

# Installation Instructions for **HMI** HOYME ADP-1101-10AV

Allows Two Separate Exhaust/Ventilation Switches to control One Exhaust fan: One to operate the Exhaust Fan only; the other (Designated Ventilation Switch) to turn on the same Exhaust Fan, plus the Appliance Circulation Fan and to open a Fresh Air Damper (if used).

**Installation Of This Adaptor Shall Be In Accordance With The Requirements Of the Authorities Having Jurisdiction.**

**Refer also to HOYME Installation Instructions for: Air Control Damper – HAC-0x10-OPO/PC; Relay Adaptors ADP-1101-05A; ADP-1102-TWP.**

## ADP-1101-10AV



4" x 5" x 2 1/2"  
101 x 127 x 64 mm

This Adaptor interfaces with two exhaust fan switches which control the same exhaust fan: one switch that controls one exhaust fan only and another switch that controls the same exhaust fan together with a furnace circulation fan and a 24Vac inlet damper. It has two 120Vac coil relays with contact points switching both 120Vac and 24Vac circuits. See schematic wiring diagram for details.

**Fitness of this Adaptor/Damper combination to satisfy air supply requirements for fuel fired appliances during operation of the interconnected exhaust fan(s) shall be investigated by the enforcing authorities.**

Air intake duct installation shall be in accordance with: In Canada - CAN/CSA B149 & B139; In the USA – ANSI/NFPA 54, 2006, ANSI Z223.1 and/or local codes including local codes relating to ventilation air duct installation.

I.D.: **ADP-1101-10AV** comes with two relays with coils in parallel and therefore operate as **one relay with multiple contacts.**

DPDT- Coil-120Vac. Points-24Vac- 5 Amps  
DPDT- Coil-120Vac. Points 120Vac-10 Amps

- Controlled line voltage leads from both switches leading to the Adaptor ADP- 1101-10AV and the controlled line voltage leads leading from the Adaptor to the exhaust fan shall be suitably cabled, fastened and enclosed in suitable raceways.

-Refer to local and applicable codes.

-Always conduct a thorough check-out after installation is complete.

-Affix appropriate labels and follow instructions and warnings on each label.

1. Turn off electrical power supply to appropriate appliance(s).

2. Run wires from both switches and connect to the ADP-1101-10AV as follows and as per wiring diagram:

3. Connect (Bathroom) Exhaust Switch wires to Adaptor wires Black and White.

4. Connect Exhaust/Ventilation Switch wires to Adaptor wires Blue and White.

5. Connect Adaptor wires Red and White to the exhaust Fan.

6. Test the (Bathroom) Exhaust Switch only by supplying line voltage to it. Switch will cause Exhaust Fan to run. Turn off power supply to Exhaust Switch.

7. Test Exhaust/Ventilation switch only by supplying line voltage to it. Switch will cause Exhaust Fan to run. Turn off power to Exhaust/Ventilation Switch.

If Exhaust/Ventilation Switch is to cause the Furnace Circulation Fan to run during Exhaust Fan operation, then:

8. Connect Furnace Terminal **R** to Adaptor #5. Connect Thermostat wire **G** to Adaptor #3 (Gt). Connect Adaptor #4 (Gf) to Furnace Terminal **G**. **Test by turning line voltage on to the Furnace and to the Exhaust/Ventilation Switch. Switch will cause the Exhaust Fan and the Furnace Circulation Fan to run simultaneously.**

If an inlet Fresh Air Replacement Damper is to also operate while Exhaust/Ventilation Switch is on, then:

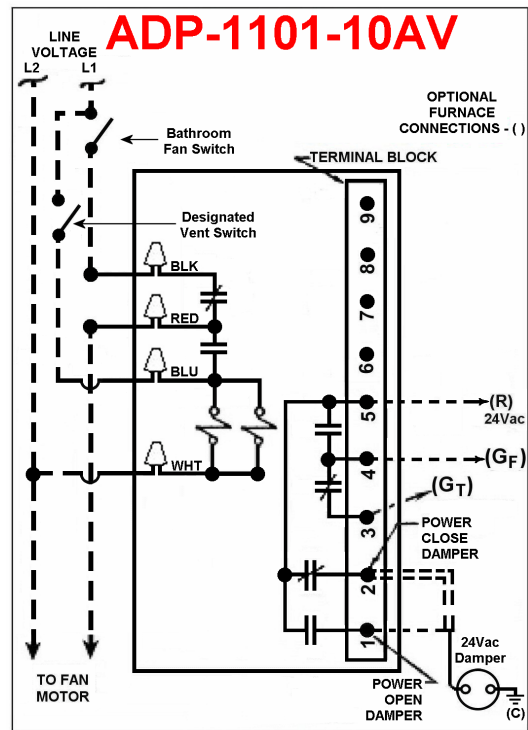
9. Turn off power supply to the Furnace and install an HAC motorized air control Damper as per instructions supplied with it. Before installing, it is recommended to use a 24Vac power supply to check the operation of the Damper.

10. Connect Furnace Terminal **R** to Adaptor #5. Connect one Damper wire to **Adaptor terminal 1 (if Power Open)** or to **Adaptor terminal 2 (if Power Close)** type. Connect other damper wire to Furnace Terminal (**C**). (See wiring diagram for Damper connections).

11. Turn on electrical line power to all appliance(s). If damper is a Power Open type, it will remain closed at this time. If damper is a Power Close type, it will close at this time.

12. Turn on Exhaust/Ventilation fan switch. Exhaust fan and furnace circulation fan will run, and inlet damper will open simultaneously.

**Schematic Wiring Diagram of Adaptor 1101-10AV allows one Switch to control an Exhaust Fan only and another Switch to control the same Exhaust Fan, Furnace Fan and a Damper simultaneously.**



Relay Coil: 120; Points 24Vac: 05A; 120Vac: 10A

Note: This marking is also on label to be affixed adjacent to Appliance Wiring Diagram. Additional wire shall be of the same size as originally used when completing electric circuits.