



Maestro Facilities Management Solutions

Heritage I/O Series DNP3.0

Quick Setup Guide (Rev 00)

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This manual is written without any warranty.

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Besides, our company stresses the fact that the performance of the product as well as accessories depends not only on the proper conditions of use, but also on the environment around the places of use.

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Heritage – Quick Setup Guide

1. Configuring the Heritage:

The Heritage application inside the unit has three states that it can be in and they are as follows:

- Application not started
- Application started and in configuration mode
- Application started and in execution mode

In order to download the parameters into the Heritage unit, it must be in configuration mode. So if the application has not started, it will need to be started or if it is already in execution mode, then you will need to go to the “Config Mode”.

2. Operational Buttons

The following parameters are needed to start, stop and download the parameters into the Heritage unit.

Open File:

If the parameters have previously been saved to a file, clicking the “Open File” button will retrieve those parameters so that it may be used to program other Heritage units.

Save File:

Once all the parameters have been correctly entered, clicking the “Save File” button will save the parameters into a file. Simply select the directory and filename for the file.

Detect Baud Rate:

If the user is uncertain of the baud rate in the Heritage unit, clicking the “Detect Baud Rate” button will automatically detect the baud rate provided that the Heritage unit is in “Config Mode”.

Application Status:

If the user is uncertain of the status of the application, clicking the “Application Status” button will detect the status provided that the Heritage application is running.

Start Application:

If the application is in config mode, clicking the “Start Application” button will activate the Heritage application and set it to execution mode.

Verify Config:

Clicking the “Verify Config” button will verify if the parameters have been entered correctly. It is recommended that the user verify the configuration parameters to ensure that it is correct before downloading them into the Heritage unit.

Go Config Mode:

If the Heritage application is currently running, clicking the “Go Config Mode” will set the Heritage unit into configuration mode.

Start Application:

If the application is in configuration mode, clicking the “Start Application” button will start the Heritage application and set it to execution mode.

Stop Application:

If the application is in execution mode, clicking the “Stop Application” button will stop the Heritage application and set it to configuration mode.

Download:

If the application is in configuration mode, clicking the “Download” button will download the parameters into the Heritage unit.

Upload:

Parameters from the Heritage unit may be uploaded and save into a file. Clicking the “Upload” button will upload the parameters from the Heritage unit.

Exit:

Exit the configuration program.

3. Heritage System Settings Parameters

The following parameters are needed for the Heritage unit to work correctly.

Software Password:

Every Heritage unit will require a unique 128bit encrypted password to operate. This will be supplied with the purchase of the Heritage unit or Heritage firmware.

Network Setting:

The Heritage unit can operate in one of three modes – (a) Standalone, (b) SMS and (c) GPRS mode.

1. In Standalone mode, the Heritage unit act as a Modbus or DNP 3.0 slave device. Communications is direct via the serial port on the unit.
2. In SMS mode, the Heritage unit act as a cost-effective Modbus or DNP 3.0 slave device and using SMS as the communications medium. The SCADA data packets are sent / received via SMS. In the SMS mode, it is necessary to use the SMS Converter at the server site.
3. In GPRS mode, the Heritage unit act as a cost-effective Modbus or DNP 3.0 slave device and using GPRS as the communications medium. The SCADA data packets are sent / received using GPRS. In the GPRS mode, it is necessary to use the GPRS ROUTER server software at the server site.

In both SMS and GPRS mode, the Heritage unit also act as a wireless gateway for other devices that are attached to the serial port. It is important that the device IDs of the attached devices are different to the device ID configured for the Heritage unit.

For example, more I/Os can be added by attaching an external PLC to the serial port or by using another Heritage unit in standalone mode.

GPRS Setting:

These are the parameters associated with the connection to the GPRS network and are not available for configuration in Standalone or SMS mode.

- **APN:**
This is the “Access Point Name”. The APN is different for different telecommunications companies. For example, in Australia there are three major telecommunications companies and their APNs are as follows:

Telstra – telstra.internet
Optus – internet
Vodafone – vfinternet.au

- **User Name:**
For most SIM cards with GPRS enabled, the telecommunications company will only provide dynamic IP addresses each time the user connects onto the GPRS network. With these accounts, no user name is required. For the “User Name” field, leave it as blank.

However, for private VPN, the user will be provided with a user name and password to access the GPRS network.

