Repairing a Suzo Arcade joystick using a new joystick cable

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There are various types of Arcade joysticks from Suzo. For the MSX computer these are the best joysticks available, especially the versions with two independent fire buttons. But after many hours of playing fun even these joysticks may no longer work properly. Luckily, they can easily be repaired.



Various Arcade joysticks.

- Open the joystick by removing all three screws at the bottom (they are covered by the little rubber feet, which will have to be removed first).
- Use a multimeter to check if the microswitches are still functioning. If they no longer switch you can easily replace them. If all switches are fine and the joystick still doesn't work properly then almost certainly some wires in the cable are broken.
- The old cable can easily be detached, because it is connected to the circuit board with a connector.
- Cut the old cable at the strain relief, so that the white connector with loose wire ends remains. The connector will be attached to the new cable by soldering the wire ends of the old and new cables together, so make sure you don't cut the old cable too close to the connector. Below there's an overview of which Suzo wire to connect to which Sega wire.

SUB-D	Suzo wire color	Internal pin	Function	Sega wire color
1	White	3	Up	Red
2	Blue	6	Down	Black
3	Green	1	Left	Gray
4	Brown	5	Right	Orange
5	Red	8	5 Volt	Brown*
6	Orange	4	Fire button 1	Green
7	Gray	7	Fire button 2	White*
8	Black	2	Output	Blue
9	Yellow	9	Ground	Yellow*

* Only used for joysticks with 2 fire buttons.



PCB top view.

You can easily buy new cables from a website such as AliExpress or Ebay. These are sold as Sega joypad cables.



The new cable.