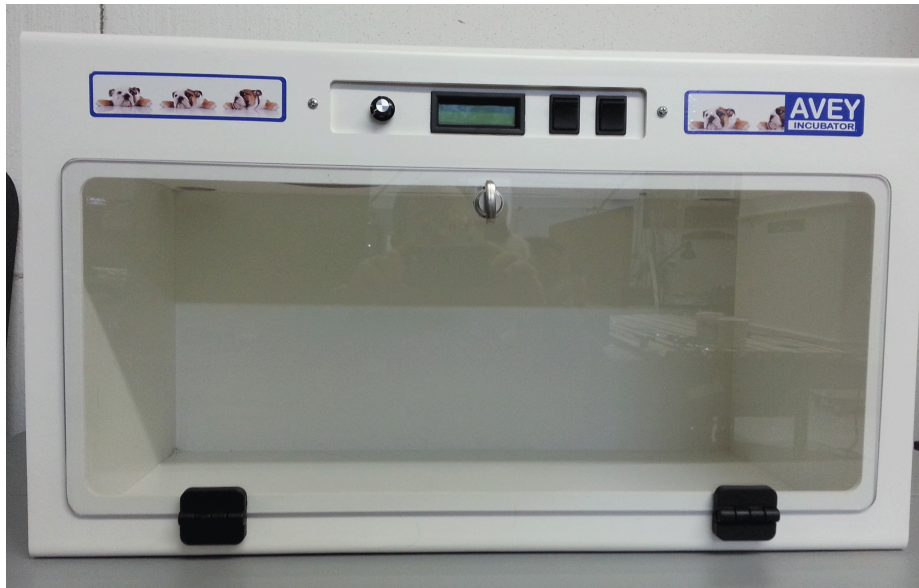


Precision Puppy Incubator



Avey Incubator, LLC

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**Support www.precisionincubators.com/support
email info@precisionincubators.com**

There is a 5 minute YouTube video showing how to set up and run this incubator. You can find the video at <https://youtu.be/kOR7ZIYhSnQ> or you can go to our website <http://www.precisionincubators.com/dog-cat-incubator/> and click on the red arrow in the middle of the picture.

Unpacking and setup.

a. Inspect for damage
Check for damage when unpacking for the first time check for proper operation.

b. Plug the incubator in and power it up. The power on switch is the right hand switch on the incubator front panel.

c. The other switch controls the interior LED light strip.

The oxygen concentrator (an extra cost option) connects with the included tubing to the oxygen hose barb on the rear of the incubator. A good starting flow rate is 4 LPM (liters per minute)

If you have digital humidity control (an extra cost option) then you received a cool mist humidifier that is used as a water source, a hose that connects between the humidifier and the incubator, and you have an additional menu screen that allows you to set the desired humidity level inside the incubator.

Be sure to plug the humidifier into *the special outlet on the back of the incubator*. DO NOT PLUG INTO A WALL OUTLET. The incubator controls the desired humidity inside the incubator by turning the power to the humidifier's special outlet off and on as needed.

Fill the humidifier water tank with filtered (reverse osmosis) or distilled water. **Don't use tap water.** Tap water will shorten the life of the humidifier and cause a water powder to be deposited all through the incubator.

Leave the humidifier turned off until the incubator reaches the desired temperature. Then turn on the humidifier to about the middle "speed". Watch the display and be sure that the humidity level stabilizes at the level you set on the menu screen. Don't turn the humidifier up to it's maximum speed (output). It won't work any better and you run a risk of adding too much moisture, too fast. That can cause water droplets to form on the humidity sensor and it will give a false reading, usually causing too much moisture to be added.

Do not operate the incubator at more than 65% humidity for extended times. 50% is the recommended level. If you find you have the incubator humidity staying above the desired level then perhaps it is time to change the bedding in the incubator.

Another solution is to open the side mounted fresh air vents and mix in a little

fresh air to “dilute” the humidified air in the incubator. It doesn't take a very big opening to make a big difference. Too big an opening and you will blow all the humidified air out the the vents and will just make the humidifier (and you) work harder and you'll be filling the tank much more often.

