contacts connect directly to the binding posts for complete isolation between the external circuit and the TXP-16. When configured to drive the external circuit as a wet circuit, the output relay contacts connect a power source to the binding posts.

The channel inputs use current-limited opto-isolated circuits to isolate the binding posts from the TXP-16. Each input can be configured to connect to an external wet or dry circuit. When configured to connect to an external wet circuit, the binding posts connect directly to the input circuit for complete isolation between the external circuit and the TXP-16. When configured to connect to an external dry circuit, a power source is connected between the binding posts connect and the input circuit.

The ON LED indicates the channel is active.

The OUT LED indicates the channel direction. When the LED is on, the channel is configured as an output. When the LED is off, the channel is configured as an input.

The WET LED indicates the channel is configured to connect to an external circuit with power added at the source of the circuit. When the channel is an output and the WET LED is on, the channel output relay contacts connect the circuit wetting power source to the channel binding posts. When the channel is an output and the WET LED is off, the channel output relay contacts are connected directly to the channel binding posts. When the channel is an input and the WET LED is on, the channel binding posts are connected directly to the channel input circuit. When the channel is an input and the WET LED is off, the circuit wetting power source is connected between the channel binding posts and the channel input circuit.

Channel Direction	*WET LED*	
output	on	wet power source switched through relay contacts to binding posts
output	off	relay contacts connected directly to binding posts
input	on	binding posts connected directly to input circuit
input	off	wet power source connected between binding posts and input circuit

Wet Power Source

The circuit wetting power source can be configured as an internal +5V supply, the front panel PWR binding posts, the rear panel PS2 power input, or none. LEDs indicate when the circuit wetting power source is on and the source of the wetting power.

The ON LED indicates there is power on the selected wetting power source.

The source of the wetting power is indicated by the illuminated LEDs beside the front panel PWR binding posts.

Configuration

To enter the configuration mode press and hold the PWR Select pushbutton (beside rightmost black binding post) for 1 second. The PWR ON LED flashes while in configuration mode. To exit the configuration mode press and hold the PWR Select pushbutton for 1 second. The configuration mode will also automatically exit 30 seconds after the last pushbutton press.

While in the configuration mode the I/O channel OUT and WET pushbuttons toggle the output/input and wet/dry setup of each I/O channel.

While in the configuration mode the PWR Select pushbutton sequences the circuit wetting power selection between +5V, front panel binding posts, rear PS2 power input, and none.

The configuration is saved in non-volatile memory and will be restored on power-up.