

**Valve Control Box**  
**Part #: ADPT-VALVE-INTERFACE-1**

**Description**

The Valve Control Box will switch an attached 12 V DC valve according to the pumping direction.

**Contents:**

Description	Figure	Quantity
Valve Control Interface Box for one valve	4	1
Power Supply: 12 VDC @ 200 mA	1	1
DB9 to RJ-11 adapter (CBL-TTL-1)	3	1
Modular cable: 6P4C, 7'	2	1

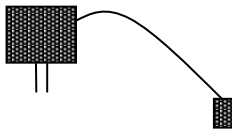


Figure 1: Power Supply



Figure 2: Adapter Cable, 7'

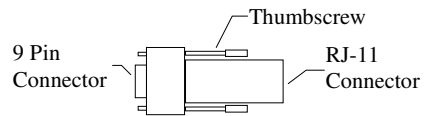
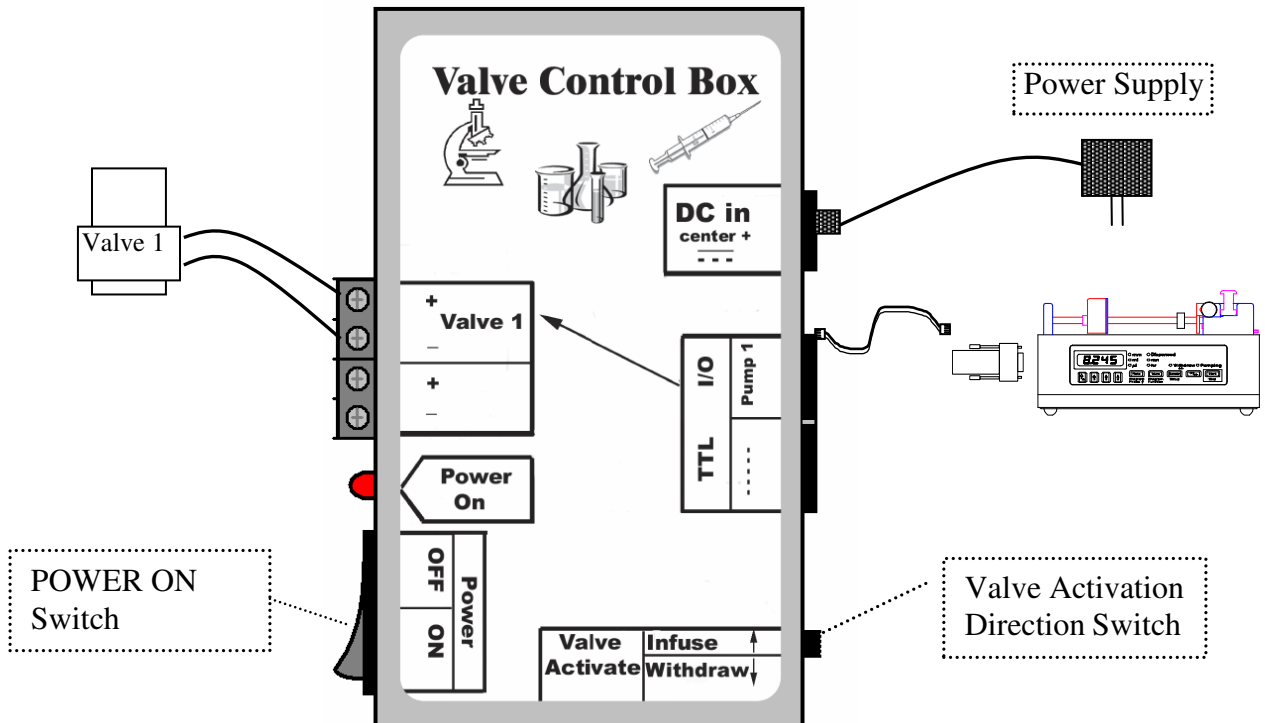


Figure 3: TTL Pump Adapter

Figure 4: Valve Control Box



## System Setup

- 1) Turn the Power switch to the “Off (0)” position and turn power off to the pump.
- 2) Attach valve:  
Using a small screwdriver, attach one wire to the connector labeled Valve 1(+), and the other wire to connector labeled Valve 1(-).

Note: Most valves do not have polarity, therefore wires can be connected to either connector. If the valve requires polarity, connect according to (+) and (-) polarity. Refer to your Valve User Manual.

- 3) Attach Pump:
  - a) Attach the 9 pin adapter to the 9 pin connector labeled "TTL I/O" on the back of the pump.
  - b) Attach the modular cable (telephone style) to the 9 pin adapter attached to the pump.
  - c) Attach the other end of the modular cable to the Valve Control Box "TTL I/O" connector labeled “Pump 1”.
- 4) Attach Power supply: Attach the power supply to the DC Power Supply connector then, plug the power supply into a power outlet.
- 5) Turn power on to the pump and the Valve Control Box by switching to “On (1)”.

## Operation

The Valve Control Box will activate the valve when the pump is either infusing or withdrawing, according to the setting of the Valve Activation Direction Switch. Since the valve draws power and will heat up when activated, the valve should be set to be active during the shorter operation cycle, infusing or withdrawing.

Set the Valve Activation Direction Switch to configure when the valve will be activated and configure the tubing accordingly.

After powering on the pump, turn the power switch on the Valve Control Box to the On position (1). The Power On LED will illuminate when power is on. It is normal for the LED to dim slightly when the valve is activated.

## Valve Control Box Specifications

Power Supply Type: Unregulated linear external wall adapter  
Connector: 2.1 mm pin, center positive  
Power Supply Output Rating: 12 V DC @ 200 mA

Power Supply can be upgraded to 12V DC @ 1A