Setting the temperature, humidity(optional) and heater control.

The control consists of a display and a knob. The knob is more than just a knob. It is a sophisticated control called a rotary encoder. The main display will show the temperature in both Fahrenheit and Celsius and optionally, the humidity readout. NOTE: Optional Humidity Readout is disabled when in “Heat Disabled Mode”

To change a setting, or even to check the setting that is entered, first push in the knob and let it go. The display screen will change to “Enter passcode”. Turn the knob left or right until 5 (your passcode) is displayed. Push the button in, let it go, the display changes to “adjust temp”. The last entered temperature is displayed (without the decimal point – 350C is 35.0C and 950F is 95.0F. Turn the knob left or right until your desired temperature setpoint is displayed. Push the button in and the display changes to Set Humidity (if equipped). Turn the knob left or right until your desired humidity setpoint is displayed. Push the button in and the display changes to Heater Control. Turn the knob left or right until the display switched to “HEATER OFF” or “HEATER ON”, when the desired state of the heater control is displayed, push the button in to set the heaters “state” and the main display will say “Heat Disabled” on the bottom line, if disabled, and when the heater is set to “HEATER ON” the bottom line will scroll through a series of banner messages.

High and Low Temperature Alarms

The high and low temperature alarms are preset to about 2 degrees C above the setpoint and 4 degrees below the setpoint. If you leave the door open too long the low temperature alarm will sound and the bottom line of the display will indicate “Low Temp Alarm”. To silence the sounder, press the control knob in and let go. The display screen will reset when the alarm condition has been corrected.

The high temp alarm can occur if the sun or some other heat source like a furnace vent hits the incubator. Another cause is when you have many pups or older (larger) pups in the incubator. Each puppy is operating at 100 degrees. At some point, if you have a bunch of 100 degree “pups” (heaters) in the incubator then the incubator can't regulate the heat as well. The solution is to open the air vents and let more room temperature heat into the incubator. This allows the internal thermostat to regulate the heat more effectively.

The incubator can add heat really well. The only way it can cool down is to turn off the heating element. But if you have a large enough total mass of puppy in the incubator (at 100 degrees) then the incubator can't cool down enough because the puppies are adding some heat of their own.. By mixing in fresh air the effective cooling ability is enhanced.

Oxygen Concentrator

Search on Google for oxygen concentrator maintenance and you should find companies that service and sell concentrators. It's important to get a machine that will do at least 5 liters per minute output at 90% or better pure oxygen. There are lesser machines out there that will do one or the other but not both at the same time. Stay away from those. And the lightweight ones that you carry on your shoulder with a battery pack, those won't work. Just not enough output to make a difference.

Operate the incubator

Be sure to set up, plug in, turn on the incubator and get familiar with all the features before you put your puppies inside. Having new pups is stressful enough without the additional stress of not knowing how to work the incubator.

The recommended use for puppies (and kitten – or whatever animal you place in a rescue situation) would be to place the puppies in the incubator as they are born and then monitor the pups for color and body language to make sure they are not too hot or too warm and whether they are getting enough oxygen.

You can tell they are not getting enough oxygen because their gums will turn a bluish gray color and when they have enough oxygen they will be a bright healthy pink color.

You should start the oxygen concentrator's (not included) output at 4 liters per minute (LPM) and monitor how the puppies are doing. Be sure the side air vents on the incubator are closed when using the oxygen concentrator. Otherwise the effect of additional oxygen is canceled out by the fresh air being brought in through the vents.

The starting temperature for the incubator should be around 95° or 96° although you may find a personal preference for more or less heat and more or less oxygen.

The wonderful thing about raising animals everyone has an opinion that may vary slightly from others but all are generally in the same ballpark as far as how to have success raising puppies.

We recommend that you monitor the puppies at that level for about six hours. If during that time you see the puppies acting too warm or too cold, make a change to the temperature setting, usually in small increments, a degree at a time, and then continue to monitor them. After you make a change, watch for 30 minutes and if you are still thinking they are too cold or too warm make another change.

