DUAL® DECODER

Two-Wire Decoder Control for I-Core®

With all the intelligent features of I-Core, upgrading to Dual means you’re doing the best job even faster. The I-Core controller can be upgraded to two-wire capability with the simple installation of a Dual output module. You’ll see savings in labor, maintenance, troubleshooting, and wire, while enjoying I-Core’s state-of-the-art features and benefits, including real-time flow monitoring, quick access to a whole system overview, a factory-installed SmartPort®, six language capability, and a bold, graphic display. And with the familiar programming of a Hunter controller, operating a two-wire system is easy for you and your clients. Why run 50 wires when you only need two?

Dual decoders are available in one and two-station versions, which allows any I-Core Dual system to be customized to the needs of larger commercial installations.
DUAL® FEATURES & BENEFITS

DUAL48M I-Core® Module

Simply install the DUAL48M module into any I-Core, and your controller is now two-wire ready for up to 48 stations. And with the flexibility of two-wire technology, it’s a snap to expand the number of stations of a pre-existing system without additional wiring.

The DUAL48M decoder output module includes its own user interface, just for decoder functions. It can also coexist with conventional ICM-600 station modules.

I-Core Features

- 4 Independent programs
- Programs A,B,C: 8 start times; Program D: 16 start times
- Max. station run time: 12 hours
- Easy Retrieve™ memory
- Compatible with Hunter Clik sensors and other micro-switch type weather sensors
- Compatible with Hunter Solar-Sync for automatic weather-based water savings
- One touch manual start and advance for easy manual operation
- Real-time flow monitoring with Hunter HFS flow sensor
- Flow monitoring and alarms to station level
- Rain sensor bypass
- Programmable rain delay
- Manual cycle
- Automatic short circuit protection
- Seasonal adjustment: 0% to 300% (in 1% increments)
- Monthly seasonal adjustment settings
- Delay between stations (maximum): 9 hours
- Sensor programmable by zone
- Simultaneous program operation: Any two
- Total run time calculator

Connections Made Easy

Color-coded connections simplify installation with any standard 24 VAC irrigation solenoids. All Dual decoders include DBRY-6 waterproof connectors for two-wire path splices.
**DUAL® FEATURES & BENEFITS**

**Easy Programming with ICD-HP**
Program, test, and diagnose decoders without disconnecting any wires.
The ICD-HP uses wireless induction to program and communicate with new or installed decoders, right through the decoder body.

Height: 8"
Width: 4"
Depth: 3"

**Jacketed ID Wire**
Hunter’s color-coded, twisted pair ID Wire is jacketed for direct burial. This easy-to-install wire resists surges and electrical noise, while providing high tensile strength for permanent in-ground installation. And with only one line to run from I-Core, material costs are reduced.

**Simple, Reliable Decoders**
Hunter’s Dual decoders are waterproof, color-coded, and field programmable.

Height: 3½"
Width: 1½"
Depth: ½"

**Customizable Surge Protection**
With Dual-S surge suppressors, regions that require additional surge protection are covered. Add at least one grounded Dual-S for every 12 decoders or 1000 ft, and always one at the end of the two-wire path. Add more in high lightning areas.

Height: 1⅜"
Width: 4⅜"
Depth: 4"

http://hunter.direct/dualhelp
**Dual Specifications**

- **DUAL48M output**: 34V peak to peak, non-sinusoidal
- **Decoder station sizes available**: 1, 2
- **Dual decoder (DUAL-1 and DUAL-2)**: Power consumption
  - Standby: 3–4mA; Active: approximately 40mA per solenoid
- **Max. distance to decoder**: 14 AWG wire path: 5,000 ft; 12 AWG wire path: 7,500 ft.
- **Max. recommended distance, decoder to solenoid**: 100 ft
- **Field programmable**: Dual decoder module display and push button programming makes it easy to program decoders at the controller itself.

**I-Core Electrical Specifications**

- **Transformer input**: 120/240 VAC, 50/60 Hz
- **Transformer output (24 VAC)**: 1.4 A
- **P/MV output**: 0.56 A
- **Simultaneous station operation (includes master valve)**: 5 valves
- **Real-time flow monitoring** with Hunter HFS
- **Click sensor inputs**: Plastic – 2; Metal – 3
- **Operating temperature**: 0º F to 140º F

**Approvals**

- CE, UL, cUL, C-tick, FCC

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### DUAL MODELS

<table>
<thead>
<tr>
<th>Base Model</th>
<th>Plus Description</th>
<th>Description</th>
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<tbody>
<tr>
<td>IC-600-PL</td>
<td>DUAL48M</td>
<td>48-Station controller, indoor/outdoor, plastic cabinet</td>
</tr>
<tr>
<td>IC-601-PL</td>
<td>DUAL48M</td>
<td>International version, 6-Station controller, indoor/outdoor, plastic cabinet</td>
</tr>
<tr>
<td>IC-600-M</td>
<td>DUAL48M</td>
<td>48-Station controller, indoor/outdoor, metal cabinet</td>
</tr>
<tr>
<td>IC-600-PP</td>
<td>DUAL48M</td>
<td>48-Station controller, indoor/outdoor, plastic pedestal</td>
</tr>
<tr>
<td>IC-600-SS</td>
<td>DUAL48M</td>
<td>48-Station controller, indoor/outdoor, stainless steel cabinet</td>
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</tbody>
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### DUAL Model Description

- **DUAL48M**: Dual decoder output module. Plug-in module converts any I-Core controller to two-wire decoder system (up to 48-Station maximum)
- **DUAL-1**: Dual 1-Station decoder (includes 2 DBRY-6 connectors)
- **DUAL-2**: Dual 2-Station decoder (includes 2 DBRY-6 connectors)
- **DUAL-S**: Dual surge arrestor (includes 4 DBRY-6 connectors)

### ID WIRE MODEL GUIDE

<table>
<thead>
<tr>
<th>14 AWG Decoder Cable</th>
<th>ID 1 Wire</th>
<th>ID 2 Wire</th>
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<tbody>
<tr>
<td>ID1GRY Gray jacket</td>
<td>ID1GRY Gray jacket</td>
<td></td>
</tr>
<tr>
<td>ID1PUR Purple jacket</td>
<td>ID1PUR Purple jacket</td>
<td></td>
</tr>
<tr>
<td>ID1YLW Yellow jacket</td>
<td>ID1YLW Yellow jacket</td>
<td></td>
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<tr>
<td>ID1ORG Orange jacket</td>
<td>ID1ORG Orange jacket</td>
<td></td>
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<tr>
<td>ID1BLU Blue jacket</td>
<td>ID1BLU Blue jacket</td>
<td></td>
</tr>
<tr>
<td>ID1TAN Tan jacket</td>
<td>ID1TAN Tan jacket</td>
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</table>

### MAXIMUM WIRE RUNS

<table>
<thead>
<tr>
<th>ID 1 Wire</th>
<th>ID 2 Wire</th>
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<tbody>
<tr>
<td>5,000 ft. with I-Core/Dual systems</td>
<td>7,500 ft. with I-Core/Dual systems</td>
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