This document describes the **SmartPanel** Projector Driver for the **Proxima DP-5900** projector. This Projector Driver is believed to work for the **Proxima DP-5950** as well. For more information on configuring and using the Panel see the *SmartPanel Configuration and Installation Guide.*

I. PROJECTOR CONTROL

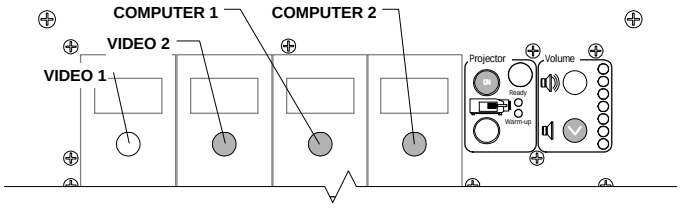
A. Volume and Power Control

Volume control on the Proxima is **relative**; however, the Proxima's onscreen display indicates absolute volume level. Absolute volume control for the Proxima is only possible with use of SP Controls' optional **Audio Follow Video Pre-Amplifier**.

B. Input Selection Mapping

The following table specifies the factory preset input mapping for this Driver. The **Configuration Utility** can be used to customize these settings your installation.

Selection 1:	VIDEO 1
Selection 2:	VIDEO 2
Selection 3:	COMPUTER 1
Selection 4:	COMPUTER 2

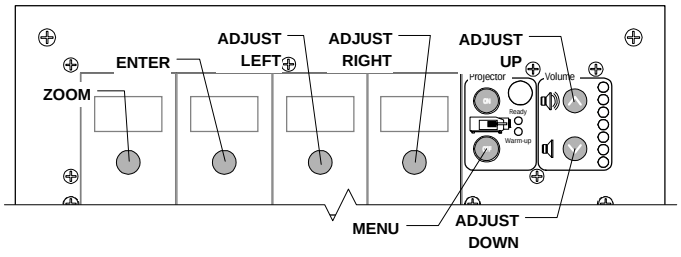


Input choices available for the Proxima with this Driver are VIDEO 1, VIDEO 2, COMPUTER 1 and COMPUTER 2.

C. Hidden Function Mapping

The following table specifies the factory preset hidden function mapping for this Driver. The **Configuration Utility** can be used to customize these settings your installation.

Selection 1:	ZOOM
Selection 2:	ENTER
Selection 3:	ADJUST LEFT
Selection 4:	ADJUST RIGHT
Off:	MENU
Volume Up:	ADJUST UP
Volume Down:	ADJUST DOWN



Hidden functions names are based on the Proxima remote and controls on top of the projector. *Adjust* controls navigate through onscreen menus. Hidden functions are accessed by pressing the indicated key while the holding the **On** key down.

The hidden functions available for the Proxima with this Driver are as follows:

MENU	ZOOM
ADJUST LEFT	FOCUS
ADJUST RIGHT	NORMAL
ADJUST UP	FINE SYNC +
ADJUST DOWN	FINE SYNC -

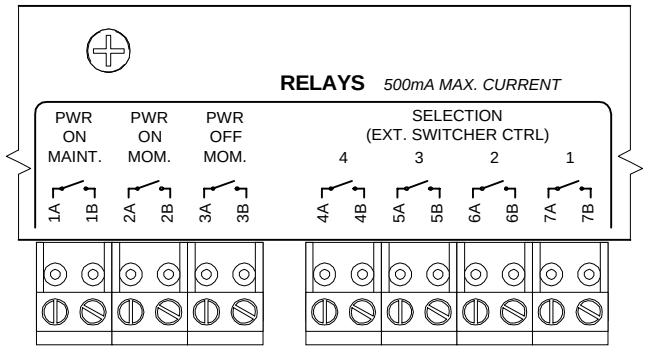
 SP Controls reserves the right to modify specifications without notice at any time.

ENTER

D. Relays

The following table specifies the factory preset settings for the low-current relays found on the rear of the **SmartPanel.** The **Configuration Utility** can be used to customize these settings your installation.

Relay 1	ON Maintained
Relay 2	ON Momentary
Relay 3	OFF Momentary
Selection	Momentary; not Binary



E. Other Presets

The following table specifies other default factory settings for this Driver that affect is control of the Projector.

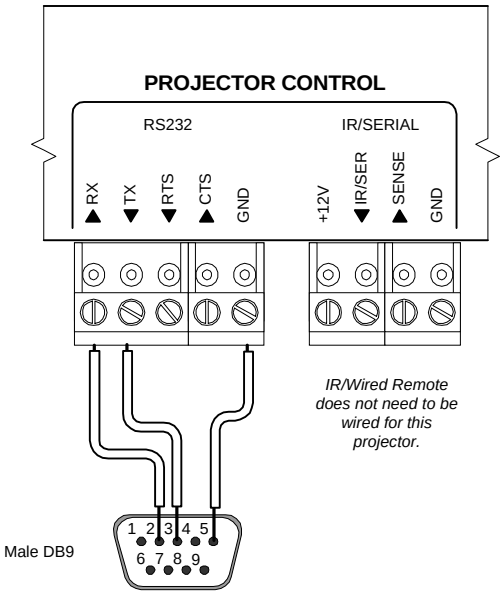
Power Status Feedback Method	RS-232 Polling (see note 1)
Control Wiring Option	None (see note 2)

