

## Repairing a Suzo Arcade joystick with a used 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.



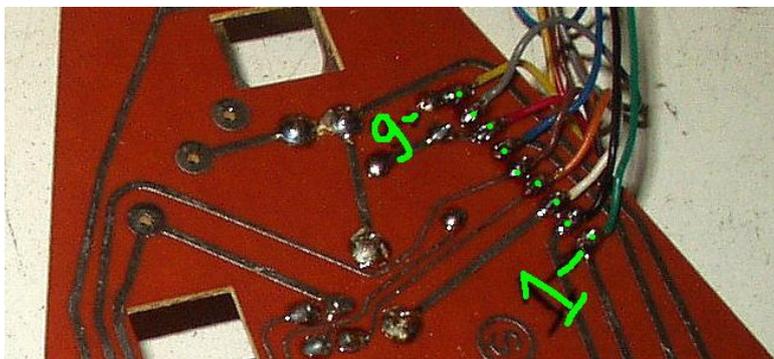
Various Arcade joysticks.

The only problem is finding the right cable. For instance, find an old Quickshot, Crackshot or Spectravideo joystick and make sure this works correctly. Carefully remove the cable from the joystick. The cables of these joysticks often contain enough wires to be suited to repair any Arcade joystick.

- Open the joystick by removing all 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 does not 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.
- Solder the wires of the new cable to the bottom side of the connector on the PCB. Below there is an overview of which wire to connect to which pin, including the colors of the old Suzo cable.

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	+5V DC	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 bottom side.

By the way: it is also possible to solder the joystick cable to the connector of the old cable, so you don't have to do any soldering on the PCB. For instructions see the manual "Repairing a Suzo Arcade joystick using a new joystick cable".