

SECTION 05:

CONTROLLERS

CONTROLLERS





CONTROLLERS

ADVANCED FEATURES

BATTERY OPERATED CONTROLLERS



RESIDENTIAL CONTROLLERS



COMMERCIAL CONTROLLERS



REMOTE CONTROL



Water-Saving Features

CYCLE AND SOAK

This water-saving feature allows the operator to specify a maximum cycle time for each single station in hours, minutes, or seconds, followed by a minimum soak time, to prevent runoff from slopes or saturated soil. The operator can enter any run time, and the controller will automatically divide it into cycles to allow the water to be absorbed during the soak periods. The feature is adjustable by individual station for unique soil and site conditions.

TOTAL RUN TIME CALCULATOR

This feature adds up all run times, calculates the total duration of a program, and instantly displays the full length of an irrigation cycle. This information can be used to determine the time when watering will end.

REAL TIME FLOW MONITORING

This feature permits connection of a flow meter to recognise high or low flow conditions and react automatically to alarms. The controller learns typical flows for each zone of irrigation and then monitors performance during automatic irrigation. When incorrect flows are detected, the controller can identify the faulty station and shut it down. Flow Monitoring requires the installation of a Normally-Closed Master Valve for full functionality. Flow totals are also recorded in controller memory to report system water usage.

BUILT IN SOLAR SYNC®

The Pro-C facepack has Solar Sync control built-in, making it even easier to upgrade any Pro-C to weather-based smart control. Solar Sync is an EPA WaterSense® labeled smart device which calculates evapotranspiration (ET) and adjusts Hunter controllers daily based on local weather conditions, resulting in water savings. It has also received international certifications for water conservation.

SOLAR SYNC DELAY

Solar Sync Delay allows the installer to specify a number of days before automatic weather adjustment begins. This allows a period of non-adjusted irrigation for grow-in or plant establishment purposes, without requiring a return visit to the site to enable the Solar Sync water-saving feature.

SEASONAL ADJUSTMENT: GLOBAL, MONTHLY, AND SOLAR SYNC

This feature allows for quick adjustments to irrigation run times through a percentage scale. During peak season, set the seasonal adjust to 100%. If weather conditions require less water, enter the appropriate percentage value (i.e. 50%) to cut down irrigation run times without the need to adjust each station in the program.

Global: Provides a seasonal adjustment value to all programs.

Monthly: Allows users to program a seasonal adjustment value for each month of the year. This works by automatically changing the programmed seasonal adjustment value on the first day of every month.

Solar Sync: The Solar Sync ET sensor implements an automatic daily adjustment based on measured local weather.

Convenient Maintenance & Site Management

PROGRAMMABLE DECODERS

Field programmability means no lengthy serial numbers to enter in the controller, and no time lost re-programming decoder assignments after a controller change. Each decoder is programmed with its actual station (valve) numbers for simplicity and reliability. Decoders may be re-programmed at any time if desired.

AUTOMATIC SHORT CIRCUIT PROTECTION

Automatic short circuit protection is a feature found in all Hunter AC powered controllers. This feature automatically detects electrical faults, which are typically caused by wiring issues. Only affected stations are skipped, allowing all other stations to water normally as programmed. There are no fuses to blow or internal circuit breakers to trip, so complete irrigation system shutdown is avoided.

QUICKCHECK™

The QuickCheck feature makes field wiring issues easy to assess with the push of a button. QuickCheck displays an ERR message when a field wiring short is detected on a particular station number.

SIMULTANEOUS STATION GROUPS

Simultaneous Station Groups allow for groups of stations to run together within a program. This permits consolidation of large systems into fewer items to program and can be used to control system flow in high capacity installations.

SENSOR PROGRAMMABILITY

This feature allows the user to specify which program or stations will be shut down in response to a specific sensor alarm. Stations or programs not affected by the sensor continue to run automatically.

DELAY BETWEEN STATIONS

Users can program a delay between stations as the controller advances from one station to the next. This delay can range from a few seconds (to permit slow-closing valves additional time to close) to a much longer period of time (to allow pressure tanks time to recharge), based on user requirements.

NON-WATER DAYS

Day(s) of the week can be programmed OFF in advance, so that irrigation does not occur regardless of program interval schedules. For example, if the gardener mows the lawn on Saturday, the Non-Water Days feature allows Saturday to be programmed OFF, so that watering will not occur.

MULTI-LANGUAGE PROGRAMMING

Users can choose to program Hunter controllers in six different languages including English, Spanish, French, Italian, German and Portuguese.

