

## Product Specification

Product: D.I.A.S. (Decoder in a solenoid)  
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### Description

- Solenoid with true A/C 2-wire decoder for landscape applications, compatible with Tonick decoder translators.

### Features

- Combines 2-wire decoders and a solenoid into one product.
- Available as a two-way or three-way solenoid operation.
- Expandable – simply splice additional decoders into the 2-wire line.
- Economical – typical installation requires up to 80% less cable than conventional systems.
- Redressable- DIAS can be reprogrammed 100's of times.
- Versatile – tolerant of earth leakage in the existing cables, retrofit possible, including bunched multiwire to make 2-wire path.
- Suitable for use with the complete Tonick BT2 twin translator family.
- The DIAS will operate as a normal 24VAC solenoid, when not programmed or addresses to zero.

### Diagnostic LED

The DIAS has a useful LED that indicated the condition of the device.

- RED: Solenoid active, address 0
- ORANGE: Solenoid active, address 1 -127
- GREEN: Path active, solenoid off

### Electrical

- True A/C system not harmful to cable and joints.
- Operating voltage 19VAC-32Vac, 50 or 60 Hz
- Idle current (typical) – 4.5mA
- Holding current (2-way solenoid) – 30mA
- Holding current (3-way solenoid) – 60mA
- In-Rush current – 300 – 350mA
- Maximum recommended active 2-way solenoids per 2-wire path – 16 (DIAS)
- Maximum recommended active 3-way solenoids per 2-wire path – 10(DIAS)

### Operating

- Custom firmware for OEM systems.
- Station address limit as per translator
- May be mixed with other Tonick decoders on the same 2-wire path.
- May be mixed with the Tonick range of sensor decoders for moisture, pressure, water level, flow and digital inputs.

### Physical 2 – way actuator

- Length: approx. 60mm (not inc. cables)
- Diameter: 32mm
- Fully potted to waterproof the electronics.
- 3/4" UNF20 thread

### Physical 3 – way actuator

- Length: approx. 70mm (not inc. cables)
- Diameter: 32mm
- Fully potted to waterproof the electronics.
- 3/4" UNF20 thread, front.
- 1/8" BSP Female, water port thread, back.

### Wiring

- Type LiYi 0.75, AWG18/0.75mm<sup>2</sup>, PVC, 550mm length, Black, outer for 2-wire path connection.

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## Protection

- Internal lightning protection.
- No grounding required along 2-wire path.

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## Approvals

- CE (European) marked and compliant
- RoHS (European) compliant & lead free

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## Certificate of Origin

- Manufactured in the EU.

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## Warranty

- 5-year warranty including damage by lightning.

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Please refer to the Tonick OEM Guide for integration information.

