

# IQD1SDR Re-Clocking D1 Distribution Amplifier

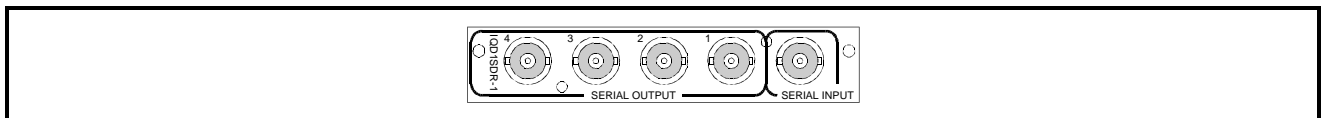
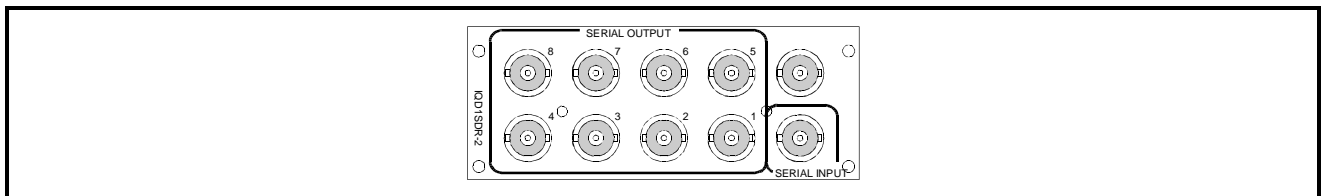


### Module Description

The IQD1SDR-1 and the IQD1SDR-2 are D1 re-clocking Serial Digital distribution amplifiers providing 4 or 8 serial outputs.

These modules handle 10-bit D1 signals and include equalisation and buffering.

### REAR PANEL VIEWS



Versions of the module cards available are:

- |           |                                                       |                     |
|-----------|-------------------------------------------------------|---------------------|
| IQD1SDR-1 | 4:2:2 Serial Digital Distribution amplifier 4 outputs | Single width module |
| IQD1SDR-2 | 4:2:2 Serial Digital Distribution amplifier 8 outputs | Double width module |

## Features

- 4 or 8 re-clocked outputs of 10-bit serial 4:2:2 signals
- Incorporates an automatic cable length equaliser
- Indication of input signal loss

**INPUT SIGNALS** Serial Digital D1 via a BNC socket terminated in 75 Ohms. Input return loss better than -15 dB @ 270 MHz. The input receiver contains an automatic equaliser allowing input cable lengths of up to 250 m when high quality cable is used.

**OUTPUT SIGNALS** 8 (1.6" module) or 4 (0.8" module) isolated serial digital outputs are available via BNC connectors for connection to 75 Ohms systems. Output level 800 mV  $\pm$ 10%  
Output return loss better than -15 dB @ 270 MHz

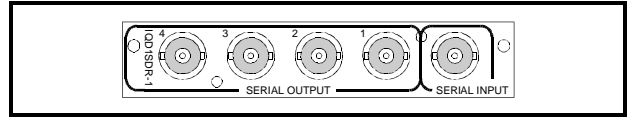
*Note that to ensure reliable transmission of serial digital signals without causing unacceptable levels of radiated emissions, only high quality 75 Ohm co-axial cable should be used. The cable must also be terminated with a precision 75 Ohm load.*

<b>TECHNICAL DATA</b>	Input Impedance	75 Ohms
	Input Return Loss	>15 dB at 270 MHz
	Output Level	800 mV $\pm$ 10%
	Output Impedance	75 Ohms
	Output Return Loss	>15 dB at 270 MHz
	<b>Power</b>	+7.5V @ 200 mA -7.5 V @ 200 mA Supplied via rack connector.

INPUTS AND OUTPUTS

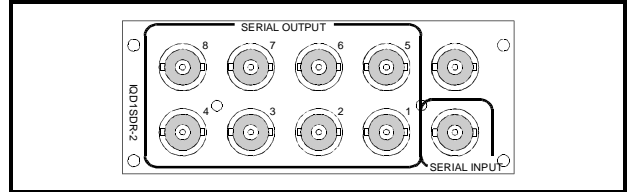
SERIAL INPUT

The serial digital input to the unit is made via this BNC connector which terminates in 75 Ohms.



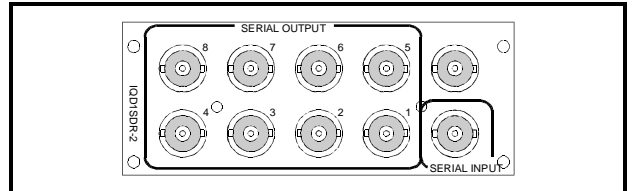
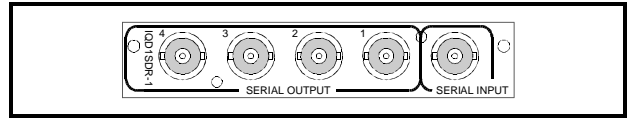
SERIAL OUTPUTS (IQD1SDR-2)

These are the eight isolated Serial Digital outputs of the unit via BNC connectors for 75 Ohms.



SERIAL OUTPUTS (IQD1SDR-1)

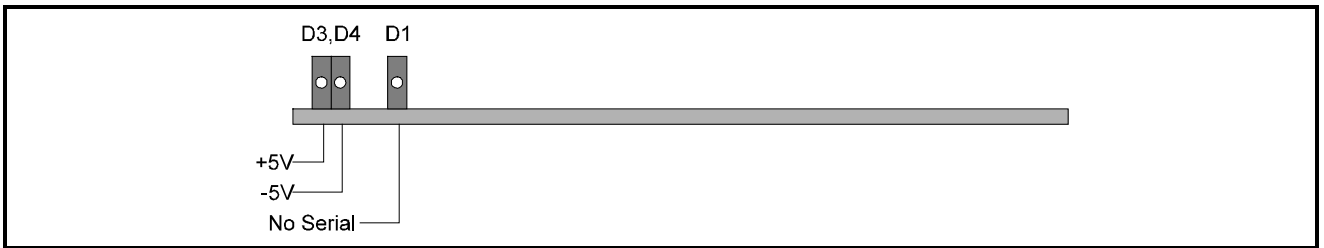
These are the four isolated Serial Digital outputs of the unit via BNC connectors for 75 Ohms.



UNMARKED BNC CONNECTOR (IQD1SDR-2)

Note that this unmarked BNC connector has no function on this unit and connections should not be made to this connector.

CARD EDGE CONTROLS



LED INDICATORS

Power Supplies

When illuminated, D3 and D4 indicate that the -5V and the +5V power supplies are present.

No Serial

When D1 is illuminated this indicates that there is no serial input signal.

