

## Mottech Decoder System



## DIAS - Decoder In A Solenoid

**New**

### Benefits

- Combines a 2 Wire Decoder and Solenoid into one product
- Screws into most valves
- LED indicator on top of the DIAS
- More stations active simultaneously



Mottech decoder system utilizes a single pair of wires to operate multiple stations with individual decoders connected along a 2-wire cable.

Each decoder contains a microprocessor which receives 24VAC power supply and control signals along the 2-wire line directly from the IRRInet ACE controller.

The decoders are pre-coded with their addresses prior to installation. Then they are attached to the cable to activate individual solenoids when a coded signal is sent from the IRRInet.

Mottech decoders can be installed in limited-access irrigation areas. They are robust, waterproof and contain internal effective lightning and surge protection.

Up to 125 outputs can be controlled independently off the same line.

Mottech decoders are available in a choice of 1, 2, 3 or 4-station outputs.

The decoders include autonomous station control, color-coded wire connections, programmable addresses, 2-way feedback to the IRRInet controller with confirmation and status indication.

The decoders are a part of the IRRInet system and the ICC (IRRIInet Control Center) software database. They can be easily mixed with existing or future Motorola IRRInet products (e.g. Piccolo XR, IRRInet M), hence they are ideal for new irrigation schemes as well as retrofits and partial re-dos.

## Decoders Specifications:

<b>Mounting:</b>	Direct Burial
<b>Wires:</b>	Standard direct burial 2-core cable
<b>Power Consumption:</b>	Typically 3mA at 26V RMS
<b>Input Voltage:</b>	19V RMS to 32V RMS, 50 or 60Hz, sinusoidal
<b>Solenoid Control:</b>	Single - 1 solenoid Dual - 2 solenoids Triple - 3 solenoids Quad - 4 solenoids
<b>Solenoid Output:</b>	Full AC input voltage less 1V is continuously applied to the solenoid for the duration of the on-time
<b>Max. Output:</b>	500mA RMS steady-state per output (typically powers 2 solenoids). 1.2A max for all outputs combined (models: TW/MOT-2/3/4)
<b>Surge Protection:</b>	Built-in
<b>Encapsulation:</b>	Waterproof
<b>Ambient Temperature:</b>	Operation: +5 °C to +50 °C at 500mA output. Max +60 °C at 250mA output. Storage: -10 °C to +70 °C
<b>Ambient Operating Humidity:</b>	0-100% RH
<b>Signaling System:</b>	Modulation of AC waveform at AC zero crossing
<b>Input Power Distortion:</b>	Pure sine wave. Avoid any distortion of waveform slope or perturbations at the AC zero crossing point or within +/- ¼ cycle from that point
<b>Decoder Address Range:</b>	1-125 outputs in multiple decoders may be programmed to the same address, but will switch simultaneously. Outputs in multiple decoders may be programmed to unrelated addresses
<b>Warranty:</b>	3 years
<b>Approvals:</b>	CE (European) marked and compliant RoHS (European) compliant & lead free WEEE (European) compliant (Exempt) C-Tick (Australia)

## Decoder Interface Module Specifications:

<b>Mounting:</b>	Fits in IRRInet ACE controller I/O slot
<b>Capacity:</b>	2 decoder lines, each line can drive up to 125 outputs (total of 250 outputs per module)
<b>Ambient Temperature:</b>	Operation: +3 °C to +50 °C Storage: 0 °C to 70 °C
<b>Ambient Humidity:</b>	Operation: 20-80% RH (non-condensing) Storage: 0-90% RH (non-condensing)
<b>Approvals:</b>	CE (European) marked and compliant RoHS (European) compliant & lead free WEEE (European) compliant (Exempt)

## Mottech Water Solutions

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