CONTROLLERS COMPARISON CHART

QUICK SPECS	ECO LOGIC	X-CORE®	PRO-C®	PCC	I-CORE®	ACC	XC-HYBRID	NODE	WVS
NUMBER OF STATIONS	4, 6	2, 4, 6, 8	4 to 16	6, 12	6 to 42 Up to 48 with Decoders	6 to 42 Up to 99 with Decoders	6, 12	1, 2, 4, 6	1, 2, 4
TYPE*	Fixed	Fixed	Modular	Fixed	Modular	Modular	Fixed	Fixed	Fixed
NUMBER OF PROGRAMS	2	3	3	3	4	6	3	3	---
START TIMES PER PROGRAM	4	4	4	4	8 (16 for program D)	10	4	4	---
MAX. NUMBER OF SIMULTANEOUS PROGRAMS	---	---	---	---	2	6	---	---	---
WARRANTY	2 Years	2 Years	2 Years	2 Years	5 Years	5 Years	2 Years	2 Years	2 Years

FEATURES

ENCLOSURE TYPE	Plastic Indoor	Plastic Indoor Plastic Outdoor	Plastic Indoor Plastic Outdoor	Plastic Indoor Plastic Outdoor	Plastic/Metal Stainless Outdoor Plastic Pedestal Stainless Pedestal	Metal Outdoor Stainless Outdoor Plastic Pedestal Stainless Pedestal	Plastic Indoor/ Outdoor Stainless Indoor/ Outdoor	Waterproof	Waterproof
SOLAR SYNC® COMPATIBLE		●	●	●	●	●			
CENTRAL CONTROL COMPATIBLE			●	●	●	●			
REMOTE CONTROL COMPATIBLE		●	●	●	●	●			
FLOW METER COMPATIBLE			●	●	●	●			
RAIN-CLIK® FREEZE-CLIK® SENSOR COMPATIBLE	●	●	●	●	●	●	●	●	●
BATTERY OPERATED							●	●	●
NUMBER OF SENSOR INPUTS	1	1	1	1	2 (Plastic Models) 3 (Metal & Ped Models)	4 + Dedicated Flow Input	1	1	1
MAX. STATION RUN TIMES (hours)	4	4	6	6	12	6	4	6	4

* Fixed or modular indicates the controllers ability to expand the number of stations from a base count.

ECO LOGIC

Number of Stations: **4, 6**
Type: **Fixed**

FEATURES

- Number of stations: 4, 6
- Type: Fixed
- Enclosure: Indoor
- Independent programs: 2
- Start times per program: 4
- Max station run time: 4 hours
- Compatible with Hunter Clik sensors and other micro-switch type weather sensors
- Rain sensor bypass
- Programmable rain delay: 1 to 7 days
- Manual cycle
- Test program allows for quick system checks
- Warranty period: 2 years
- ▶ Easy Retrieve™ memory
- ▶ Quick Check™
- ▶ Solar Sync® Delay
- ▶ Automatic short circuit protection
- ▶ Seasonal Adjustment: Global or automatic updates with Solar Sync
- ▶ Delay between stations
- ▶ Sensor programmability



Plastic Indoor

Height: 12.6 cm
Width: 12.6 cm
Length: 3.2 cm

ELECTRICAL SPECIFICATIONS

- Transformer input: 230 VAC 50/60 Hz
- Transformer output (24 VAC): 0.625 A
- Station output (24 VAC): 0.28 A
- P/MV output (24 VAC): 0.28 A
- Sensor input: 1

APPROVALS

- CE, cUL

ECO LOGIC	
Model	Description
ELC-401i - E	4-Station indoor controller, 230 VAC, with European connections
ELC-601i - E	6-Station indoor controller, 230 VAC, with European connections

X-CORE®

Number of Stations: **2, 4, 6, 8**
Type: **Fixed**

FEATURES

- Number of stations: 2, 4, 6, 8
- Type: Fixed
- Enclosures: Indoor and outdoor plastic
- Independent programs: 3
- Start times per program: 4
- Max. station run time: 4 hours
- Built in Solar Sync®
- Programmable rain delay
- Non-volatile memory
- Warranty period: 2 years
- ▶ Easy Retrieve™ memory
- ▶ QuickCheck™
- ▶ Solar Sync Delay
- ▶ Automatic short circuit protection
- ▶ Seasonal Adjustment: Global or automatic updates with Solar Sync
- ▶ Delay between stations
- ▶ Sensor programmability

ELECTRICAL SPECIFICATIONS

- Transformer input: 120 VAC or 230 VAC (international model)
- Transformer output (24 VAC): 1 A
- Station output (24 VAC): 0.56 A
- P/MV: (24 VAC): 0.28 A
- Sensor inputs: 1
- Operating temperature: -18° C to 60° C

APPROVALS

- CE, UL, cUL, C-tick, FCC
- ▶ = *Advanced Feature descriptions on pages 99*



Plastic Indoor
Height: 16.5 cm
Width: 14.6 cm
Depth: 5 cm



Plastic Outdoor
Height: 22 cm
Width: 17.8 cm
Depth: 9.5 cm

X-CORE - SPECIFICATION BUILDER: ORDER 1 + 2 + 3 + 4

1 Models	2 Transformer	3 Indoor/Outdoor	4 Options
XC-2 = 2-Station <i>(indoor model only)</i> XC-4 = 4-Station XC-6 = 6-Station XC-8 = 8-Station	00 = 120 VAC 01 = 230 VAC	(blank) = Outdoor model i = Indoor model	(blank) = No option E = 230 VAC with European connections A = 230 VAC with Australian connections <i>(Australian outdoor models have internal transformer with cord)</i>

