



I. Overview

This support document is a supplement to the *Pixie Device Control Module Installation Guide*. This document explains how to wire and configure the SP Controls Pixie™ (PXE-DCM) to control two or more display devices. One Pixie is capable of driving up to 5 IR emitters and can control multiple units of the same device, or multiple devices of different manufacture.

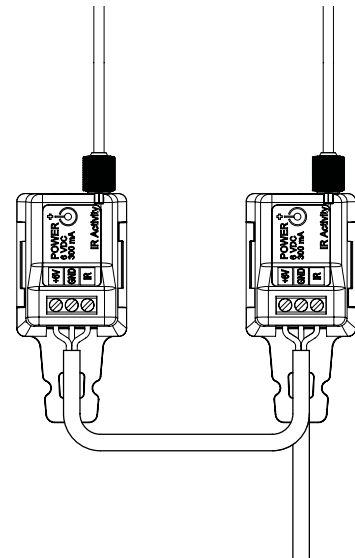
The PXE-DCM ships with one IR emitter. Additional units may be ordered separately (part no. *PXE-EMIT*).

II. Wiring Additional IR Emitters

Wire each additional PXE-EMIT in parallel to the Pixie. Each position on the Pixie barrier strip must be wired directly to the corresponding position on the PXE-EMIT barrier strip. For example, the PXE-EMIT position labeled +6V must be wired to the Pixie barrier strip position labeled +6V.

Caution: Be sure to wire the PXE-EMIT to the Pixie side of the barrier strip – not the side connected to the wall wart. The PXE-EMIT must not be connected directly to the power supply without the protection of the current-limiting resistor. Miswiring the PXE-EMIT will damage the emitter.

Wiring for the *PXE-EMIT* is shown in Figure 1.



III. Controlling Multiple Units of the Same Device

One Pixie may send identical codes to multiple units of the same device. For example, you may control two identical projectors with a single Pixie by adding an additional IR emitter and wiring it from the Pixie to a second projector. A single button press on the Pixie will send identical codes to both devices, and the Pixie will control them in tandem.

IV. Controlling Multiple Devices

One Pixie may learn IR commands from remote controls from different devices. Each button can be configured to send a single command (normal operation) or multiple commands (macro mode) with a single button press.

1. Normal Operation

The Pixie may be configured to control two different devices with each button sending only one command. For example, you may wish to control power and source selection on a projector, and volume on an IR-controllable amplifier. To do so, wire one IR emitter to the LCD monitor and the second IR emitter to the amplifier. Program the Pixie power and source buttons with the codes from the LCD monitor remote control. Program the Pixie volume buttons with the volume control codes from the amplifier remote control.

2. Macro Mode

The Pixie can be configured to send multiple commands to different devices with a single button press by configuring the Pixie buttons to *Macro* mode. For example, the Pixie could be configured to send a power command to a projector and a separate power command to an amplifier with one press of the Pixie *POWER ON* button.

In Macro mode, a single button will send multiple commands each time it is pressed. The Pixie *POWER*, *POWER ON*, *POWER OFF*, *VOLUME UP*, and *VOLUME DOWN* buttons may be programmed with up to two codes. *SOURCE*, *COMP*, and *VIDEO* may be programmed with up to four codes.

By default, a button that has been programmed with multiple codes will send them round robin, meaning that each successive button-press sends the next code in the series.

Programming a button on the Pixie to use macros has two steps: 1) program the button with multiple codes, following the instructions for programming a round robin code as described in the *Pixie Device Control Module Installation Guide*, and 2) set the button to macro mode.

To configure a button to Macro mode:

- 1) Teach the button with the appropriate number of codes.
- 2) The code will now be in *VERIFICATION MODE*. Verify that all of the codes are working properly.
- 3) Press another Pixie button to exit Verification Mode. **Note:** You may press a button that has already learned a code, and if you do not actually squirt the Pixie with a new code, it will not erase the codes already learned.
- 4) Press and hold the button you wish to set to Macro mode for approximately five seconds. The Pixie will beep three times to indicate that it has now been set to Macro mode.
- 5) Continue programming the Pixie, or exit Learning Mode if finished.

Each button may be programmed with codes from different remote controls. Each button that you wish to be in Macro mode must be independently set to Macro mode following the instructions above.

If a button is reprogrammed or the entire device is erased, the code will automatically default back to round robin mode, and must be reset to Macro mode if desired.

If a button is set to Macro mode and the codes in the Pixie are *cloned* by another Pixie, the corresponding button on the cloned unit will be set to Macro mode.

There is a 300 millisecond delay between each code in the series. Some devices may not be able to respond to multiple commands sent at this frequency. Press-and-hold repeat behavior (e.g. volume ramping) is not available for a button set to Macro mode. A Macro button can send one and only one instance of each code with a single button press.

V. REVISION HISTORY

1. Revision A (November, 2004) – *Initial release*. BT
2. Revision B (November, 2005) – *Added diagram for new IR output*. BT