

NuDAM[®]-6067 AC Relay Output Module

1. Introduction

The NuDAM-6067 provides eight form A relay output channels and can control high power devices without external circuits. Channel isolation on each channel guarantees industrial safety.

Features

- 8 channels relay output
- Programmable power on output state
- Programmable output polarity setting
- Programmable host watchdog timer for host failure protection
- Internal watchdog timer for device failure protection
- Easy programming by software
- Easy installation and wiring

Specifications

- Interface: RS-485, 2 wires
- Speed (bps): 600, 1200, 2400, 4800, 9600, 19.2k, 38.4k, 57.6k, 115.2k
- Output: AC POWER RELAY
- Number of channel: 8
- Output type: form A
- Contact rating: AC 3A/250V, DC 3A/30V
- Operate time: Approx. 6ms
- Release time: Approx. 3ms
- Insulation resistance: 1000 MΩ minimum (at 500VDC)
- Operating Temperature Range: -40 to 70 °C
- Power Requirement: +10V to +30V_{DC} Unregulated with power reversal protection
- Power Consumption: 120mW
- Case: ABS with captive mounting hardware
- CE Class A Conformity

2. Installation

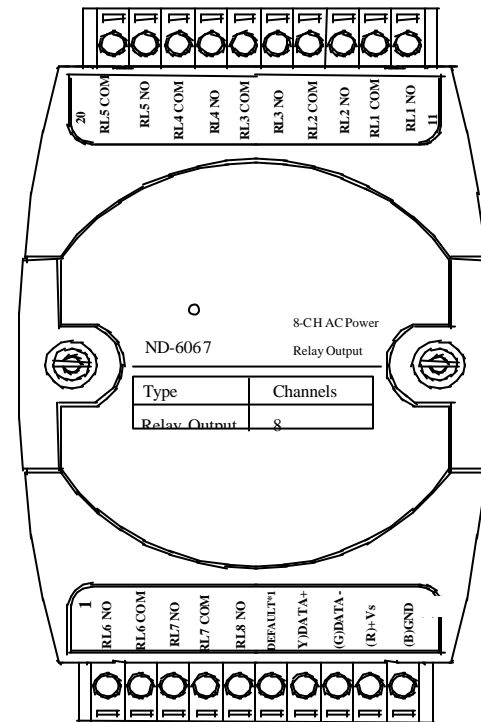
Equipment required for installation

An existing RS-485 network
NuDAM modules
DC Power supply (+10V~+30V)
Wires for power, communication and I/O signals

Installation Procedure

1. Configure all NuDAM modules using the administration utility before installation.
2. The baud rate setting and calibration procedure must be done under the DEFAULT* mode.
3. The baud rate and check-sum status must be identical to the application network. The address ID must not conflict with other modules in the network.
4. Plug the new module into the existing network.
5. Use the NuDAM administration utility to check the entire network.

3. Pin Assignment



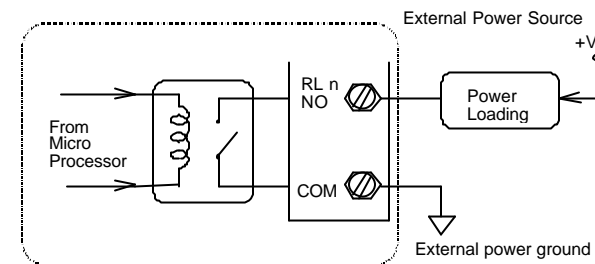
Pin Definitions

Pin #	Signal Name	Description
1	RL6 NO	Relay 6, normal open
2	RL6 COM	Relay 6, common
3	RL7 NO	Relay 7, normal open
4	RL7 COM	Relay 7, common
5	RL8 NO	Relay 8, normal open
6	DEFAULT*/RL8 COM	Initial state setting Relay 8, common
7	(Y)DATA+	RS-485 signal, positive
8	(G)DATA-	RS-485 signal, negative
9	(R)+VS	Power supply, +10V ~ +30Vdc
10	(B)GND	Ground
11	RL1 NO	Relay 1, normal open
12	RL1 COM	Relay 1, common
13	RL2 NO	Relay 2, normal open
14	RL2 COM	Relay 2, common
15	RL3 NO	Relay 3, normal open
16	RL3 COM	Relay 3, common
17	RL4 NO	Relay 4, normal open
18	RL4 COM	Relay 4, common
19	RL5 NO	Relay 5, normal open
20	RL5 COM	Relay 5, common

**This module is in DEFAULT mode when the DEFAULT* pin is connected to GND while power is applied to the unit. *Do not apply any power signals to the DEFAULT* pin, either connected it to GND or leave it left open.*

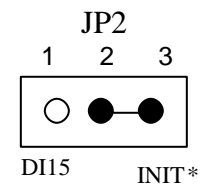
4. Application Wiring

Form A Relay Output

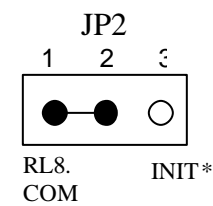


5. Jumper Setting

Init* Mode



Digital Input Mode (Default Setting)



6. Command Set

There are three categories of NuDAM commands. The first is the **general commands**, including set configuration command, read configuration, reset, read module's name and firmware version, etc. All NuDAM modules response to the general commands. The second is the **functional commands**, which depends on the functions of the module. The third is the **special commands** including functions for programming the watchdog timer, safe values, and the programmable leading code. All commands used in the NuDAM analog input module are listed in the following table.

Command	Syntax
General Command	
Set Configuration	%(OldAddr)(NewAddr)(InputRange)(BaudRate)(DataFormat)
Read Configuration	\$(Addr)2
Read Module Name	\$(Addr)M
Read Firmware Version	\$(Addr)F
Software Reset	\$(Addr)RS
Reset Status	\$(Addr)5

Functional Command	
Read Digital Output Status	\$(Addr)6
Digital Output	#(Addr)(ChannelNo)(OutData)
Special Command	
Read Command Leading Code Setting	~(Addr)0
Change Command Leading Code Setting	~(Addr)10(C1)(C2)(C3)(C4)(C5)(C6)
Set Host Watchdog / Safety Value	~(Addr)2(Flag)(TimeOut)(SafeValue)
Read Host WatchDog / Safe Value	~(Addr)3
Host is OK	~**
I/O Polarity Setting	~(Addr)CP(State)
Read Polarity Setting	~(Addr)CR

** The module accepts calibration command, baud rate and checksum configuration setting under the DEFAULT* mode. * Please refer to the manual in PDF file format in the CD for detail description of these commands.*

7. ADLINK online

ADLINK TECHNOLOGY INC. full range of NuDAM product datasheets can be downloaded from our website at: http://www.adlinktech.com/download_area/manual.html

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