Examples:

- XC-201i - E = 2-Station 230 VAC indoor controller, with plastic cabinet
- XC-401 - E = 4-Station 230 VAC outdoor controller, with plastic cabinet
- XC-601i - E = 6-Station 230 VAC indoor controller, with plastic cabinet
- XC-801 - E = 8-Station 230 VAC outdoor controller, with plastic cabinet

CONTROLLERS

PRO-C® & PCC

Number of Stations: **4 - 16, 6 & 12**
 Type: **Modular & Fixed**

FEATURES

- Number of stations:
 - Pro-C: 4-16
 - PCC: 6 & 12
 - Type:
 - Pro-C: Modular
 - PCC: Fixed
 - Enclosures: Indoor and outdoor plastic
 - Independent irrigation programs: 3
 - Independent lighting programs: 3
 - Start times per program: 4
 - Max. station run time: 6 hours
 - Solar Sync® Delay feature allows adjustments to be postponed for up to 99 days
 - Cycle and Soak feature built in: reduces runoff
 - Added knockouts for additional flexibility
 - Non-volatile memory
 - Rain sensor bypass
 - One touch manual start and advance
 - Warranty period: 2 years
- ▶ Built in Solar Sync
 - ▶ Easy Retrieve™ memory
 - ▶ QuickCheck™
 - ▶ Automatic short circuit protection
 - ▶ Seasonal Adjustment: Global or automatic updates with Solar Sync
 - ▶ Delay between stations
 - ▶ Sensor programmability
 - ▶ Non-Water Days

ELECTRICAL SPECIFICATIONS

- Transformer input: 120 VAC or 230 VAC (international model)
- Transformer output (24 VAC): 1 A
- Station output (24 VAC): 0.56 A
- P/MV output (24 VAC): 0.28 A
- Sensor inputs: 1
- Operating temperature: -18° C to 60° C

APPROVALS

- CE, UL, cUL, C-tick, FCC
- ▶ = *Advanced Feature descriptions on pages 99*



Plastic Indoor
 Height: 20.9 cm
 Width: 24.3 cm
 Depth: 9.7 cm



Plastic Outdoor
 Height: 22.5 cm
 Width: 25 cm
 Depth: 11 cm



PCM-300 and PCM-900 Expansion Modules
 These modules are compatible with the new Pro-C 400 series.

PRO-C SPECIFICATION BUILDER: ORDER 1 + 2 + 3 + 4			
1 Models	2 Transformer	3 Indoor/Outdoor	4 Options
PC-4 = 4-station base module controller PCC-6 = 6-Station PCC-12 = 12-Station	00 = 120 VAC 01 = 230 VAC	(blank) = Outdoor Model (<i>internal transformer</i>) i = Indoor Model (<i>plug-in transformer</i>)	(blank) = No option E = 230 VAC with European Connections A = 230 VAC with Australian Connections (<i>outdoor models have internal transformer with cord</i>)

PC-SERIES STATION EXPANSION	
Modules	Description
PCM-300	3-Station plug-in module: Use to increase station count from 4 to 7, 7 to 10, and 10 to 13
PCM-900	9-Station plug-in module: Use to increase station count from 7 to 16 only

Examples:

- PC-400 = 4-Station outdoor base unit, internal 120 VAC transformer, and plastic cabinet
- PCC-601iE = 6-Station indoor controller, plug-in 230 VAC transformer with European connections, and plastic cabinet
- PCC-1200 = 12-Station outdoor controller, Internal 120 VAC transformer, and plastic cabinet

CONTROLLERS

I-CORE®

Number of Stations: **6 to 42**
Type: **Modular**

FEATURES

- Number of stations: 6 to 42
 - Type: Modular
 - Enclosure: Outdoor plastic or metal
 - Independent programs: 4
 - Built in Solar Sync®
 - Start times per program: 8 (A, B, C); 16 (D)
 - Max. station run time: 12 hours
 - One touch manual start and advance
 - Programmable rain delay
 - Non-volatile memory
 - Warranty period: 5 years
- ▶ Real time flow monitoring
 - ▶ Easy Retrieve™ memory
 - ▶ QuickCheck™
 - ▶ Automatic short circuit protection
 - ▶ Total run time calculator
 - ▶ Seasonal Adjustment: Global, Monthly, by program and Solar Sync
 - ▶ Delay between stations
 - ▶ Sensor programmability
 - ▶ Cycle and Soak
 - ▶ No Water Window
 - ▶ Non-Water Days
 - ▶ Solar Sync Delay
 - ▶ Multi-language programming