- **Password:**
For most SIM cards with GPRS enabled, the telecommunications company will only provide dynamic IP addresses each time the user connects onto the GPRS network. With these accounts, no password is required. For the “Password” field, leave it as blank.

However, for private APN, the user will be provided with a user name and password to access the GPRS network.

SIM Card Setting:

If the SIM card has a PIN number, enter the PIN number in this field. It is recommended that the PIN is removed for operations in the field.

SMS Setting:

In SMS mode only, it is necessary to specify the number of the server SIM card. Enter the mobile number in this field in international format i.e. +country code then mobile number without the initial “0”.

Client Setting:

These parameters uniquely identify the Heritage unit and its elementary functions.

- **Client ID:**
Enter a meaningful and unique name to identify the Heritage unit. In GPRS mode, this name **MUST** match the name at the server or else it will not be able to authenticate itself to the server. The name can contain alphanumeric characters.*
- **Site Name:**
Enter a meaningful and unique name to identify the site where the Heritage unit resides. The name can contain alphanumeric characters.*

* Do NOT use spaces, use “_” character instead.

- **Country:**
Enter the country of usage here. This will be used to check against the mobile number(s) programmed.
- **Reboot Interval:**
This parameter will force the remote Heritage unit to reboot at periodic interval. This feature is useful in case the Heritage unit requires rebooting to resume normal operation. To reboot once a day, enter 1440. Otherwise, enter in the appropriate period in minutes.

Server Setting:

These parameters determine how the Heritage unit shall connect to the server in GPRS mode.

- **Server IP:**
Enter the IP address of the router server in this field. Normally, the server IP address is static and the PC connected to the Internet via ADSL or company's LAN.
- **Host Name:**
If the server IP address is not fixed, it is possible to use the services from www.dyndns.org where the host name can be fixed but the IP addresses changes. Using this method, there is no need to change the IP address if the Host Name is used. Select a name that is unique. For example, use "scada.dyndns.org" for this field.

Note: Enter only the IP address or Host Name but NOT both. The maximum allowable length for this field is 40 characters, so it is necessary to keep the host name less than 40 characters. For example, "GPRS.dyndns.org" is valid.

- **Server Port #:**
If in doubt, ask your IT administrator what port to use for the Innov8tiveROUTER server application because it is necessary to let data through on this port if there is a firewall in place. The default value is "8888". The same port number must be configured on the server side.
- **Heartbeat Acknowledge Service:**
The option is Disable or Enable. The recommended option is "Enable" because the server must acknowledge that it has receive the heartbeats or the Heritage unit will send several "Emergency Heartbeats" and finally if it does not receive any acknowledgements from the GPRS ROUTER server.
- **Data Encryption Service:**
The option is Disable or Enable. The recommended option is "Enable" to provide a secure link. All data are encrypted using 128 bit encryption, similar to those used in Internet banking.

Communications with Device:

These are the serial port interface settings in the computer to communicate with the Heritage unit.

- **COM Port**
Select the appropriate COM port to communicate with the Heritage unit.
- **Baud Rate**
300, 600, 1200, 2400, 4800, 9600, 19200, 38400, 57600 and 115200
- **Byte Size**
7 or 8 data bits
- **Stop Bit(s)**
1, 1.5 or 2
- **Parity Bit**
None, even, odd, mark or space
- **Flow Control**
None or CTS/RTS

Device COM Setting:

These are the serial port interface settings in the Heritage unit to communicate with the attached device(s).

- **Band Frequency**
Mono Band Mode 850Mhz
Mono Band Mode 900Mhz Extended (900E)
Mono Band Mode 1800Mhz
Mono Band Mode 1900Mhz
Dual Band Mode 850 / 1900Mhz
Dual Band Mode 900E (Extended) / 1800MHz *
Dual Band Mode 900E (Extended) / 1900MHz

* Most common mode used.
- **Baud Rate**
300, 600, 1200, 2400, 4800, 9600, 19200, 38400, 57600 and 115200
- **Number of Data Bits**
7 or 8 data bits
- **Number of Stop Bit(s)**
1, 1.5 or 2
- **Parity**
None, even, odd, mark or space
- **Flow Control**

None or CTS/RTS

- **Bytes to Wait (End Packets)**

In order to keep the protocol data together, use this setting to determine how long the Heritage unit will wait when there is no data before sending the data packets contiguously to the GPRS network or out the serial port of the Heritage unit. This is an important feature because SCADA protocols do not like to be broken up.

