

••• ••• » RS 485 Distributors

BN-485H (8-in/6-out)

BN-485M (4-in/1-out)

VIDEO DISTRIBUTORS

User Manual

V2.1



BN-485H (8-in/6-out)



BN-485M(4-in/1-out)

Before attempting to connect or operate this product, please read these instructions completely

This manual may be something inaccurate with tech or print. And the content will update casually without inform. The improvement will appear in new editions. We will improve or upgrade descriptions about products and program with our best.

Precautions

- Please operate distributors in permitted temperatures and humidity range.
- Please connect wiring strictly according to this manual

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Chapter 1 Functions Introduction

Functions introduction

Enable multiple RS485 or 422 devices (e.g. DVR, matrix, keyboard controller) control multiple objects within one bus-line, and deal with operation conflict and different authorities among controlling devices.

Functions of code converter

Enable 422 type communication devices (e.g. matrix) connect to this machine directly so as to control front-end equipments.

Functions of code distributor

BN-485H has six RS485 output ports which solve code errors problem caused by excessive front-end equipments

Functions of authority management

BN-485H has 8-levels of authority management. No. 1 port is the top level and No. 8 is the bottom level, i.e. No. 1 is higher than No. 2 which is higher than No. 3, etc. Authority releasing period is 1 second.

Functions of real-time output

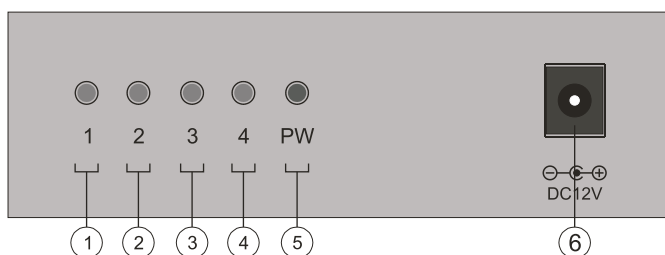
Real-time output and never change code. Do not need changing system settings. RS485 bus-line cascaded devices can be set different protocols & baud rates.

Free matching & integrating

Based on system capacity, it is available for BN-485M and BN-485H to freely integrate each other.

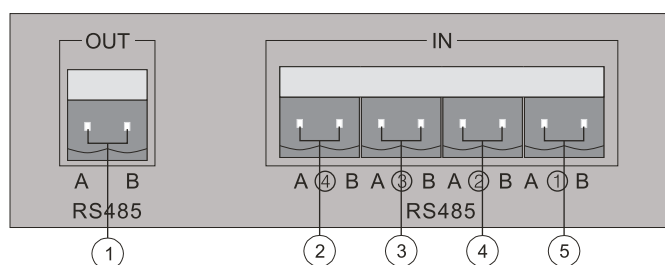
Chapter 2 Installation Directory

2.1 BN-485M Front panel instruction



| Numbers | Indicator & Interface | State & connection |
|---------|--------------------------|--|
| 1 | Input 1 then display (1) | #1 receiving channel displays flickering and green color |
| 2 | Input 2 then display (2) | #2 receiving channel displays flickering and green color |
| 3 | Input 3 then display (3) | #3 receiving channel displays flickering and green color |
| 4 | Input 4 then display (4) | #4 receiving channel displays flickering and green color |
| 5 | Input 5 then display (5) | Distributor is NO (normal open) and red color |
| 6 | Input 6 then display (6) | DC 12V power supply |

2.2 BN-485M Front panel instruction



| Numbers | Physical Interface | Description of Connect |
|---------|------------------------|---|
| 1 | RS485 output interface | Connect speed dome or decoder: A to "+" of RS485 bus-line, B to "-" of RS485 bus-line |
| 2 | Output interface1 | Connect input controllers (DVR, matrix, keyboard), A to RS485+, B to RS485- |
| 3 | Output interface 2 | Connect input controllers (DVR, matrix, keyboard), A to RS485+, B to RS485- |
| 4 | Output interface 3 | Connect input controllers (DVR, matrix, keyboard), A to RS485+, B to RS485- |
| 5 | Output interface 4 | Connect input controllers (DVR, matrix, keyboard), A to RS485+, B to RS485- |

Note 1: BN-485M has no authority limit, i.e. whichever interface (input) firstly sends code to bus channel and will occupy the bus channel.

