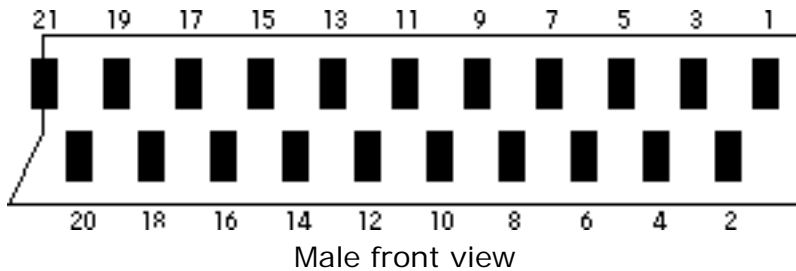


## Scart Connector

The Scart (Syndicat des Constructeurs d'Appareils Radiorécepteurs et Téléviseurs) connector is used for combined audio and video connections.

The connector is also known as Pertitel connector or Euroconnector.

A formal description is given in the CENELEC EN 50 049-1:1989 standard or in the IEC 933-1 standard. Different pin-configurations exist. Which configurations are available depends on the video device used. Sometimes one can choose the configuration (like composite or S-video) by changing a software setting. Two status signals define (partly) which video signals are active. A video device can use these status signals to automatically switch between internal or external audio/video signals.



## RGB Connection

Output connector		Input connector	
1	Audio right out	2	Audio right in
3	Audio left (or mono) out	6	Audio left (or mono) in
4	Audio return	4	Audio return
7	Blue out	7	Blue in
5	Blue return	5	Blue return
11	Green out	11	Green in
9	Green return	9	Green return
15	Red out	15	Red in
13	Red return	13	Red return
16	RGB status out	16	RGB status in
14	RGB status return	14	RGB status return
19	Sync (composite video) out	20	Sync (composite video) in
17	Sync return	18	Sync return
21	Shield	21	Shield

## S-Video Connection

Output connector	Input connector

1	Audio right out	2	Audio right in
3	Audio left (or mono) out	6	Audio left (or mono) in
4	Audio return	4	Audio return
15	Chrominance out	15	Chrominance in
13	Chrominance return	13	Chrominance return
8	Video status out	8	Video status in
19	Luminance out	20	Luminance in
17	Luminance return	18	Luminance return
21	Shield	21	Shield

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## Composite Video Connection

Output connector		Input connector	
1	Audio right out	2	Audio right in
3	Audio left (or mono) out	6	Audio left (or mono) in
4	Audio return	4	Audio return
8	Video status out	8	Video status in
19	Composite video out	20	Composite video in
17	Composite video return	18	Composite video return
21	Shield	21	Shield

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## (Composite) Decoder Connection

Receiver connector		Decoder connector	
1	Audio right out	2	Audio right in
2	Audio right in	1	Audio right out
3	Audio left out	6	Audio left in
6	Audio left in	3	Audio left out
4	Audio return	4	Audio return
8	Video status in	8	Video status out
19	Baseband out (scrambled)	20	Baseband in
17	Baseband out return	18	Baseband in return
20	Composite video in (unscrambled)	19	Composite video out
18	Composite video in return	17	Composite video out return
21	Shield	21	Shield

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## EasyLink Connection (additional)

Television connector		Video recorder connector	
10	I/O Control Bus	10	I/O Control Bus

EasyLink enables bi-directional communication between a television set and a video recorder. This way a video recorder can, for example, copy the channel settings of the television set. Who knows the details?

## Signal Levels

Signal	AC level	DC level	Impedance
Red, green, blue	Peak to blanking: 0...0.7 V $\pm$ 3 dB	0...2 V	75 Ohm
Sync	Peak to peak: 0...0.3 V -3 dB...+10 dB	0...2 V	75 Ohm
Composite video	White to sync: 0...1.0 V $\pm$ 3 dB	0...2 V	75 Ohm
Chrominance	0...0.3 V -3 dB...+10 dB	0...2 V	75 Ohm
Luminance	0...1.0 V $\pm$ 3 dB	0...2 V	75 Ohm
MAC	Black to white: 0...1.0 V $\pm$ 3 dB	0...2 V	75 Ohm
Audio in	0.2...2.0 V (nominal: 0.5 V)		$\geq$ 10 kOhm
Audio out	Nominal: 0.5 V (maximum: 2.0 V)		$\leq$ 1 kOhm
Video status	Low data rate communication: 0.0...2.0 V (e.g. remote control; Easylink)	Internal: 0.0...2.0 V External (16:9): 4.5...7.0 V External (4:3): 9.5...12.0 V	In: $Z_R \geq$ 10 kOhm $Z_C \leq$ 2 nF Out: $Z_R \leq$ 1 kOhm
RGB status		Internal: 0.0...0.4 V External: 1.0...3.0 V	75 Ohm

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