For example, with Modbus RTU protocol if there is a gap of two bytes, then it considers it to be the end of that packet. Therefore, enter 2 in this field if the protocol is Modbus RTU protocol.

Reconnect Settings:

There are different reasons why the communication links between the Heritage unit and GPRS ROUTER server will be disconnected. The telecommunications company could disconnect the session, power failure at the remote site, server PC reboots etc. Whatever the reason might be, it is important that the remote Heritage unit reconnect with the server. For this, there are three levels that the Heritage unit will go through in order to connect with the server again. Each level has a “time to wait” and the “number of retries” parameter.

Level 1 (Time to Wait = 30s, Number of Retries = 3):

This assumes that the telecommunications company has disconnected the session. The Heritage unit will retry the connection every 30s for 3 times.

Level 2 (Time to Wait = 60s, Number of Retries = 3):

This assumes that the server had to reboot. After all the retries in level 1, the Heritage unit will use the parameters in level 2 to connect to the server. If it still could not connect, then it will use the parameters in level 3.

Level 3 (Time to Wait = 3600s, Number of Retries = 3):

This assumes that there is an extended problem at the server end.

For all the three levels, please adjust the parameters to suit your needs. For the server PC, we would recommend using a sufficiently large UPS or some form of backup power to avoid the PC from rebooting.

4. Modbus Slave Settings

For the Heritage unit, the standard unit has six (6) Digital Inputs and six (6) Digital Outputs. Four optional analogue inputs are available using the external PCB attachment for the Heritage unit.

Slave Device:

Enter the appropriate details for the following parameters:

- **Address**
This is the device ID of the Heritage unit as seen by the SCADA server.
- **Description**
Enter the general description for the device here.
- **Number of Records**
In Modbus RTU mode, this is the number of Modbus registers. The standard unit with six (6) Digital Inputs and six (6) Digital Outputs will have twelve (12) registers or records. For units with the optional four (4) analogue inputs, the number of registers or records is sixteen (16).

The Heritage unit support four different Modbus types and functions 1 – 6. The types supported are as follows:

- Coil Status (CS)
- Input Status (IS)
- Holding Register (HR)
- Input Register (IR)

The Input Status and Input Registers may NOT be written to and are to be used with Digital Inputs and Analogue Inputs respectively.

Functions 5 & 6 are used to operate the coils or relays in the Heritage unit.

Normally with Modbus devices, they do not support time-stamping when the digital input changes state. The Heritage unit does support time-stamping of digital inputs with 1 millisecond resolution. Simply poll the appropriate registers to retrieve the date / time information.

The Digital Inputs also act as counters. Using the Modbus Master program, write the appropriate “multiplying” factors into the registers and it will increment the values accordingly each time the Digital Input changes state.

General Buttons:

The general buttons on the right hand side are related to parameters collectively:

- **Open File**
Open an existing file where the parameters are stored. This is useful in programming the Heritage units when the parameters are the same.
- **Save File**
Save the existing parameters into a file.
- **Verify Config**
Verifies the parameters entered to ensure the correctness of each field.
- **Download**
Download the parameters into the Heritage unit. It will check that the unit is in "Config Mode" before downloading the parameters. Otherwise, an error message will appear to indicate the problem.
- **Upload**
It is possible to upload the existing parameters from the Heritage unit and saves the parameters into a file.

Modbus Profile		
Type 1 - 6 x DIs and 6 x DOs		
Modbus Register	Description	
10001	Digital Input # 1	
10002	Digital Input # 2	
10003	Digital Input # 3	
10004	Digital Input # 4	
10005	Digital Input # 5	
10006	Digital Input # 6	
00001	Digital Output # 1 Status	Corresponding Digital Output
00002	Digital Output # 2 Status	Corresponding Digital Output
00003	Digital Output # 3 Status	Corresponding Digital Output
00004	Digital Output # 4 Status	Corresponding Digital Output
00005	Digital Output # 5 Status	Corresponding Digital Output
00006	Digital Output # 6 Status	Corresponding Digital Output
30001	Power Up - Year	
30002	Power Up - Month	
30003	Power Up - Date	
30004	Power Up - Hour	
30005	Power Up - Minute	
30006	Power Up - Second	
30007	Power Up - MilliSecond	
30008	Digital Input # 1 - Year	When the DI changes state, record the latest date/time change into Input Registers Does not matter if it is from OFF->ON or ON->OFF. As long as it changes state, then write the date/time values into the Modbus registers
30009	Digital Input # 1 - Month	
30010	Digital Input # 1 - Date	
30011	Digital Input # 1 - Hour	
30012	Digital Input # 1 - Minute	
30013	Digital Input # 1 - Second	
30014	Digital Input # 1 - MilliSecond	
30015	Digital Input # 2 - Year	
30016	Digital Input # 2 - Month	
30017	Digital Input # 2 - Date	
30018	Digital Input # 2 - Hour	
30019	Digital Input # 2 - Minute	
30020	Digital Input # 2 - Second	
30021	Digital Input # 2 - MilliSecond	
30022	Digital Input # 3 - Year	
30023	Digital Input # 3 - Month	
30024	Digital Input # 3 - Date	
30025	Digital Input # 3 - Hour	
30026	Digital Input # 3 - Minute	
30027	Digital Input # 3 - Second	
30028	Digital Input # 3 - MilliSecond	
30029	Digital Input # 4 - Year	