Plastic Outdoor

Height: 28 cm
Width: 34 cm
Depth: 16 cm



Metal Wall Mount

(grey or stainless steel)
Height: 31 cm
Width: 39 cm
Depth: 15 cm

ELECTRICAL SPECIFICATIONS

- Transformer input: 120/230 VAC, 50/60 Hz
- Transformer output (24 VAC): 1.4 A
- Station output (24 VAC): 0.56 A
- P/MV output (24 VAC): 0.28 A
- Simultaneous program operation: 2
- Sensor inputs: Plastic: 2; Metal: 3
- Operating temperature: -18° C to 60° C

APPROVALS

- CE, UL, cUL, C-tick, FCC
- Steel wall mounts: IP-56
- Plastic pedestal: IP-24
- Plastic wall mount: IP-44

▶ = Advanced Feature descriptions on pages 99



Plastic Pedestal

Height: 97 cm
Width: 55 cm
Depth: 40 cm



Metal Pedestal

(grey or stainless steel)
Height: 92 cm
Width: 39 cm
Depth: 13 cm



ICM-600 Expansion Module

I-Core's unique "bridge" modules activate the existing terminal strips

I-CORE	
Model	Description
IC-600-PL	6-Station controller, indoor/outdoor, plastic cabinet
IC-601-PL	International version, 6-Station controller, indoor/outdoor, plastic cabinet
IC-600-M	6-Station controller, indoor/outdoor, metal cabinet
IC-600-PP	6-Station controller, indoor/outdoor, plastic pedestal
IC-600-SS	6-Station controller, indoor/outdoor, stainless steel cabinet
ICM-600	6-Station plug-in expansion module
ACC-PED	Metal pedestal, gray powder-coated, for use with I-Core and ACC metal controllers
PED-SS	Stainless steel pedestal for use with I-Core and ACC stainless steel controllers

ENCLOSURE TYPES & EXPANSION

Enclosure Type	Expands To
Plastic cabinet	30-Stations
Metal/stainless steel cabinet	42-Stations
Plastic pedestal	42-Stations
Metal/stainless steel pedestal	42-Stations

DUAL® FOR I-CORE®

Number of Stations: **Up to 48**
Type: **Decoder**

FEATURES

- Two-wire decoder system for I-Core controllers
- Decoder station sizes available: 1, 2
- Field programmable decoders (no serial numbers to enter)
- DUAL-S external surge protection module
- DUAL decoder module display and push button programming make it easy to program decoders at the controller itself
- Decoder module displays decoder operation and diagnostic information
- Can operate up to 48 stations of combined decoder and conventional control making system retrofit easy
- Waterproof connectors for connection to two-wire path included with all DUAL decoders and DUAL-S surge protection
- Number of two-wire paths: 3
- Solenoid finder feature assists in locating valves in the field
- Wireless programming with ICD-HP
- ▶ **Programmable decoders**

DUAL SPECIFICATIONS

- Max. recommended distance, decoder to solenoid: 30 m
- Max. distance to decoder
- 2 mm² wire path: 1,500 m
- 3.3 mm² wire path: 2,300 m

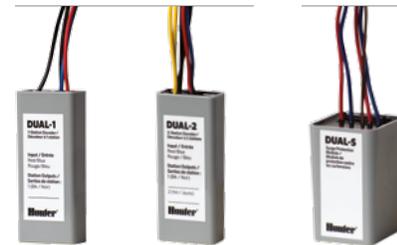
APPROVALS

- CE, UL, cUL, C-tick, FCC
- ▶ = *Advanced Feature descriptions on pages 99*



DUAL48M Decoder Output Module

Height: 3.5 cm
Width: 11 cm
Depth: 10 cm



DUAL Decoders

Height: 7.6 cm
Width: 4.4 cm
Depth: 5 cm

Surge Arrestor

Height: 7 cm
Width: 4.4 cm
Depth: 5 cm

DUAL		
Base Model	Plus	Description
IC-600-PL	DUAL48M	48-Station controller, indoor/outdoor, plastic cabinet (USA)
IC-601-PL	DUAL48M	48-Station controller, indoor/outdoor, plastic cabinet (international)
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. 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			
2 mm ² Decoder Cable		3.3 mm ² Long Range, Heavy-duty Decoder Cable	
ID1GRY	Grey jacket	ID2GRY	Grey 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
1500 m with I-Core/DUAL systems	2300 m with I-Core/DUAL systems
3 km with ACC/ICD systems	4.5 km with ACC/ICD systems

ACC

Number of Stations: **12 to 42**
Type: **Modular**

FEATURES

- Number of stations: 12 to 42
 - Type: Modular
 - Enclosure: Outdoor plastic and stainless steel
 - Independent programs: 6
 - Start times per program: 10
 - Max. station run time: 6 hours
 - Built in Solar Sync®
 - One touch manual start and advance
 - Non-volatile memory
 - Programmable rain delay
 - Warranty period: 5 years
- ▶ Real time flow monitoring
 - ▶ Solar Sync Delay
 - ▶ Easy Retrieve™ memory
 - ▶ Automatic short circuit protection
 - ▶ Total run time calculator
 - ▶ Seasonal Adjustment: Global, by Program, and/or by Solar Sync
 - ▶ Delay between stations
 - ▶ Sensor programmability
 - ▶ Cycle and Soak
 - ▶ No Water Window
 - ▶ Simultaneous station groups

