

AXA - TOM
(Tiny Output Module)

2 x Volt Free Relay Output Module



**Product Operation
Manual**

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1.0 Device Overview



The AXA-TOM is intended for use where low voltage, low current contacts are required to trigger third party devices like Gate Latches, Garage Door Controllers, Curtain Controllers, Damper Motors etc. Two relay outputs are available, Relay 1 has a common, normally open and normally closed connection and Relay 2 has a common and normally open connection.

2.0 System Connections

DyNet Connections



- | | |
|---------|-----------|
| (1) +12 | - 12 Volt |
| (2) D- | - Data - |
| (3) D+ | - Data + |
| (4) GND | - Ground |
| (5) S | - Shield |

1 2 3 4 5

Trigger Connections



- | | |
|----------|---------------------------|
| (1) COM2 | - Relay 2 Common |
| (2) NO2 | - Relay 2 Normally Open |
| (3) NC1 | - Relay 1 Normally Closed |
| (4) COM1 | - Relay 1 Common |
| (5) NO1 | - Relay 2 Normally Open |

1 2 3 4 5

3.0 System Requirements

1. Connection to a Dynalite network.
2. DyNet connection capable of supplying the AXA-TOM's required current demands (see Specifications).

4.0 System Setup

1. Make sure the system requirements have been met.
2. Connect DyNet as shown in System Connections.
3. Connect low voltage, low current contacts that require triggering (see System Connections).
4. Follow the **Setup using Dlight** instructions.

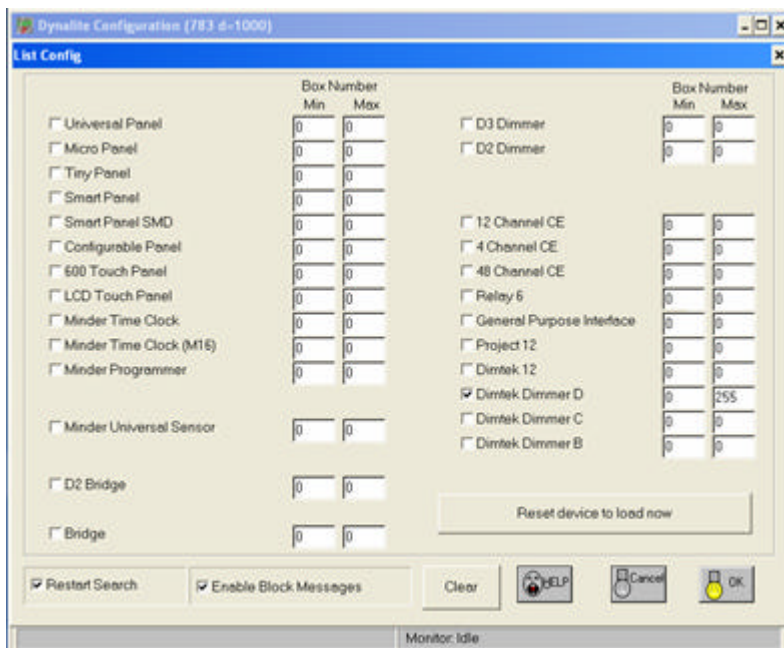
4.1 Factory Setup

The AXA-TOM has the following factory default settings:

Relay 1 (Channel 1) is set as Area 1 and Logical Channel 1
Relay 2 (Channel 2) is set as Area 1 and Logical Channel 2

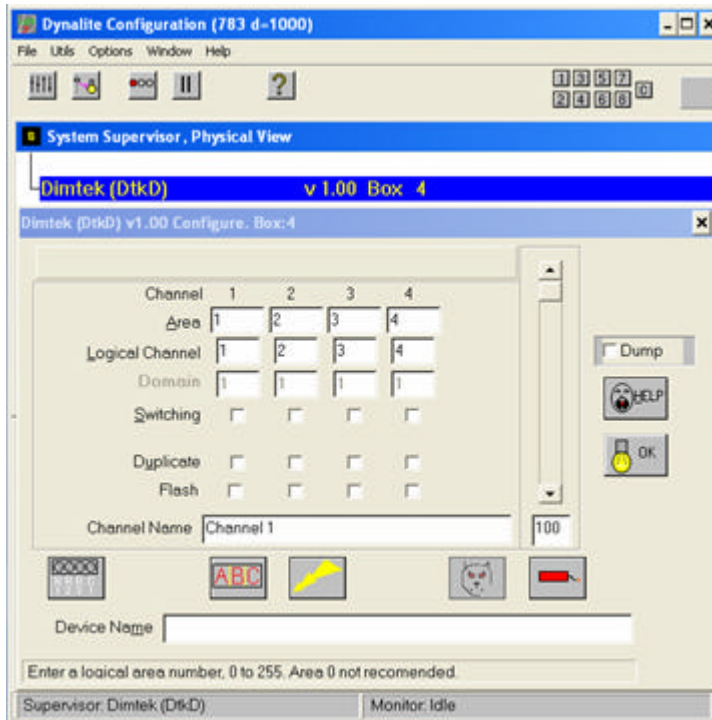
4.2 Setup using DLight

1. With the Dlight software open go to **Options** then **Config Search List** (or press L as a shortcut).
2. Select **Dimtek Dimmer D** by clicking on the tick box and then set the Box Number range from **0 to 255** and then press ok.



3. Once the search finds the device you may cancel the search. Wait until the device finishes loading before continuing.
4. You will see the System Supervisor, Physical View box will display Dimtek (DtkD) version – xx Box – xx.