30030	Digital Input # 4 - Month	
30031	Digital Input # 4 - Date	
30032	Digital Input # 4 - Hour	
30033	Digital Input # 4 - Minute	
30034	Digital Input # 4 - Second	
30035	Digital Input # 4 - MilliSecond	
30036	Digital Input # 5 - Year	
30037	Digital Input # 5 - Month	
30038	Digital Input # 5 - Date	
30039	Digital Input # 5 - Hour	
30040	Digital Input # 5 - Minute	
30041	Digital Input # 5 - Second	
30042	Digital Input # 5 - MilliSecond	
30043	Digital Input # 6 - Year	
30044	Digital Input # 6 - Month	
30045	Digital Input # 6 - Date	
30046	Digital Input # 6 - Hour	
30047	Digital Input # 6 - Minute	
30048	Digital Input # 6 - Second	
30049	Digital Input # 6 - MilliSecond	
40001	Counter # 1	
40002	Multiplying Factor # 1	
40003	Counter #2	
40004	Multiplying Factor # 2	
40005	Counter #3	
40006	Multiplying Factor # 3	
40007	Counter #4	
40008	Multiplying Factor # 4	
40009	Counter #5	
400010	Multiplying Factor # 5	
400011	Counter #6	
400012	Multiplying Factor # 6	

Sample Configuration:

GPRS Mode:

The screenshot displays the 'Modbus Slave Settings' window of the 'HERITAGE - I/O v3.0.2' application. The window is divided into several sections for configuring GPRS communication:

- Program Setting:** Software Password: D8-B2-79-78-35-48-58-B6-6C-41-73-40-BA-14-8B-A2
- Network Setting:** Networked(GPRS)
- Client Setting:** Client ID: RemoteHeritage_IO, Site Name: RemoteHeritage_Site, Country: Australia, Reboot Interval: 1440
- Server Setting:** Server (IP): . . . (Hostname): scada.dyndns.org, Server Port #: 8888, HeartBeat Interval: 1, HB Ack Service: Enable, Encrypt Service: Enable
- Reconnect Settings:** Level 1 (WT: 30, Retry: 3), Level 2 (WT: 60, Retry: 3), Level 3 (WT: 90, Retry: 3)
- GPRS Setting:** APN: internet, Username: , Password:
- SIM Card Setting:** Sim Card Pin:
- SMS Setting:** Server Phone #:
- Communication With Modem:** Com Port: COM3, Baud Rate: 115200, Byte Size: 8, Stop Bit: 1, Parity Bit: NONE, Flow Control: RTS/CTS
- Modem COM Setting:** Band Frequency: dual-band mode 900E (extended) /1800 MHz, Baud Rate: 115200, Parity Bit: NONE, Byte Size: 8, Flow Control: NONE, Stop Bit: 1, Bytes to wait (End packet): 1

On the right side of the window, there is a vertical column of control buttons: Open File, Save File, Detect Baudrate, Application Status, Verify Config, Go Config Mode, Start Application, Stop Application, Download, Upload, and Exit.

In GPRS mode, use the GPRS ROUTER at the server site to route the data packets to the appropriate remote site.

