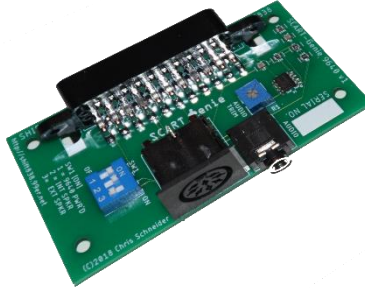


# SCART enie



Last Updated: July 20, 2018

*SHIFT838* announces the new SCART-Genie for 2018 in multiple models.

The SCART-Genie is a board that can be used (depending on model) to hook up a Myarc Geneve 9640 or Texas Instruments TI-99/4A or SNUG system to a SCART enabled monitor supporting 15kHz.

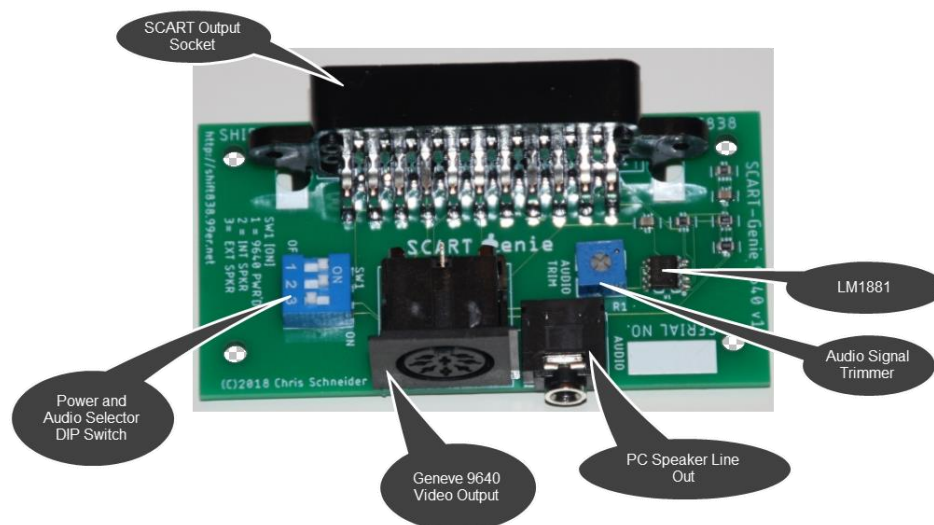
The SCART-Genie comes in 3 models:

- 9640 : Myarc Geneve 9640
- AVPC : SNUG system with AVPC
- EVPC : SNUG system with EVPC

The SCART-Genie utilizes a LM1881 Video Sync Separator to clean up both the Horizontal and Vertical Sync signals in order to produce a clear video. The Units also have circuitry to choose how the RGBS line receives power to throw the monitor in RGB mode as well as the ability to use a set of standard external PC type speakers.

Each model is described in more detail below.

## Model 9640:



### Parts on PCB:

- 1 x SCART 21pin PCB Right Angle Socket
- 1 x DIN 8 pin PCB Right Angle Socket
- 1 x 3 position DIP switch (SW1)
- 1 x 5 Pin Stereo Audio PCB Jack (3.5mm)
- 1 x 1k Trimmer (R1)

- 1 x LM188M Sync Separator IC (U1)
- 2 x .1uf 16v capacitors 0805 package SMD (C1 & C2)
- 1 x 470-ohm ¼ watt resistor 0805 package SMD (R2)
- 1 x 680-ohm ¼ watt resistor 0805 package SMD (R3)
  
- 1 x 470-ohm ¼ watt resistor 0805 package SMD (R4)
- 1 x 100-ohm ¼ watt resistor 0805 package SMD (R5)

#### Connection Requirements:

- 1 x SCART-Genie 9640
- 1 x SCART male to male cable
- 1 x DIN 8 Pin Male to Male straight through cable.
- 1 x SCART Monitor or SCART to HDMI up-scaler that supports 15kHz.
- 1 x Myarc Geneve 9640