ELECTRICAL SPECIFICATIONS

- Transformer input: 120/230 VAC, 50/60 Hz
- Max. AC Current Draw: 120 VAC, 2 Amps; 230 VAC, 1 Amp (max. computed with all programs running and optional accessories installed)
- Transformer output (24 VAC): 4.0 A
- Station output (24 VAC): 0.56 A
- P/MV output (24 VAC): 0.32 A
- P/MV: 2, normally-closed
- Sensor inputs: 4 + Flow
- Operating temperature: -18° C to 60° C

APPROVALS

- CE, UL, cUL, C-tick, FCC
- Metal wall mounts: IP-56
- Plastic pedestal: IP-24

ALL STAINLESS STEEL (SS) MODELS

- American-made Type 304 Stainless Steel 1.45 mm gauge steel
 - Passivated for corrosion resistance
- ▶ = *Advanced Feature descriptions on pages 99*



Metal Enclosures

(grey or stainless steel)
Height: 31 cm
Width: 39 cm
Depth: 16 cm



Metal Pedestals

(grey or stainless steel)
Height: 92 cm
Width: 38 cm
Depth: 13 cm

Plastic Pedestal

Height: 97 cm
Width: 55 cm
Depth: 40 cm



ACM-600

Standard 6-Station output module with heavy-duty surge protection

AGM-600

Optional Extreme Service high-lightning 6-Station output module

ACC	
Model	Description
ACC-1200	12-Station base unit controller, expands to 42-Station, metal cabinet
ACC-1200-SS	12-Station base unit controller, expands to 42-Station, stainless steel wall mount cabinet
ACC-1200-PP	12-Station base unit controller, expands to 42-Station, plastic pedestal
ACC-PED	Metal pedestal, grey powder-coated, for use with I-Core and ACC metal controllers
PED-SS	Stainless steel pedestal for use with I-Core and ACC stainless steel controllers

STATION EXPANSION MODULES

Modules	Description
ACM-600	6-Station plug-in module for use with the ACC-1200 series controllers
AGM-600	6-Station plug-in module for use with the ACC-1200 series controllers (extreme service lightning protection version)

ACC-99D

Number of Stations: **1 to 99**
Type: **Decoder**

FEATURES

- Includes all features of the ACC controller, plus decoder operations
- Built in Solar Sync®
- Decoder station sizes available: 1, 2, 4, 6
- Sensor decoder available with Flow and Klik inputs
- Max. recommended distance, decoder to solenoid: 45 m
- ICD-HP wireless handheld programmer compatible
- Two-way communications
- Surge suppression: Internal (ground wire included)
- Dual P/MV outputs may be assigned to decoders
- Wire path connectors included with each decoder
- Number of wire paths: 2
- Automatic daily weather-based scheduling with optional Hunter Solar Sync sensor
- ▶ **Seasonal Adjustment: Global, by Program, or Solar Sync**
- ▶ **Programmable decoders**
- ▶ **Solar Sync Delay**

ELECTRICAL SPECIFICATIONS

- Transformer input: 120/230 VAC, 50/60 Hz
- Max. AC Current Draw: 120 VAC, 2 Amps; 230 VAC, 1 Amp (max. computed with all programs running and optional accessories installed)
- Transformer output: 24 VAC, 4 A, at 120 VAC
 - Decoder Line (path) output: 34 V peak-to-peak
 - Decoder Power draw: 40 mA per active output
 - Solenoid capacity: 2 standard 24 VAC Hunter solenoids per output within 45 m runs, up to 14 solenoids max. simultaneous
- Wiring, Decoder to solenoid: 45 m max.
- 6 two-wire output paths to field decoders
- Diagnostic LEDs with line status, signal activity, decoder and status
- ▶ = *Advanced Feature descriptions on pages 99*



ICD-100, 200, ICD-SEN

Height: 92 mm
Width: 38 mm
Depth: 12.7 mm

ICD-400, 600

Height: 92 mm
Width: 46 mm
Depth: 38 mm

ID WIRE MODEL GUIDE

2 mm ² Decoder Cable		3,3 mm ² Long Range, Heavy-duty Decoder Cable	
ID1GRY	Grey jacket	ID2GRY	Grey 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

ID WIRE MAXIMUM WIRE RUNS

ID 1 Wire	ID 2 Wire
1500 m with I-Core®/DUAL® systems	2300 m with I-Core/DUAL systems
3 km with ICD systems	4.5 km with ICD systems

ACC-99D DECODER	
Model	Description
ACC-99D	2-Wire decoder controller with 99-Station capacity, metal cabinet
ACC-99D-SS	2-Wire decoder controller with 99-Station capacity, stainless wall mount
ACC-99D-PP	2-Wire decoder controller with 99-Station capacity, plastic pedestal
ACC-PED	Metal pedestal, grey powder-coated, for use with I-Core and ACC metal controllers
PED-SS	Stainless steel pedestal for use with I-Core and ACC stainless controllers

