

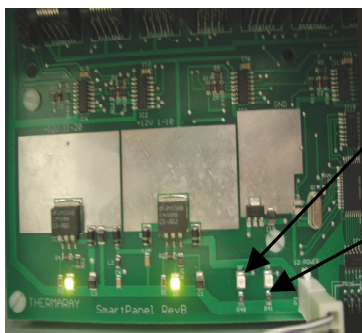
SMARTROOMS DISTRIBUTION PANEL PROGRAMMING INSTRUCTIONS

Ensure there is 120 volt power to your SmartRooms Distribution Panel (SRDP). There is power to the SRDP when the L.E.D next to the transformer is on. It is very important that the circuits are labeled so you can easily program the SRDP.

Setup

1. Make sure no Comfort Controllers are connected to the SmartRooms Distribution Panel (SRDP) until ALL programming is done.
2. Find the Test Plugs supplied with the SRDP. One is labeled "P" for PRIMARY and the other is labeled "S" for SECONDARY.

At the top of the panel where the RJ45 jacks are, is the communication panel. You will see 3 green lights. One green light should be flashing. This indicates the panel is in normal operating mode. This is known as the Run light.



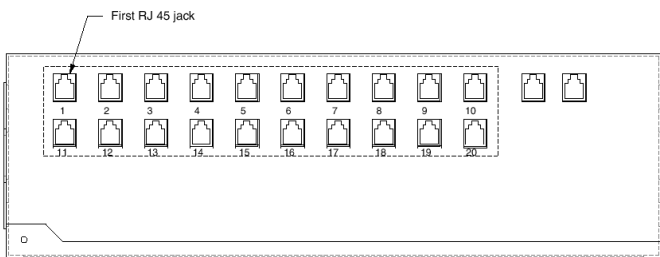
TEACH
LIGHT

RUN
LIGHT

The SRDP is shipped from the plant with all the relays having been cleared. In effect none of the relays should be programmed. However, to be sure, we suggest that you clear all the relays in the panel before programming the relays.

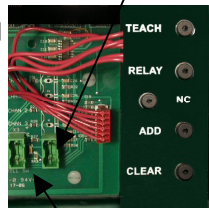
Starting with a New Panel - Clearing all relays.

3. Insert the PRIMARY test plug into the first RJ 45 jack.



TIME OF USE
RECEPTACLE

4. Press and hold the TEACH and CLEAR buttons simultaneously. The green flashing light (also known as the Run light) will become solid and then jump to the light next to it (D7/R40). This light is the Teach light. You should now have 3 solid green lights. Once you have 3 solid green lights, release the two (2) buttons.



5. To clear all relays,

KILL RECEPTACLE

NOTE: TO DISCONNECT POWER TO SRDP SWITCH OFF BREAKER

- a. Press and hold the CLEAR button first, (do not release) then
 - b. Press the ADD button and hold for 5 seconds. The Teach light will flash briefly.
6. Release the buttons. The Teach light will stay on briefly then it will flash and then jump to the Run light. Then the Run light will stay flashing indicating that you have cleared all relays. Remove the PRIMARY test plug.

Teach Mode

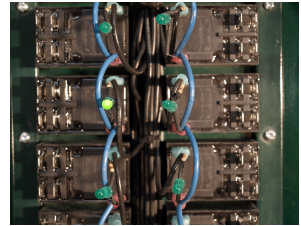
7. Insert the PRIMARY test plug into the jack for the room you wish to program. For example, if the kitchen is being controlled by the 3rd RJ45 jack and this is the room you want to program the relay for, you insert the PRIMARY test plug into the third (3rd) jack. CAUTION: Use only one test plug at a time.
- Hint –
- a) The PRIMARY test plug is always used.
 - b) The SECONDARY test plug is used only when you have one controller controlling two systems.
 - Floor & Ceiling (P is for floor, S is for ceiling)
 - ETS & Ceiling (P is for ETS, S is for ceiling)
 - ETS & DHW (Domestic Hot Water) (P is for ETS, S is for DHW)
8. Ensure KILL SW (Switch) Connector is not plugged in.

Enter Teach Mode

9. Press and hold the TEACH button and then the CLEAR button for 3 seconds. The Run light will stop flashing and the Teach light next to it will become solid. The Run light is now off. All green lights should be solid indicating you are in TEACH MODE.
10. Release the buttons.

Programming a Relay

Each relay has a green L.E.D light next to it. During programming, the L.E.D light will turn on so that you know which relay you have chosen.



