

SL-One Speaker Level A/B Switching Module

CTL02002

LIT02002

LIMITED 5-YEAR WARRANTY

SpeakerCraft warrants this product to be free of defects in materials or workmanship. This extends for five years from the date of purchase by the original consumer. Any products returned to SpeakerCraft and found to be defective by SpeakerCraft within the warranty period will be repaired or replaced, at SpeakerCraft's option, at no charge. SpeakerCraft will not be responsible for the actual cost of installation or removal of the product, nor for any incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you. This warranty gives you specific legal rights. You may have additional legal rights that vary from state to state.

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INSTALLATION INSTRUCTIONS

SL-One Speaker Level A/B Switching Module

The SL-One permits one set of stereo speakers to be switched automatically between two stereo amplifiers, replacing manually operated A/B switches. Exclusive microprocessor controlled system ensures precision timing and switching accuracy. Dual relays handle music power levels up to 150 Watts per channel and isolated ground paths permit use of BTL amplifiers. Status LEDs indicate which amplifier is active and a status output jack permits triggering of local devices.

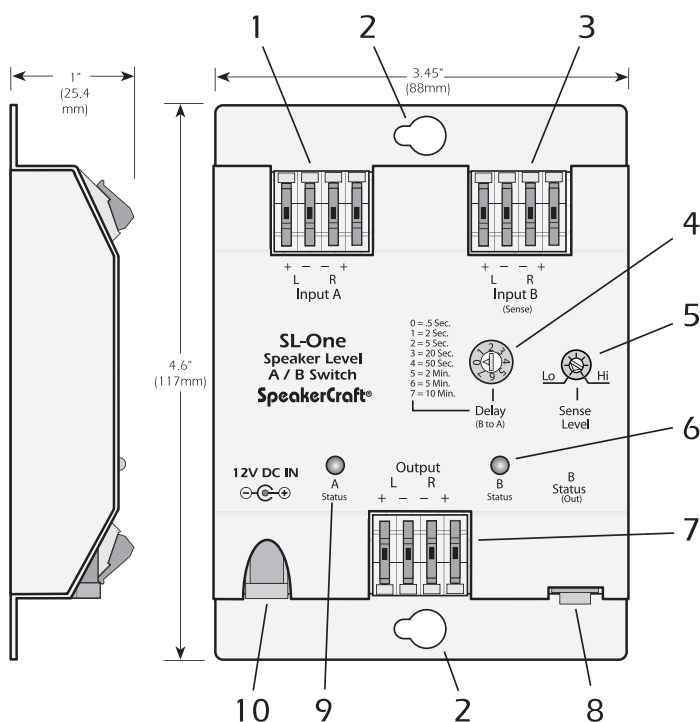
SPECIFICATIONS

Delay Range, uPC Controlled	0.5 Sec. to 10 Min.
Sensitivity Range	30mV to 300mV
Max. Music Power Handling	150 Watts
Independent Grounds	for BTL Amps
Dual Relays Contact Rating	30V @ 2 A
B Status Output Voltage	12V DC @ 10 mA
Power Requirements	9V DC @ 100 mA Max.
Power Jack	12V DC @ 120 mA
Diagnostics	See Connection Notes section

Dimensions

4.6" (117mm) L x 3.45" (88mm) W x 1" (25.4mm) H

Fig. 1 The SL-One



SL-One A/B Switching Module

FEATURE DESCRIPTIONS (Refer to Fig. 1)

1. Spring-loaded "EZ-Connect" amplifier **Input A** speaker terminals accept wire sizes from 14 to 28 AWG.
2. Mounting holes. For use with Included screws.
3. Spring-loaded "EZ-Connect" amplifier **Input B** speaker terminals accept wire sizes from 14 to 28 AWG. This is the "Sensed" input.
4. Octal **DELAY** switch provides precision delay settings from 0.5 seconds to 10 minutes to handle virtually any music energy interval without false switching.
5. **Sense Level** adjustment accommodates a wide range of music level conditions, from the amplifier connected to the sensed Input B, for best switching threshold.
6. **B Status** LED lights when signal is received from the amplifier connected to Input B and signal plays through to speakers connected at the Output terminals, item 7.
7. Spring-loaded "EZ-Connect" **Output** speaker terminals accept wire sizes from 14 to 28 AWG.
8. **B Status** 3.5mm output jack provides 12V DC (100mA Max.) to trigger local devices (i.e. lighting, etc.) where desired.
9. **A Status** LED lights when there is NO signal present at Input B. The signal output from the amplifier connected at Input A then plays through to speakers connected at the Output terminals, item 7.
10. **12V DC IN** is a 2.1mm Power Jack for powering the SL-ONE. It permits use of standard SpeakerCraft 12 Volt DC Power Supplies (the PS-1.0 is recommended).

