

INDIGOVISION

8/16 CHANNEL ENCODER

BX RANGE

QUICK START GUIDE

PACKAGE CONTENTS

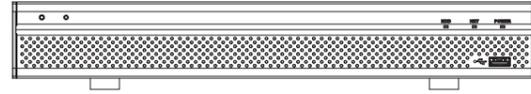


Figure 1 BX 8/16 Channel Encoder

Encoder

1. BX 8/16 Channel Encoder

Additional

- 2x Binary I/O Terminal block
- 1x Quick Start Guide
- 1x 15-way Audio connector (16 Channel variant only)
- 1x 12V DC Power supply

CONNECTIONS

The encoder is connected using connection sockets in the rear panel.

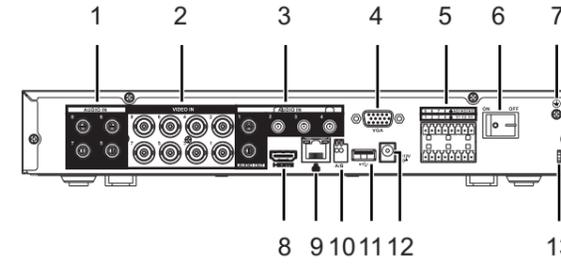


Figure 2 Rear panel (8 channel)

Table 1: Connections (8 channel)

| No. | Description | No. | Description |
|-----|-----------------------|-----|----------------------------|
| 1 | Audio IN (5-8) | 8 | HDMI (not supported) |
| 2 | Video IN (1-8) | 9 | Ethernet |
| 3 | Audio IN (1-4) | 10 | RS485 A/B (camera control) |
| 4 | VGA (not supported) | 11 | USB 2.0 (not supported) |
| 5 | Alarm I/O connections | 12 | Power (12V DC) |
| 6 | Power ON/OFF | 13 | Cable fastener |
| 7 | Ground screw | | |

SAFETY NOTICES

Warning

- ⚠ Ensure that the power supply is switched off during installation.
- ⚠ When installing the encoder, fasten it securely to the surface. A falling device may cause personal injury.
- ⚠ Do not dismantle the device or attempt repairs yourself. Repairs must be done by IndigoVision representatives.
- ⚠ Ensure that the power supply conforms to the SELV (Safety Extra Low Voltage) safe level.

Caution

- ⚠ Only transport, store and install the encoder in suitable environments.
- ⚠ Handle the encoder with care, so that the main electronics and components are not damaged.
- ⚠ For security reasons, you must configure the Admin password of the encoder.
- ⚠ Using the incorrect power supply or voltage can damage the encoder. Ensure that the correct voltage is used.
- ⚠ The encoder has been certified for internal use only.
- ⚠ Ensure that you install the network cable in a location where it will not be trampled or crushed.

BINARY IO CONNECTIONS

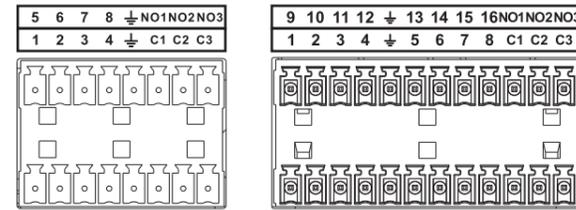


Figure 3 Binary I/O connectors (8 / 16 channel)

Table 2: Binary I/O connection wiring

| Label | Description |
|--------|------------------------------------|
| 1-16 | Alarm inputs on 16 Channel Encoder |
| 1-8 | Alarm inputs on 8 Channel Encoder |
| Ground | Alarm ground |
| C1 | Alarm output common 1 |
| C2 | Alarm output common 2 |
| C3 | Alarm output common 3 |
| NO1 | Alarm output 1 (Normally open) |
| NO2 | Alarm output 2 (Normally open) |
| NO3 | Alarm output 3 (Normally open) |

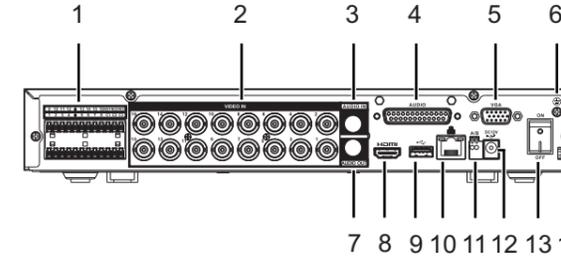


Figure 4 Rear panel (16 channel)

Table 3: Connections (16 channel)

| No. | Description | No. | Description |
|-----|---|-----|----------------------------|
| 1 | Alarm I/O connections | 8 | HDMI (not supported) |
| 2 | Video IN | 9 | USB 2.0 (not supported) |
| 3 | Audio IN (channel 1) | 10 | Ethernet |
| 4 | Audio IN (channels 2-16) using 15-way Audio connector | 11 | RS485 A/B (camera control) |
| 5 | VGA (not supported) | 12 | Power (12V DC) |
| 6 | Ground screw | 13 | Power ON/OFF |
| 7 | Audio OUT | 14 | Cable fastener |

REGULATORY

- EN 61000-3-2
- EN 61000-3-3
- FCC Part 15 Subpart B Class A
- EN 50130-4
- EN 55032 Class B
- EN 55032
- EN 55024
- UL 60950-1
- EN 60068-2-1 : 2007
- EN 60068-2-2 : 2007
- EN 60068-2-30 : 2007
- EN 60068-2-6 : 2008
- EN 60068-2-64 : 2008
- EN 60068-2-27 : 2009
- IEC 61000-4-2
- IEC 61000-4-3
- IEC 61000-4-4
- IEC 61000-4-5
- IEC 61000-4-6
- IEC 61000-4-8
- IEC 61000-4-11
- RoHS directive 2002/95/EC



Environment

- Temperature:
 - Operating: -10°C to +55°C (-14°F to 131°F)
 - Cold start: -10°C (-14°F)
 - Storage: 0°C to +50°C (32°F to 122°F)
- Maximum humidity: 90%



Document ID: IU-RACK-MAN012-3

COPYRIGHT © INDIGOVISION LIMITED. ALL RIGHTS RESERVED.

