

5283 AES WORDCLOCK SEPARATOR/DA**CONTENTS**

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1 APPLICATION

The 5283 is a sub-module used only on the 5281 digital audio distribution amplifier.

It provides a 1 in, to 5 out wordclock separator function which is derived from the main signal on the base 5281 module.

2 SPECIFICATION

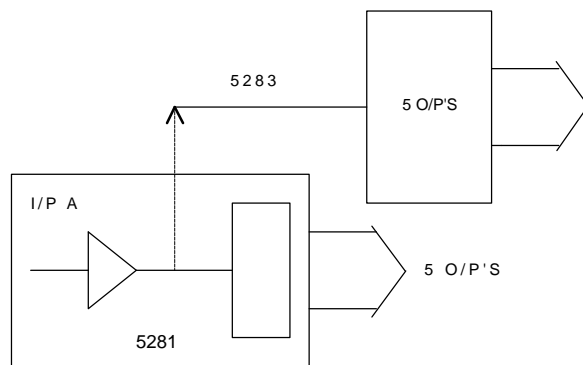
- 2.1 Inputs** Number and type: 1 TTL level signal from 5281 module (input A).
- 2.2 Outputs** Number and type: 5 unbalanced wordclock outputs
Impedance: <75 Ω
Output level: Minimum 3V peak-to-peak into 75 Ω as standard
Temperature range:
 Operating: 0 ° C to +40 ° C
- 2.3 General** Size: 94mm x 120mm (approx.) - mounts on a 5281 (3U extended Eurocard).
Weight: 100g (approx.)
Power: +5V at approx. 120mA, supplied by the 5281
Connectors: 2 x 32 pin SIL strips which mate with the 5281

3 GENERAL DESCRIPTION

The 5283 is a reduced version of the 5282 and consists of a single PCB which is designed to match the 5281 series of products. It is a 5-way wordclock extractor/splitter (wordclock separator) which can be mounted on a 5281 to create 5 copies of the input sample clock. It uses the TTL level signal from the 5281 (input A).

4 CIRCUIT DESCRIPTION

The 5281 decodes the AES data which is then fed to IC7 on the 5283 which then routes the wordclock data to the differential drivers IC's 4 and 5. One leg of each driver is then used as the output, via a current limiting resistor.



BLOCK DIAGRAM

5 INSTALLATION



WARNING: This sub-module can only be used on a 5281. Before fitting to a 5281, ensure that the power has been removed from the 5281 for at least 1 minute to allow the PSU capacitors to discharge. Failure to do so could result in damage to both boards.

Remove the two M3 x 8mm screen fixing screws from the ejector end of the 5281. Align the 5283 with the connector strips on the 5281. **Check that PL7 pin1 (5281) mates with PL7 pin 1 of 5283.** Press the two boards together evenly, **do not use excessive force.** Using the two 16mm screws & 8mm spacers provided with the 5283, fit the spacers under the sub-module and fit the screws from the 5283, component side, through to the bushes mounted on the screen.

Set the jumpers for the desired mode of operation and re-fit the whole assembly into its frame.

