

USING A SONY KV-20XBR/KV-25XBR
or
KV-1311CR Monitor with an Atari ST

Original article: Henry Katzmarek
Expanded by: Forrest Blood - JACS

Soon after I purchased my Sony KV-20XBR (a 20 inch TV/RGB monitor) over a year ago, I immediately started looking for information on hooking it up to my 520ST. After many hours of searching through BBS's, magazines, newsletters and sending letters to Sony, I finally found a solution which works. The article that follows was based on an article (SONY2.DOC) which appeared on the CompuServe Information Service.

WARNING: You are making this interface at your own risk. I have made the interface myself and it's currently working fine on my own computer; however, I cannot vouch for any problems due to changes in the computer and/or monitor, or omissions I might make in this article.

Items 3, 4, and 5 on the next page are not necessary, but they greatly simplify the construction of the interface. The joystick extension cord connectors are cut off, and the remaining 9 conductor wire is used to pass the video/audio signals. If you want to hook up the Sony KV-1311CR, then you'll need these joystick connectors to complete the interface. The phono jack board is connected to the composite video, audio in and audio out pins of the ST to simplify connection to a VCR or stereo. The project box is used to mount the phono jack board, resistors, diodes and jumper wires.

The Sony connectors can be obtained from:

Sony Factory Service
10360 Drummond Road
Philadelphia, PA 19154
(215)637-0850

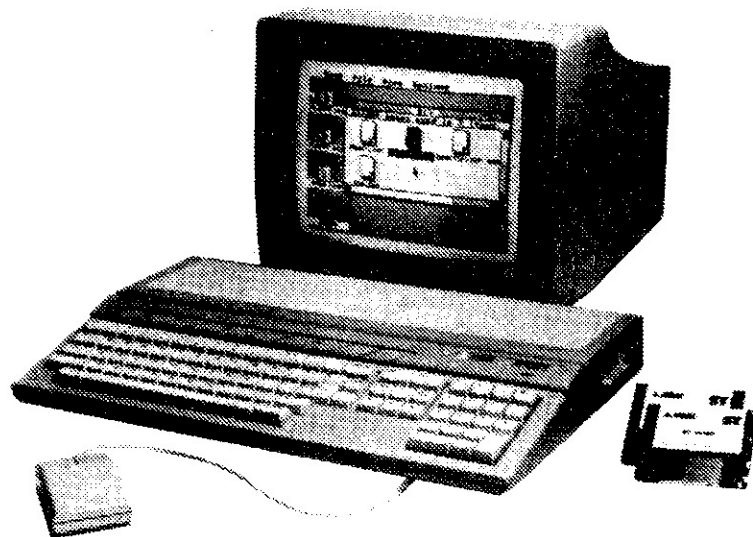
Special Notes on the Sony KV-1311CR

If you're making a cable for a Sony KV-1311CR, then you'll have to make a few small modification to the above circuit. Since neither the ST, nor the KV-1311CR has +5 volts DC present on it's video connector (pin 1 isn't connected on this monitor), you'll have to get it from somewhere else. The easiest source for this voltage is from the ST joystick port #2 - pin 7 (+5v) and pin 8 (ground).

First substitute the connection from monitor pin 1 to monitor pin 33/RGB-Normal mode select. The next step is to wire the male and female joystick connectors together, the junction being inside the project box. Connect each pair of the same colored wires together. Attach a jumper wire (within the project box) from the joystick ground wire to the ST video ground wire. Now connect another jumper wire from the joystick +5 volt wire to the wire which connects to monitor pins 29,33 and 34. Now plug the female connector into joystick port #2 and plug your joystick into the male connector.

If you've connected everything correctly, you should now get a clear, sharp picture on your Sony monitor. Enjoy.

Parts & wiring on page 6



Parts List:

Description	Source	P/N	Qty	Cost
1) 470 ohm resistor, 1/4 watt or higher, 5%	Radio Shack	271-1317	2	.39
2) general purpose diode, 1N4001 or equiv.	Radio Shack	276-1101	2	.49
3) economy project box	Radio Shack	270-022	1	2.19
4) 10 foot joystick extension cord	Radio Shack	276-1978	1	3.99
5) 4 position phono jack board	Radio Shack	274-322	1	.99
6) connector, male, DIN 13 for ST (inc. tax+ship)	Sony	156094600	1	10.79
7) connector, PX34 for Monitor (inc. tax+ship)	Sony	156179000	1	25.20
Total cost				44.04

Description of Wiring from ST to KV-20XBR/KV-25XBR

```

----->Project box----->Monitor signal/pin
----->Phono jack #1 & #2----->Audio(R)+(L) in/20+24
Composite out/2----->Phono jack #3      |-----<+5 volts DC/1
(only works if your ST has an RF modulator) |
                                              |----->Audio select/34
                                              |
Audio in/5----->Phono jack #4          |----->Blanking in/29
                                              |
Green out/6----->Green in/26
Red out/7----->Red in/25
Ground/8+13----->Ground for Phono jacks #1-#4--->Ground/3-13,15,16
Horizontal sync./9----->CR1----->R1-----|
(CR1 is the diode listed above)              |
(the non-banded side of CR1 goes to the computer) |
(R1 is the resistor listed above, no polarity) |--->Composite sync./30
                                              |
Vertical sync./12----->CR2----->R2-----|
(CR2 is the diode listed above)              |
(the non-banded side of CR2 goes to the computer) |
(R2 is the resistor listed above, no polarity)
Blue out/10----->Blue in/27
  
```

WARNING: +5 volts DC/monitor pin 1 does NOT get connected to composite out/ST pin 2 or audio in/ST pin 5.
