I. Driver Features

1. Command Format

This device is controlled through RS-232.

2. RS-232 Commands
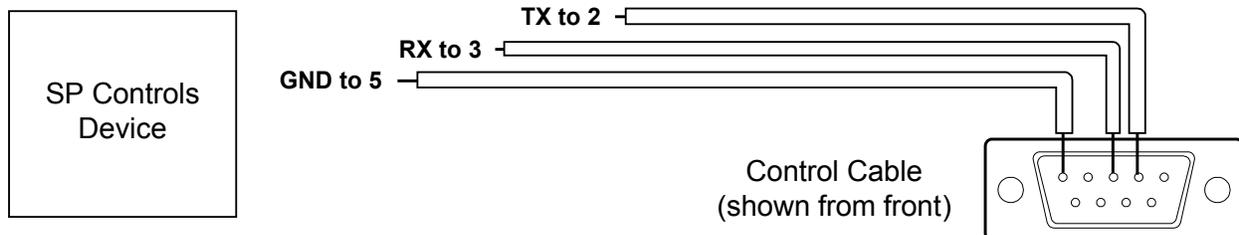
Power On	Source: Video (RCA)	Menu	Bright Up	Sync Up
Power Off	Source: S-Video	Adj Up	Bright Down	Sync Down
Volume Up	Source: BNC (RGB-Analog)	Adj Down	Help	Tracking Up
Volume Down	Source: BNC (RGB-Video)	Adj Left	Resize	Tracking Down
	Source: YCbCr (BNC)	Adj Right	A/V Mute	
	Source: YPbPr (BNC)	Enter	E-Zoom Up	
	Source: Computer (VGA)	Escape	E-Zoom Down	
	Source: DVI			

3. Other Driver Features

Default Power Status Feedback: RS-232 Power Polling
Projector Restart Lockout Timer (Default):   42 Seconds

II. RS-232 Control Wiring

Wire RS-232 control to a female DB9 as follows:

Connect female DB9 to projector port labeled *Control (RS-232c)*.
Serial Adapters (for NRC only): None

III. Projector Configuration

The Epson EMP-7800 projector **must be configured** to STANDBY MODE: NETWORK ON in the projector onscreen menu ADVANCED1. If the projector STANDBY MODE is not configured to NETWORK ON, it may stop responding to RS-232 commands. If the projector does stop responding to RS-232 control, manually power down the Epson projector. Once the projector cools down, unplug the projector from the outlet and allow it 15 seconds to reset. Reapply power and the projector should work normally.

Note: When the projector is placed in **STANDBY MODE: NETWORK ON** the projector fan remains on in standby mode. This is normal projector behavior.

Additional Projector Settings:

> STARTUP SCREEN should be set to OFF in the ADVANCED1 Menu.
> COM PORT must be set to RS-232 in the ADVANCED2 menu.
> SLEEP MODE should be set to OFF in the SETTING Menu.
> DISPLAY MESSAGE should be set to OFF in the SETTING Menu.

Projector Firmware Note

This driver is known to work with Epson EMP-7800 projectors with projector firmware version 2.05 or higher. It is possible that units running with firmware versions less than 2.05 will stop responding to RS-232 control under certain conditions. Should this occur, control can be restored by powering off and unplugging the projector, and then plugging it back in.

SP Controls strongly recommends verifying the projector firmware version during installation, and if it is less than version 2.05, upgrading the projector firmware. The EMP-7800 firmware is flash-upgradeable in the field with a laptop. The process is quick and simple.

In order to verify the firmware version of your projector:

1) Use the projector remote control to power on the projector.

2) When the projector is on at full brightness, press and hold the *HELP* button on the remote control for 5-7 seconds, until the service menu comes up.

3) At the bottom of the service menu, you will see three numbers listed. The first number, indicated by *P:*, is a long number indicating the firmware version. The last three digits of this number indicate which version you are running.

If the firmware version on your projector is less than 2.05, please contact Epson. For contact information, refer to your Epson documentation.

NOTE: SP Controls also has an IR-only version of this projector driver available, which will run on any firmware version of the Epson EMP-7800 with no difficulty. If you would like the IR-only driver, contact SP Controls Technical Support at (877) 367-8444 ext. 302.