

INTRODUCTION

Preservatech's PMCG generator is a miniature humidity control device for museum showcases and similar small sealed enclosures. This unit can reliably control humidity for individual well sealed enclosures.



When properly installed, this microclimate control system will typically maintain the relative humidity level in a sealed enclosure to within two percent (or less) of an operator determined value.

Depending upon the ambient temperature conditions and enclosure construction, relative humidity levels of less than twenty to over sixty percent can be attained.

This unit will work only with high quality display cases with a air change rate of 0.2 per day or better.

This manual will assist you in installing and setting up the unit, and attaching all the necessary connections. As well, it contains complete instructions on operating the unit.

Please note the cautions and warnings, as the unit may not provide optimum performance if all directions are not carefully followed

DIMMENSION



Packing List

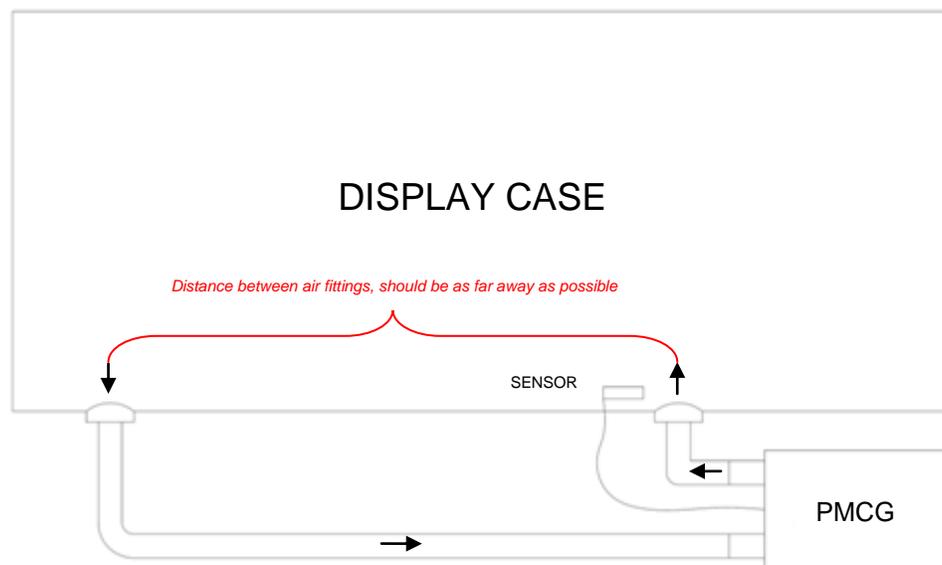
Every machine shipment consist:

1. PMCG generator. (1 pc)
2. Silicone hose for connecting to display case (2 m)
3. Through wall air connector (2 pcs)
4. Humidity sensor.
5. Power cord
6. External alarm LED.

INSTALLATION

The PMCG unit re-circulates air inside the case. Installation is very simple and includes:

- connection of the PMCG unit to the case, using two flexible hoses made of silicone (or other material approved by conservator), Hoses outside diameter: 7/8" - 22 mm (included)
- hose connecting machine OUT port with the case should be as short as possible, other hose can be longer.
- installation of the RH sensor inside the case (to get most stable humidity inside the case, sensor should be located close to the air input but not directly in the air stream).
- connection to a standard power outlet.
- setting up proper RH level (see next chapter)



SETTING UP

The machine is controlled by a microprocessor located at the front of the machine. Using 5 buttons, located on the right side of the display, it is possible to switch display between, "RH" - actual value of RH measured by machine sensor (left top button) "SET" - target RH value (left bottom button) and "ALA" - out of range alarm deviation (center button).

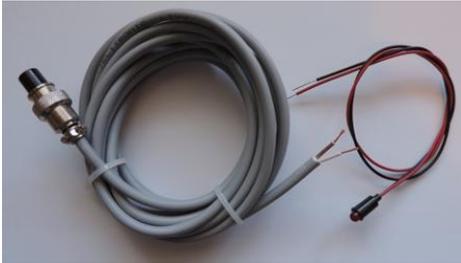
See detailed instruction below. For more comprehensive instruction of microprocessor programming, please see our "PMCG - Programming Manual".

Shows actual RH value measured by machine sensor	RH-measured humidity-read only	
Target RH value.	SET-target humidity	
Value offset for OUT OF RANGE ALARM. Alarm will be triggered when RH>(SET+ALA) and/or when RH<(SET-ALA)	ALA-out of range alarm	

ALARM CONNECTION



PMCG machines have an alarm connector on the back of the machine. Each machine is shipped with 2 meters of cable and a small red LED light. LED can be located away from the machine, to indicate "RH OUT OF RANGE" status.



LED light is powered by 12 VDC and LED's leads should be connected properly:
RED to WHITE and BLACK to BROWN.

DATA LOGGER



Some of the machines are equipped with a built in data logger. The data logger records the actual measurements on the SD card (not included) . The logger is programmed in factory to record at 1 minute intervals.

Time intervals can be changed between 1 and 60 minutes in 1 minute increments, please see "PMCG Programming Manual".