

Explanation of common terms used with enerstat *SLIMLINE* controllers.

Technical Help Series

1.- Smart Fan.

Available on **SHC-7, SMS-1 and SHP-2.**

Option is selected via **dip switch #2** being "ON" and activated by pushing "FAN" Button to manual, thus showing manual fan. Continuous Fan on the screen display.

The effect will be: The fan will run continuously during **occupied** hours, but go to automatic during **UN-occupied** hours. If, however, the measured temperature (say in the morning) at the required start time, is within the set point range, i.e. there being no call for heating or cooling – then the fan **will** come ON, on its own, as if someone had pushed the fan button, and it **will** run all day or until program goes into setback.

2.- Selection of "Fan with Plenum" or "Fan with Heat".

It is **imperative** that this selection via Dip Switch is checked for any system using **DSL-200, DSL-200A, DSL-300, DSL-700, SK-3, SHC-7, and SMS-1.** I.e. all Heat / Cool controllers, as distinct from **HEAT PUMP** controllers.

"Fan With Plenum" selection simply means that the controller does not control the fan to come ON with the call for Heat as the function is now taken care of by the heater manufacturer via a **Plenum or electronic** switch in the heater.

If, however, a cooling unit with **ADD ON** electric heat or a **REVERSE CYCLE** unit is installed, you **must** select "Fan With Call For Heat"

3.- 4 min/2 min Dip Switch Select.

This simply means that once equipment is called to come ON it will run for a minimum of either 4 minutes or 2 minutes, and stay OFF for the same selected time. I.e: **short cycle protection for compressors.**

4.- ADD ON Heat Pump Dip Switch on DSL-600 eg.

Means that on a cold day the **Heat Pump** unit will come on and try to maintain **Heat** requirement and if it cannot do this with the heat pump^S Capacity at the present ambient temperature, it will shut the **Heat Pump** down and will switch the **AUX Heater ON** (if installed).

When **Heat** is again called for, it will again try the **Heat Pump** first etc.

5.- Single multi-stage DipSwitch Select.

Simply means that on the Commercial Programmable Controllers you only have to have it ON in the morning and OFF at night I.e. One ON/OFF per day, each day of the week.

6.- Convention is that "0" = Reversing valve is energised with call for **COOL** and "B" = Reversing valve is energised with call for **HEAT**.

7.- Balance Point.

Setting Outdoor Hi & Lo Temperature Balance Points on (SHP-1, SHP-2)

When using the optional Electronic Outdoor Temperature sensor (**SL-ODT**), you can select the outdoor balance points to inhibit the auxiliary heat and / or compressor of your **Heat Pump** equipment.

HibP – Press and hold the **OUTDOOR** button, then press the **MODE** button.

HibP will appear on the display. Raise or lower the **HibP** by pressing the **▲** or **▼** button to set the temperature above which the **AUX.** heat is locked out. If another key is not pressed, the controller will return to normal operation in 15 seconds.

Press the **OUTDOOR** button while showing the **HibP** and the controller will switch to show **LobP** on the display. **LobP** is used to lock out the compressor. eg. If a **HEAT PUMP** is set with **AUXILIARY** heat **HibP** = 11.1 C, **LobP** = -2.2 C.

When the outdoor ambient temperature is 11.1 C or above, the controller will not allow the **AUXILIARY** heat to energize, allowing the compressor to continue to run to achieve the set point.

When the temperature is -2.2 C or lower, the controller will automatically lock out the compressor and allow only the **AUX.** Heat to energize. The factory **HibP** and **LobP** setpoints are +48C and -48C.

8.- SKIP A TIME SLOT, say on a Sat-Sun in a commercial situation. Only 3 out of 4 **time** slots can be skipped or, in other words, at least **one** time slot **must** be active, usually the set back time slot.

TO INSTALL SKIPS (---)

Press program button - select **DAY** will blink.

Press and **HOLD** program button again and **HOUR** selection will blink.

Then press "MODE KEY" and Dashes(---) will be inserted instead of a time I.e.

Dashes (---) mean that there is no "indent" command "pin" inserted, just as in an analog time lock.

Typically in a commercial installation Monday – Friday, no Saturday, no Sunday **ON** in the morning, but **OFF** in the night.

Do remember that there is no OFF program, merely a Set Back Or Set Up at a desired time. I.e if you do not want Heating or Cooling, set heating temperature SET POINT to LOW and Cooling temperature SET POINT to HIGH, say 5 degree Heat and 40 degree Cool. And Nothing will come on between these points. Only if measured temperature exceed 40 degree or fall below 5 degrees will the equipment come ON.