

SIRIUS SDV INPUT/OUTPUT CARDS USER GUIDE



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1 Introduction

1.1 The SDV range

There are three builds of Serial Digital Video card in the Sirius range:

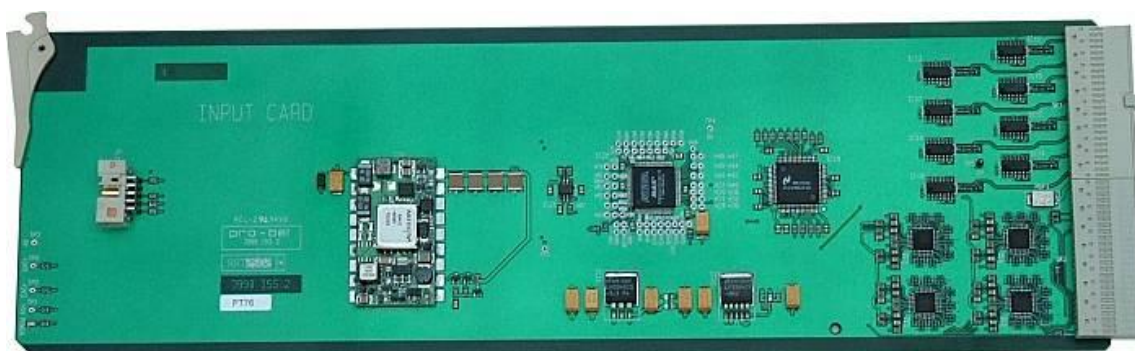
- 3990: 8 channel SDV/ASI input card
- 3994: 8 channel SDV/ASI input card
- 3995: 8 channel SDV reclocking output card
- 3996: 8 channel SDV/ASI non-reclocking output card

Due to the short, high quality signal path provided by the router, non-reclocking outputs are offered as standard, reclocking outputs are available as an option to users specifically requiring signal regeneration. The input card is fitted with automatic signal equalization as standard, and all cards have on-card circuitry for input and output monitoring via the Sirius monitoring card. The reclocking output card only operates at 143, 177, 270 and 360 Mbit/s, and is not recommended for use with the ASI signal format. The input card and non-reclocking output cards handle data rates between 140 and 360 Mb/s, and are therefore compatible with the ASI signal format.

3990 and 3994 are interchangeable, functionally identical modules. They can be used alongside each other in the same frame. The two numbers are used to distinguish between the two items for internal purposes at Pro-Bel only.

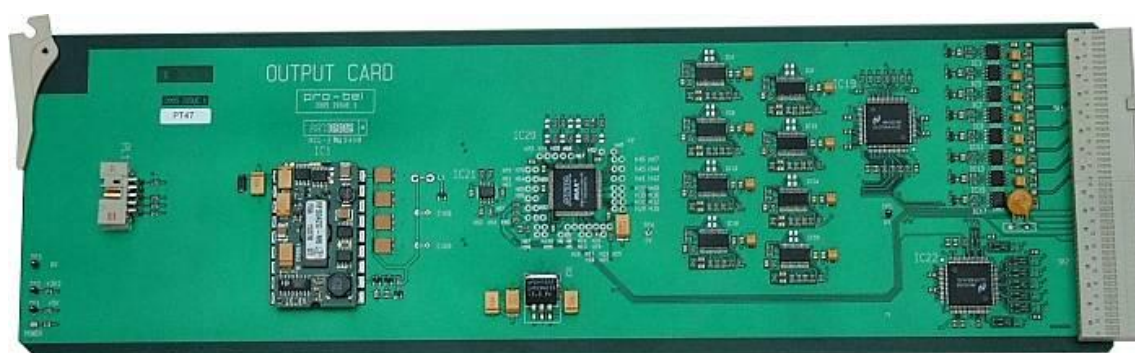
2 SDV card details

2.1 3990/3994 input card



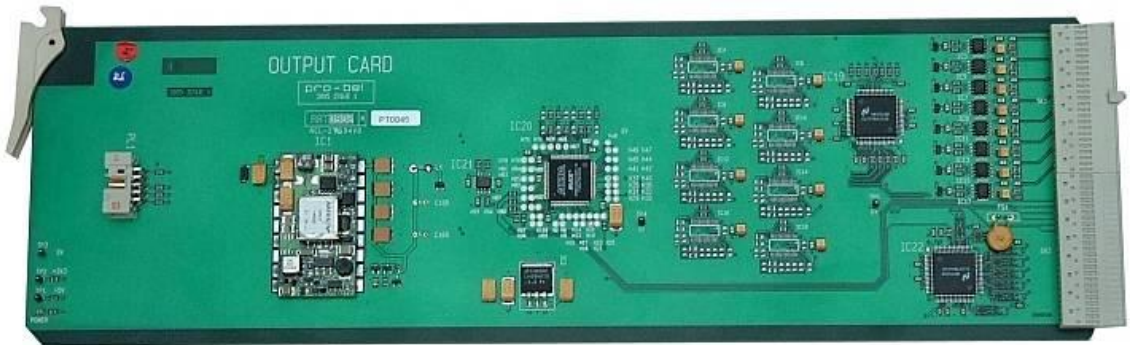
Eight inputs of SDV or ASI, each with automatic equalization. The card has no user adjustments or settings available. A single green LED on the front edge indicates that 5 Volts is present on the card, having been locally converted from the Sirius 48 Volt supply.

2.2 3995 reclocking output card



Eight SDV outputs, all outputs reclocked. The card has no user adjustments or settings available. A single green LED on the front edge indicates that 5 Volts is present on the card, having been locally converted from the Sirius 48 Volt supply.

2.3 3996 output card



Eight SDV or ASI outputs, with no reclocking. The card has no user adjustments or settings available. A single green LED on the front edge indicates that 5 Volts is present on the card, having been locally converted from the Sirius 48 Volt supply.



3 Specification

3.1 Digital Video

Inputs

Number and type:	up to 128 serial to EBU Tech 3276E, SMPTE 259M
Data rate:	50Mbit/s to 400Mbit/s
Impedance:	75 Ohm
Return Loss:	>15dB 10MHz to 300MHz
Equalisation:	>250 metres low loss video cable (typ. Belden 8281 or PSF 1 / 2) . Typically 300m.

Outputs

Number and type:	up to 128 serial to EBU Tech 3276E, SMPTE 259M
Data rate:	50Mbit/s to 400Mbit/s
Impedance:	75 Ohm
Return Loss:	>15dB 10MHz to 300MHz

Performance

Reclocking:	On outputs on 3995 card only
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