BN352
1:4 12G-SDI DA

Thank you for purchasing this Bluebell Opticom professional broadcast video product. The BN352 SDI interface is very simple to install and this Quick Start Guide should provide sufficient information to get you up and running in the vast majority of cases.

Quick Start Guide

Ref: BN352 QSG issue 1.0_10/24

Safety Warning – Important Precautions

To reduce the risk of fire or electric shock, do not expose this equipment to rain, moisture, or wet conditions.

General Safety Guidelines

- Always **disconnect the entire system from the AC mains** before cleaning or servicing.
- The following product frames – **BC100, BC100i, BC101, BC102, BC120, BC160i** – must be connected using a **three-conductor AC mains power cord with an earth ground**. All three conductors must be used at all times to prevent electric shock.
- Do **not** bypass or disable any fuse.
- Only replace fuses with those of the **specified type and rating**.
- Do **not** use flammable or combustible chemicals for cleaning.
- Do **not** pour or spill liquids directly onto the unit.
- Do **not** allow any liquid to enter the unit or wet the internal components.
- Do **not** operate the unit with any cover or panel removed.
- Do **not** obstruct the ventilation slots—**adequate airflow must be maintained**.
- Do **not** operate the unit in environments with **extreme temperatures**.
- Do **not** use or store the unit in **explosive atmospheres**.
- Do **not** attempt to repair the unit yourself. If servicing is required, please contact your local **Bluebell Opticom** distributor.
- 🛡️ **Product Warranty**
- **Bluebell Opticom Ltd** provides warranty coverage as detailed in our general terms and conditions.
  Please note that warranty support is only valid **if product serial numbers remain intact and legible**. Tampering with or removing serial numbers may void your warranty.

Overview:

The BN352 is a high-performance 12G-SDI distribution amplifier designed for the rigorous demands of modern broadcast and video production environments.

With a 1:4 architecture, it takes a single SDI input and distributes it to four identical outputs, ensuring signal clarity and consistency across all connected devices. Its auto-adaptive capability adjusts to the input signal's data rate, offering compatibility with a wide range of SDI standards.

The BN352 also features automatic input signal equalization and output reclocking, extending signal reach over longer distances while maintaining quality. It complies with SMPTE standards, including ST-2082 (12G-SDI), ST-2081 (6G-SDI), ST-424 (3G-SDI), ST-292 (HD-SDI), and ST-259 (SD-SDI), as well as DVB-ASI, making it an easy fit into existing setups. It supports resolutions up to 4K@60Hz, delivering clear, high-quality visuals across multiple displays.

The compact aluminium enclosure allows for easy installation in tight spaces or rack-mounted configurations, and LED indicators offer quick status updates for signal and power. Lockable BNC connectors prevent accidental disconnections, ensuring uninterrupted signal flow in critical environments.

Whether in a professional studio or a live broadcast setting, the BN352 is a reliable solution for distributing SDI signals with high performance and dependability.

Power supply:

All BN352 variants require an external power supply voltage between 5 and 17 V DC. A Bluebell Model PS12 PSU (12 V) will be packed with the interface if one was ordered. The power supply connector is a Neutrik® XLR4M, and a locking mating connector is pre-fitted to the PS12 DC cable.

If using an alternative PSU, wire the connector as below:

Pin	
1	0 V
2	n/c
3	n/c
4	+V DC

The power consumption of the BN532 is typically 2.4W at 12V DC.

Inputs and outputs:

SDI Video:

BN352 interfaces can be used with serial digital video signals having data rates up to 12 Gb/s. Standards supported are:

SD-SDI: SMPTE ST259M compliant
HD-SDI: SMPTE ST292M compliant
3G-SDI: SMPTE ST424M compliant
6G-SDI: SMPTE ST2081 compliant
12G-SDI: SMPTE ST2082 compliant

ASI baseband streams are also compatible.

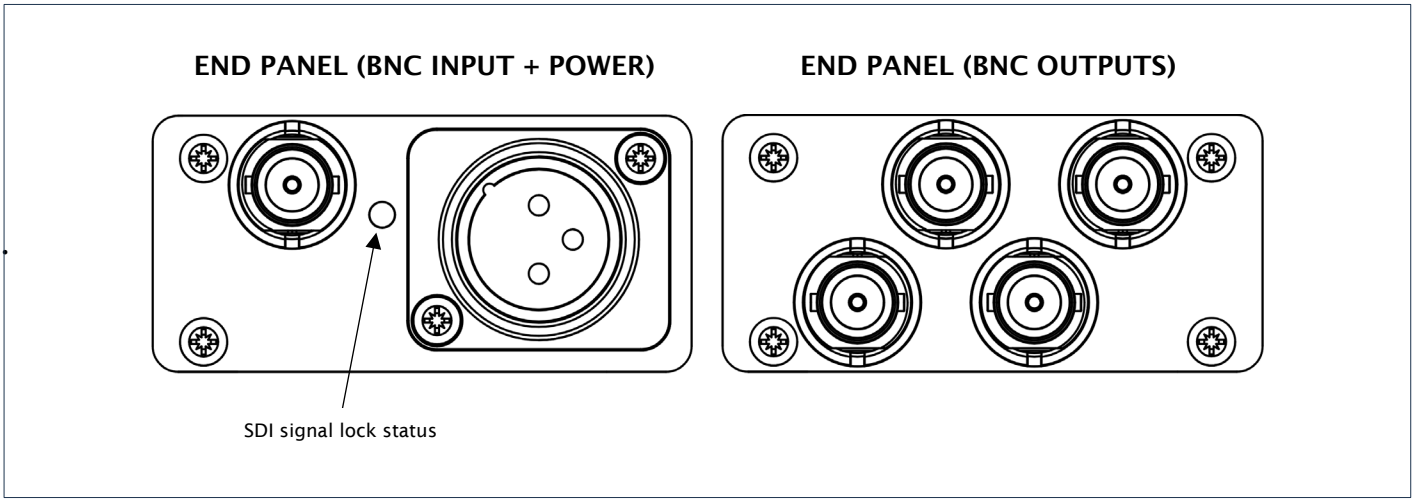
Video inputs and outputs are on 75 ohm BNC sockets. This variant has 5 connectors: 1x input and 4x outputs.

MADI:

BN352 can also be used to distribute MADI data streams via the BNC connectors. The interfaces are agnostic to MADI format – 56/64 channels, 48/96 kHz frame rate, and all standard sample rates from 44.1 kHz to 192 kHz. The optical data rate is fixed at 125 Mb/s.

LEDs:

Bi-colour LEDs are fitted adjacent to the input BNC connector. This illuminates **green** to confirm a valid input signal (SD/HD/3G/6G/12G-SDI or MADI), or **red** to indicate either no signal or a signal which is in some way invalid. It can also be used as an indication for power on either green/red state.



NOTE: For any technical issues not covered in this Quick Start Guide, please contact Bluebell Opticom.

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