

MedeaWiz[®] SS-38

Serial Splitter for MedeaWiz[®] Sprite[®] and Sprite[®] 4K

Manual Version 1.00

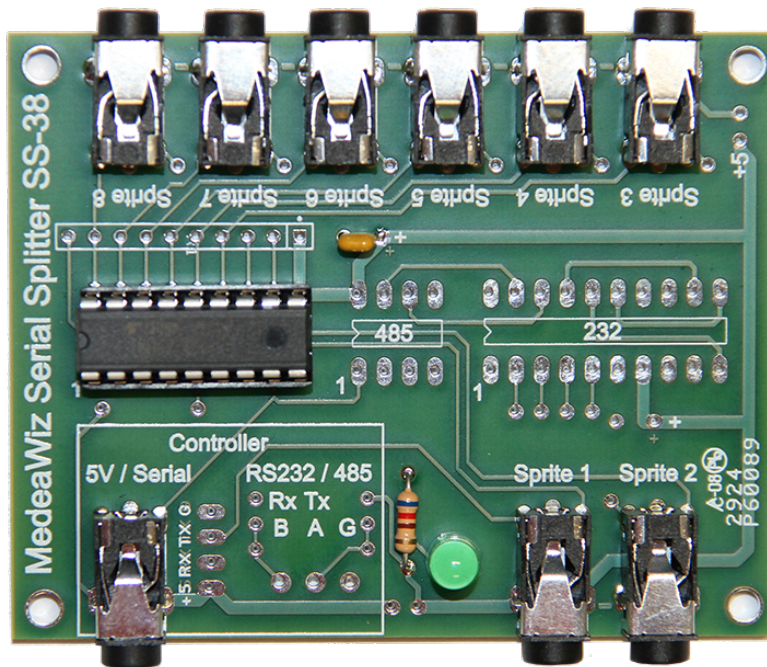


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Introduction

The MedeaWiz® SS-38 serial splitter is a serial control / trigger splitter and buffer to control 8 or more Sprite® or Sprite® 4K video players from a single serial port, push button or motion sensor. If you plan to connect more than 3 or 4 Sprites on one TTL serial bus, push button or motion sensor, you will need this to get a strong serial or trigger signal to all Sprites. Two or more SS-38 may be chained to drive additional Sprites from each SS-38, all from a single serial port or trigger. In addition, there are available add-on options to use RS232 control, with TTL level translation, or RS485 control.

Operation

The SS-38 input area, marked “Controller”, has our standard 3.5mm 4-pole jack and can connect directly to our Hydra® input / output expander, our MSA-B motion sensor, or a push button, etc. This input port can supply 5 volts at 100 mA to power the Hydra or MSA-B. You can use any micro-controller with a 3.3 to 5 volt serial port.

There are provisions for optional RS232 or RS485 input. Note the connector and other components are not installed for RS232 or RS 485, but may be provided as an option from your dealer at additional expense.

The port marked “Sprite 1” must have a Sprite connected. This Sprite will supply power to the SS-38 and the controller input port. Sprite 1 will also transmit serial reports back to the Hydra or other controller.

The ports marked “Sprite 2” to “Sprite 8” can be used for additional Sprites, each with its own power supply, or to chain to other SS-38 serial splitters, each with at least a Sprite connected to the Sprite 1 port for power. Ports 2- 8 are not connected to power and do not transmit serial reports. Use cables with 3.5mm 4-pole plug at each end to connect Sprites or a Hydra. Since every installation may be different, we only supply one, 1M long cable, with the SS-38.

If you are syncing videos from 2 or more Sprites, it is best to use the same encoding for all files and the exact same make and specifications USB drives or SD memory cards. The Sprite 4K model DV-S4 syncs very well together.

Wiring

Controller Input

A Hydra® or MSA-B motion sensor may be plugged into the 3.5mm 4-pole controller input jack, marked “5V / Serial”. Please refer to the Sprite® manual to set the Control Mode to “Serial Control” at 9600 baud for the Hydra, Trigger High No Interrupt for the MSA-B motion sensor, Trigger Low for a push button. This input is rated for 0 to 5 volts, or 3.3 to 5 volt TTL serial input. A negative voltage, or over 5.5 volts, will cause damage to the SS-38.

