SIMPLWINDOWS NAME: Aprilaire 8870 Command Queue

MANUFACTURER: Aprilaire
MODEL: 8870

CATEGORY: HVAC

VERSION: 1.1

SUMMARY: Queue commands to be sent to the Aprilaire.

GENERAL NOTES: This module stores command strings for the Aprilaire
and sends them with the proper timing between commands. Only one copy of
this module is needed per program.

NOTE: The Aprilaire 8870 Menu Parser and the Aprilaire 8870 Command Queue are not
necessary if (and only if) the only Aprilaire module being used is one
copy of the Aprilaire 8870 64 Zone Full Control module. If that is the case,
the To_Command_Queue$ output should be routed to the RS-422 comport and
the From_Parser$ input should be routed from the RS-422 comport. If more
than one copy of the Aprilaire 8870 64 Zone Full Control module is being used
or the Aprilaire 8870 Inside Temperature Monitor or the Aprilaire 8870 Remote
Temperature Monitor or the Aprilaire 8870 Menu modules are being used the
Aprilaire 8870 Menu Parser and the Aprilaire 8870 Command Queue MUST be used.

NOTE: When the thermostat is in Network Override(Hold On) changes made from the Crestron
will be ignored by the thermostat. Also, when the menus are on, the Hold_On/Off will not
operate.

CRESTRON HARDWARE REQUIRED: CNXCOM, ST-COM

SETUP OF CRESTRON HARDWARE:
RS422
Baud Rate - 9600
Parity - None
Data Bits - 8
Stop Bits - 1

VENDOR FIRMWARE: P0.7 - RPC 2001

VENDOR SETUP: There is a setting in the Aprilaire menus for the maximum
number of thermostats on the system. All thermostats on the Aprilaire system
should be addressed sequentially. The setting for the maximum number of
thermostats should be set to the highest thermostat number. This will
allow better response times. If the maximum number is set to 64, it could
take up to 17 seconds to get an update.

CABLE NUMBER:

Crestron	Aprilaire
DB9F	Bare Wire
Pin 1	B-
Pin 4	A+
Pin 5	REF
Pin 6	B+
Pin 9	A-

INPUT DESCRIPTIONS:

Name	Type	Description
From_Modules$	S	serial signal to be routed from the other Aprilaire modules in the program.

OUTPUT DESCRIPTIONS:

Name	Type	Description
To_Device$	S	Serial signal to be routed to a 2-way com port.

X-GEN OPS USED FOR TESTING: 5.12.26-x
2 SERIES OPS USED FOR TESTING: v1.014

COMPILER USED FOR TESTING: SimplWindows 4.03.20

SAMPLE PROGRAM: Aprilaire 8870 v1.1 Demo PRO3

REVISION HISTORY:

version 1.1: Incorporated 3-series best practices to all Simpl+
modules.