Note 2: light and small dimension. The whole installation process is just placing it at cabinet

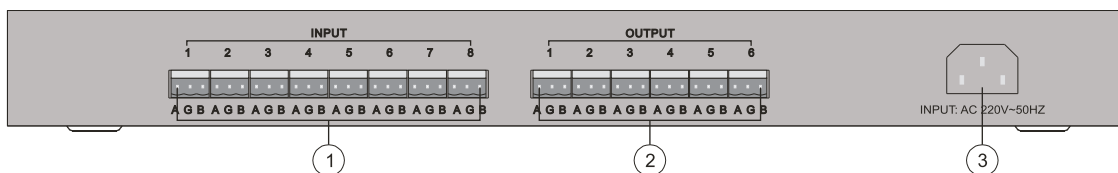
Note 2: light and small dimension. The whole installation process is just placing it at cabinet

2.3 BN-485H Front panel instruction



| Numbers | Indicator & switch | Description of State |
|---------|------------------------|---|
| 1 | Power switch of device | Power switch of device: indicator shines means power on, otherwise means power off, indicator is NO (normal on) and red color |
| 2 | Indicator of output | 6 interfaces display flickering and green color |
| 3 | Input display (1~8) | 8 interfaces display flickering/passing green/pausing green |

2.4 BN-485H Back panel instruction



| Numbers | Physical Interface | Description of Connect |
|---------|-----------------------------|---|
| 1 | RS485 input interface (1-8) | Connect input controllers(DVR,matrix,keyboard),A to RS485+,B to RS485-,G to grounding |
| 2 | RS485 output interface | Connect to speed dome or decoder,A to "+" of RS485 bus-line,B to "-" of RS485 bus-line,G to grounding |
| 3 | Power supply | AC100~240V |

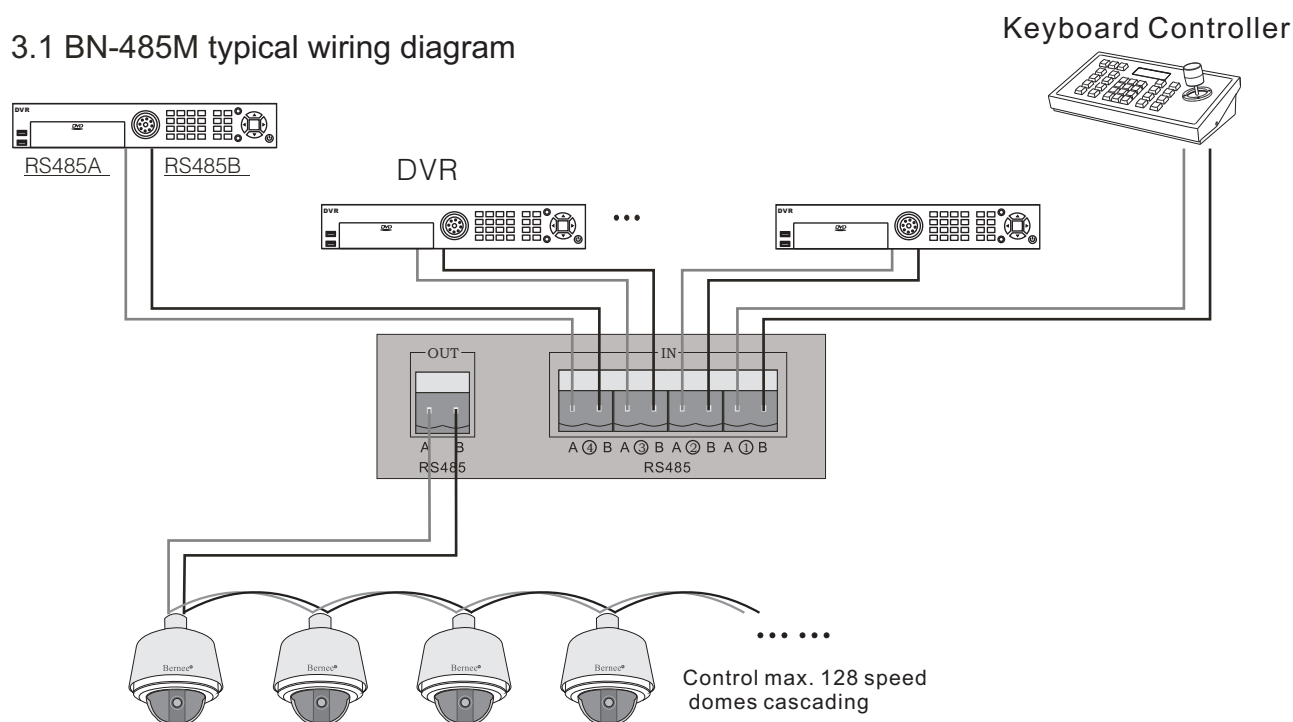
Note 1: BN-485H has 8-levels of authority management. No. 1 port is the top level and No. 8 is the bottom level, I.e. No. 1 is higher than No. 2 which is higher than No. 3, etc. Authority releasing period is 1 second.