11. While in TEACH MODE, press the RELAY button. An L.E.D. light will turn green next to a relay. Pressing the RELAY button again will cycle to the next non-programmed relay.
 12. When you light the L.E.D. for the relay you want to program, press the ADD button. Then press the TEACH button. That relay is now programmed.
 13. You can add multiple relays to a controller. For each relay you want:
 - a. Press the RELAY button until the desired relay is lit, then press the ADD button. Repeat this step until all desired relays are programmed for this RJ45 jack.
 - b. Once you have programmed all the desired relays for this jack, press the TEACH button.
 14. This will return you to RUN mode, so you must press TEACH and CLEAR until the TEACH light is lit in order to program the rest of the relays.
 15. Move the PRIMARY PLUG to the next desired RJ45 jack and repeat the above programming steps until all relays are programmed.
- Note: Only relays that are not programmed can be selected. During programming, should you encounter a previously programmed relay, the software will automatically

skip/bypass this particular relay. You will not be able to program it unless you clear the relay. See how to clear your relays in the **Clearing a Relay** section.

Note: If the Teach LED light goes out and the Run LED light starts flashing, you have not inserted the Test plug correctly. There must be only one RJ 45 test plug inserted in order to enter TEACH MODE.

One (1) Controller for Two (2) Heating Systems

16. If you have one (1) controller controlling two (2) heating systems, you must first exit Teach Mode by following steps 15-17 in the **Completing the Teach Mode** section. Then,
 1. Remove Primary test plug.
 2. Insert Secondary test plug (into the same RJ45 position).
 3. Repeat steps 9 – 13 and 15 – 17.

Completing Teach Mode

17. Press the TEACH button when you are done selecting all the relay or relays for that RJ45 position. This will result in the green Run light flashing once again.
18. All the relays selected for a specific Controller (RJ45 jack) will turn on one at a time.
19. Now remove the test plug. The LED lights on the relays selected will turn off.

Repeat the above steps for each Comfort Controller that is to be connected to the SRDP.

HINT!!

Now would be a good time to record the rooms that are mapped to a specific relay. There is a form on the panel door for that purpose.

Clearing a Relay

If a relay is already programmed and you want to use this one, you have to clear the program before you re-program it.

20. Insert the PRIMARY test plug into the RJ45 jack that you wish to control. For example, if the kitchen is being controlled by the 3rd RJ45 jack and this is the room you want to re-program the relay for, you insert the test plug into the third (3rd) jack.
21. Enter TEACH MODE.
22. The relay programmed for this jack should light up.
23. Press the CLEAR button. This will clear the relay.
24. Re-start at the section **Teach Mode** Step #7 and follow the steps on how to Program a Relay.

Advanced Option

This option is used for a remote shutdown of the Panel. This is often the case where a power utility offers off-peak or reduced electric rates as part of their program, they shut down the power to the storage heating system. The easiest way to do this is to program all of your relays for the rooms you want (see Teach Mode) then teach the relay(s) that you want to operate in off-peak mode.

Teaching the KILL SWITCH INPUT (REMOTE CONTROL FOR OFF-PEAK USE)

25. Make sure there are no Comfort Controllers or test plugs plugged into the SRDP.
26. Insert a jumper wire on the terminals on the Green Plug. The Green Plugs are supplied separately. A jumper wire is any small bare wire readily available on the job site.

27. Insert one Green Plug into the Green Kill Receptacle (see picture on page 1). Do not insert any plug in the time of use receptacle. The Green Kill Switch acts just like the Primary test plug so do not insert any test plugs or controllers until you are finished.
28. Follow steps 9 – 13.
29. Once you have added all your relays for off-peak use you must decide on whether the Kill Switch is normally open (closes when the relays need to be deactivated) or normally closed (opens when relays need to be deactivated).
30. If it is normally open (the default) then just press TEACH to complete the session.
31. If it is normally closed then you must press and hold N.C. (Normally Closed) button and press the TEACH button.
32. Release the buttons to finish.
33. Remove the Green Plug, and then remove the jumper wires. Connect the Green Plug to the utilities off-peak circuit and then insert the Plug into the off-peak Kill Receptacle.

Teaching the Time-of-Use Switch

NOTE: DO NOT ADD THE RELAYS THAT CONTROL THE EARTH STORAGE SYSTEMS. ALL OTHER RELAYS MAY BE ADDED FOR TIME-OF-USE.

34. Make sure there are no Comfort Controllers or test plugs plugged into the SRDP.
35. Temporarily remove the Green Plug from the Off-Peak Kill Receptacle.
36. Insert a jumper wire on the terminals on the 2nd Green Plug.
37. Insert the 2nd Green Plug into the Time-of-Use receptacle. The Time-of-Use Switch acts just like the Primary test plug so do not insert any tests plugs or controllers until you are finished.
38. Follow steps 9-13.
39. Once you have added all your relays for Time-of-Use you must decide on whether the Kill Switch is normally open (closes when the relays need to be deactivated) or normally closed (opens when relays need to be deactivated).
40. Follow steps 28-30.
41. Remove the 2nd Green Plug, and then remove the jumper wires. Connect the 2nd Green Plug into the utility's Time-of-Use Circuit. Then insert the Plug into the Time-of-Use Receptacle.
42. Insert the 1st Green Plug back into the Off-Peak Kill Receptacle.

Power Failure:
Your SRDP's programming memory is designed to outlast a 10 year long power failure.

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