

Remote HVAC Temp Sensor

Your Alpine HVAC system utilizes two remote temp sensors. One will be located in Main living area and the other located in the master bedroom. These sensors sample the ambient inside air temperature and send signals to thru either Zone 1 AC or Zone 2 AC control boxes/

Signals sent tell either the Air conditioner, Heat Pump, or Furnace if they need to continue running bases on ambient room temperature sensed. IF the sensor cover is blocked or plugged with dust and such the signals sent will not be accurate

Plcs show incorrect sensor mounting (inside the wall) and correct sensor placement (outside the wall cutout hole)





This sensor is not properly mounted and will sense air temp from inside the wall structure. It needs to be relocated so that it is sitting outside the wall as shown in next pic





The image above shows a properly mounted remote temp sensor located outside the wall to detect the room air temp.. NOT the temp inside the wall..

NOTE: also in the last pic above you can see the hole behind the sensor is quite large.. For best overall results you will need to seal up this hole so that air from inside the wall doesn't wick out over the sensor and cause it to detect incorrectly.

Foam sealant could be used but be careful to not get sealant on the actual sensor shown in the picture above..

The image below tells you how to verify if the remote temp sensor (One for Zone 1 and One for Zone 2) should read in ohms at a given temp. You would need to go on the roof and remove the AC cover and locate the control module for the AC unit.. There will be a 2 wire plug that runs down inside to the remote temp sensor

With the AC unit turned OFF remove the plug and use a multimeter ot ohm the resistance of the remote temp sensor. Chart below indicates what the ohm reading should be at a given institute temperature

The proper location of the remote sensor is very important to maintain a comfortable temperature in the RV. The following rules should be observed when selecting a location:

- a. Locate the remote sensor 54" above the floor.
- b. Install the remote sensor on a partition, never on an outside wall.
- c. Avoid locations that are close to doors that lead outside, windows or outside adjoining walls.
- d. Keep them away from discharge from supply registers.
- e. Place them in areas that have good air movement. Avoid corners and under cupboards.

Unplug the remote sensor and test its cable with an ohm-meter. See figure 10. The ohm reading should be as follows:

TEMPERATURE	OHM READING
55°F	11667
60°F	10212
65°F	8959
70°F	7876
75°F	6939
80°F	6126
85°F	5418
90°F	4802
95°F	4264
100°F	3793

Note: Any ohm reading has a tolerance of plus or minus 10%.