

## ICOD PLUS

Icod Plus, 2 wire decoder system is the evolution of the Icod coding-decoding system. Like the previous version, it is composed of a control unit ICODE PLUS (able to code the signals coming from the controller to transmit them through the two non-polarised wires) and decoders to receive the signal transmitted (one type for connection to the electrovalves, one for the Master Valve (MV) and a third for Pump Control (CP)).

### Installation

ICOD PLUS is connected to the terminal board of the controller through the (multicolour) cables provided depending on the number of stations to be controlled. Each decoder has 5 wires, 2 of which are connected to the solenoid of the valves or to the pump control circuit, 2 to the ICODE Plus line and the last one to ground.

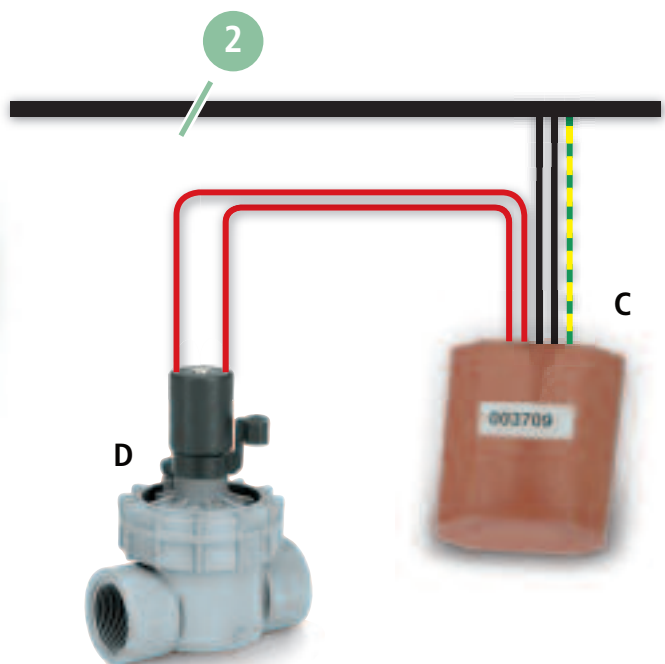
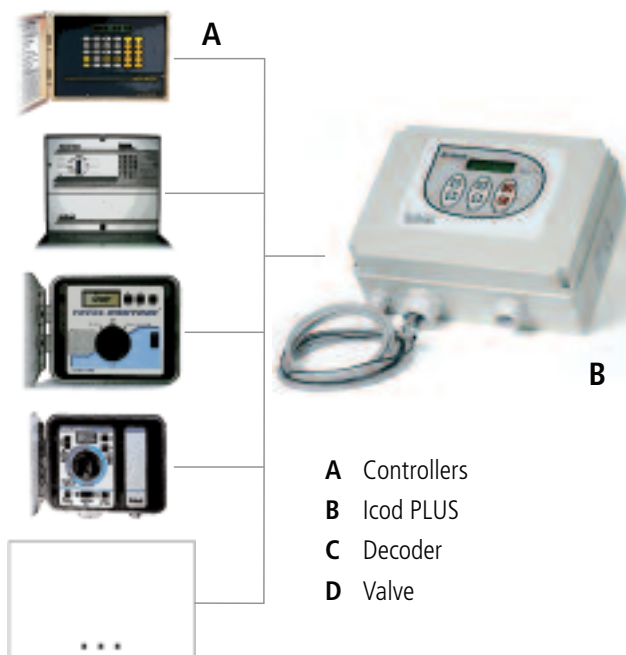
### Features

Like ICOD it has the following features:

- Can be used with all Irritrol controllers and other controllers without open circuit alarm
- The system can operate with a minimum of one module (8 stations) and a maximum of six modules (48 stations)