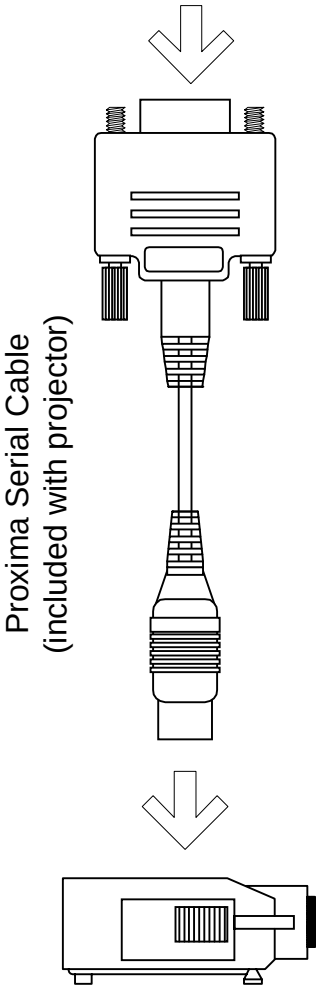
RS-232 must be wired to control the Proxima. We recommend wiring an additional wire for infrared, in case a change of projector or driver requires infrared. Wired Remote is not an option as the DP-5900 does not have a wired remote input.

The following table specifies settings for the Panel's configurable timers. For more information on the inactivity shutdown feature and the lockout timer see the *SmartPanel Configuration and Installation Manual*

Lockout Timer	75 seconds (see note 3)
Inactivity Shutdown	Disabled

II. CONTROL WIRING





RS-232 to
CONTROL PORT2

This section specifies how RS-232 should be wired to the projector.

RS-232 should be connected to the Proxima control port labeled **CONTROL PORT2**. Connection should be as follows:

1. Wire the Panel to a male DB9 as shown.
2. Connect this male DB9 to Proxima's custom serial/mouse (DB9 to DIN) cable as shown.
3. Connect the Proxima custom cable to the projector port labeled *CONTROL PORT2* (the right port on rear of DP-5900).

III. TROUBLESHOOTING

Addition tips can be found in the *SmartPanel Configuration and Installation Guide.*

The lens retracts, and Zoom and Focus settings are lost, every time the projector is powered down.
By default the Proxima "auto-retracts" its lens when powered down. This feature is deactivated by setting *AUTO RETRACT* to *OFF* in the Proxima's onscreen *SETTINGS* submenu (the *SETTINGS* menu is summoned using the *MENU* hidden function or button on the handheld remote).

The Panel does not completely control the projector.
Full control of the projector requires wiring of both the infrared emiiter *and* RS-232. Make sure that RS-232 is correctly connected through Proxima's custom cable (DB-9 to DIN) to *CONTROL PORT* **two**. *Control port one is a mouse port and* **cannot** *be used for projector control.*

The Panel does not do anything at all.
When power is applied to the Panel it should run through a brief power on self-test, during which all of the Panel lights will turn on and off in sequence. If you do not see this self test, make sure power is connected correctly and that polarity is correct.

The Panel keeps turning itself off even though the projector is on.
The Panel turns itself off when power polling indicates that the projector is off. Check to make sure the RS-232 connection is correctly wired (it is extremely unlikely other control would work, and power polling not).

When I try to turn the projector on, the warming indicator (red LED) blink.
The projector is in the default configured *lockout state*, and the Panel is waiting for its internal lockout timer to expire. This feature protects the projector's bulb. Be sure to let your client know about this behavior.

IV. TECHNICAL NOTES

1. By default, projector power is verified by polling every few seconds via the RS-232 port. Power polling can be suspended by depressing and holding the **On** key; polling will be restored when the key is released. Should the Proxima power off, the Panel will usually detect this condition and power off within thirty seconds. Should the Proxima power on, the Panel will usually detecting this condition and power on within ten seconds. Power polling is suspended on the Proxima during a non-configurable seventy second lockout following the sending of power off.

2. We recommend wiring to support IR in case a driver revision uses Proxima IR function. Wired Remote is not an option as the Proxima does not have a Wired Remote port.

3. The lockout timer specifies the amount of time allowed between sending *POWER OFF* and *POWER ON* to the projector (the delay allows the projector bulb to cool before re-powering). This delay can be configured using the **Configuration Utility**; however, adjusting the lockout timer delay is **strongly discouraged** as rapid re-powering causes undue wear on the projector's bulb.

V. REVISION HISTORY

1. Revision A (February, 1998) *Original release.*
2. Revision B (September, 1999) *Field changes. (Not published).*
3. Revision C (October, 1999) *Changed to RS-232 used for all functions.*

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