Application Notes

1.13 ESCORT – Thermostat Scheduling Control (PC1616/1832/1864 V4.2)

Panels:

POWER SERIES (PC1616/1832/1864 V4.2)
Escort5580TC Module
EMS-X00 Thermostat
EMS-ITS Internal Temperature Sensor (optional)
EMS-OTS Outdoor Temperature Sensor (optional)

Overview:

Typical home installation with one thermostat. This application will provide an example for setting
the temperature by schedule. The Escort will automatically change the temperature to the
programmed setting at 8:00 am and 11:00 pm.

Special Notes:

1. The Application Note assumes that the EMS-X00 will be used to control both heating and
   cooling.
2. The user cannot ‘temporarily’ change the temperature. Any time the user manually
   changes the temperature set point for an Occupancy Setting, it will change to the new setting.
3. Occupancy Settings: Day (sun icon) and Night (moon icon)

Program Sections:

Escort Section [030] to [032] Schedule [01] Programming
Escort Section [033] to [035] Schedule [02] Programming
Escort Section [800] Thermostat 1 Options
Escort Section [801] Thermostat 1 Day Setting Schedules
Escort Section [803] Thermostat 1 Day Setting Output Option
Escort Section [806] Thermostat 1 Night Setting Schedules
Escort Section [808] Thermostat 1 Night Setting Output Option

Procedure:

To enter ESCORT programming, perform the following on any local touchtone phone:

Enter [“][“][“] on any local touchtone phone
Enter [“][8][ESCORT Service Code] Enter ESCORT programming

Note: The default Service Code is [5580].
Step 1 – Schedule [01] Programming – Escort Section [030] to [032]

Each of the 16 schedules contain three program items; On time, Off Time and Day of the Week selection. The new temperature will be set when the schedule is activated (On Time) so no Off Time is required. Schedule [01] will be used for the Day Occupancy Setting (starting at 8:00 am) and will be programmed as follows:

- Program data [0800] in Section [030] (8:00 am On Time)
- Program data [9999] in Section [031] (no Off Time is required)
- Turn Options [01] through [07] ON in Section [032] to enable all days of the week.

Step 2 – Schedule [02] Programming – Escort Section [033] to [035]

Schedule [02] will be used for the Night Occupancy Setting (starting at 11:00 pm) and will be programmed as follows:

- Program data [2300] in Section [033] (11:00 pm On Time)
- Program data [9999] in Section [034] (no Off Time is required)
- Turn Options [01] through [07] ON in Section [035] to enable all days of the week.

Step 3 – Thermostat 1 Options – Escort Section [800]

- Turn Option [01] ON to enable the thermostat.
- Turn Option [02] ON if an EMS-OTS outdoor temperature sensor is connected.
- Turn Option [03] ON if the thermostat will be used to control heating.
- Turn Option [04] ON if the thermostat will be used to control cooling.
- Turn Option [05] ON so the Day Occupancy Setting will always activate by schedule.
- Turn Option [06] ON so the Night Occupancy Setting will always activate by schedule.

Step 4 – Thermostat 1 Day Occupancy Setting Schedule Assignment – Escort Section [801]

Turn Option [01] ON for the Day Occupancy Setting to follow Schedule [01].

Step 5 – Thermostat 1 Day Occupancy Setting Output Option – Escort Section [803]

Program data [02] for schedule control only. The user will always have manual control as well.

Step 6 – Thermostat 1 Night Occupancy Setting Schedule Assignment – Escort Section [806]

Turn Option [02] ON for the Night Occupancy Setting to follow Schedule [02].

Step 7 – Thermostat 1 Night Occupancy Setting Output Option – Escort Section [808]

Program data [02] for schedule control only. The user will always have manual control as well.

Operation: At 8:00 am, every day, the Escort will adjust the temperature to the value programmed for the Day Occupancy Setting and at 11:00 pm the Escort will adjust the temperature to the value programmed for the Night Occupancy Setting.