

# **SB-DN-R0816**

# High Power Relay 8Ch 16A

## **Instruction Manual**



## **Features**

## 8 x 16A Feed Throw outputs

Latching free voltage Relay Suitable for use with ON/OFF lights, water heater, Pumps, heavy machine and Industry Use.

## Manual override switch

8 switch manual override for each channel work even when no supply

## **Surge Protection**

Each module has capacitors and voltage-sensitive resistors for surge protection power line

### **Simple Installation**

Din Rail Mount, Standard 35mm guide rail mounting, with Elegant Plastic for Module Name

#### **Areas and Scenes**

Up to 8 independent areas, each with up to 12 scenes, with Fade time of 0 seconds to 60 minutes

## **ON Delay Protection**

To use for industry use and have load machine, Window AC that needs On Delay Protection Time

#### **Green Product**

Bus enabled, Powered by 15-32 VDC, Powered by Bus Low Voltage Consumption 12mA/24VDC

#### **Broadcast Address Button**

To broadcast the Module Address to the Programming software

#### **Data line Short Protection**

Protection for Bus Power Polarity Change, or connect to data terminal

#### Life statues LED

LED Indicator, blinking to indicate that Module powered and bus connected

#### **Sequence Feature**

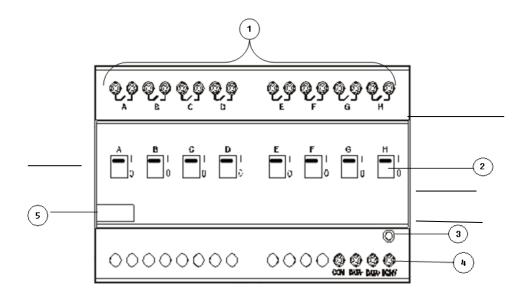
2 Sequences of 8 steps each 1.0 second to 60 minutes With Optional steps times, and Running modes.

## **Restore Function**

Device restored to previous scene or Specific scene after Power Restore to the Module



# **Layout description**



- 1- A-H: 8 channel output terminal to connect to the Load
- 2- 4 switch manual override for each 1-4 channels
- 3- Module broadcast address keystroke and Life statues LED.
- 4- Com, Data-, Data +, DC 24 V 485 S-bus connection terminal.
- 5- Labeling Plastic place.

## **Important Notice:**



- Safety warning: Please Power OFF before any installation.
- Installation Place: in a dry, well-ventilated damp-proof, shake-proof, and dust-proof location. Controllers may emit some mechanical noise. Take this into account when deciding the mounting location.,
- Load connection: module Load connection must be connected via suitable breaker.
- Output Circuits: The load on a circuit should not exceed the specified per channel capacity of 16 Amps.

- Bus connection Use stranded RS485 data cable with four twisted pairs. Connect devices in a 'daisy chain' or "Star". A data cable that is connected to an energized device is live. Do not cut or terminate live data cables.
- Power Sources This device should only be operated from the S-Bus Power supply.
- Regularly check: test the circuitry and other related circuit or cables and replace the disqualified on time.
- **For Maintenance**: Please contact Qualified Person.



## **Installation Steps**

- 1. Mount the device on a DIN rail inside an approved enclosure.
- 2. Calculate loads to ensure any channels are not overloaded, and then connect loads to the output channels. The maximum loading of this device is as follows: Maximum channel load: 16Amps Maximum device load: 8\*16 Amps
- 3. Connect a single phase suitable breaker to the Load channel.
- 5. Connect data cables to the device as per diagrams below.
- 6. Insert the Labeling Sticker of Module Name on the Plastic Labeling Place
- 7. This device will only operate in basic modes unless programmed via a computer.. Once the data cable is connected to the devices, the factory default settings will allow any control panel to operate all channels in all controllers, If programming is required, contact your local agent for details, or see the *S-Bus Lighting Motor and HVAC Programming Guide* e-Book for more Details.

## **Recommended Wiring:**

- Load output wire: up to 4 mm<sup>2</sup> Electrical copper wire per terminal
- 485 BUS connection cable: Cat5e

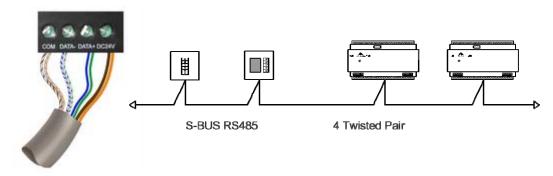
## Recommended cable color coding

COM → Brown white, Orange white

Data - → Blue white, Green white

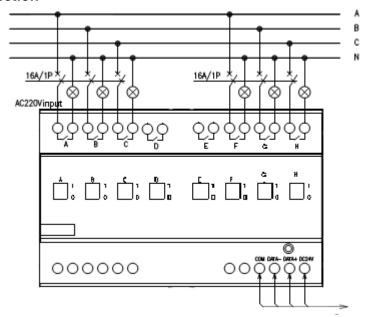
Data + → Blue, Green

DC24V → Brown, Orange





#### **Load Connection**



## **Product specifications**

Feed throw output Relay: Latching relay up to 16A per channel

Power consumption: (without operation): 12mA/24V, (with operation Relay ON/OFF) 35mA/24V

Control Inputs: 1 x RS485 S-Bus, Module Powered by Bus connection

Working Ambient Temperature: -10° to 45°C, Ambient Humidity, 20% to 85% RH

Storage Temperature: -20° to 60°C, Ambient Humidity, 20% to 90% RH

Dimensions: W 144mm× H 88mm× D 66mm

Packed Weight: 0.5Kg

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