5.1 Connectors

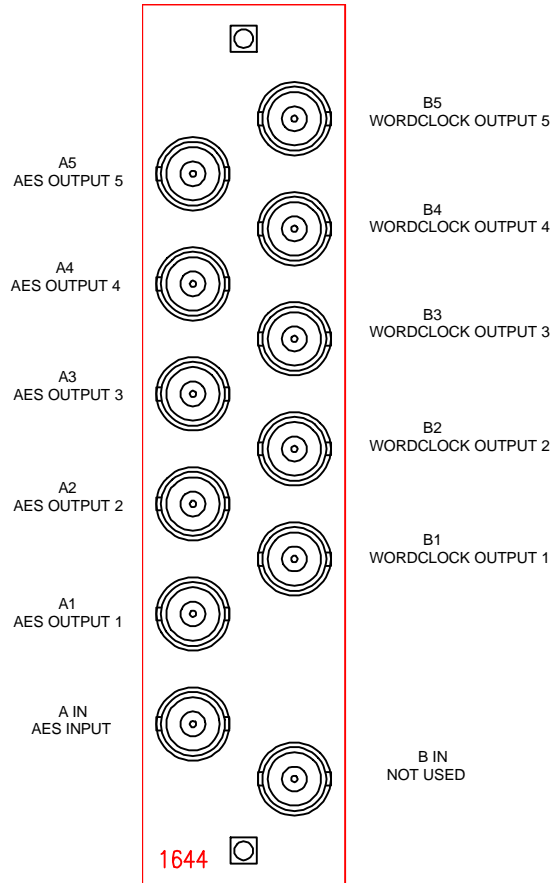
Pin No	PL7	PL8	Pin No
1	+5V	N/C	1
2	N/C	N/C	2
3	N/C	N/C	3
4	N/C	N/C	4
5	N/C	N/C	5
6	N/C	N/C	6
7	N/C	GND	7
8	DRIVER VOLTS	N/C	8
9	N/C	SELECT2	9
10	N/C	N/C	10
11	N/C	N/C	11
12	N/C	N/C	12
13	N/C	N/C	13
14	N/C	N/C	14
15	N/C	SDATA1	15
16	N/C	N/C	16
17	N/C	N/C	17
18	N/C	OUT6+	18
19	N/C	N/C	19
20	N/C	GND	20
21	FSYNC1 (input)	OUT7+	21
22	N/C	N/C	22
23	N/C	GND	23
24	N/C	OUT8+	24
25	N/C	N/C	25
26	N/C	GND	26
27	N/C	OUT9+	27
28	N/C	N/C	28
29	GND	GND	29
30	N/C	OUT10+	30
31	N/C	N/C	31
32	GND	GND	32

6 TERMINATION PANELS

This module may be used with the following termination panels.

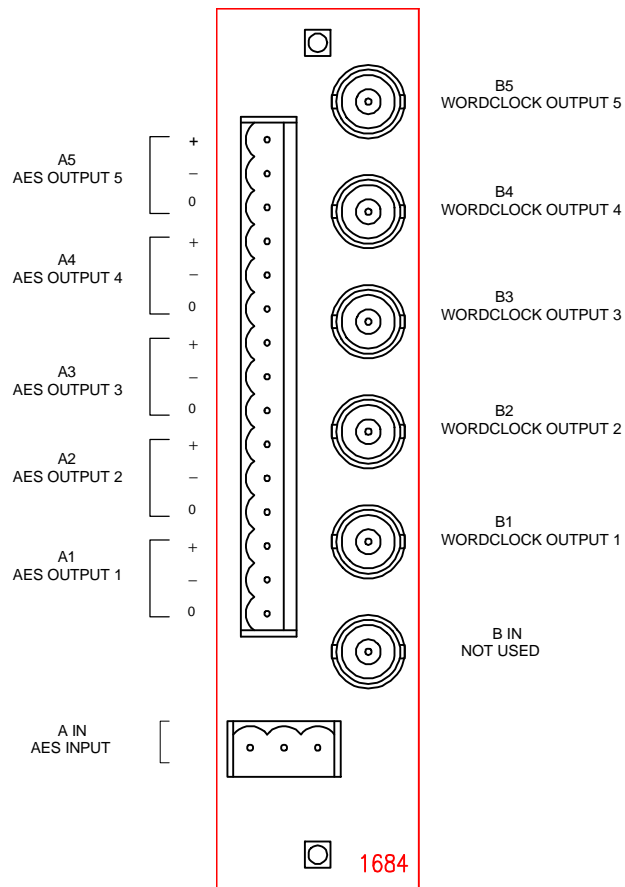
6.1 1644 Panel

This panel provides 5 unbalanced AES outputs and 5 wordclock outputs.



6.2 1684 Panel

This panel provides 5 balanced AES outputs and 5 wordclock outputs.



6.3 6068 Panel

This panel provides 5 balanced AES outputs and 5 wordclock outputs.

