

INSTALLATION INSTRUCTIONS

MODEL SPLCDCB100 SmartPad LCD™ Amplified IR Connecting Block



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INTRODUCTION

The SPLCDCB100 Connecting Block allows any combination of SmartPad LCD™ panels and standard Xantech IR Receivers to be connected in parallel while providing 10 Amplified Emitter outputs (expandable to 100 Emitter Outputs).

The SPLCDCB100 allows central 16VDC powering (for SmartPad LCD™ panels) and includes a regulated 12VDC Voltage output for powering all standard Xantech IR Receivers (such as the 291-90, 490-90, and 780-90 Plasma Series). This enables all devices to be wired back to the head-end for centralized wiring distribution.

The SPLCDCB100 also features 10 amplified emitter outputs to assure proper emitter signal strength allowing for longer emitter runs (up to 500ft with 18AWG wire). The SPLCDCB100 emitter output can also be expanded using Xantech's 790-00 Emitter Expansion Block to accommodate any project.

FEATURES:

- Screw-Terminal Connections for Voltage, Status, IR and GND for SmartPad LCD™ Connection
- Built-In 12vDC Regulator for powering Xantech IR Receivers
- 10 Amplified Emitter Outputs for Xantech full line of IR Emitters (282M, 283M, 284M etc..)
- 3.5mm Quick-Connect Jack for easy IR Receiver Input (also screw-terminal connection for IR Receivers)
- High IR OUT for expansion to Xantech 790-00 Connecting Block (Connect up to nine 790-00 for a total of 100-Emitters)
- IR Talk Back LED for system verification
- Easily mounts to flat wooden, plastic, or metal surfaces using the included screws.

SPECIFICATIONS:

- Power Input: 16VDC (2.1mm Coaxial Jack)
- Power Output: 12VDC (100mA Max)
- SmartPad LCD™ Connection: 4-Screw Terminal (16VDC Pass thru, GND, Status, IR Input)
- IR Receiver Connection: 3.5mm Quick Connect Stereo Mini Jack & 4-Screw Terminal (12VDC output, GND, STATUS, IR Input)
- Ten IR Emitter Ports (3.5mm Mono Mini Jack)
- High IR Output: 1Amp Current Output for expansion to 790-00 Connecting Block (3.5mm Mono Mini Jack)
- Dimensions: 6-7/8" L x 2-3/4" W x 15/16" H (175mm L x 70mm W x 24mm H)
- SPLCDPS1 16VDC Power Supply (not included) powers one SPLCD and up to four IR Receivers.
- SPLCDPS4 16VDC Power Supply (not included) powers up to four SPLCD's and up to four IR Receivers.
- Maximum Emitter Output Current: 12mA

INSTALLATION

POWER WIRING:

1. Connect the 16VDC SPLCDPS1 or SPLCDPS4 power supply to the 2.1mm coaxial power input jack (labeled 16VDC).
2. Plug the AC Adaptor into an un-switched AC Outlet.

SPLCD IR WIRING:

1. Wire 4-Conductor 18AWG from the SPLCD's IR OUT, GND, STATUS (optional) and +16VDC terminals back to the appropriate terminals of the SPLCDCB100 Connecting Block. 18AWG can be run in excess of 1000ft. See **Figure 1** for wiring examples.
2. For more than one SPLCD Controller, connect in parallel directly on the 4-screw WECO terminal or use a CB-18 parallel connecting block to neatly combine up to 4-SPLCD controllers (Requires SPLCDPS4 Power Supply).

