Pinouts of different RGB connectors

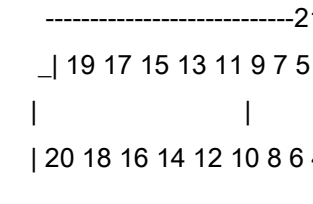
This documents has some RGB connector pinouts which might be useful to VGA to TV converter circuit experimenters who wish to connect their PC to some other video display devices than normal TV.
The information is collected to various sources which I believe to be correct. I have not been able to verify every pinout in this document so there is no guarantee that those are the correct ones. So use this information at your own risk.

TV SCART

Here is the SCART RGB input pinout for a reference:

Pin	Signal	Signal level
5	Ground (blue)	
7	Blue input	(0.7V, 75ohm)
8	Function select/AV control	(9.5-12V = AV mode, >10kohm)
9	Ground (green)	
11	Green input	(0.7V, 75ohm)
13	Ground (red)	
15	Red input	(0.7V, 75ohm)
16	RGB switching control	(1-3V = RGB mode on, 75ohm)
17	Ground (sync signal)	
18	Ground (RGB switching)	
20	Composite sync input	(as in 1Vpp video signal, 75ohm)
21	Common ground (shield)	

The connector itself looks like this:



Monitors

Commodore 1084

Commodore 1084 is an RGB monitor designed to be used with Commodore Amiga and has the following specs:

Line frequency: 15625 Hz

Raster frequency: 50 Hz (47 - 62.5 Hz)

Resolution: 640 x 200 pixels (on RGB input)

The vertical resolution can be doubled if interlacing is used.

Some more information on that monitor can be found at http://www.interlog.com/~gscott/t-1084.html. The RGB connector in the back of the monitor has the following pinout:

Monitor

Pin	Description
4	Red Video
1	Green Video
5	Blue Video
3	Ground
2	Horizontal Sync
6	Vertical Sync

Philips CM8833-II

Philips CM8833-II has quite similar specs to the monitor above (used in the same type of applications). Philips CM8833-II has a RGB connector which can accept both analogue and digital RGB signal. The RGB connector uses the following pinout:

-Pin-	-RGB TTL-	-RGB Analogue-
1	Ground	Ground
2	Ground	Ground
3	Red	Red
4	Green	Green
5	Blue	Blue
6	Intensity	Fast Blanking
7	Not used	Composite Sync
8	H. Sync	H. Sync
9	V. Sync	V. Sync

Some of the CM8833-II models have also a sepearate composite video input (RCA connector). I have also heard of special versions with only the digital TTL RGB input.

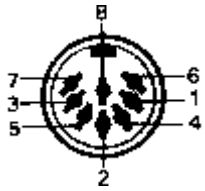
DIN 45326

DIN 45326 is a standardized TTL level RGB input connector which is quite common in some older European computer monitors (for example Commodore 1084). DIN 45326 connector cna be for example used to accept the signal from PC CGA card with suitable cable. DIN 45326 connector has the following pinout:

Pin Function

1 Status computer
2 Red
3 Green
4 Blue
5 Intensity
6 Earth
7 H.syncronization or composite syncronization
8 V.syncronization

The connector model is 8-pin round DIN connector (7 pins at 270 degrees and one center pin) with the following pin numbering:



Video projectors

Sharp Video Projector

This pinout description is for Sharp LCD Video Projector Japanese domestic model XV-Z4050. More information on this projector can be found at http://www.sharp.co.jp/sc/gaiyou/news-e/96030.htm. Pinout of input connector labelled "15.75 kHz analog RGB; 15-pin D-sub connector":

1 R
2 gnd
3 G
4 gnd
5 B
6 gnd
7 n.c.
8 gnd

9 n.c.
10 n.c.
11 n.c.
12 gnd
13 n.c.
14 H sync (Analog)
15 V sync (Analog)

34 pin RGB connector pinout in Sony monitors

This information was mailed to me and is is claimed that is is from a schematic of a Sony US model Profeel KX-1901A. This connector was sed on the profeel series (1980 . 1984) for the teletext upgrade boxes (TXT100UB).

34 pin RGB connector pinout:

Pin # Descrip
1,2 +5V
4,5,6 GND
18 T IN
19 N/RGB
20 H BLK
21 V SYNC
22 H SYNC
23 BLK
24 NO CONNECTION
25 B
26 G
27 R
28 AL
29 NOT MARKED BUT COMES FROM THE VIDEO BUFFER
30 REMOTE IN
31 NOT MARKED BUT GOES TO A TRANSISTOR BASE
32 AR
33 NO CONNECTION
34 INT/EXT

Another SONY 34 pin connector documentation can be found at http://www.wk.go.dlr.de/Home/Sachs/Connectors/Monitor/F_Pinouts3.html#PINOUTS_014 and at http://www.geocities.com/SiliconValley/Haven/1236/pinconmis_sony_rgb_multi_inp.htm

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