

MZ to SCART TV.

Jeroen F. J. Laros

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Contents

1	Introduction.	3
2	The reasons.	3
3	Background.	3
4	The cable.	3
5	The results.	4
6	Disclaimer.	4
7	References and credits.	4

1 Introduction.

This document describes how to connect your Sharp MZ to a TV using the SCART plug. You can also use the RF output to connect a TV, but that's something else.

2 The reasons.

I had several reasons to do this:

- I got sick of changing cables at the back of my TV.
- My TV is not entirely silent when I turn the volume down or mute it.
- I wasn't satisfied with the quality of the RF output.

3 Background.

At first I made a cable that was designed to connect an MZ to a Thomson RGB monitor with a SCART input. This didn't give a good result. All I could see was a white square. When I loaded a black and white program I could see something, but the image quality was very poor. So I started experimenting, I cut some wires to see which ones were in use and I came to the conclusion that none of the RGB wires were used. I also found out that I could get a nice b/w screen with gray taints when I cut the c-sync wire. Then I found a document about connecting a Commodore 128 to a TV, in this document something was mentioned about the 'fast blank' pin on the SCART cable to enable RGB. Your TV defaults to reading the composite signal you send on your SCART cable and because this signal was present (it must be, otherwise the TV can not sync) it displayed the composite signal. To enable the RGB signal I connected the c-sync signal to the 'fast blank' pin, but the c-sync signal is also used to sync, so I had to add another wire from the 'fast blank' pin to the composite video input pin.

Now everything seemed to work, but there was still something strange, I couldn't quite put my finger on until I played a game I knew. It turned out red and green were switched, so that was quite easy to fix.

4 The cable.

Because I had a lot of trouble finding the correct pin layout of the RGB port, I will give a table of which I'm sure it works.



This is the front view of the DIN plug. The cable itself is fairly simple (NC means not connected):

Sharp RGB	SCART TV
SHIELD	NC
1 - VIDEO / I	NC
2 - GND	17 - VIDEO GND
3 - C-SYNC	16 - FAST BLANK + 20 - Composite VIDEO IN
4 - H-SYNC	20 - Composite VIDEO IN
5 - V-SYNC	20 - Composite VIDEO IN
6 - GREEN	11 - GREEN
7 - RED	15 - RED
8 - BLUE	7 - BLUE

Hint: you can group all sync signals to pin 20 and then make a wire from pin 20 to pin 16.

5 The results.

- Now I can switch from my MZ to TV with my remote control.
- I do not have any background sound when I use my MZ.
- I don't have to adjust the sound volume anymore.
- The picture quality is better than with RF.

6 Disclaimer.

Use this information at your own risk. The author is not responsible for any damage or data loss as a result of using this information. The cable has only been tested on an MZ-800.

7 References and credits.

The original RGB cable I got from:

<http://www.sharpmz.org/mz-700/sharptoscart.htm> The pin layout I used I got from: <http://www.sharpmz.org/mz-700/connect.htm#RGB> The hint about the 'fast blank' pin I got from:

<http://www.funet.fi/pub/cbm/documents/cables/128-videocable.txt> See:
<http://www.sharpmz.org/index.html> for almost everything about the Sharp series.