

Installer's Guide

Percent Timer (PT) Control CNT04821 CONTROL CNT04820 PUSH BUTTON CONTROL

⚠ WARNING: HAZARDOUS VOLTAGE - DISCONNECT POWER BEFORE SERVICING

ALL phases of this installation must comply with NATIONAL, STATE AND LOCAL CODES

IMPORTANT— This Document is **customer property** and is to remain with this unit. Please return to service information pack upon completion of work.

PERCENT TIMER (PT) CONTROL REPLACEMENT INSTALLER'S GUIDE

ELECTRICAL CONTROLS

⚠ WARNING

Hazardous Voltage – Disconnect Power Before Servicing

Note: Proper Wiring Size Selection and Wiring Installation Is The Responsibility of the Electrical Contractor.

Controls

The percent timer (PT) control is the primary control for operation of the ERV. The PT control should be set by the installing dealer. After startup, the PT control will operate the ERV automatically.

To assist the dealer in determining the PT control setting a ventilation calculator is available from your local distributor. Microsoft Excel is required to run this program. The calculator input can accept a minimum ventilation airflow requirement per local code or calculate the minimum airflow required per ASHRAE 62.2-2004. The program will calculate the minimum percent runtime to meet the ventilation requirement.

In addition to the PT control some installations may include Push Button (PB) or point of use control(s). The PB controls are typically located in bathrooms or areas where exhaust ventilation is required for short periods of time. PB controls are wired in parallel to the PT controls and energize the ERV whenever there is a manual call for ventilation.

PERCENT TIMER CONTROL (PT)

The Percent Timer Control automatically energizes and de-energizes the energy recovery ventilator every hour, providing ventilation for the home around-the-clock. The PT control has two status lights. One is the power light located in the upper left hand corner of the control. The other is the Runtime % light. The power light is on whenever the PT control is calling for the ERV to run.

The Runtime % light indicates the amount of time per hour the ERV will operate. Set the control per your local code or ASHRAE Std 62.2 and your ventilator will run once every hour.

FOR CONSTANT OPERATION: Press the fan icon until the 100% light is on. The "Runtime %" light turns on. The ERV unit will run continuously.

FOR MINIMUM VENTILATION REQUIREMENT OPERATION: Set the control at the percentage that meets local code or ASHRAE 62.2. Press the fan icon until the light for the percent desired is on.

TO TURN THE ERV OFF: Press the fan icon until all lights are off. The control is off. The ERV motor is de-energized. (Power is still present inside the unit. Always unplug cord from outlet before servicing!)

NOTE for ERV systems with more than one control:

Another control may be causing your ventilator to run -even if the runtime % light on this control is off. If you wish to keep your ventilator from running, check that the other controls are not calling for unit operation.

REPLACEMENT

1. Disconnect Power before servicing ERV.
2. Remove Lutron Decora™ cover plate and save plate and screws.
3. Remove PT control from electrical box and disconnect two wires connected to terminals "C" and "R" on back of control. If push button control(s) are connected to the Percent Timer control, remove the wires from the PB terminals. See Figure 1.
4. Reconnect all the wires just removed from the PT control to the appropriate terminals on the new PT control. The wiring should be 18 Gauge.
5. Secure the new PT control in the electrical box with the two screws.
6. Re-fasten the Lutron Decora™ cover plate to the electrical box to complete the installation.

Installer's Guide

Push Button Point-of-use Control (Optional Accessory)

For use with all ERV models

OPERATION

The Push Button (PB) Point-of-use Control lets you manually turn on your energy recovery ventilator for a short period of operation – for example, when you are using a bathroom. The PB Control must be connected to a PT control to operate.

20-40-60 MINUTE VENTILATION CONTROL:

Press the fan icon and your ventilator will run for 20 minutes. Press again and the unit will run 40 minutes. A third press provides for 60 minutes of operation. Percent Timer Control does not need to be on for the PB Control to operate the ERV unit.

You can cancel a cycle at anytime. Just press the logo and hold for about five seconds.

You can start another cycle by pressing the logo.

FOR ERV SYSTEMS WITH MORE THAN ONE CONTROL:

Another control other than the push button may be causing your ventilator to run. If you wish to keep your ventilator from running, check that none of your controls are calling for unit operation.

INSTALLATION

4. Install control in a standard 2" x 4" electrical box, with a minimum depth of 1.5", with the two screws provided.
5. Wire Size: 18 gauge, no more than 500 feet. Wiring is non-polar.
6. Two wires from the PB Control should be attached to the 'PB' positions on the terminal block on the back of the Percent Timer Control.
7. For two PB controls, one wire from each can be twisted together and inserted into a single position on the terminal block on the Percent Timer Control. The wires must be a 18 gage solid wire. If more than two PB controls are attached or 18 gage stranded wire is used then pigtails must be inserted into the 'PB' positions on the Percent Timer Control and the leads attached to the pigtails with wire nuts.
8. Use a Lutron Decora™ cover plate to complete installation.