DECODER MODELS	
Model	Description
ICD-100	Single-station decoder with surge suppression and ground wire
ICD-200	2-Station decoder with surge suppression and ground wire
ICD-400	4-Station decoder with surge suppression and ground wire
ICD-600	6-Station decoder with surge suppression and ground wire
ICD-SEN	2-input sensor decoder with surge suppression and ground wire

ROAM

Range: **Up to 300 m**
Type: **Remote**

FEATURES

- Works with Hunter X-Core®, Pro-C®, PCC, I-Core® and ACC controllers through a SmartPort® connection
- 128 programmable addresses for use of multiple Roam remotes in the same neighborhood
- Run manual watering cycles without modifying regular program
- Programmable run times: 1 to 90 minutes
- Range: 300 m (line of sight)
- Warranty period: 2 years

REMOTE SPECIFICATION

- Transmitter power source: 4 AAA batteries included
- Receiver power source: 24 VAC, from controller through a SmartPort connector
- System operating frequency: 433 MHz band
- SmartPort connector can be mounted up to 15 m (max.) from controller (use ROAM-SCWH shielded cable wiring harness)
- FCC approved: No FCC licence required



Transmitter and Receiver

Height: 18 cm
Width: 6 cm
Depth: 3 cm



SmartPort

Hunter remotes require the installation of a SmartPort wiring harness. The SmartPort is a connector that is wired to the terminals on the controller, and allows quick connection to any Hunter remote.

Wall Mount Bracket for SmartPort

P/N 258200

ROAM	
Model	Description
ROAM-KIT	Transmitter, receiver, SmartPort wiring harness, and 4 AAA batteries included
ROAM-R	Receiver unit
ROAM-TR	Transmitter unit, and 4 AAA batteries included

OPTIONS	
Model	Description
ROAM-WH	SmartPort wiring harness (length: 1.8 m)
ROAM-SCWH	Shielded SmartPort wiring harness (length: 7.6 m)
258200	Wall mount bracket for SmartPort

CONTROLLERS

ROAM XL

Range: **Up to 3 km**
Type: **Remote**

FEATURES

- Works with Hunter X-Core®, Pro-C®, PCC, I-Core® and ACC controllers through a SmartPort® connection
- Up to 3 km (line of sight) range for remote manual operation of Hunter irrigation systems
- 128 different programmable addresses
- Display shows remaining battery life
- Programmable run times: 1 to 90 minutes
- Large LCD display, push-button operation
- Run manual watering cycles without modifying regular program
- Rugged plastic carrying case included
- Warranty period: 3 years

REMOTE SPECIFICATION

- Transmitter power source: 4 AAA batteries included
- Receiver power source: 24 VAC, from controller through a SmartPort connector
- System operating frequency: 27 MHz band
- SmartPort connector can be mounted up to 15 m (max.) from controller (use ROAM-SCWH shielded cable wiring harness)
- FCC approved: No FCC licence required

* Not available in all countries.



Roam XL
(w/o antenna)
Height: 16 cm
Width: 8 cm
Depth: 3 cm

CONTROLLERS

ROAM XL	
Model	Description
ROAMXL-KIT	Transmitter, receiver, SmartPort wiring harness, 4 AAA batteries and plastic carrying case included
ROAMXL-R	Receiver unit (SmartPort wiring harness included)
ROAMXL-TR	Handheld transmitter, and 4 AAA batteries included

OPTIONS	
Model	Description
258200	Wall Mount Bracket for SmartPort
ROAMXL-CASE	Plastic carrying case
ROAM-WH	SmartPort wiring harness (length: 1.8 m)
ROAM-SCWH	Shielded SmartPort wiring harness (length: 7.6 m)



SmartPort
Hunter remotes require the installation of a SmartPort wiring harness. The SmartPort is a connector that is wired to the terminals on the controller, and allows quick connection to any Hunter remote.



Wall Mount Bracket for SmartPort
P/N 258200

ICD-HP

Type: **Decoder Programmer**

FEATURES

- Program or re-program decoder stations, whether new or installed
- Program any station numbers in any order, or skip stations for future expansion
- Simplifies setup and diagnostics for sensor decoders
- Sensor test functions for Klik and Flow sensors, plus built-in multimeter
- Communicates with decoder through plastic case: wireless electro-magnetic induction saves waterproof connectors
- Compatible with Hunter ICD-HP, DUAL®, and Pilot® series decoders
- USB powered for shop or office use; 4 AA batteries for field use
- All test leads and cables included in durable, foam-padded carrying case
- Turn decoder stations on and view solenoid status, current in milliamps, and more
- Waterproof programming cup
- Backlit adjustable display
- 6 operating languages

ELECTRICAL SPECIFICATIONS

- Power input: 4 AA batteries, or standard USB connector (included)
- Communications: Wireless induction, range 25 mm
- Fused test leads for unpowered decoder functions

APPROVALS

- FCC, CE, C-tick (no licence required)



ICD-HP

Height: 21 cm
Width: 9 cm
Depth: 5 cm

Packaged in an outdoor carrying case, this complete kit includes probes, induction cup, cable, USB power cable for bench use, and 4 AA batteries for field work.

