

Contents

1	Introduction	2
2	Configuration and operation	3
2.1	Selecting the rear connector	3
2.2	Trouble shooting	4
3	Status monitoring	5
4	Specification	6
5	Ordering information	7

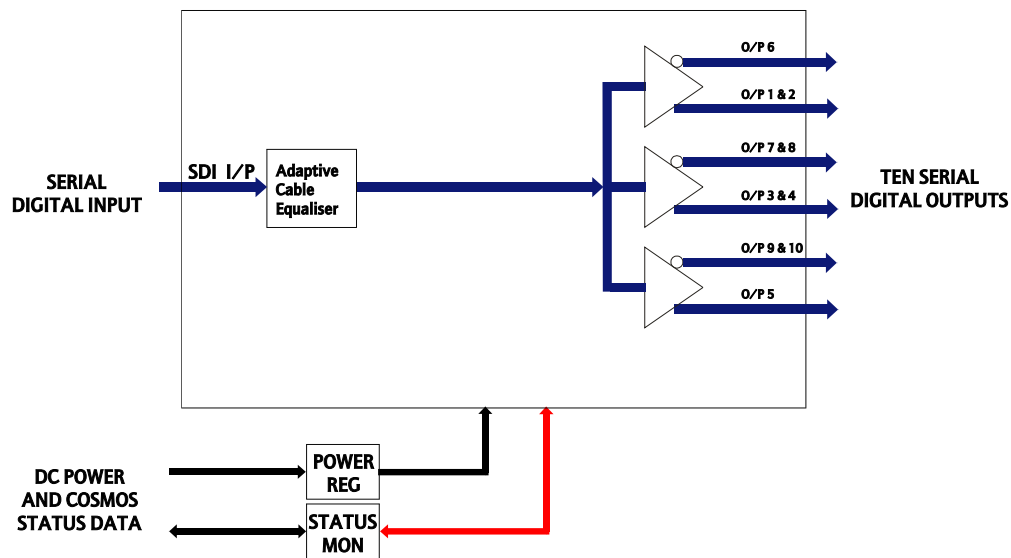
1 Introduction

The 3404 is a serial digital video distribution amplifier designed to be used in the ICON series of 1RU or 3RU frames. It offers up to ten non-reclocked and equalised serial digital outputs and takes both 20mm and 30mm rear connectors.

The module can also be used with most unbalanced data signals, including SDTI, ASI and MADI.

The features available are:

- five outputs with the 20mm K3404.2 rear connector
- ten outputs with the 30mm K3404.3 rear connector
- ten outputs with the 20mm K3400.2M
- five outputs are DVB-ASI compliant outputs (non-inverting)
- adaptive input equalisation
- COSMOS equipped