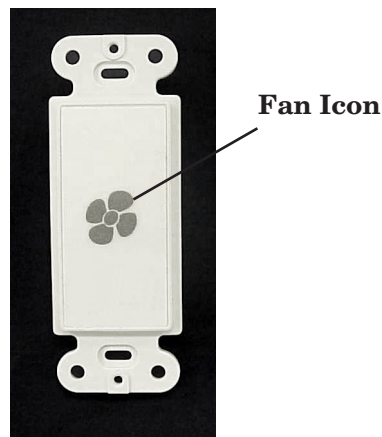
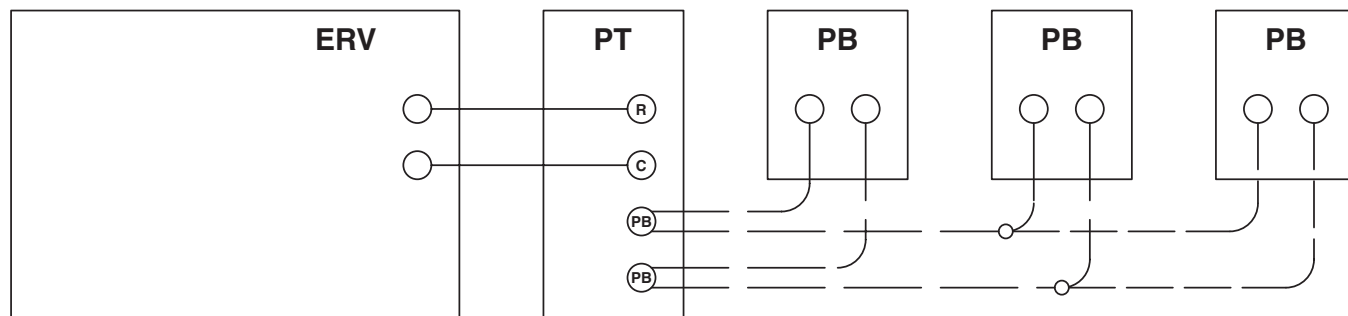


Figure 1
Optional Push Button Control

Push Button Control (PB) Optional Accessory



(2) PB controls can be directly connected to the PT control
Up to (6) PB controls, wired in parallel, may be used.

Figure 2 ERV with Percent Timer control and optional Push Button controls.

Start-up and Check Out Procedure

1. Make sure power is disconnected by unplugging electrical cord.
2. Check field-supplied control wiring to insure proper installation and that all connections are tight.
3. Check field-supplied power supply for proper voltage.
4. Make sure that the ERV is securely installed.
5. Check all duct connections to insure they are sealed.
6. Check all duct outlets. All outlets must be open.
7. Check unit filters are secured in place and clean. Vacuum or replace as needed.
8. Close unit door – plug in unit.
9. Turn all controls to off
10. Set timer to 10 %; unit should start and run for approximately six minutes.
11. Go to outside of building and check for airflow at inlet and outlet hoods. Check that weatherhood screens are in place and clean. Make sure that the intake hood is positioned away from any exhausts or other sources of pollutants. **The quality of the introduced fresh air is the most important function of this system!**
12. If the unit has a push-button timer installed press it one time after the unit has cycled off from the percentage timer's cycle. Unit should run twenty minutes and then cycle off.
13. Set percent timer to recommended percentage. (See application guide) Place peel & stick dot on the face of the percentage timer to indicate proper runtime percent setting.
14. Instruct end user on proper operation procedures and leave use and care manual with them.

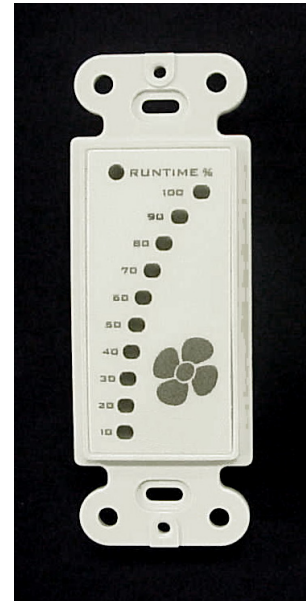


Figure 3 Percent Timer control



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*For more information contact
your local dealer (distributor)*

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Since the manufacturer has a policy of continuous product and product data improvement, it reserves the right to change design and specifications without notice.