

1 KOOLANCE CTR-SPD10/24/X2 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 individual controller. If the speed controller increases voltage, ensure that the connected device will safely accept the higher voltage.

Koolance speed controllers use voltage control to adjust Koolance pump or fan speeds. Some models step-up voltage for extra power to devices which allow it. Never exceed the maximum current rating for the speed controller (usually 3A per output, depending on the model). Also, confirm the maximum voltage of your device. Connecting a 12V-only pump to a 24V speed controller can damage the pump.

Single Pump Controller



Power In
(PSU 12VDC)

Power Out
(Pump)

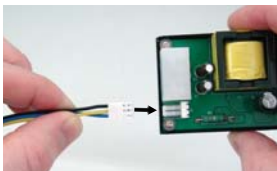
Dual Pump Controller



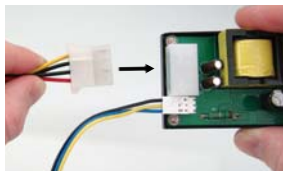
Power In
(PSU 12VDC)

Power Out
(Pump)

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

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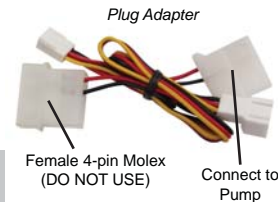
If your Koolance pump has a 4-pin Molex connector, you must use the plug adapter included with your speed controller.



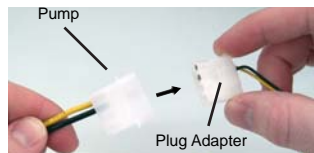
CAUTION: Your power supply will power the pump through the controller. DO NOT connect the power supply directly to the plug adapter.

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

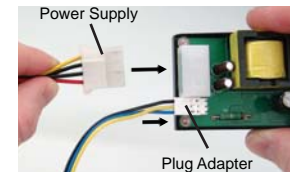
Connect the pump to the 4-pin plug adapter. Connect the plug adapter's 3-pin to the speed controller's "Power Out". Connect the power supply's 4-pin Molex plug to the speed controller's "Power In" connection.



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



Connect 4-Pin Pump to Plug Adapter



Connect 3-Pin Plug Adapter to Controller



For dual speed controllers, each pump will require a power supply connection.