

Input Expansion Card (Optical)

1. Principal of Operation

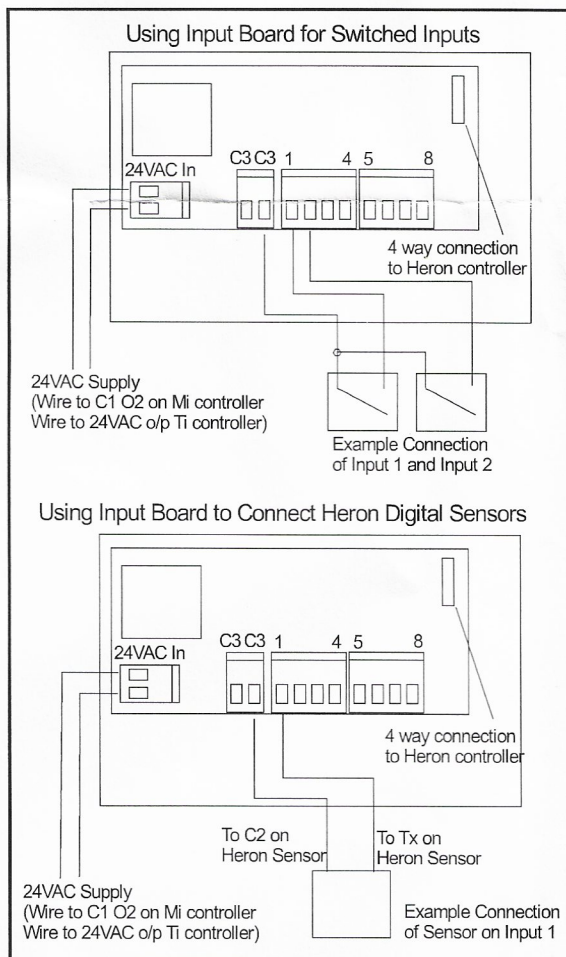
The Input expansion board card increases the number of remote inputs.

The input board can be used to:-

- Increase the number of switched inputs (for example additional remote start inputs)
- Add additional Heron sensors (for example Moisture sensors).

2. Connecting Up the Input Board

The Input is wired up as shown below.



For operation of switched inputs please see next section. For operational description of Heron Sensors please refer to sensor manual.

3. Description of Switched Inputs

Switched inputs can be set to either:-

- Freeze a program
- Stop a Program
- Start a program
- Manually Advance a program
- Stop all irrigation
- Activate a text message and initiate a logging record

Configuring the Inputs

When controller is configured for Input Card additional Option Menu is displayed – “Input Options”
The following options are configurable:-

Input	Option Number to set the use of this input. See the table below for description of uses	Option number to allocate the program controlled by this input
1	1	2
2	3	4
3	5	6
4	7	8
5	9	10
6	11	12
7	13	14
8	15	16

Table of Input Uses

Input Use	Value	Description	Input needs to change state to re-activate the input
Freeze a program	1	Closed contact freezes program	No
Stop a program	2	Closed contact stops a program	Yes
Start a program	3	Closed contact starts a program. Contact must be opened before input reactivated	Yes
Manually Advance a program	4	Closed contact advances a program.	Yes
General monitor	5	Open contact at any time will log a fault. If the GSM module is fitted, a text message will be sent.	Yes
Irrigation monitor	6	Open contact will stop all irrigation programs. A delay period can be optionally assigned to allow the input to stabilize after a valve opens or closes. The delay period is set using option 37. When the irrigation is stopped a fault is logged.	Yes
General Stop (controllers July 2011 onwards)	7	Closed contact stops all programs	No

4. Setting Addresses on Mi and Ti Controllers

Once the card has been installed, the address of the card needs to be defined to the irrigation controller. The card should be given a unique address. The possible addresses are listed in the table below:-

Device	Address
Multi-Wire Driver Board 1	21
Multi-Wire Driver Board 2	22
Multi-Wire Driver Board 3	23
Multi-Wire Driver Board 4	24
Input Board 1	40
Input Board 2	41
MPD 1	45
MPD 2	46
MPD 3	47
MPD 4	48
MPD 5	49
Two Wire Driver Board 1	51
Two Wire Driver Board 2	52
Two Wire Driver Board 3	53
Two Wire Driver Board 4	54

To enter addresses you need to enable Engineering Options. Go into Controller Options and set Option 16 to 137. This will enable Engineering Options.

Now you must Exit Options.

No go back to the Options Menu and **Select Eng Options** from the Options Menu

```
OPTIONS
>Standard Opt
  Prog Options
  Eng Options
```

The **Eng Options** page will be displayed as shown below. Now enter the card addresses of the input card.

Note: The first card is always reserved for the main card that comes with the irrigation controller. This will be 21 for a Mi controller and 51 for Ti controller. Do not change this.

In the example below an input card has been assigned to the next available slot.

```
Eng Opt
Card 1 Address 51
Card 2 Address 40
```