ICD-HP



ICD-HP	
Model	Description
ICD-HP	Wireless handheld decoder programmer, includes all test and power leads, programming cup, and rugged carrying case

PSR

PUMP START RELAY

Type: **Accessory**

FEATURES

- Choice of three models sized accordingly to fit your particular application
- NEMA 3R rated locking plastic enclosure rated for outdoor use, weather resistance and security
- 24 VAC flying leads make it quick and easy to wire to controller
- The PSR-22 meets demanding electrical requirements for UL approval, and the PSR-52/-53 contains UL-approved relays
- Warranty period: 2 Years



Pump Start Relay

Height: 17 cm
Width: 19 cm
Depth: 12 cm

PUMP START RELAY

Model	Description
PSR-22	Double pole/single throw pump start relay for 120 VAC pumps up to 1.5 kW or 230 VAC pumps up to 2.2 kW
PSR-52	Double pole/single throw pump start relay for 120 VAC pumps up to 2.2 kW or 230 VAC pumps up to 5.6 kW
PSR-53	Triple pole/single throw pump start relay for 120 VAC pumps up to 2.2 kW, 230 VAC pumps up to 5.6 kW, or 230 VAC pumps up to 7.5 kW (3 phase)

PUMP START RELAY ELECTRICAL SPECIFICATIONS

Model	Single Phase		3 Phase	Max. Full Load AMPS	Max. Resistive AMPS	Coil VA							
	kW AT 120 VAC	kW AT 230 VAC	kW AT 230 VAC			INRUSH		HOLDING					
						50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz
PSR-22	1.5*	2.2*	N/A	30	40	33	30	1.38	1.25	8	6.5	0.33	0.27
PSR-52	2.2	5.6	N/A	40	50	65	60	2.71	2.50	7.5	5	0.31	0.21
PSR-53	2.2	5.6	7.5	40	50	65	60	2.71	2.50	7.5	5	0.31	0.21

Note:

* Approximate power

PSRB

PUMP START RELAY BOOSTER

FEATURES

- Solves long distance pump start relay power challenges
- Suitable for conventional or ICD decoder connections
- Includes easily activated solid state relay, and local 24V transformer for PSR activation
- Easy wiring with labeled wire connections
- NEMA 3R enclosure with standard key lock

ELECTRICAL SPECIFICATIONS

- Primary AC Power: 120/230 VAC, 50/60 Hz, 50W
- Output (to PSR): 25V, 1600 mA
- MV Input: Dual pole, double throw solid state relay (10 A)



PSRB Pump Start Relay Booster

Height: 22 cm
Width: 18 cm
Depth: 9.5 cm

XC HYBRID

Number of Stations: **6, 12**
 Type: **Battery Operated, Fixed**

FEATURES

- Battery or AC powered
- Type: Fixed
- Number of stations: 6, 12
- Operates DC latching solenoids only
- Enclosures: Indoor and outdoor plastic; outdoor stainless steel
- Independent programs: 3
- Start times per program: 4
- Max. station run time: 4 hours
- Optional Solar Panel SPXCH provides maintenance-free operation
- Compatible with Solar Panel Kit
- One touch manual start and advance
- Warranty period: 2 years
- ▶ Easy Retrieve™ memory
- ▶ Rain sensor bypass
- ▶ Programmable rain delay
- ▶ Non-volatile memory
- ▶ Seasonal Adjustment: Global
- ▶ Delay between stations
- ▶ Sensor programmability

ELECTRICAL SPECIFICATIONS

- Operates DC latching solenoids (only) 9-11 VDC
- P/MV
- Sensor inputs: 1
- Operating temperature: -18° C to 60° C

POWER SOURCE

- Operates on battery power or 24 VAC plug in transformer or optional Solar Panel
- Plastic model uses 6 AA batteries
- Stainless steel model uses 6 C batteries

APPROVALS

- CE, UL, cUL, C-tick
- Plastic model: IP-24
- ▶ = *Advanced Feature descriptions on pages 99*

XC HYBRID	
Model	Description
XCH-600	6-Station indoor/outdoor controller
XCH-600-SS	6-Station outdoor controller, stainless steel
XCH-1200	12-Station indoor/outdoor controller
XCH-1200-SS	12-Station outdoor controller, stainless steel



Plastic Indoor/Outdoor

Height: 22 cm
 Width: 18 cm
 Depth: 10 cm

Stainless Steel Outdoor

Height: 25 cm
 Width: 19 cm
 Depth: 11 cm



XCHSPOLE

with XCHSPB installed pole
 for stainless steel model
 Height: 1 m



SPXCH

Optional solar panel
 Height: 8 cm
 Width: 8 cm
 Depth: 2 cm

MAXIMUM WIRE RUNS

Wire Size	Max. Distance (m)
1 mm ²	152
1.5 mm ²	244
2 mm ²	396
2.5 mm ²	610

OPTIONS (SPECIFY SEPERATELY)

