



- 01 Easy Installation:** The Dual decoder module easily plugs into the I-Core controller, converting it to two-wire/decoder control. Up to 3 two-wire paths can be wired to the controller, for maximum design flexibility.
- 02 Connections Made Easy:** Color-coded connections simplify installation with any standard 24 VAC irrigation solenoids.
- 03 7,500 Feet Each Direction:** Wire up to 7,500 feet of 12 AWG or 5,000 feet of 14 AWG.

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.



Haji Sons International

IRRIGATION | LANDSCAPING | SOLAR SYSTEM | LASER LAND LEVELER | SEEDS

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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.

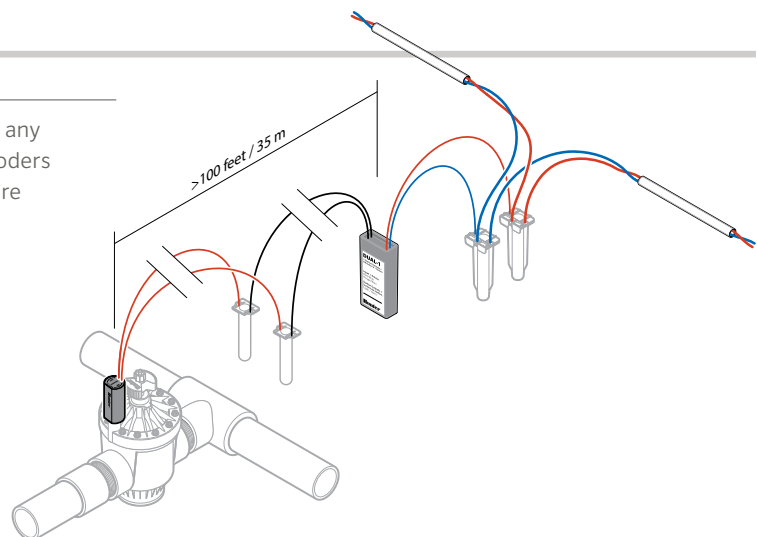


I-Core Features

- 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: 1¾"

Width: 4¾"

Depth: 4"



<http://hunter.direct/dualhelp>

DUAL[®] SPECIFICATIONS

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
- Dual decoders can also be field programmed with the Hunter ICD-HP. No need to remove decoders from the two-wire path
- Decoder module displays decoder operation and diagnostic information including current draw in milliamps
 - Can operate up to 48 stations of combined decoder and conventional control, making system retrofit easy
 - Dual-S external surge protection (connect to earth ground hardware)
 - Waterproof connectors for connection to two-wire path supplied with all Dual decoders and Dual-S surge protection
 - Number of two-wire paths: 3

I-Core Electrical Specifications

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

Approvals

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

DUAL MODELS

Base Model	Plus	Description
IC-600-PL	DUAL48M	48-Station controller, indoor/outdoor, plastic cabinet
IC-601-PL	DUAL48M	International version, 6-Station controller, indoor/outdoor, plastic cabinet
IC-600-M	DUAL48M	48-Station controller, indoor/outdoor, metal cabinet
IC-600-PP	DUAL48M	48-Station controller, indoor/outdoor, plastic pedestal
IC-600-SS	DUAL48M	48-Station controller, indoor/outdoor, stainless steel cabinet

DUAL Model Description

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

14 AWG Decoder Cable		12 AWG Long Range, Heavy-Duty Decoder Cable	
ID1GRY	Gray jacket	ID2GRY	Gray jacket
ID1PUR	Purple jacket	ID2PUR	Purple jacket
ID1YLW	Yellow jacket	ID2YLW	Yellow jacket
ID1ORG	Orange jacket	ID2ORG	Orange jacket
ID1BLU	Blue jacket	ID2BLU	Blue jacket
ID1TAN	Tan jacket	ID2TAN	Tan jacket

MAXIMUM WIRE RUNS

ID 1 Wire	ID 2 Wire
5,000 ft. with I-Core/Dual systems	7,500 ft. with I-Core/Dual systems

Website hunterindustries.com | **Customer Support** 1-800-383-4747 | **Technical Service** 1-800-733-2823

Helping our customers succeed is what drives us. While our passion for innovation and engineering is built into everything we do, it is our commitment to exceptional support that we hope will keep you in the Hunter family of customers for years to come.


Gregory R. Hunter, President of Hunter Industries



DUAL®

Save materials and labor by adding this optional plug-in module to upgrade conventional I-Core® systems to two-wire control.

KEY BENEFITS

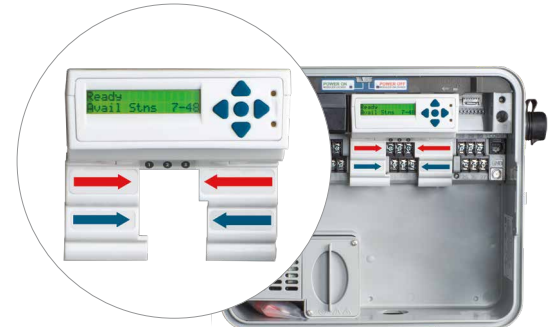
- DUAL48M output module enables up to 48 stations in any I-Core configuration
- 3 separate two-wire paths provide flexibility in system design and installation
- 1- and 2-station decoders for use with a variety of valve manifolds
- Field-programmable decoders do not require serial numbers
 - Decoders can be programmed before installation at the DUAL48M interface
 - Wireless programming with ICD-HP allows for decoder programming or re-programming after installation to the two-wire path
 - DUAL-S external surge protection module provides additional protection
- DUAL48M output module displays decoder programming, operation, and diagnostic information for assistance with maintenance and troubleshooting
- DUAL48M may be installed with conventional modules for hybrid operations
- Solenoid finder feature aids in locating decoders and valves in the field

OPERATING SPECIFICATIONS

- Maximum recommended distance, decoder to solenoid: 100'
- Maximum distance to decoder via two-wire path:
 - 14 AWG wire path: 5,000'
 - 12 AWG wire path: 7,500'
- Approvals: UL, cUL, FCC, CE, RCM
- Decoder rating: IP68 submersible
- Warranty period: 5 years

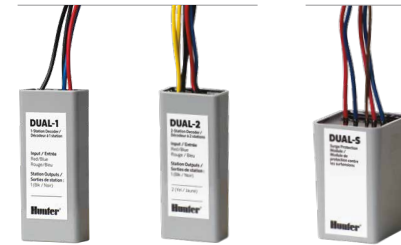
USER-INSTALLED OPTIONS

- DECSTAKE10 Universal decoder stake kit, 10-pack



DUAL48M Decoder Output Module

Height: 1 $\frac{3}{8}$ "
Width: 4 $\frac{3}{8}$ "
Depth: 4"



DUAL Decoders

Height: 3 $\frac{3}{4}$ "
Width: 1 $\frac{5}{8}$ "
Depth: $\frac{7}{8}$ "

Surge Arrester

Height: 2 $\frac{7}{8}$ "
Width: 1 $\frac{7}{8}$ "
Depth: 2"

DUAL		
Base Model	Plus	Description
IC-600-PL	DUAL48M	48-station controller, indoor/outdoor, plastic cabinet
IC-600-M	DUAL48M	48-station controller, indoor/outdoor, metal cabinet
IC-600-PP	DUAL48M	48-station controller, indoor/outdoor, plastic pedestal
IC-600-SS	DUAL48M	48-station controller, indoor/outdoor, stainless steel cabinet
DUAL Model	Description	
DUAL48M	DUAL decoder output module, 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)	
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