INDIGOVISION, INDIGOULTRA, INDIGOPRO, AND INDIGOLITE ARE REGISTERED TRADEMARKS OF INDIGOVISION LIMITED. CAMERA GATEWAY, AND MOBILE CENTER ARE UNREGISTERED TRADEMARKS OF INDIGOVISION LIMITED. ALL OTHER PRODUCT NAMES REFERRED TO IN THIS MANUAL ARE TRADEMARKS OF THEIR RESPECTIVE OWNERS.

THIS MANUAL IS PROVIDED WITHOUT EXPRESS REPRESENTATION AND/OR WARRANTY OF ANY KIND.

PLEASE CONTACT INDIGOVISION LIMITED (EITHER BY POST OR BY E-MAIL AT TECHNICAL.SUPPORT@INDIGOVISION.COM) WITH ANY SUGGESTED CORRECTIONS AND/OR IMPROVEMENTS TO THIS MANUAL.

CONTACT ADDRESS

CHARLES DARWIN HOUSE,
EDINBURGH TECHNOPOLE,
EDINBURGH, EH26 0PY, UK

FURTHER INFORMATION

FOR FURTHER INFORMATION, SEE THE PARTNER PORTAL:

[HTTPS://PARTNERS.INDIGOVISION.COM](https://partners.indigo.com)

ALTERNATIVELY, SCAN THE QR CODE BELOW.



1. POWERING UP THE DEVICE

The encoder must be powered by auxiliary power using the supplied power supply.

- Auxillary power supply
 - 12V DC with a maximum power of 10 Watts

The encoder should only be powered from the specified voltage. The encoder will emit a beep when it is powered up.

2. CONFIGURING THE DEVICE

Configure the settings

- Power up the encoder and connect to a PC using an Ethernet cable.
- Navigate to the encoder's default IP address using a web browser, and enter the default user name.

Table 4: Default network settings

| | |
|---------------------|-----------|
| Default Username | Admin |
| Default IP Address | 10.5.1.10 |
| Default Subnet Mask | 255.0.0.0 |
| Default Gateway | 10.0.0.1 |

- When prompted, enter a secure password for the `Admin` user. Please note this password carefully.
The admin password must be set before the encoder can be used in Control Center.
If the admin password is forgotten, the hardware reset procedure must be performed to regain access to the encoder.
 - For more information, refer to "Reset to factory defaults"
- Enter the NTP server and port on the **Setup > System > General > Date & Time** menu.
- Enter a new IP address and subnet mask on the **Setup > Network > TCIP/IP** menu.
- Select the video standard for your region using the **Video Standard** option on the **Setup > System > General** menu. Choose **PAL** for countries with 50Hz power frequency and **NTSC** for countries with 60Hz power frequency.

Binary I/O connections

The BX 8/16 Channel Encoder has 8/16 binary inputs (corresponding to the number of channels on the encoder) and 3 binary outputs. These are connected using the Alarm IO connections on the encoder.

Binary inputs

The binary alarm inputs are operated by connecting the input directly to GND.

- 10kΩ Pull up input to 5V for non-powered contacts
- Normally high

The input must be configured on the Web Configuration pages to ensure correct behavior.

Connect the input to GND using a switch to trigger the input.

Binary output

The binary alarm outputs are solid state open collector outputs:

- Max load voltage: 30V DC
- Max current carrying capacity: 1A

The binary outputs are not polarity sensitive and are normally open. This can be configured on the Web Configuration pages.

3. INSTALLATION

Installing the encoder into a rack cabinet

- Mount the encoder in the rack using a rack mount kit (IndigoVision part code 130079) according to the instructions in the supplied Installation Guide.

When installing your BX 8/16 Channel Encoder in a rack cabinet, please consider the following:

- Elevated Operating Ambient** — If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the specified maximum ambient temperature (T_{ma}) of the unit.
- Reduced Air Flow** — Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised. To facilitate this, an air gap of at least 6cm on both sides of the unit is recommended.
- Mechanical Loading** — Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.
- Circuit Overloading** — Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.
- Reliable Earthing** — Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g. use of power strips).

4. OPERATIONS

This chapter describes common tasks required for the operation of the BX 8/16 Channel Encoder.

Configuring the encoder

You can access the encoder configuration pages using the IP address of the encoder.

Alternatively, you can access these pages through IndigoVision Control Center.

- In Setup view, select the encoder you want to configure.
- Select the **Configure** tab, and enter a valid user name and password if required.

Reset to factory defaults

You can reset the encoder settings to factory defaults using the following methods while the encoder is powered:

- Go to **Setup > System > Default** on the encoder's Configuration pages, and enter the chosen credentials.

If a full hardware reset is required, for example, if you have forgotten the admin password, then please contact IndigoVision Technical Support for more information.