

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)