#### Suggested Cables:

SCART Male to Male cable

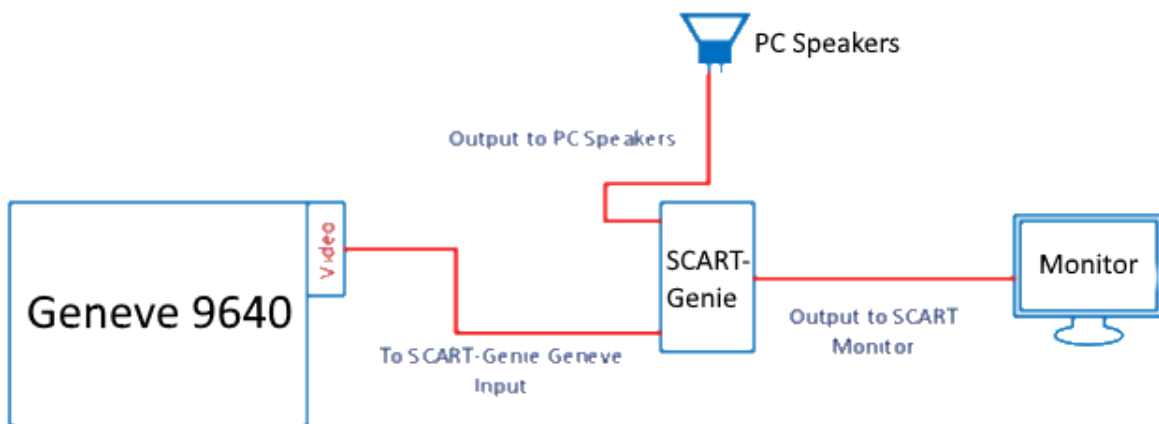
[https://www.amazon.com/KabelDirekt-multiple-shieldings-precision-connector/dp/B01DYELZXE/ref=sr\\_1\\_1\\_sspa?ie=UTF8&qid=1526853502&sr=8-1-spons&keywords=scart+cable&psc=1](https://www.amazon.com/KabelDirekt-multiple-shieldings-precision-connector/dp/B01DYELZXE/ref=sr_1_1_sspa?ie=UTF8&qid=1526853502&sr=8-1-spons&keywords=scart+cable&psc=1)

DIN 8 Pin Male to Male cable

<http://www.kraydad.com/din-8-3-ft-male-male-cable-large-din-heavy-duty/>

Note: I have tried cheap cables and they do not filter out the video signal interference as well. The two links above are the ones I actually use on my Geneve with the SCART-Genie 9640.

### Connection Diagram:



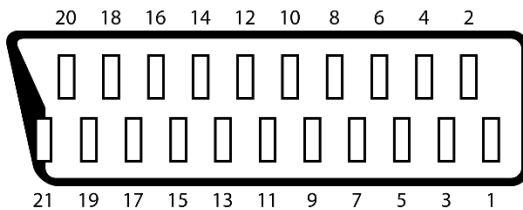
### Setup:

1. Set SW1 DIP switch settings:
  - a. #1
    - i. Off = SCART Genie will be powered by monitor connect (requires modification to monitor)
    - ii. On = SCART Genie will be powered by modified monitor [ **DEFAULT** ]
  - b. #2
    - i. Off = Disable internal monitors speakers
    - ii. On = Enable internal monitor speakers [ **DEFAULT** ]
  - c. #3
    - i. Off = Disable external PC speakers [ **DEFAULT** ]
    - ii. On = Enable external PC speakers
2. Plug SCART-Genie 9640 into Geneve Video OUT with straight through DIN 8 male to male cable
3. Plug SCART-Genie 9640 into SCART enabled monitor using standard SCART male to male cable.

