procool
AV Cooling Solutions

SP480XT

* Model No. **SP480XT** (intake), **SP480XT-E** (exhaust)

Panel SIze:	(2U) 19" x 3.5" x 1.5"
Panel Color/Material:	Black/Metal
Fans:	4
Fan Size:	80mm x 80mm x 25mm
Fan Speed:	1200-2400 RPM
Air Flow:	56-128 CFM
Noise:	12-20 dBA
Bearings:	fluid dynamic bearings
Thermal Probe length	24" (48", 72" available)
Power Supply:	100-240 VAC/12VDC/5VDC
Power Supply Cable length	AC-60" DC-36"
Current draw:	.68A
Power consumption:	8.16w
Grills/Guards:	Black Wire

Temperature Display/ Fan Controller Features:

* Connect up to 4 fans
* Large Blue LED display (Switchable- on or off)
* Switch between Fahrenheit or Celsius easily.
* ON/OFF (back) Switches from thermal control to always on
* Programmable from 32-212°F (0-100 Celsius)
* 24" thermal probe
  (48" Extensions are available separately)
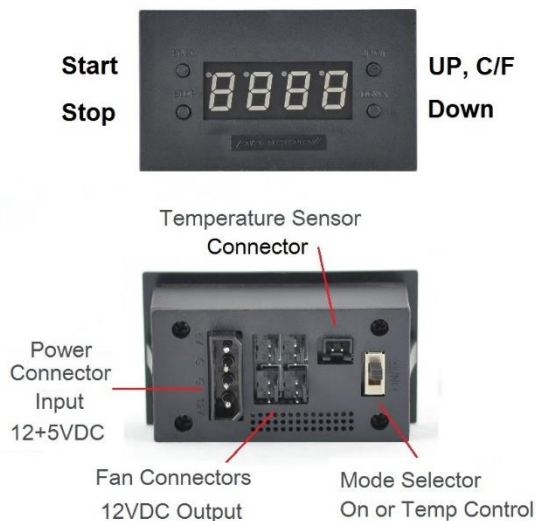
Temperature Controller Instructions:

THERMAL PROBE: Place the end of the temperature probe where you want it to detect the temperature. It can be left as is on the panel for an ambient temp. Or it can be placed at the top of a cabinet or above a hot component. Try to avoid placing the probe where the fans will blow directly on it. For best results, locate the probe where it will detect the most heat.

START: Press "START button" to put the unit in START up programming mode. The start temp will blink. Use the Up/Down buttons on the right to set the desired temperature where the fans will turn on. (Note: The ON temperature must be 2F (1C) above shut off temperature) Press the start button again to set the temperature and return to the display readout.

STOP: Press "STOP button" once to put the unit in STOP programming mode and the stop temperature will blink. Use the Up/Down buttons on the right to set the desired stop temperature. (Note: The On temperature must be 2F (1C) above shut off temperature) Press the stop button again to set the temperature and return to the real time temperature readout.

C/F - UP - Display: Will change the display from Fahrenheit to Celsius. - Will increase the temp setting when in start or stop programming modes. - Hold for 5 seconds to turn display on or off. Disables only the display while still operating normally.

DOWN: Will decrease the temp when in the start or stop programming modes.

ON/OFF Switch (back) When the switch is ON the display will read "HI" or ("212" on latest rev.) and the fans will run constantly (always on) without thermal control. When the switch is OFF the display will show the current temperature and the fans will then run within the user selected temperature range.

POWER SUPPLY: Connect the 4 pin power supply plug to the controller. The plug is formed to go in only one way. **CAUTION**: Do not plug the power plug in backward as it will damage the controller.

Set up and Operation instructions:

* Connect the 4 pin plug from the power supply to back of controller. Plug AC cord into standard 110/240 VAC outlet.
* Position the thermal probes as close to the heat source as possible. The controller probe and the fan probes can all be positioned at the same point or at separate heat points. The probe positions will affect the fan speed and performance of the system. Best to begin with all probes at the hottest point.
* Set the on and off temperatures as described in the Temperature Controller Instructions.

Tip: Play with probe locations and temps to fine tune the fans performance.

For best performance, clean the fan blades often. More often if in a dusty environment is better. A can of compressed air works well for frequent cleaning. If dust is visible on the blade it is best to clean it before it builds up. Excess dust/dirt on the fan blades can decrease the fans performance and cause the fan to make noise.

For more thorough cleaning the blade prop can be removed. Grasp the blade prop evenly and pull firmly, straight out of the housing. Use a damp cloth or paper towel to wipe away dust from the blades. Avoid wiping the grease from the shaft. The shaft can be lubricated using light grease if needed. Apply a thin layer evenly on the shaft. Re-insert the blade prop into the fan housing. Press in firmly on center of blade prop until it snaps into place.

If a fan is not spinning

Ensure the blade prop is snapped into place. Hard impacts can cause the blade to pop loose and not function.   Press IN firmly on the center of the blade prop until it snaps into place. Use a small screwdriver or similar that will fit through the front grill.   If it does not snap in, remove the grill guard, pull the blade prop out and insert it again. Press in firmly until it snaps into place. Once in place the fan will run normally. When new the fan may not spin if the temperature is below 70°F, warm the thermistor probe tip by hand and the fan will spin.
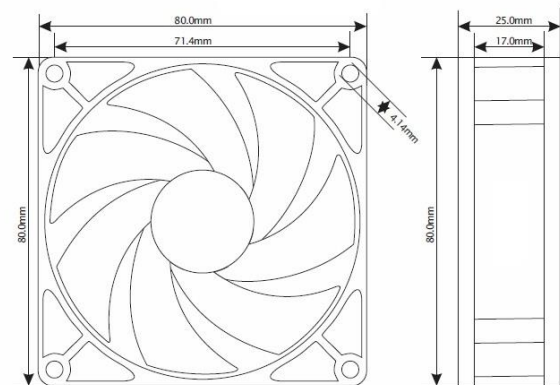
Procool fan model SXT80
Thermistor Speed Chart