Note 2: BN-485H adopts standard 1U box, and it is just placed at cabinet for all installations

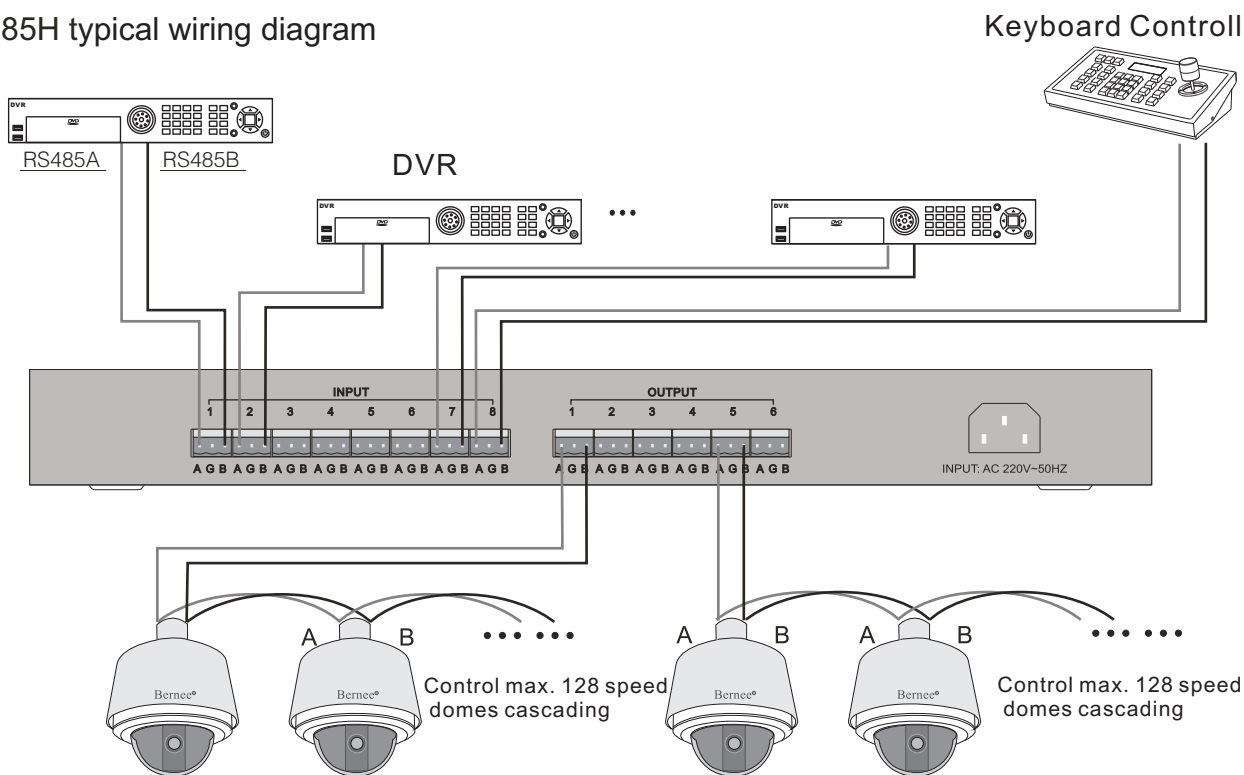
Note 3: Connect BN-485H to 422 type controllers: A to 422+, B to 422-.