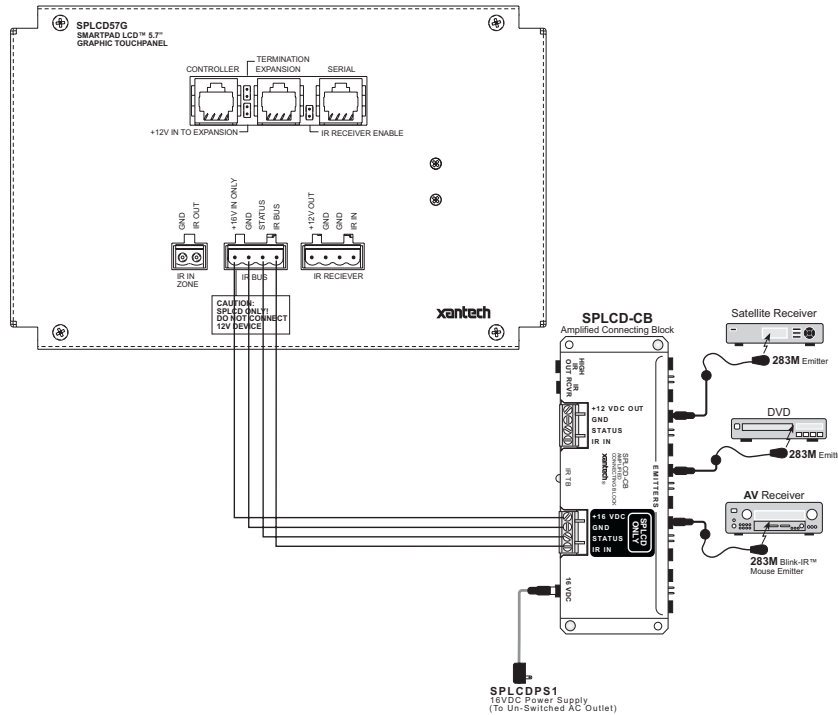


Figure 1 – Basic Connection: Connecting the SmartPad LCD™ Controller to the SPLCDCB100



Caution: Remember, the STATUS output can be either an Input (5-30VDC from remote device) to trigger a Macro within the SPLCD, give LED indication of a Zones power status, or it can be an OUTPUT (+12VDC from the SPLCD) to trigger some other external device. This is important to note before STATUS wiring is made between the SPLCD and the other device.

SPLCD WIRING OVER CAT5:

CAT5 Wire can be used up to approximately 200ft. when wired appropriately (maximum distance may differ depending upon wiring locations and other outside elements). Follow the appropriate wiring scheme as outlined below:

1. Twist all four white-stripe wires together on both ends and connect to the GND terminal on both the SPLCDCB100 and the SPLCD Controller.
2. Twist two solid colored wires together on both ends and connect to the 16VDC terminal on both the SPLCDCB100 and the SPLCD Controller.
3. Twist the last two solid colored wires together on both ends and connect to terminal labeled IR IN on the SPLCDCB100 and to the terminal labeled IR BUS on the SPLCD Controller.

Note: If using the STAUTS line, use one of the solid wires in step 3 for STATUS and the other for IR. This will limit the overall distance to under 200ft.

CAUTION: When using CAT5 always measure the voltage at the rear of the SPLCD across the 16VDC and GND terminals and confirm the voltage is between 13VDC and 16VDC.

IR RECEIVER WIRING:

1. For IR Receivers with Xantech's *Quick-Connect* Stereo Mini Plug, simply plug directly into the 3.5mm IR Receiver Jack on the SPLCDCB100 connecting block.
2. For all other wiring configurations, connect the 12VDC, GND, STATUS (optional), and IR Output wires to the appropriate of the SPLCDCB100 Connecting Block.
3. For more than one IR Receiver, connect in parallel directly on the 4-screw WECO terminal or use a CB-18 parallel connecting block to neatly combine up to 4-IR Receivers.

