

Cartridge name:	Sunrise/gfx-9	Franky	Playsonic	One chip msx	Powergraph	Powergraph lite
Type connector:	9 pin d-sub F	15 pin d-sub F	15 pin d-sub F	15 pin d-sub F	15 pin d-sub M	15 pin d-sub F
Pin numbers:	Pin name and functions					
1	Ground	1 Red	1 Red	1 Red	1 Red	1 Red
2	Ground	2 Green	2 Green	2 Green	2 Green	2 Green
3	Red	3 Blue	3 Blue	3 Blue	3 Blue	3 Blue
4	Green	4 Not connected	4 Not connected	4 Not connected	4 V_sync_in	4 S-Video C
5	Blue	5 Ground	5 Ground	5 Ground	5 Csync_out	5 Ground
6	5 volt	6 Ground	6 Ground	6 Ground	6 YS_out	6 Ground
7	CVBS	7 Ground	7 Ground	7 Ground	7 DLCK_out	7 Ground
MSX Graphics card video connector PIN in and output						
9	Audio out Right	9 Not connected #A	9 Not connected #B	9 5 Volt	9 H_sync_in	9 5 Volt
10		10 Ground	10 Ground	10 Ground	10 Croma	10 Ground
11		11 Not connected	11 5 Volt	11 Not connected	11 Y_out	11 Not connected
12		12 Not connected	12 Not connected	12 3,26v???	12 GND	12 S-Video Y
13		13 CVBS-Full	13	13 H_Sync**	13 H_Sync	13 H_Sync**
14		14 Audio out	14 Audio out	14 Audio out	14 GND	14 not connected #E
15		15 Not connected	15 Audio In	15 3,11v???	15 GND	15 Composit video

\*\* In fact this signal is only a SYNC signal, used for synchronization. So no composite video output (CVBS) is available.

#A Franky can be the same cable as the One Chip MSX and Powergraph lite but Franky doesn't have the 5 volt at pin 9. Putting 5 Volt at pin 9 makes it possible to use equal cables

#B Pin 9 is not connected, putting the 5 volt at this pin makes the Playsonic compatible with Franky, Onechip and Powergraph lite to make it possible to use equal cables.

#E pin 14 is connected to Audio input pin 6 on the scart connector to make the cable compatible with the rest. Wil not be used with the powergraph lite.

Please note the changes you make (if you do) and why! :

Name:	Date:	Changes and explanation:
Emil.S	2018-09-27	Just placed the document for all the graphics Cards and there connectors :)
Emil.S	2018-11-09	Addes some extra thoughts for cable compatibility, did veriy the signals of the powergraph lite.