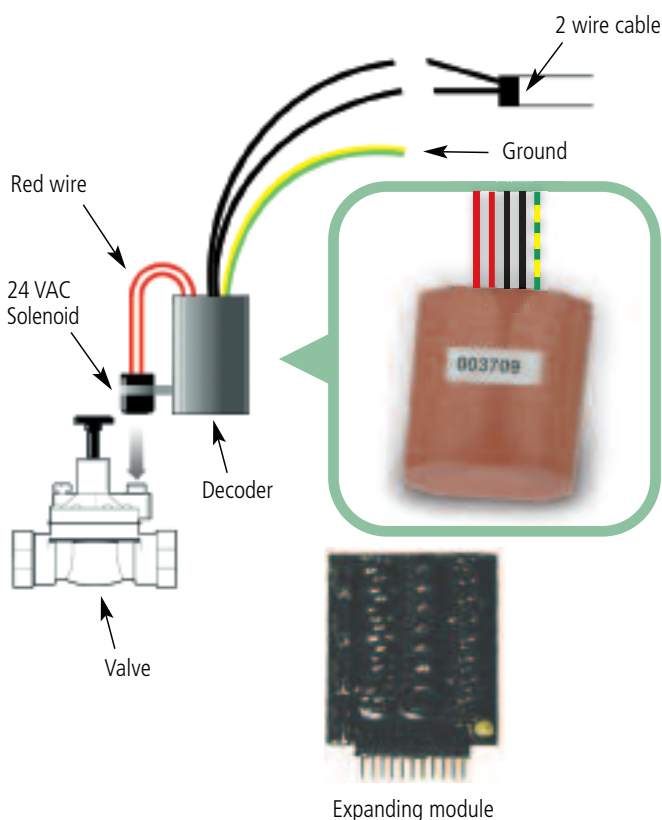


- Easy programming using the six buttons of the ICODE PLUS viewable, on alphanumeric display
- Decoders are identified by a 6-digit code that can be manually programmed or automatically read by ICODE PLUS
- Up to 4 decoders per station or 3 valves per decoder
- 4 different types of alarm which respectively identify potential problems (open circuit, overload, short-circuit and one generic)
- Possibility of updating the software and modifying the operating parameters (delay times between one decoder and the next, EV, MV/CP holding current, station activation via PC, alarm list and erasing, etc.) through a RS232 port for connection to a PC
- Selectable languages: English, Italian, French, Spanish and German.



**Compared to the earlier version, it has the following extra features:**

- Possibility of changing the impedance to better adapt to the various electrical conditions of the system
- Extractable terminals to facilitate system wiring
- Possibility of station activation in manual mode (without the need of a controller to give the command)
- New resin-bonded decoder IP68 (50 cm deep under water)



**Specifications**

- PVC cabinet for indoor/outdoor use (IP56), removable cover with 4 screws, for wall-mounting
- Dimensions: 220 x 300 x 120 mm (H x W x D)
- Stations: 8, 16, 24, 32, 40, 48 depending on the modules installed
- Connections:
  - Power cable 3 x 1 mm<sup>2</sup>
  - Input connection cable: 1 (3 max) x 16 x 0.5 mm<sup>2</sup>
  - Common 1 mm<sup>2</sup> black unipolar cable
  - Decoder connection cable, max 1-6 mm
- Power supply and outputs:
  - Input: primary 230 VAC, 50/60 Hz.
  - Secondary A: 7 VAC, 400 mA
  - Secondary B: 33.5 VAC, 2.2 Amp
  - Output: 2-wire, 46 VDC, max 2 Amp
- Sensor input: N.C. switch
- Alarm output: N.C. or N.O. relay, 230 VAC, 10 Amp
- Terminal boards:
  - Inputs (1,2,3, .... 48) 1 mm
  - Output, max 6 mm
- Temperature: -5°C to +50°C

**Code**

<b>IT-ICODPLUS</b>	16 Station Icod Plus coder
<b>IT-IDECODPLUS</b>	Valve decoder
<b>IT-IDECODM</b>	Master Valve decoder
<b>IT-IDECODP</b>	Pump control decoder
<b>IT-IDECODEXP8PLUS</b>	8 Station expansion module with pre-wired terminal

**Maximum cable lengths**

Cable section FG7 (mm <sup>2</sup> )	Specific resistance (Ohm/km)	Number of valve decoder (connected to only one solenoid) activated simultaneously			
		1	2	3	4
1,0	17,70	3.700	2.300	1.700	1.300
1,5	12,20	5.500	3.500	2.600	1.800
2,5	7,35	9.300	5.800	4.400	3.400
4,0	4,60	14.900	9.400	7.000	5.500
6,0	3,06	22.300	14.100	10.500	8.300

The table refers to a system with 16 decoders