User Manual

Audio Sources Selector
SSS4_1

v. 2.0

essol
ENERGY & SECURITY SOLUTIONS

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Installation & Operating Manual

Specifications

Input Voltage:	12 V DC
Current:	21mA (No channel selected)
	81mA (One stereo channel selected)
	51mA (One mono channel selected)
LED 12V Supply:	40mA (max) / Button (Led)

WARNING: ***All wiring must be performed with the power off and always respected the technical characteristics.***

Module's electrical supply

The power applied to the dual terminal marked "(+) (-)". The operating voltage is 12Vdc.

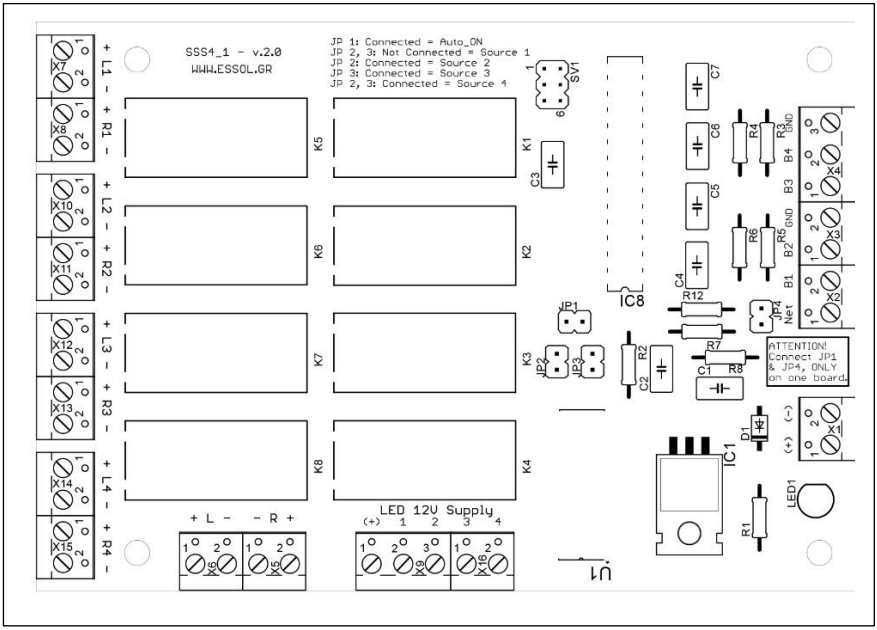
Functional description SSS4_1

According to our selection, the Essol SSS4_1 module, enables us driving one of the four inputs (LR1-4), to the output (L R) and vice versa. The selection is made by using external control buttons at the screw connectors (B1-4), which corresponds one for each input.

For an even more complete experience, there is the possibility to use buttons with LED inside. There are two options available. The first is to drive simultaneously all the buttons' LED or else, one of the buttons can be litted, which follows the selected channel.

Each SSS4_1 module comprises four separate channels. Each channel controls two DPDT relays, one for left and one for the right channel, of an audio source. For each of the audio channels, both of the poles (signal and the GND), are switched by the relay. The module ensures that only one input (sound source), will be driven to the output each time.

In order to increase beyond four, the number of samples that are demonstrated simultaneously, is afforded the opportunity to establish of a network with more than one modules. This is achieved using one cable, connecting all the screw connectors named "Net", between them.



Picture 1 – Sound Source Selector module SSS4_1.

Wiring and Connections

Input (LR1-4) - Output (LR)

On input terminals (LR1-4) and output (LR) of each card SSS4_1, stands the internal connection through the relays: Ln + / L +, Ln- / L-, Rn + / R +, Rn- / R-. In case of multiple modules on network, the output terminals (LR), must be connected to each other, one by one.

Selection Buttons

The first connection point of the normal open contact (NO) from the selection buttons must be connected at the terminal block with the letter B1-4 and the second connection point to GND.

Selection Button with LED

You can highlight the selected device via buttons with LED. For this function, you can power the buttons' LEDs, by the connector marked "LED 12V Supply (+)" and their return, from the connector marked "LED 12V Supply 1 - 4". It is necessary to comply with the rules, associated with the LED's current limitation.

CAUTION: ***The maximum current per channel (1-4) is 40mA.***

Light All Buttons

If we want to turn on the lights of all the buttons, the LED is powered from the main supply of 12VDC. It is necessary to comply with the rules, associated with the LED's current limitation.

Networking two or more modules

CAUTION: ***Connect the JP4, ONLY ON ONE of the networked modules every time.***

Networking two or more modules, is achieved through the use of one cable, which connects all the terminals of the modules, which is marked as "**Net**". Through networking, ensured communication between the modules and their integration into a unified group, with 4 x N audio source, where N is the number of networked modules.

In case of interruption of the link cable, if is disconnected a module with the JP4 jumper opened, then all other modules, turns off its relays. If any other module disconnected, with JP4 open, then only this module turns off its relays. The system remains so until the connection is repaired.

In each group of networked modules, an audio source is driven to the exit, only when first isolated the previously selected source.

Each module, in order to operate **autonomous**, must have the JP4, connected.

Auto Start

Through JP1, JP2 and JP3, are regulated the functions associated with automatic startup of a selected channel, when the unit powered.

CAUTION: ***Connect the JP1, ONLY ON ONE of the networked modules every time.***

JP1 {**Open**} = Off, **JP1** {**Close**} = On

JP2 & **JP3** {**Open}** = Channel 1

JP2 {Close} & JP3 {Open} = Channel 2

JP2 {Open} & JP3 {Close} = Channel 3

JP2 & **JP3** {**Close}** = Channel 4

Application Examples

Example 1

Sampling car audio sources.

At inputs (LR 1-4), are connected the audio sources. At the output (LR), are connected the speakers.

In this case, the selected audio source is played in a pair of speakers.

Example 2

Sampling car speakers.

At the (LR) terminal block connect the audio source. At the (LR1-4) terminal block, connect the demonstrated speakers.

In this case, the selected pair of speakers will reproduce the constant audio source.

Example 3

Sampling car audio sources and speakers.

You can use the SSS4_1 to demonstrates simultaneously audio sources and speakers, combining at least two modules. The first module handles the sources and the second one the speakers.

To achieve this, connect the output (LR) of the first to the input (LR) of the second. At the inputs (LR1-4) of the first, connect the audio sources and at the outputs (LR1-4) of the second, connect the speakers.

Alternative management of waste electrical and electronic equipment

For the countries of the European Union

This label is affixed to the product to remind you that the electrical and electronic products must not in any event be considered municipal waste.

Electrical and electronic products, including cables, plugs and accessories should be separated at source, to allow the necessary treatment, with the ultimate goal to reuse or recovery.

These products should be available in specified units with the best techniques of collection, treatment and alternative management.

The separate treatment provides the following significant advantages: valuable materials can be reused and thus prevent the generation of municipal waste.

This action helps to protect the environment and human health. Please be aware that fine may be imposed for illegal disposal of electrical and electronic equipment. Please drop your old electronic equipment at appropriate recycling electronics or contact your local authorities for further information.

For countries outside the European Union

The management of electric and electronic equipment in countries outside the European Union should be in accordance with local regulations. Please contact your local authorities for further information.

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The manufacturer Christos N. Chiotis, with contacts details: Address: Rodou 24 Koridallos, 18120, Attiki – Greece Phone/Fax: 210-2018328 - Email: christos.chiotis@essol.gr

Declares that this device SSS4_1 V2.0, meets the requirements of European Directives: 2004/108/EK (EMC), 2011/65/EE (RoHS).

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