SMS Mode:

HERITAGE - I/O v3.0.2

System Settings | **Modbus Slave Settings**

Program Setting
Software Password : D8-B2-79-78-35-48-58-B6-6C-41-73-40-BA-14-8B-A2

Network Setting : Networked(SMS)

Client Setting
Client ID : RemoteHeritage_ID_
Site Name : RemoteHeritage_Site
Country : Australia
Reboot Interval : 1440 (1 per ? Min)

Server Setting
Server (IP) :
(Hostname) : scada.dyndns.org
Server Port # : 8888
HeartBeat Interval : 1 (1 per ? Min)
HB Ack Service : Enable
Encrypt Service : Enable

Level 1 Reconnect Setting
WT (sec) : 30 Retry : 3

Level 2 Reconnect Setting
WT (sec) : 60 Retry : 3

Level 3 Reconnect Setting
WT (sec) : 90 Retry : 3

GPRS Setting
APN : internet
Username :
Password :

SIM Card Setting
Sim Card Pin :

SMS Setting
Server Phone # :

Communication With Modem
Com Port : COM3
Baud Rate : 115200
Byte Size : 8
Stop Bit : 1
Parity Bit : NONE
Flow Control : RTS/CTS

Modem COM Setting
Band Frequency : dual-band mode 900E (extended) /1800 MHz
Baud Rate : 115200 Parity Bit : NONE
Byte Size : 8 Flow Control : NONE
Stop Bit : 1 Bytes to wait (End packet) : 1

Open File
Save File
Detect Baudrate
Application Status
Verify Config
Go Config Mode
Start Application
Stop Application
Download
Upload
Exit

In SMS mode, use the SMS Converter application at the server site to route the data packets to the appropriate remote site.

Standalone Mode:

The screenshot displays the 'HERITAGE - I/O v3.0.2' application window with the 'Modbus Slave Settings' tab selected. The interface is organized into several sections:

- Program Setting:** Software Password: D8-B2-79-78-35-48-58-B6-6C-41-73-40-BA-14-8B-A2
- Network Setting:** Standalone (selected)
- Client Setting:** Client ID: RemoteHeritage_ID_, Site Name: RemoteHeritage_Site, Country: Australia, Reboot Interval: 1440
- Server Setting:** Server (IP): (empty), (Hostname): scada.dyndns.org, Server Port #: 8888, HeartBeat Interval: 1, HB Ack Service: Enable, Encrypt Service: Enable
- Level 1 Reconnect Setting:** WT (sec): 30, Retry: 3
- Level 2 Reconnect Setting:** WT (sec): 60, Retry: 3
- Level 3 Reconnect Setting:** WT (sec): 90, Retry: 3
- GPRS Setting:** APN: internet, Username: (empty), Password: (empty)
- SIM Card Setting:** Sim Card Pin: (empty)
- SMS Setting:** Server Phone #: (empty)
- Communication With Modem:** Com Port: COM3, Baud Rate: 115200, Byte Size: 8, Stop Bit: 1, Parity Bit: NONE, Flow Control: RTS/CTS
- Modem COM Setting:** Band Frequency: dual-band mode 900E (extended) /1800 MHz, Baud Rate: 115200, Parity Bit: NONE, Byte Size: 8, Flow Control: NONE, Stop Bit: 1, Bytes to wait (End packet): 1

On the right side of the window, there is a vertical column of buttons: Open File, Save File, Detect Baudrate, Application Status, Verify Config, Go Config Mode, Start Application, Stop Application, Download, Upload, and Exit.

In standalone mode, the Heritage unit act as a PLC.

Modbus Slave Settings:

HERITAGE - I/O v3.0.2

System Settings **Modbus Slave Settings**

Slave Device

Address : 1

Description : Heritage_ID

Number of Records : 12

IO Setting

#	I/O Type	Register Type	Register Address
1	INPUT	IS	1
2	INPUT	IS	2
3	INPUT	IS	3
4	INPUT	IS	4
5	INPUT	IS	5
6	INPUT	IS	6
7	OUTPUT	CS	1
8	OUTPUT	CS	2
9	OUTPUT	CS	3
10	OUTPUT	CS	4
11	OUTPUT	CS	5
12	OUTPUT	CS	6

Reset 1x record

Reset All

Open File

Save File

Verify Config

Download

Upload

For the Heritage unit, the standard unit has six (6) Digital Inputs and six (6) Digital Outputs. Four optional analogue inputs are available using the external PCB attachment for the Heritage unit.

5. DNP 3.0 Settings

For the Heritage unit, the standard unit has six (6) Digital Inputs and six (6) Digital Outputs. Four optional analogue inputs are available using the external PCB attachment for the Heritage unit.

