



Product Introduction

A Smart Weather-based Irrigation Controller
(HWN12-100, HWN8-200, HWN12-200)

Version 10.1



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NxEco is a smart, weather-based, irrigation controller.

NxEco combines a standard irrigation controller, which operates manually on site; and a weather-based controller, which operates via a smart mobile device.

NxEco complies with Part 15 of the FCC Rules

Models of NxEco Controller

- HWN12-100 : 12 Zones, WiFi Connection, 3.3v DC USB Port
- HWN8-200: 8 Zones, WiFi Connection
- HWN12-200: 12 Zones WiFi Connection, Ethernet Connection, Rain Sensor Port, Zone-Extension Port, 3.3v DC Port

Standard Irrigation Control Irrigation Features

- 12-zone irrigation control (HWN12-100 / HWN12-200), 8-zone irrigation control (HWN8-200)
- Independent zone-specific programming for separated schedules
- Master Valve and pump control function
- A water budget adjustment for five days
- Manual Rain delay maximum to 72 hours
- Memory function that preserves the irrigation program even if power lost

Smart Weather-base Irrigation Control

All of the above features, plus:

Weather-based irrigation control

- Delay the irrigation as connected rain sensor detecting instant rain falls. (HWN12-200)
- Local weather info act to prevent or decrease irrigation after rainy days
- Local weather info (Monthly ET and Daily Forecast) is used by an algorithm to adjust irrigation times for optimal efficiency

Customized irrigation based on type of vegetation

- Irrigation schedule based on individual plant on each zone.
- Smart irrigation fine is added on each zone for customer favors.

Internet access on NxEco

- Embedded Wi-Fi access to AP (IEEE802.11b/g/n), plus
- Wire to Internet via RJ45 Ethernet port
- Weather-based irrigation modification
- Easily modify irrigation times to comply with various city watering restrictions

Mobile operation on NxEco

- Check watering status anytime and from anywhere
- Control irrigation anytime and from anywhere
- Setup irrigation schedules anytime and from anywhere
- Personal water saving service that complies with local watering restrictions
- Nxeco APP operation on iOS, and Android based device
- Nxeco Web-Portal opens to signed up accounts.

Accommodating watering restrictions

- Operation on specified day(s)-of-week schedule; either even day or odd day scheduling
- The ability to set irrigation runtimes to avoid watering during a prohibited time of day
- Complete shutoff (e.g. on/off switch) to accommodate outdoor irrigation prohibition

NxEco electronic and Mechanical Specs

- Size: 6.5 X 9.8 X 1.4 (inches)
- Weight: 1.2 pounds
- AC Input: 24VAC, 60Hz, 750mA (adapter included)
- Valve output: 24VAC, max 8VA

- Indoor operating temperature range*: 32F to 122F / 0° to 50° C
- Outdoor Operation temperature range*: 14F to 130F / -10° to 55° C
- Easy installation requiring just three stews (included)
- Operates either indoor or outdoor (in one water-resistant box)

Panel, Ports and LEDs on NxEco

There is one Dial, eight buttons, and two LED lights on the NxEco Panel.

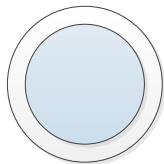
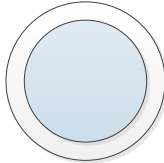
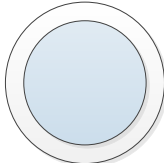



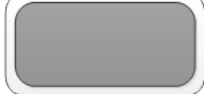
- Dial List:




Dial Setting	Function
OFF	<ul style="list-style-type: none"> • Shuts off watering
Auto Run	<ul style="list-style-type: none"> • Runs programmed watering • Let's smart terminals (smart phone, tablet, PC, etc.) operate this controller
Manual Watering	<ul style="list-style-type: none"> • Initiates instant watering • Runs watering on a zone by zone basis
Rain Delay	<ul style="list-style-type: none"> • Delays watering up to 72 hours
Schedule	<ul style="list-style-type: none"> • Sets up basic watering schedules manually



Weather Adjustment	<ul style="list-style-type: none"> • Checks the auto-setting watering adjustment % though server within weather conditions • Changes the water % manually and keeps this watering adjustment 24 hrs
Special Features (Device Info)	<ul style="list-style-type: none"> • Checks Device S/N and FW version
Setting	<ul style="list-style-type: none"> • Sets up Date and/or Clock manually • Accesses Smart Wi-Fi to securitized AP • Registers NxEco controller on cloud server

- **Button List:**

Button Name	Sign	Function
Zone 1-4	<p>ZONE 1-4</p> 	<ul style="list-style-type: none"> • Setup Zone 1, Zone 2, Zone 3, Zone 4
Zone 5-8	<p>ZONE 5-8</p> 	<ul style="list-style-type: none"> • Setup Zone 5, Zone 6, Zone 7, Zone 8
Zone 9-12	<p>ZONE 9-12</p> 	<ul style="list-style-type: none"> • Setup Zone 9, Zone 10, Zone 11, Zone 12
Operation One		<ul style="list-style-type: none"> • Setup
Operation Two		<ul style="list-style-type: none"> • Setup
Operation Three		<ul style="list-style-type: none"> • Setup
Operation Four		<ul style="list-style-type: none"> • Setup

Smart Wi-Fi		<ul style="list-style-type: none"> • Sets up Wi-Fi access security
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LED List:

LED Name	Sign	Function
Smart Wi-Fi	 <i>Smart Wi-Fi</i>	<ul style="list-style-type: none"> • Off: Wi-Fi access off • Flashing: Controller attempting to establish Wi-Fi connection with router • On: Wi-Fi access to AP successful
Internet	 <i>Internet</i>	<ul style="list-style-type: none"> • Off: Fail to Internet • On: Link to Internet established

• Port List:

Name	Functions
24V AC	Input 24v AC power
8 or Zone Ports	8- 12 ports plus 1- 2 common ports driving 12 valves
Ethernet Port	Connect to Ethernet Cable or Mobile card
USB Port	Connect to USB cable
Extension Port	10-pin port to 24-zone extension box (HWN12-200)

Tech and Service Support

- Life-time free weather aware and optimal irrigation procedure
- Life-time free Botanist advices on line and updated irrigation procedure
- 2-Year standard hardware warranty

NxEco, Inc. www.nxeco.com

Email: support@nxeco.com

FCC STATEMENT

1. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.

(2) This device must accept any interference received, including interference that may cause undesired operation.

2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.