Options	Description
XCHSPOLE	Steel mounting pole (1.2 m)
XCHSPB	Stainless steel mounting bracket (required for pole)
458200*	DC latching solenoid
SPXCH	Solar Panel Kit for XC Hybrid

Notes:
 * Use DC latching Solenoids only

CONTROLLERS

NODE

Number of Stations: **1, 2, 4, 6**
 Type: **Battery Operated, Fixed**

FEATURES

- Type: Fixed
- Battery Operated
- Number of stations: 1, 2, 4, 6
- Enclosure: Outdoor plastic
- Independent programs: 3
- Start times per program: 4
- Max. station run time: 6 hours
- One touch manual start and advance
- Master Valve operation (available in 2, 4, 6 station models)
- Solar Panel Kit (SPNODE) provides maintenance-free operation
- Accepts single or double 9 V batteries for extended battery life
- Solenoid wire length up to 30 m (use 1 mm² wire)
- Programmable off mode
- Submersible to 4 m (IP68 rated)
- Battery life indicator
- Protective rubber cover
- Warranty period: 2 years
- ▶ **Easy Retrieve™** memory
- ▶ **Seasonal Adjustment: Global**

ELECTRICAL SPECIFICATIONS

- Sensor inputs: 1
- Operates DC latching solenoids only (P/N 458200)
- Operating temperature: -18° C to 60° C
- Power source: 9 V battery (up to two) or Solar Panel
- Solar Panel Kit SPNODE eliminates the need for batteries and provides maintenance-free operation

APPROVALS

- CE
- ▶ = *Advanced Feature descriptions on pages 99*



NODE-100
NODE-100-LS
 (less solenoid)
 Diameter: 9 cm
 Height: 6 cm



NODE-200
NODE-400
NODE-600
 Diameter: 9 cm
 Height: 6 cm



NODE-100-Valve
 Diameter: 9 cm
 Height: 6 cm



SPNODE
 Height: 8 cm
 Width: 8 cm
 Depth: 2 cm

CONTROLLERS

NODE		MAXIMUM WIRE RUNS	
Model	Description	Wire Size	Max. Distance (m)
NODE-100	Single station controller (DC latching solenoid included)	1 mm ²	30
NODE-100-LS	Single station controller (DC latching solenoid not included)		
NODE-200	2-Station controller (DC latching solenoid ordered separately)		
NODE-400	4-Station controller (DC latching solenoid ordered separately)		
NODE-600	6-Station controller (DC latching solenoid ordered separately)		
NODE-100-VALVE	Single station controller with PGV-101-G valve and DC latching solenoid (NPT threads)		
NODE-100-VALVE-B	Single station controller with PGV-101-GB valve and DC latching solenoid (BSP threads)		
OPTIONS (SPECIFY SEPARATELY)			
Model*	Description		
458200	DC latching solenoid		
SPNODE	Solar Panel Kit for Node		

WVP & WVC

Number of Stations: **1, 2, 4**
 Type: **Battery Operated, Fixed**

FEATURES

- Type: Fixed
- Battery Operated
- Number of stations: 1, 2, 4
- Enclosure: Outdoor plastic
- Independent station programming
- Start times per program: 9
- Max. station run time: 4 hours
- WVC submersible to 3 m (IP68 rated)
- Battery life indicator
- Wireless remote programming
- Max. solenoid wire run 30 m (use 1 mm² wire)
- Warranty period: 2 years



WVP
 Height: 29 cm
 Width: 8 cm
 Length: 5 cm

ELECTRICAL SPECIFICATIONS

- Simultaneous station operation
- Sensor inputs: 1
- Power source: 9 V battery
- Operates DC latching solenoids only (P/N 458200)
- Operating temperature: -18° C to 60° C
- Frequency: 869 MHz ISM band
- No FCC licence required



WVC
 Diameter: 8 cm
 Height: 13 cm

APPROVALS

- CE

WVP / WVC	
Model	Description
WVC-100	Single station wireless controller (DC latching solenoid ordered separately) 900 MHz ISM band (US/Australia)
WVC-200	2-Station wireless controller (DC latching solenoid ordered separately) 900 MHz ISM band (US/Australia)
WVC-400	4-Station wireless controller (DC latching solenoid ordered separately) 900 MHz ISM band (US/Australia)
WVC-100-E	Single station wireless controller (DC latching solenoid ordered separately) 869 MHz (Europe)
WVC-200-E	2-Station wireless controller (DC latching solenoid ordered separately) 869 MHz (Europe)
WVC-400-E	4-Station wireless controller (DC latching solenoid ordered separately) 869 MHz (Europe)
WVP	Wireless valve programmer to be used with wireless valve controllers
WVPE	Wireless valve programmer to be used with wireless valve controllers (Europe)

CONTROLLERS