RS232 Specification for Classe Audio CP-800
Rev 1.03      5 February 2013

Rev History:
1.03     Added Standby Status
1.02     Added Tone Control commands and status.
1.01     Added AMX Beacon, Stereo/Mono commands and status.
1.00     Initial specification.

Data format
The RS232 communication with the CP-800 operates with a UART configuration for 19200 baud, 8 bits, no parity, with one stop bit.
There is no minimum time between bytes required, as the CP-800 allows for a 16 byte FIFO. The PC or home controller system similarly must accept status data without delays between bytes from the CP-800. All command and status data are ASCII bytes.

Command structure
All commands are terminated with an ASCII carriage return.
All Status strings are terminated with an ASCII carriage return and line feed.

Command strings
The command strings consist of all ASCII characters and carriage return.
The following is a list of commands that are recognized by the CP-800:

- **MAIN n**: change main input to input number n
- **INP+**: steps to the next input
- **INP-**: steps to the previous input
- **OUTP n**: Output configuration n
- **VOLM vv.v**: sets volume to vv.v, or the nearest possible value, mute disengaged
- **VOL+**: *steps the volume up from current, mute disengaged
- **VOL-**: *steps the volume down from current, mute disengaged
- **MUTE**: if not muted, engage mutes and adjusts volume
- **UNMT**: if muted, disengages mute and returns to premute volume level
- **BALL**: shift balance ½ dB to left
- **BALC**: recenter to even balance
- **BALR**: shift balance ½ dB to the right
- **STBY**: puts CP-800 into standby.
- **OPER**: puts CP-800 into operate mode
- **T1_0**: turns off trigger 1
- **T1_1**: turns on trigger 1
- **T2_0**: turns off trigger 2
- **T2_1**: turns on trigger 2
- **LCD0**: sets the front panel LCD to low power “screen saver” mode
- **LCD1**: sets the front panel LCD to high intensity
LCD2  sets the front panel LCD to medium intensity
LCD3  sets the front panel LCD to low intensity
IRC nnn passes IR code nnn, where nnn is the code identified in the CP800 IR code table
STAT MAIN request for main volume and input selection
STAT AUTO status requests for automatic status updates, volume relative display (-- : +14.0)
STAT AUTA as STAT AUTO but volume will be shown as absolute (0.0 : 100.0)
STAT OUTP request for output status
STAT OFF  disables automatic status updates
STAT PWR request for standby status
AMX  requests the AMX Beacon
STMO toggles stereo/mono modes
TCDIS disable tone control
TCEN enable tone control
TTCW tone tilt clockwise (bass cut, treble boost), must be in tilt mode
TTCCW tone tilt counter clockwise (bass boost, treble cut), must be in tilt mode
TCB+ tone control bass boost, must be in discrete tone control mode
TCB- tone control bass cut, must be in discrete tone control mode
TCT+ tone control treble boost, must be in discrete tone control mode
TCT- tone control treble cut, must be in discrete tone control mode

Replies and Status
The CP-800 will send a 3 character reply to acknowledge each recognized command. The acknowledgement character is an exclamation point (!) followed by a carriage return and line feed. There is no leading address field for this reply. If the command received by the CP-800 is not recognized, a question mark character replaces the exclamation point. The reply is generated within 100ms of the receipt of the last command termination character (line feed). If no reply is received at the PC/controller host after 100ms., the command should be reissued.

The following status strings are returned by the CP-800:

SY PWRUP  CP-800 has completed power up
SY STBY  CP-800 is in standby
SY OPER  CP-800 is in operate
SY VOLM vv.v Volume is at vv.v. If mute engaged the string “muted” is appended.
SY MAIN n  CP-800 has source number n selected.
SY OUTP n  CP-800 has output number n selected.
SY MODE x  x = STEREO or MONO
SY TONE a B:x.x T:y.y a = EN or DIS  B: = bass cut or boost T: treble cut or boost
SY PWR x  x = ON (unit operational) or OFF (unit in standby)