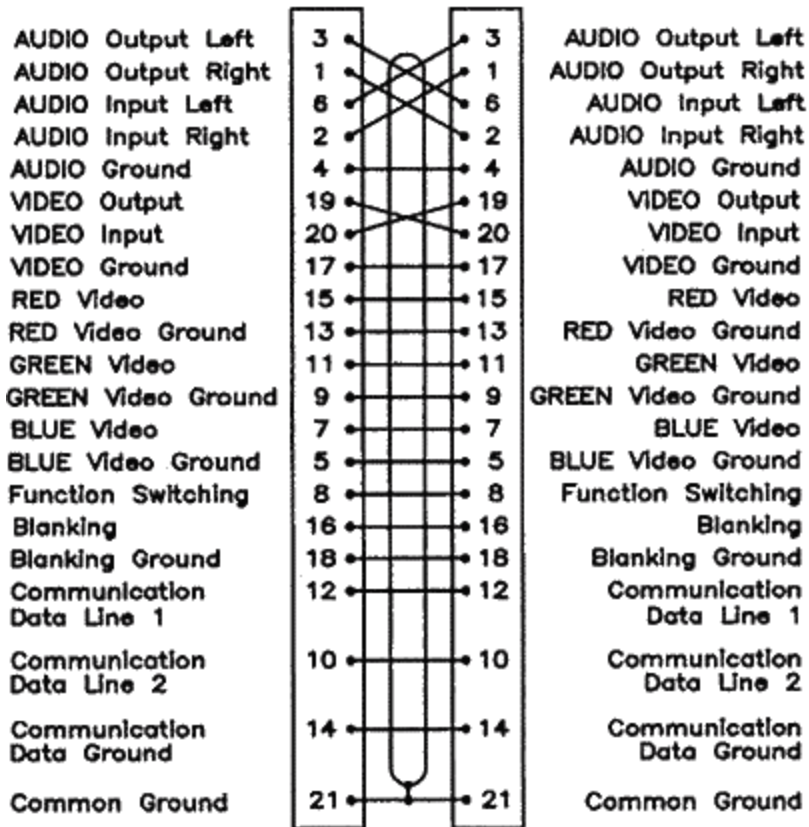
4. If using PC speakers plug PC speaker into line out connector on SCART-Genie.
  5. If the SCART-Genie is not in a case then ensure no contacts are touching any conductive material.
  6. Boot.
  7. Adjust the Audio Signal Trimmer to filter out any residual interference on the video signal caused by the Audio signal if using internal speakers. This is needed because the Audio signal coming from the Geneve is very strong and typically needs to be decreased in order not to interfere with the video signal. This is not the case if using external speakers.
8. Sit back, relax and enjoy your new SCART-Genie 9640.

### Wiring/Connector Diagrams:

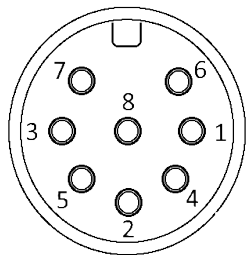
#### SCART Socket (PCB):



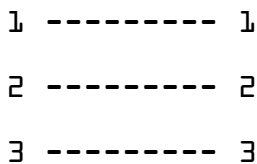
#### SCART Male to Male:



Geneve 9640 & DIN & Socket (PCB) Connector:



Geneve 9640 DIN & Male to Male



4 ----- 4  
5 ----- 5  
6 ----- 6  
7 ----- 7  
8 ----- 8

Model AVPC (Picture coming soon)

AVPC (DIN-6 - female)

- 1 - Blue
- 2 - Red
- 3 - Ground
- 4 - Green
- 5 - CSYNC
- 6 - +5V (N/C)

Model EVPC



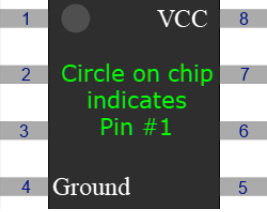
**EVPC (DB9 - Male)**

- 1 – Ground (Shield)
- 2 – Ground
- 3 – Red
- 4 – Green
- 5 - Blue
- 6 –Sound
- 7 – N/C
- 8 – CSYNC
- 9 – N/C

**Troubleshooting:**

Symptom	Check
Not Clear or Video Interference	Adjust Audio Trim



<p>Sound not working</p>	<p>Check dipswitch settings for audio.</p> <p>Cables may not be wired for Audio, refer to SCART wiring diagram if using internal speakers.</p> <p>For external speakers verify phono cable does not have short</p>
<p>Video Colors off</p>	<p>Cable may not be wired correctly on the RGB lines or capacitors within monitor may be faulty.</p>
<p>No picture or dim picture</p>	<p>SCART-Genie is not getting enough power (call SCOTTY - we need more power!)</p> <p>Check dip switch power setting (#1). If correct verify pin #1 on the Geneve DIN connector has 12v DC voltage.</p> <p>Verify Pin #8 on the LM1881 is receiving 12v of power. Measure with voltmeter between pin #4 (ground) and pin #8 (VCC) of the LM1881 (BE CAREFUL)</p>  <p>If LM1881 is receiving the correct voltage then</p>

	<p>verify 1v to 3v is being received on pin #16 of the SCART connector using voltmeter and measuring between pin #16 and a ground pin such as pin #18. (Refer to SCART diagram)</p> <p>SCART cable may not be wired correct to video output lines. Refer to SCART wiring diagram.</p>
Constant Vertical Scrolling	LM1881 is faulty.
Audio volume low	Check audio dip switch settings. Do not have both #2 and #3 enabled at the same time. This will cause the audio signal to be reduced by 50% as the board will detect 2 channels.

For Support or questions send an email to:

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