AP8 – FC4 – RC4
Basic Command Quick Reference

AP8:

"P" – Play Specified Audio Segment

SEROUT Sio, OT2400, ("!AP8", %11, "P", 7)

In this example, the AP-8 at address %11 will play audio segment seven.

"X" – Stop Play

SEROUT Sio, OT2400, ("!AP8", %11, "X")

In this example the AP-8 at address %11 is stopped.

Transferring Sounds to the AP-8

1. Connect your PC sound card output to the AP-8 with a stereo 1/8" cable (male-to-male).
2. Move the AP-8 power switch to the LO position.
3. Select the track(s) to record (left, right, or both) with the IN L and IN R jumpers. (Default setting is both in which mixes the left and right channels to a mono track)
4. Move the PLAY/REC jumper to the REC position. (The red REC LED will illuminate)
5. Select the segment for recording with switches 0..2; set the loop (L) switch to Open. (Refer to the segment table below)
6. Start the audio on your computer and press the PLAY/REC button on the AP-8.
7. Hold the PLAY/REC button until the sound is finished playing, then release.
8. Repeat steps 3 through 7 as required for all segments.
9. Move the PLAY/REC jumper to the PLAY position.

#	2	1	0	Start	Length
0	X	X	X	0.0	6.4
1	X	X	O	6.4	6.4
2	X	O	X	12.8	6.4
3	X	O	O	19.2	6.4
4	O	X	X	25.6	6.4
5	O	X	O	32.0	6.4
6	O	O	X	38.4	6.4
7	O	O	O	44.8	15.2

O = Open, X = Closed

FC4:

“L” – Set Level for Selected Channel

SEROUT Sio, OT2400, ("!FC4", %00, "L", 2, 128)

In this example the lamp output channel O2 will be set to 50% brightness.

“S” – Set Levels for All Channels

SEROUT Sio, OT2400, ("!FC4", %00, "S", 0, 64, 128, 255)

In this example the lamp outputs, O1 to O4, will be set to 0%, 25%, 50%, and 100% respectively.

“P” – Preset All Channels

SEROUT Sio, OT2400, ("!FC4", %00, "P", 25)

In this example the lamp outputs, O1 to O4, will be set to 10%. This can be used to keep filaments warm when fast switching to higher levels is desired.

“A” – All Channels to Full Brightness

SEROUT Sio, OT2400, ("!FC4", %00, "A")

In this example the lamp outputs, O1 to O4, will be set to 100% (full bright).

“D” – Digital Control of All Channels

SEROUT Sio, OT2400, ("!FC4", %00, "D", %0110)

In this example the lamp outputs O1 and O4 will be set to 0% (off), and outputs O2 and O3 will be set to 100% (full bright).

“**X” – All Channels to Off**

SEROUT Sio, OT2400, ("!FC4", %00, "X")

In this example the lamp outputs, O1 to O4, will be set to 0% (off).

“F” – Fade Channel

SEROUT Sio, OT2400, ("!FC4", %00, "F", 1, 0, 255, 20)

In this example the FC-4 will perform a fade up on channel 1, starting at full off and ending at full on. The duration of the fade is about five seconds. The timing for the fade is the difference between the start and end levels, plus one, multiplied by the step duration (in milliseconds); 255 – 0 + 1 = 256 x 0.02 = 5.12.

“C”, 0 – Cross Fade Two Channels, Program 0 (zero)
SEROUT Sio, OT2400, ("!FC4", %00, "C", 0, 1, 2, 40)

In this example the FC-4 will perform a cross-fade between channel 1 (starts at 100%) and channel 2 (starts at 0%). The fade will take approximately ten seconds (256 x 40 milliseconds).

Note: You must specify different channels for chA and chB, otherwise the command is ignored.

“C”, 1 – Cross Fade Two Channels, Program 1
SEROUT Sio, OT2400, ("!FC4", %00, "C", 1, 1, 64, 2, 191, 8)

In this example the FC-4 will perform a partial cross-fade between channel 1 (starts at 25%) and channel 2 (starts at 75%). The fade will take approximately one second (127 steps x 8 milliseconds).

Cross-fade program one allows the designer to specify the starting levels at other than 0% and 100% as is used with program zero. The timing for the cross-fade will be determined by the difference in levels and the timing per step. To determine the step timing value, divide the number of steps into the desired number of milliseconds for the fade; use the integer result of this division for the step timing.

“C”, 2 – Cross Fade Two Channels, Program 2

SEROUT Sio, OT2400, ("!FC4", %00, "C", 2, 1, 0, 2, 255, 128, 8)

In this example the FC-4 will perform a partial cross-fade between channel 1 (starts at 0%) and channel 2 (starts at 100%). The fade will take approximately one second (128 steps x 8 milliseconds). Due to their starting values, channels 1 and 2 will be set to 50% at the end of the cycle. Note that the value of chA can never exceed 255 and the value of chB can never drop below 0.

Cross-fade program two allows the designer to specify the starting levels at other than 0% and 100% as is used with program zero as well as control the number of steps in the sequence. The overall timing for this partial cross-fade will be determined by the number of steps specified and the timing per step. To determine the step timing value, divide the number of steps into the desired number of milliseconds for the cross-fade; use the integer result of this division for the step timing.

RC4:

“S” – Setup All Relays
SEROUT Sio, OT2400, ("!RC4", %00, "S", %0001)

In this example, relay K1 will be activated, while K2, K3, and K4 will be deactivated.

“R” – Set/Reset Individual Relay
SEROUT Sio, OT2400, ("!RC4", %00, "R", 4, 1)
In this example, relay #4 (K4) is activated.

“X” – Reset All Relays
SEROUT Sio, OT2400, ("!RC4", %00, "X")
In this example, all relays (K1..K4) are deactivated.