

### **MANSION INDUSTRY CO. LTD.**

5FL. No. 6 Szu Wei Lane, Chung Cheng Rd. Hsin-Tien City, Taipei, Taiwan, R.O.C.(231)
TEL.: +886-2-22189212
FAX: +886-2-22187983

www.mclellandmusic.com

# Owner's Manual

## **SS-V Series**

Dual-Source Speaker Selector with Volume Control







McLELLAND

#### **SPECIFICATIONS**

#### SS-22V

Power: 150 watt total RMS continuous

180 watt total average 200 watt total peak

Volume Control: 42 dB attenuation, 12 positions

Impedance Matching: Autoformers

Wire Size: up to 12 gauge wire

**Dimensions:** 8.5" W x 3.0" H 6.25" D(216 mm X 7.6 mm X 159 mm)

**Weight:** 4 lb(1.8 kg)

#### SS-24V

Power: 150 watt total RMS continuous

180 watt total average 200 watt total peak

Volume Control: 42 dB attenuation, 12 positions

Impedance Matching: Autoformers Wire Size: up to 12 gauge wire

**Dimensions:** 17" W x 3.0" H 6.25" D(432 mm X 7.6 mm X 159 mm)

**Weight:** 9 lb(4.05 kg)

#### SS-26V

Power: 150 watt total RMS continuous

180 watt total average 200 watt total peak

Volume Control: 42 dB attenuation, 12 positions

Impedance Matching: Autoformers Wire Size: up to 12 gauge wire

**Dimensions:** 17" W x 3.0" H 6.25" D(432 mm X 7.6 mm X 159 mm)

**Weight:** 10 lb(4.5 kg)

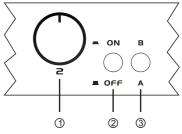
Congratulations on your purchasing of a McLELLAND SS-V series Dual-source Speaker Selector with Volume Control.

Please take a few moments to read the entire manual, and be sure to retain this document for future reference. Please read and observe all safety instructions detailed on each page.

#### **DESCRIPTION**

The McLELLAND SS-22V, SS-24V and SS-26V are high-power, dual-source, autoformer-based speaker selectors with individual volume controls for 2, 4 or 6 areas/rooms. Dual-source operation means either one of two different amplifiers/receivers can be chosen to power selected speakers independently. For example, you can choose to listen to jazz music in a couple of rooms and classical music in all the others. Each room has its own input selector, volume control and on/off switch, located on the front of the unit. The McLELLAND SS-V series speaker selectors work with all speakers rated from 4 to 8 ohms, and amplifiers rated for 4 to 8 ohm loads.

#### **CONTROLS**



- 1. Rotary Volume Control: It is used to adjust the volume of each output zone. Turn it clockwise to increase the volume of the corresponding output zone, turn it counterclockwise
- 2. On/Off Switch: It is used to switch on/off each output zone. Switch it to "IN" position, the corresponding zone will be turned on, switch it to "OUT" position, the corresponding zone will be turned off.
- **3. Source Switch:** It is used to select the input source to the corresponding output zone. Switch it to "IN" position, the AMP B source will be selected to the corresponding output zone, switch it to "OUT" position, the AMP A source will be selected to the corresponding output zone.

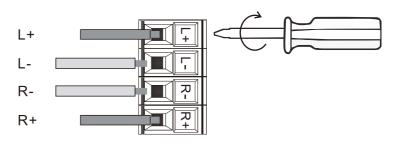
Remark: The control of each zone of the McLELLAND SS-V series Speaker Selectors are the same.

#### CONNECTIONS

All SS-V models have 4-pole screw down removable terminals for speaker and amplifier connections. These accept wire up to 12 gauge.

Remove the terminal by firmly pulling it out of its 4-pole connector. Strip about 3/8" of insulation from the ends of all wires to be connected. If necessary, twist the exposed conductor to insure the no loose strands exist. Insert the wire ends into the screw down connector, being careful to observe proper channel and polarity. Tighten the screws on the connectors. Connect the amplifier(s) and each speaker pair to the appropriate connector.

Speaker connections can support multiple speaker pairs wired in parallel or series, provided their combined impedance is a minimum of 4 ohms.



#### **SETTING THE IMPEDANCE**

The impedance of the autoformers in SS-V series speaker selectors is set at the factory to be proper for most applications. The SS-22V comes set at 2X, the SS-24V at 4X, and the SS-26V at 8X. However, if certain applications require changing the impedance setting, simply remove the cover of the unit and re-position the jumpers on the autoformers to the necessary inpedance-matching setting. McLELLAND SS-V series speaker selectors autoformers can be set to impedance-matching settings of 2X, 4X or 8X.

- 1. Determine the amplifier's minimum impedance. Consult the individual product specifications or the back panel of the amplifier near the speaker terminals. AC impedance is measured in ohms.
- 2. Identify the correct impedance-matching chart below according to your amplifier's minimum impedance: either for a 4 ohm amplifier or an 8 ohm amplifier. If your amplifier is 6 ohm stable, use the 8 ohm chart.
- 3. Determine the impedance for each pair of speakers (see its manual).
- 4. Determine the total number of 4 ohm pairs of speakers (rows on charts).
- 5. Determine the total number of 8 ohm pairs of speakers (columns on charts).
- 6. Use the appropriate row and column to determine jumper settings.

	Impedance Matching For 8-ohm Amplifiers 8-ohm Pairs												
irs		0	1	2	3	4	5	6	7	8			
ı Pai	0	-	1X	2X	4X	4X	8X	8X	8X	8X			
hm	1	2X	4X	4X	8X	8X	8X	8X	8X				
4-ohm	2	4X	8X	8X	8X	8X							
7	3	8X	8X	8X									
	4	8X											

	Impedance Matching For 4-ohm Amplifiers 8-ohm Pairs																	
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
S	0	-	1X	1X	2X	2X	4X	4X	4X	4X	8X							
Pair	1	1X	2X	2X	4X	4X	4X	4X	8X									
4-ohm P	2	2X	4X	4X	4X	4X	8X											
	3	4X	4X	4X	8X													
	4	4X	8X															
	5	8X																
	6	8X	8X	8X	8X	8X												
	7	8X	8X	8X														
	8	8X																

#### **SETTING SYSTEM VOLUME**

It is important to properly adjust an impedance-matching system to avoid distortion or DC clipping(DC voltage will be produced from an amplifier that is overworked or that has an improper load). These can cause an amplifier/receiver to go into protection, and can cause autoformers on volume controls to heat up. damaging system components. To set up the system, the amplifier/receiver volume should be at its lowest setting, and the speaker selector volume control should be at the highest setting. Slowly adjust the amplifier/receiver volume to a level that is acceptable for the amplifier to produce without clipping.

#### **OPERATION**

To operate the SS-V series speaker selector, simply power the amplifiers and select a source for each amplifier. At the speaker selector, turn on the selected pair of speakers and select AMP A or AMP B. Set the volume by rotating the control clockwise to increase volume or counter-clockwise to decrease volume. The SS-V series speaker selector allows operation of any combination of speakers selected to either amplifier A or B.

#### DIAGRAM

