1 KOOLANCE CTR-SPD1224 Installation Guide v 1.0

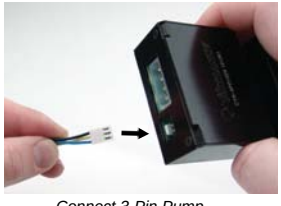
CAUTION: Improperly connecting the speed controller can damage it, the pump, or the power supply. Ensure that total device load does not exceed the maximum rating of the controller (36W@12VDC, 50W@24VDC). Ensure that the connected device will safely accept the voltage being supplied (12V or 24V depending on the jumper setting).

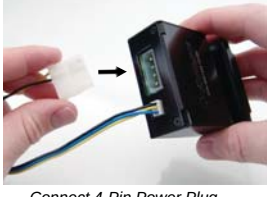
The Koolance CTR-SPD1224 uses voltage control to throttle speeds for 12VDC pumps or fans. With a jumper setting, it will also step-up and throttle voltage for 24VDC devices. CTR-SPD1224 requires a 12VDC input.

Do not operate components at voltages which exceed their specifications. Running a 12V-max pump at 24V from the speed controller can damage the pump.

To avoid damaging the speed controller, do not connect devices which exceed the controller's maximum power rating (36W@12V, 50W@24V).

If your Koolance pump has a 3-pin power connector, plug it directly into the speed controller's "Power Out" connection. Connect the power supply's 4-pin Molex plug to the speed controller's "Power In" connection.


Connect 3-Pin Pump


Connect 4-Pin Power Plug

2

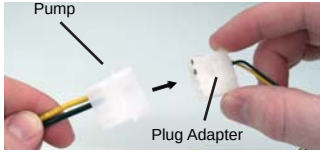
Plug Adapter

If your Koolance pump has a 4-pin Molex connector, you must use the plug adapter included with your speed controller.

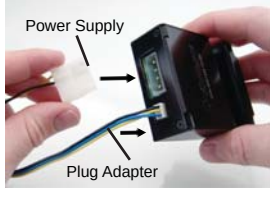
Pump tachometer signals are not used by the speed controller. If your pump has an integrated speed knob, it should be left on the maximum setting when adjusting speed via the Koolance controller.

Pumps with built-in control should be left on maximum speed

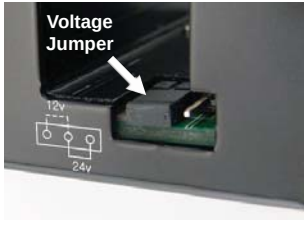
Connect the pump to the 4-pin plug adapter. Connect the plug adapter's 3-pin to the speed controller's "Power Out". Connect the power supply's 4-pin Molex plug to the speed controller's "Power In" connection.



Connect 4-Pin Pump to Plug Adapter



Connect 3-Pin Plug Adapter to Controller



CTR-SPD1224 has a jumper to select from 12V (max) or 24V (max) speed control.

CAUTION: Do not power 12V pumps or other devices with the 24V setting! This can permanently damage the attached device.