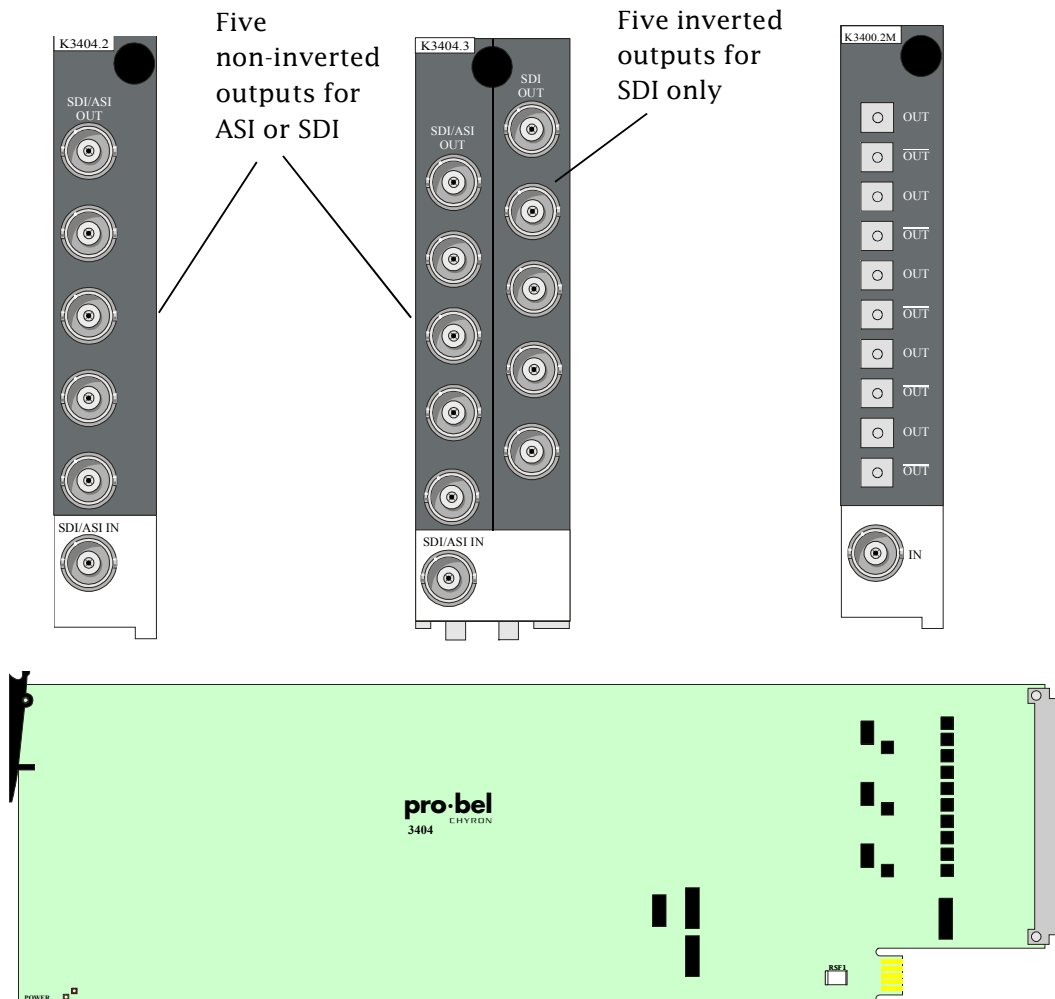


The 3404 SDI/SDTI/ASI/ MADI distribution amplifier

2 Configuration and operation

2.1 Selecting the rear connector

The 3404 may be used with either the 20mm K3404.2 rear connector providing five outputs or the 30mm K3404.3 rear connector providing ten outputs. Only the first five, non-inverting outputs can be used for ASI. (Although many products can cope with ASI if it is inverted, this cannot be guaranteed). A third option of rear panel is the K3400.2M. This has a BNC input and 10 SMB outputs and is only 20mm wide. This is supplied with ten 1.6m long SMB-BNC cables for easy interconnection to other equipment with BNC connections.



The 3404 SDI/SDTI/ASI/MADI distribution amplifier

Please refer to the installation chapter for help with installing modules and rear connectors into the ICON frame.

2.2 Troubleshooting

Half the outputs appear not to work

- check that only the non-inverting outputs (1 to 5) are used for ASI signals

The Power LED is not lit

- check mains power to the frame is turned on
- if necessary check the PSU as explained in the power supply section
- check the card is plugged in securely
- check to see if the re-settable fuse has operated. To do this turn the power off, wait for thirty seconds and then restore the power.

3 **Status monitoring**

The 3404 module will provide the following information to the COSMOS status monitoring controller (if fitted):

- module present
- module type
- module bar code
- module issue no

For further details of the Pro-Bel status monitoring system please refer to the COSMOS status monitoring manual.

4 Specification

Inputs

Number and type:	One serial digital video input to EBU Tech 3267E, SMPTE 259M - ABCD or ASI (EN 50083-9)
Impedance:	75 Ω unbalanced
Data rate:	3 Mbit/s to 400 Mbit/s (continuous)

Outputs

Number and type:	Ten as input, equalised, only 5 available with 20mm BNC rear panel
Compatibility:	All outputs are compatible with SDI/SDTI. Only the first five are non-inverting and can be used with ASI format signals
Impedance:	75 Ω unbalanced

Performance

Input return loss:	> 15dB to 300MHz, > 12.5dB to 400MHz
Max output level:	800mV into 75 Ω load
Output return loss:	> 15dB to 300MHz, > 12.5dB to 400MHz
Output rise time:	<500ps
Overshoot:	<5%
Cable equalisation:	> 250 metres of Belden 8281 or PSF1/2, (300 metres typical) at 270Mbit/s > 200 metres of PSF1/3, (250 metres typical) at 270Mbit/s

LED indicators Power OK - green

Rear panels K3404-2, five output 20mm wide rear connector
K3404-3, ten output 30mm wide rear connector
K3404-2M, ten output SMB, 20mm wide rear connector

5 **Ordering information**

Part number	Description
ICO-3404-2000	5 output non-reclocking SDI/ASI DA, 20mm
ICO-3404-3000	10 output non-reclocking SDI DA, 30mm
ICO-3404-2M00	10 output SMB non-reclocking SDI DA, 20mm