



## 25110 AIRPORT FRESH AIR EXCHANGER INSTALLATION INSTRUCTIONS

The function of the AIRPORT Fresh Air Exchanger is to help take out existing, stale interior air from inside the RV while bringing in new, fresh air from outside the RV. As opposed to a conventional fan that will add or remove air in only one direction, the AIRPORT transfers the air simultaneously. Also, the AIRPORT helps keep the interior air temperature close to your desired level by crisscrossing the air without mixing it. So if your RV is cool inside while the outside environment is hot, the AIRPORT helps transfer that cooler interior air to the incoming hot exterior air while keeping it fresh. The goal is for the AIRPORT to help improve your RV's interior air quality while keeping the temperature at your preferred comfort level.

### **PLEASE READ COMPLETE INSTRUCTIONS BEFORE PROCEEDING!**

Required Installation Items (not included):

- Screws, appropriate to mount AIRPORT to floor or wall (depending on wood or metal)
- Screws, 1/4", to fasten ducting to vents and collars (optional)
- Screws, appropriate to mount Interior and Exterior vents (depending on wood or metal)
- Wire, 14 gauge, length depending on installation needs
- Spade connectors, 16 gauge, for switch installation
- Misc electrical connectors and supplies for wiring completion

Interior Installation:

- 1) Locate an area in a closet or cabinet that will allow for proper mounting of the AIRPORT. We suggest the area be out of the way but with easy accessibility. Preferably, the location should have access from floor to ceiling to allow for an easier installation of ducting. It is best to locate the interior vents as far away as possible to improve air circulation and keep the input and output air from mixing. **Before proceeding, please check for existing wiring, plumbing, and structural elements before drilling or cutting.**
- 2) To mount the AIRPORT a wall, there is one black tab on each side of the device. Use appropriate wood or metal screws to mount the device securely to the wall making sure that the mounting screws are fastened to proper support within the wall.
- 3) During use, the AIRPORT will create water runoff from condensation. There are two 3/8" drain outlets at the bottom of the device. Attach the vinyl hose to these outlets and route thru the floor of the RV to drain excess water underneath. The hoses will not be pressurized during operation but be sure to attach the hoses securely to the outlets to avoid any leakage.
- 4) Once the AIRPORT is mounted, locate two vent locations that allow for unobstructed air flow in the RV's interior living space. Choose locations that are as far apart as possible to improve air circulation. (If mounting in a closet, a possible option would be one vent at floor level and one at ceiling level.) Once you have determined the two locations, cut a 4 inch round hole to mount the round interior vents. Again, please make sure the vents are not obstructed.

- 5) One of the vents will be used for fresh air INTAKE from outside the RV. This location should be as close to the floor as possible. Attach the included flexible 4 inch ducting to the round vent and then to the collar on the AIRPORT marked as 'Fresh air to house' on label, cutting the ducting to the proper length. Use the included clamps or 1/4" screws (not included) to fasten the ducting securely to both the vent and the collar on the AIRPORT. Duplicate this procedure for the EXHAUST from inside the RV by attaching the duct to the second interior vent (this location should be as close to the ceiling as possible) and then to the collar marked as 'Exhaust stale air from house' on label.

#### Exterior Installation:

- 1) The installation of the two exterior vents will be very similar to the interior vent procedure in steps 3 and 4 listed above. Locate two spots on the exterior of the RV that have direct access to the AIRPORT's interior mounted location. You will need to be able to direct the ducting from the device to these vents without any interference. Again, we suggest that these two exterior locations be as far apart as possible to improve air circulation. We recommend locating the INTAKE vent thru the sidewall of the RV close to the AIRPORT. Once located, cut a 4 inch hole and install the included exterior square vent. Attach the 4 inch duct from this vent to the collar labeled 'Fresh air from outside'. Secure the duct to the vent and collar using the included clamps or 1/4" screws (not included).
- 2) (Choose one of the three options in this paragraph) If you have a motorhome or trailer without basement storage, one option is to put the exterior EXHAUST vent thru the floor to exhaust stale air underneath the RV. If you have a motorhome or trailer with basement storage, the second option is to exhaust the stale air into your basement compartment as long as this compartment is separated from the interior living space. This might help keep your basement compartment's air temperature close to the temperature in the living space. The third option is to locate the exterior EXHAUST vent thru the sidewall of the RV as far apart from the previously installed exterior INTAKE vent to keep the two air flows from mixing. **In any case, please check for existing wiring, plumbing, and structural elements before drilling or cutting.** Once you have mounted the second square exterior vent, attach the 4 inch duct from this vent to the collar labeled 'Exhaust stale air to outside'. Secure the duct to the vent and collar using the included clamps or 1/4" screws (not included).

#### Electrical Wiring:

- 1) Locate a 12 volt power source to provide power to the AIRPORT. If you are splicing into existing wire, please be sure to use the proper electrical connectors and electrical tape. If this source is already fuse protected within the RV, there will be no need to add additional fuses. If you are running 12 volt wire directly from the RV's battery, please insert an inline 10 amp fuse holder and appropriate fuse.
- 2) Determine a location for the AIRPORT's On/Off switch. This location should be convenient for operation and have access for wire from the power source and to the device. Cut a hole appropriate to mount the switch and plate.
- 3) Once the switch is mounted, fasten the wire to the switch using electrical spade connectors. Be sure the connectors are safely secured. At this point, the AIRPORT is ready for use. It is safe to use the AIRPORT in a continuous ON mode as long as you consider that the device will deplete a 12 volt battery's power if there is no offsetting charging mechanism (converter charger or solar panel).