



NETAFIM LANDSCAPE CONTROLLER

Decoder Based 2-Wire Controller with Integrated Diagnostics and Flexibility

NLC-100D DECODER

APPLICATIONS

- For commercial and residential applications
- For recreational applications such as sports fields, parks and arenas
- Nurseries and greenhouses

SPECIFICATIONS

- Stations (valves): 1 - 100
- Electrical input: 115VAC, 50VA
Electrical output: 24VAC
- Maximum simultaneous active valves: 12
- Booster pumps: 2 (1 per program)
- Built-in lightning protection
- Maximum wire lengths: *
16,300' with #14/2
10,200' with #16/2
- Cabinet: NEMA 4 rated locking plastic cabinet or stainless steel cabinet with Class 2 internal transformer
- Diagnostics:
Decoder Test - pass/fail
Short Test - checks line condition
Line Survey - displays 2-Wire voltage and current
- Flow sensing capable

* When running 2 valves simultaneously.

FEATURES & BENEFITS

PROGRAMMABLE LINE DECODER

Decoder is easily programmed by the user with specific station identifications connected anywhere along the 2-Wire path to turn on almost any 24VAC solenoid valve.

SUPPORTS 1 TO 100 VALVES

Operate up to 100 valves with one 2-Wire path, connecting the valves in a series.

INTEGRATED DIAGNOSTICS

Controller tests for decoder operation as well as 2-Wire path conditions.

MANAGE REMOTELY

Control irrigation programs and review daily logs and schedules for multiple sites from any web-based computer (service contract required).

INSTANT TROUBLESHOOTING

Built-in monitors and alarms send automatic notifications pinpointing the exact nature of the problem (service contract required).

EASY TO EXPAND

Adapts to your growing system by allowing the addition or modification of valves with no need for costly rewiring or upgrades.

ENERGY EFFICIENT

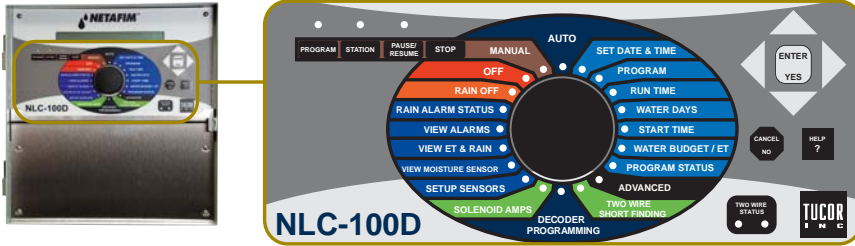
The 2-Wire cable carries both power and signal to control each valve using 1/10th the power of a conventional system.



ADVANCED FEATURES

MIST MANAGER	Valve operations controllable in 1 second increments
FLOSTACK™	Program stacking based on flow for up to 10 simultaneous programs
REALNET	Real-time, internet based water management via GSM or LAN
INTELLISET	Smart irrigation using a host of ET-based capabilities
FLOGUARD	Alarm and control option based on flow monitoring

NLC-100D DECODER CONTROLLER FACE PLATE



OPERATING FEATURES

PROGRAMS	10 + 1 Test Programs, 10 Concurrent
START TIMES	12 per Program
CALENDAR	14 days or Odd/Even
STATION RUN TIMES	0-999 minutes in 1 second increments (<4 minutes) or 10 second increments (4-999 minutes)
WATER BUDGET	0-250% at 1% increments
PROGRAM MODES	Active and Passive
START METHODS	Auto, Manual by Program or Station
DISPLAY	Monitors active programs, run times, line conditions, alarms
DECODERS	Addressed and tested at controller

DECODER SPECIFICATIONS

LEAD LENGTH	11"
DIMENSIONS	1.5" X 1.4" X 2.3"

SURGE PROTECTOR SPECIFICATIONS

NORMAL SPARK OVER VOLTAGE	230V
MAX. SPARK OVER VOLTAGE	450V
MAX. CURRENT	
Surge protector must be installed and grounded every 500' and at the end of the wire run. Resistance of the 2-Wire to ground must be 50Ω or less.	

DIMENSIONS & WEIGHT

LENGTH	12"
DEPTH	6"
HEIGHT	12"
WEIGHT (LBS.)	15

TUCOR WIRE SPECIFICATIONS

INSULATION	POLYVINYLCHLORIDE
JACKET	POLYETHYLENE
SIZES	12-16 AWG
COLORS	RED, GREEN, ORANGE, BLUE
SPOOL LENGTHS	500', 1,000', 2,500'

Some wire colors and spool lengths are special order.

TUCOR WIRE LENGTHS

NUMBER OF SIMULTANEOUS PROGRAMS	VALVES EVENLY DISTRIBUTED ALONG 2-WIRE (FT.)		
	AWG 18	AWG 16	AWG 14
1	7,000	11,000	17,800
2	6,400	10,200	16,300
3	5,500	8,800	14,100
4	4,900	7,800	12,500
5	4,400	7,000	11,200
6	4,000	6,300	10,100
7	3,600	5,800	9,200
8	3,300	5,300	8,500
9	3,100	4,900	7,800
10	2,800	4,600	7,300
10 + 1 MANUAL	2,700	4,300	6,800
10 + 2 MANUAL	2,500	4,000	6,400

DECODERS, SURGE PROTECTION AND WIRES

The decoder is easily programmed with a specific station ID, then connected anywhere along the 2-Wire path to enable valve activation. The decoder energizes almost any 24VAC solenoid and can be reprogrammed with a different ID when desired. Wire options:

- NLC Decoder (Blue: NLC100D) required.
- TUCOR WIRE - is the preferred means of connecting the field decoders to the controller. Tucor wire is designed expressly to ensure a secure, water-tight electrical pathway.

NOTE: Tucor wire is not supplied by Netafim.

- NETAFIM SINGLETNET CABLE - two low capacitance wires and a drain wire, 16 AWG, pre-packaged as a single cable inside a polyethylene sheath.



Field disruptions due to lightning are minimized by the use of the NLCSP100 surge protector which safely absorbs 2-Wire voltage surges adding substantial protection to the 2-Wire path.

ORDERING MATRIX

OPTIONS

NLCDP - 100 - CABINET/PEDESTAL - COMMUNICATION - NO - N

DECODER PANEL

STATION COUNT

CABINET/PEDESTAL
P12 = 12" x 12" x 6" Cabinet (Up to 100 stations)
C12 = 12" x 12" x 6" Cabinet (Up to 25 stations)
C20 = 12" x 20" x 6" Cabinet (Over 25 stations)
PE1 = 2 Piece Top Entry SS Lite Pedestal (1-100 stations)
PE3 = 1 Piece Top Entry SS HD Pedestal (1-100 stations)
NON = No Cabinet or Pedestal

COMMUNICATION
W = Cellular
L = LAN
N = None

NOT HYBRID NO OUTPUT

ORDERING EXAMPLE:

NLCDP-100-P12-N-NON = Model Number **NLCDP100-C12NNON**
Netafim Landscape Controller NLC-100D, Decoder Controller, 100 Stations, 12" x 12" x 6" Cabinet, No Communication, Not Hybrid, No Output Terminal



NETAFIM USA
(888) 638 2346

www.netafimusa.com

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