5. Go to **Utils** menu and then to **Configure Device** (or press C as a shortcut).



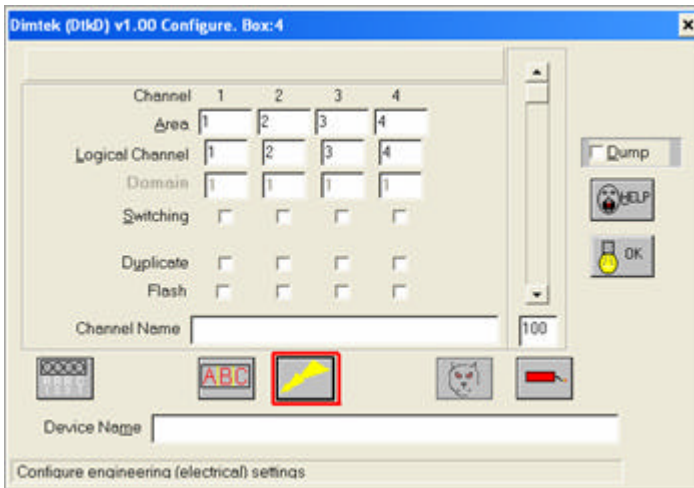
6. In the Configuration box Channel 1 corresponds to Relay 1 and Channel 2 corresponds to relay 2 (Note – channels 3 and 4 are not used).
7. Set the desired Area and Logical Channel
8. The device can also be named for identification on the network.
9. Click the tick box “Dump” and ok
10. When the store data to device box opens press ok and the information will be written to the device.

NOTE – In the Configuration box only the mentioned fields and tick boxes are used eg: Switching, Duplicate and Flash perform no function.

4.3 Changing the Box Number

If the box number requires changing please follow the following steps:

1. Follow steps 1 to 5 from the **Setup using Dlight** section.
2. Click on the engineering settings icon.



3. Change the box number and ok.
4. Select **Dump** in the **Configuration box** and ok to complete the box number change.

5.0 Specifications

AXA-TOM System Specifications

Physical Dimensions

Width 25mm, Length 60mm, Height 15mm

Parameter	Min	Typ	Max	Unit
Supply Voltage		12		V
No Relays On Current Draw		10		mA
1 Relay Current Draw		40		mA
2 Relay Current Draw		70		mA
Relay Switching Capability			24	V AC/DC
Relay Switching Capability			1	A

6.0 DyNet Messages

The DyNet messages used to control AXA-TOM are listed with examples to simplify system setup.

Interface Use RS485, 9600, 8 bit data, 1 start bit, 1 stop bit, no parity. Idle between bytes to be < 1ms. Delay between Packets to be > 10ms.

Physical and Logical Message Protocol 8 byte packet, Checksum = Negative 8 bit 2's complement sum of bytes 1-7. All numbers in hexadecimal:

Example Channel Level Message

Byte 0: 1C hex Logical Message
Byte 1: 01 Area Number (1 for this example)
Byte 2: 01 Logical Channel (1 for this example)
Byte 3: 71 OpCode
Byte 4: FF Channel Level (FF = Relay OFF or 0%)
Byte 5: 00 Fade Rate
Byte 6: FF Join usually FF
Byte 7: Checksum
Example: Turn Channel 1, area 1 off
[1C] [01] [01] [71] [FF] [00] [FF] [CHECKSUM]

Example Channel Level Request

Byte 0: 1C hex Logical Message
Byte 1: 01 Area Number (1 for this example)
Byte 2: 01 Logical Channel (1 for this example)
Byte 3: 61 OpCode
Byte 4: 00 hex
Byte 5: 00 hex
Byte 6: FF Join usually FF
Byte 7: Checksum
Example: Request the level information for channel 1, area 1.
[1C] [01] [01] [61] [00] [00] [FF] [CHECKSUM]

Example Channel Level Reply

Byte 0: 1C hex Logical Message
Byte 1: 01 Area Number (1 for this example)
Byte 2: 01 Logical Channel
Byte 3: 60 OpCode
Byte 4: 00 Target Level
Byte 5: 00 Actual Level
Byte 6: FF Join usually FF
Byte 7: Checksum
Example: Request the level information for channel 1, area 1.
[1C] [01] [01] [60] [00] [00] [FF] [CHECKSUM]

Example Preset Message

Byte 0: 1C hex Logical Message
Byte 1: 01 Area Number (1 for this example)
Byte 2: 00 Fade - Low
Byte 3: OpCode Preset 1=0x00, Preset 2 = 0x01, Preset 5 = 0x0A
Byte 4: 00 Fade - High
Byte 5: 00 Bank
Byte 6: FF Join usually FF
Byte 7: Checksum
Example: Select Preset 1, Area 1
[1C] [01] [00] [00] [00] [00] [FF] [CHECKSUM]

Example Preset Request

Byte 0: 1C hex Logical Message
Byte 1: 01 Area Number (1 for this example)
Byte 2: 00 hex
Byte 3: 63 OpCode
Byte 4: 00 hex
Byte 5: 00 hex
Byte 6: FF Join usually FF
Byte 7: Checksum
Example: Request the current preset in Area 1
[1C] [01] [00] [63] [00] [00] [FF] [CHECKSUM]

Example Preset Report

Byte 0: 1C hex Logical Message
Byte 1: 01 Area Number (1 for this example)
Byte 2: 01 Preset
Byte 3: 62 OpCode
Byte 4: 00 hex
Byte 5: 00 hex
Byte 6: FF Join usually FF
Byte 7: Checksum
Example: Preset 1, Area 1 Report
[1C] [01] [01] [62] [00] [00] [FF] [CHECKSUM]

7.0 Contact Details

Postal and Delivery Address

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8.0 Disclaimer

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