***Note you must cut the jumper wire near the LED, between the Sprite 1 port and the Controller port, if you wish to power some other controller using a separate power supply. See picture on page 3.**

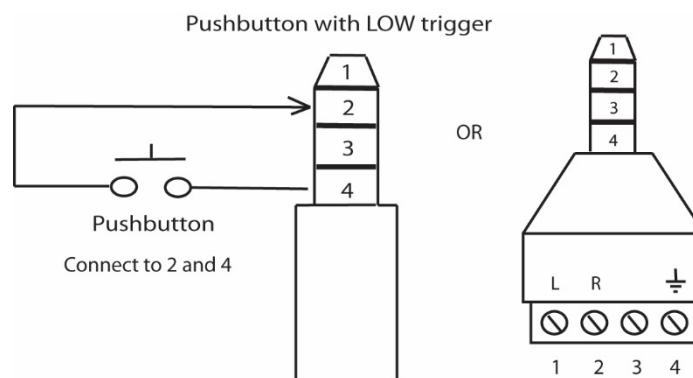
There are provisions on the Controller input area for screw-terminals and termination resistor, if needed, for RS232 and RS485 inputs. These are not installed but may be available as an option from your dealer. The RS232 option will provide serial reports back to the controller from Sprite 1 only. The RS485 port will not provide any serial reports as it can only receive.

Sprite® 1 – 8 Outputs

A Sprite must be connected to the Sprite 1 port to provide power to the SS-38 serial splitter. Sprite 1 will provide serial reports back to the controller. Sprite 2 to Sprite 8 outputs may be connected to other Sprites or to other SS-38 for expansion. All use our standard cables with 3.5mm 4-pole plug at each end. All Sprites will require their own power supply. All SS 38 will require Sprite 1 to supply power.

Push Button Wiring to the 5V / Serial Port

Using a pushbutton or other dry contacts



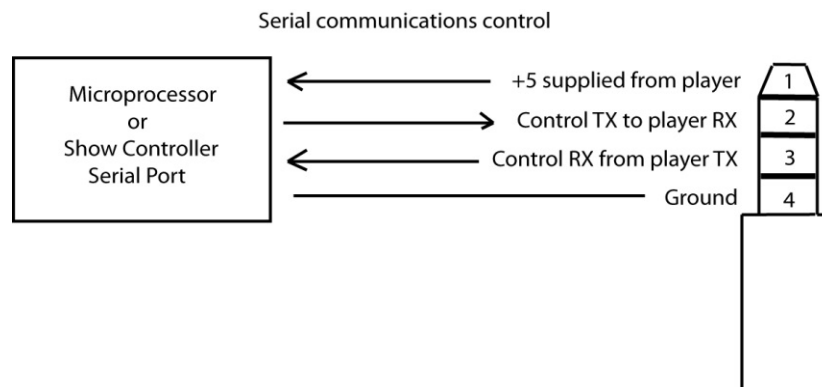
The Control Mode should be set to Trigger Low No Interrupt or Trigger Low with Interrupt or Trigger Low Delayed. No Interrupt and Delayed will queue from the end-of-file on Sprite 1 only.

The screw terminal adaptor shown above on the right is included with the Sprite®. Note that the numbers near the screws match to the numbers on the plug at the left.

Serial Communications Wiring to the 5V / Serial Port

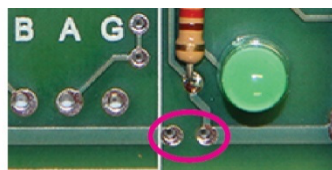
The SS-38 can pass serial commands from a Show Control or micro controller like a Basic Stamp, PIC, Atmel, Arduino, Raspberry Pi, or etc. using serial communications at 3.3V or 5V levels.

Note that RS232 levels from a PC or PLC serial port to the Controller 5V / Serial port will require a level translator like the MAX3232 series. Do not allow negative voltage below ground, or over 5.5 volts, to be applied to this port.



The SS-38 can supply 5V DC at up to 100 mA, from Sprite 1, to power your micro controller.

Note you should cut / remove the jumper wire near the LED, between the Sprite 1 port and the Controller port, if you wish to power some other brand controller using a separate power supply.



Cut or remove jumper here to use separate power for controller.

Support

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