SYSTEM CONNECTIONS

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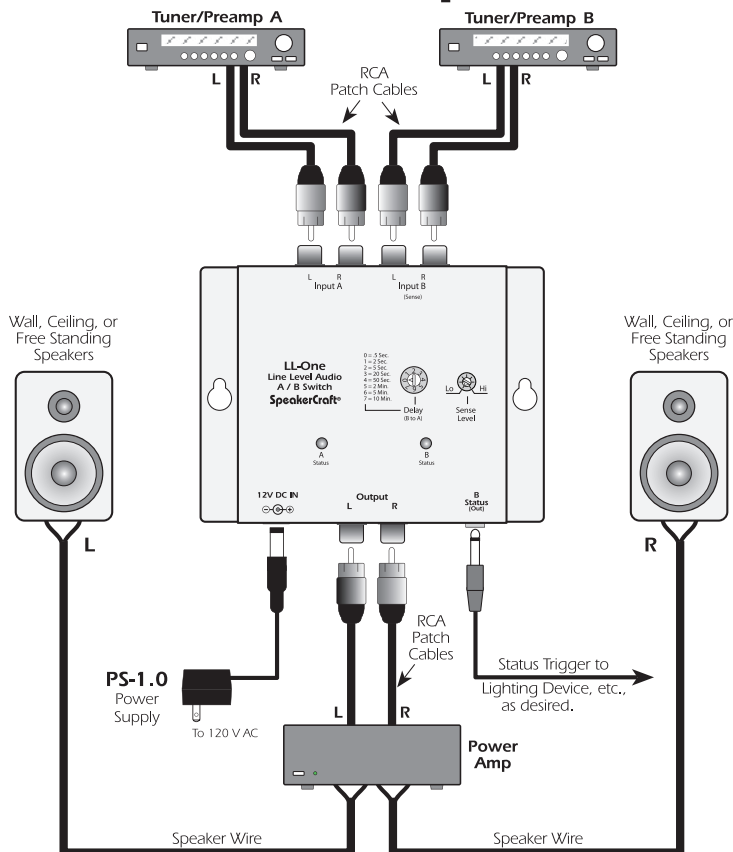


Fig. 2 shows typical system connections for the SL-One.

Connection Notes:

1. Make connections using **Fig. 2** as a guide.
2. When the power supply is first plugged into the SL-One, the unit will go through a self diagnostic check as follows:
 - If the **Delay** switch is set to **0** (.5 Sec.) the unit's relay and B Status LED will go ON/Off once.
 - If set to **1** (2 Sec.), the relay and B Status LED will go ON/Off once, pause, then rapidly go ON/OFF **1** more time.
 - If set to **2** (5 Sec.), the relay and B Status LED will go ON/Off once, pause, then rapidly go ON/OFF **2** more times.
 - If set to **3** (20 Sec.), the relay and B Status LED will go ON/Off once, pause, then rapidly go ON/OFF **3** more times.
 This same type of diagnostic action will repeat for each setting up to position **7**.

Note: The power supply must be removed and reinserted each time the **Delay** switch is changed for the above to be true.

3. Amplifier A, for instance, could be a feed from a whole house music amplifier. Amplifier B could be the speaker leads from a local room TV. The Speakers could be SpeakerCraft in-wall or ceiling types, normally used in a room as part of a whole house music system.
4. The system would operate as follows: When the TV is Off, whole house music would play through the wall speakers from Amplifier A. When the TV is turned On, the TV audio would be sensed by the SL-One at Input B and automatically switch the speakers to the TV (Amplifier B). When the audio signal stops from the TV (Amplifier B), the SL-One will switch back to Amplifier A after a timed interval set by the **Delay (B to A)** adjustment

Sense Level and Delay (B to A) Adjustments:

These need to be set carefully in order to achieve consistent results. Proceed as follows:

1. Set the **Sense Level** by first rotating it to the full **Lo** (CCW) position and the **Delay (B to A)** to the **0** position. If the TV (Amplifier B) does not switch ON with audio signal playing, rotate the **Sense Level** CW a little at a time until it does. Usually, setting the **Sense Level** at mid rotation will work well.
The **Sense Level** range is 300mV at full **Lo** (CCW) and 30mV at full **Hi** (CW).
2. Next, rotate the **Delay (B to A)** CW until you find a place where the TV (Amplifier B) does not shut OFF and ON too frequently with low sound or music levels or during track and disc changes on CDs, DVDs, etc.
Since the **Delay** range is 0.5 seconds at the 0 position and up to 10 minutes at the 7 position, you should be able to find a good compromise between too frequent shut Offs and too long a time for the music to turn Off after the program material ends. Usually, a setting at **3** (20 seconds) or **4** (50 seconds) will work well.

B Status (out)

This output is provided so that external devices, such as drape pulls, lighting, additional amplifier, etc., can be triggered at the same time as the B Input is triggered. Just be sure that the triggered device will operate with a 12V DC trigger voltage and does not demand more than 100 mA of current draw. Actually, the 12V B Status output voltage will drop to about 9V at the max. current of 100 mA.