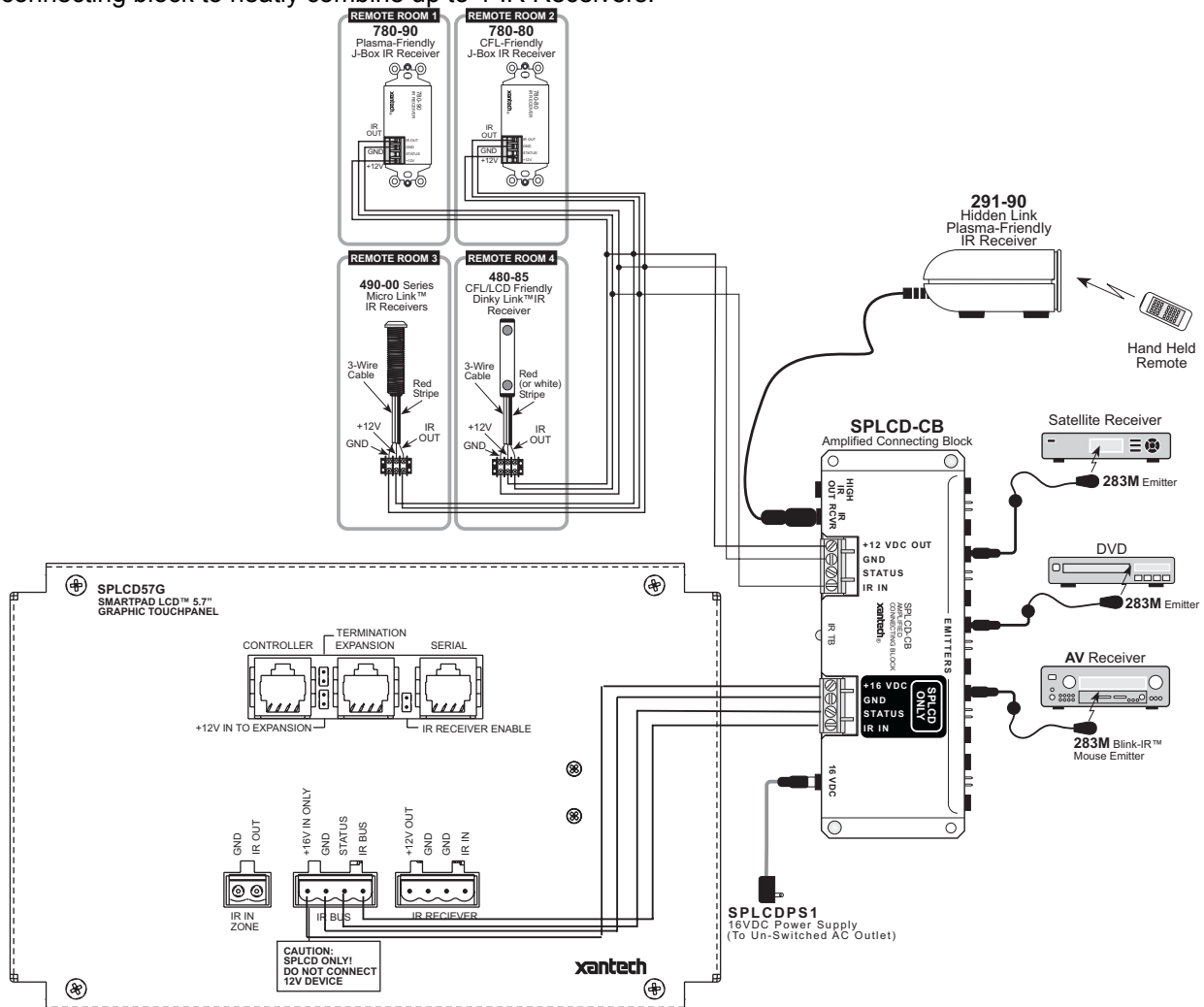


Fig. 2 – Advanced Connection: Connecting SmartPad LCD™ and Multiple IR Receivers

HIGH IR OUT WIRING:

The HIGH IR OUT wiring is for emitter expansion to Xantech's 790-00 passive Connecting Block. Up to nine 790-00 Connecting Blocks can be combined for a total of 100 emitter ports.

1. Use a Mono Mini cable from the SPLCDCB100 High IR Out connector to either of the two HIGH IR IN/OUT connectors on the 790-00 Connecting Block.

Note: See the 790-00 Instructions for further details.

CAUTION: The High IR Out jack should only be used when expanding to the 790-00 connecting block. **Do Not Connect Emitters or IR Receivers directly to this jack!**

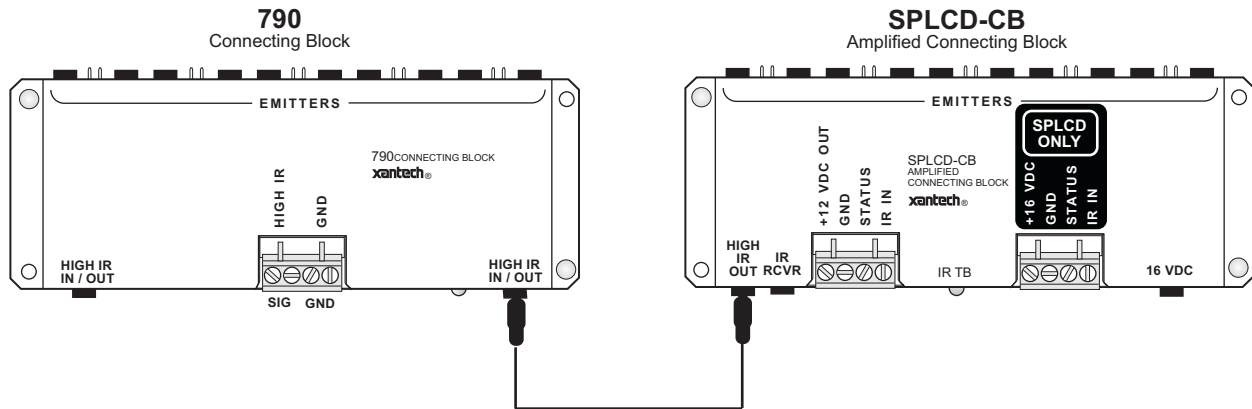


Fig. 3 – Expansion Emitter Wiring: Connecting the SPLCDCB100 to the 790-00

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