Chapter 3 Typical Wiring Diagram

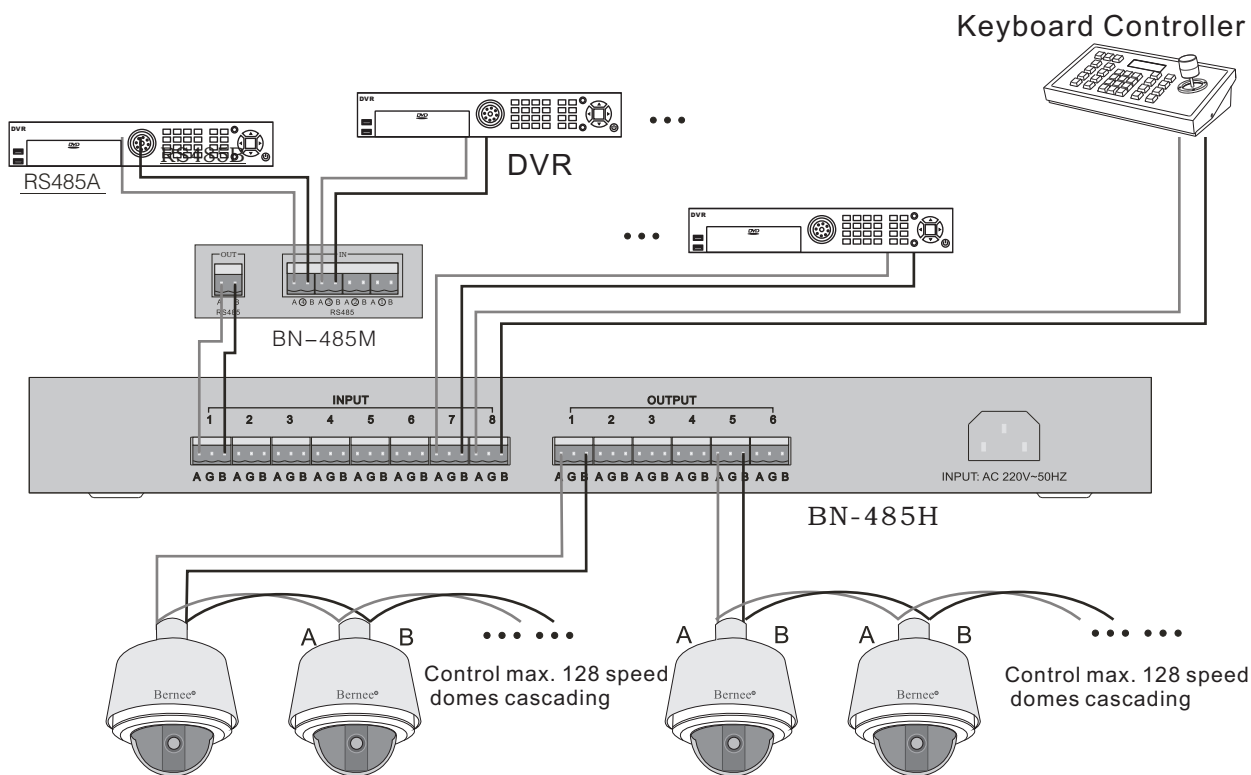
3.1 BN-485M typical wiring diagram



3.2 BN-485H typical wiring diagram



3.3 Mixing BN-485M and BN-485H



Chapter 4 Appendix

4.1 Specifications

| Models | BN-485M | BN-485H |
|---------------------|-----------------------------|-----------------------------|
| Input Interface | 4xRS485 (flat cable) | 8xRS485 (flat cable) |
| Output Interface | 1xRS485 (flat cable) | 6xRS485 (flat cable) |
| Communication Port | RS485 non-sync half- duplex | RS485 non-sync half- duplex |
| Transmission Speed | 1200bps~19200bps | 1200bps~19200bps |
| Distance | 1200 meters | 1200 meters |
| Power Supply | DC12V±10% 50Hz | DC12V±10% 50Hz |
| Power Consumption | 0.3W | 2W |
| Dimension | 147x121x42mm(L x W x H) | 210x482x46mm(L x W x H) |
| Weight | 0.33kg | 2.3kg |
| Working Temperature | -10~+50°C | -10~+50°C |

4.2 Accessories list

| BN-485M Accessories List | | | |
|--------------------------|----------|------|-------|
| Name | Quantity | Unit | Notes |
| DC12V Power Supply | 1 | / | |
| 3PIN Plug | 5 | / | |
| <i>User's Manual</i> | 1 | / | |
| Product Certificate | 1 | / | |
| Guarantee Card | 1 | / | |

| BN-485H Accessories List | | | |
|--------------------------|----------|------|-------|
| Name | Quantity | Unit | Notes |
| DC12V Power Supply | 1 | / | |
| 3PIN Plug | 14 | / | |
| <i>User's Manual</i> | 1 | / | |
| Product Certificate | 1 | / | |
| Guarantee Card | 1 | / | |