If the puppies still remain gray after being in the incubator at 4 L per minute which is the starting amount then you may need to talk to your vet quickly because they are still in distress at that point. The concentrator is rated at 5 liters per minute (LPM). But please check with your vet if your pups are still in distress at 4 LPM.

After six hours if the puppies are all doing well, showing good color, comfortable with the temperature, then the next stage is to reduce the temperature by a degree and reduce the output on the concentrator to 3 ½ LPM and then observe the puppies. Observe and assess ... is the color still good and their body language still indicating comfort with the heat setting? If so, if everything looks good after six hours then reduce the temperature by a degree and the oxygen output by half a liter a minute. So now we would be down to 3 LPM and maybe 94° or 95° and observe the puppies for color and body language.

The body language is pretty obvious to read, but if they're all curled up in a tight little ball they are cold so they need to be a little bit warmer, if they stretch out or they are panting, they are too warm. The idea is to find the ideal window that they are comfortable. Many of the breeders I talk to leave their puppies in the incubator for up to a week or so if they are healthy because about that time is when they start to be developed enough to where they can maintain their own body heat. Keep assessing and reducing when appropriate until they are ready to be at room temperature.

At this point some breeders open the side air vents and change the setting so heat is disabled. (Enter the passcode 5, push the button in, let it go, the display says “adjust temp” - just push the button in and the display changes to Heater Control. Turn the knob left or right until the display switched to “HEATER OFF” push the button in to set the heaters “state” and the main display will say “Heat Disabled” on the bottom line.

NEVER PUT ANIMALS INTO AN INCUBATOR THAT IS TURNED OFF. The fan needs to be running to bring in fresh air.

It is important to wean the pups off oxygen. As soon as the pups show that they can breathe on their own turn off the concentrator and put it away for the next litter.

Usually at this point the pups can maintain their own heat, breathe on their own and just need a box to stay in – and stay out of a draft. The incubator can still be used at this point, leave them in the incubator until they have developed enough to do well on their own. If you find that the high temp alarm goes off and your pups are a couple of weeks old then they may have outgrown the incubator and its time to take them out.

The plan should be to wean them off of the oxygen as soon as you can and you wean them down to room temperature as soon as you can. Too high a concentration of oxygen, for too long, can damage the puppies eyes and that's something that you want to be very careful of if you have a sick puppy that's in there and their eyes are open.

When you are done with the litter and ready to turn the incubator off, be sure the following are done:

Thoroughly clean inside with disinfectant. Nine parts water to one part bleach, in a spray bottle, is a very effective blend, cheap, and easy to use. Spray on all surfaces (watch out for carpet or adjacent material – overspray can bleach out neighboring

furniture) – let stand wet for 10 minutes and then wipe down with a clean dry towel. **Run the incubator with the door open for an hour and the heat set to “Heater on” to completely dry any moisture. Don't squirt water (or anything else) up through the fan and exhaust openings in the ceiling of the incubator.**

Every year I get a couple of calls that say “ It worked great all last season and then when I plugged it in this year it didn't work” The cause has been identified as cleaning and then closing the door – packing it away wet and then the moisture sits and stews on the electronics and causes corrosion. Don't be that caller. Run the incubator with the door open for an hour and the heat set to “Heater on” to completely dry any moisture.

One last thought. Buy an air compressor. Something with a small tank. Compressed air is great for blowing out dust in the upper part of the incubator. And once you have a compressor you'll find other uses for it. DeWalt makes a small 2 tank model that I like. It's on Amazon and Home Depot. About \$150.

Warranty

The Precision Puppy Incubator carries a one year parts and labor warranty. Shipping charges to and from our facility are the buyer's responsibility. Contact our service dept. at www.precisionincubators.com/support to begin the support process.

Return Policy. Returns will be accepted for 15 days after shipping date on *unused equipment returned in the original packaging*. You must call for return authorization or shipment will be refused. Shipping charges and arrangements are your responsibility. A restocking charge of 20% will be assessed. Packages must be insured. You need to call and notify us on the day you ship your return, be prepared to supply your tracking number.