Slave Device:

Enter the appropriate details for the following parameters:

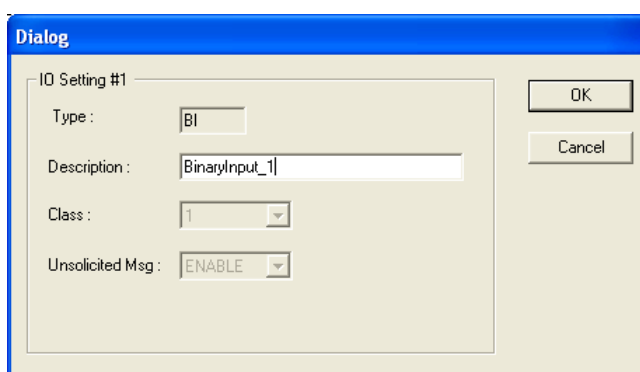
- **Address**
This is the device ID of the Heritage unit as seen by the DNP 3.0 server.
- **Description**
Enter the general description for the device here.
- **GSM Auto Time Sync**
In SMS or GPRS mode, the Heritage unit may be time sync by the DNP 3.0 master or the GSM network. Typically, the DNP 3.0 master will time synchronise the remote outstations. Therefore, select "Disable" if the DNP 3.0 master will perform the time synchronisation.

I/O Setting:

The default Heritage unit support six (6) binary inputs and six (6) binary outputs. The four analogue inputs are optional.

- **Binary Inputs**
For the number of binary inputs, select "6".

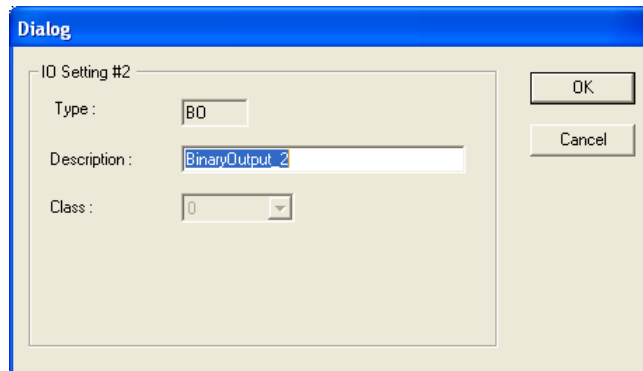
Currently, the binary inputs are assigned as Class 1 and unsolicited reporting is enabled. The only parameter that the user may change is the description for each binary input.



The screenshot shows a dialog box titled "Dialog" with a blue header. Inside, there is a section for "IO Setting #1". It contains four fields: "Type" (text box with "BI"), "Description" (text box with "BinaryInput_1"), "Class" (dropdown menu with "1"), and "Unsolicited Msg" (dropdown menu with "ENABLE"). On the right side of the dialog, there are "OK" and "Cancel" buttons.

- **Binary Outputs**
For the number of binary outputs, select "6".

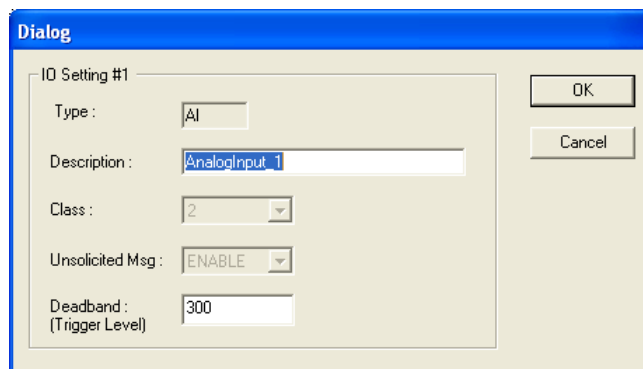
Currently, the binary outputs are assigned as Class 0. The only parameter that the user may change is the description for each binary output.



- **Analogue Inputs**

For the number of analogue inputs, select “4” if the optional external analogue board is used.

Currently, the binary inputs are assigned as Class 2 and unsolicited reporting is enabled. The only parameters that the user may change are the description for each analogue input and the “deadband” or trigger level.



Select / Operate Arm Setting:

For the output control, the Heritage unit support both “Direct Operate” and “Select then Operate” commands. This parameter determines how long the Heritage unit should wait after it receives the “Select” command to validate the next “Operate” command. If the “Operate” command is not received within the given period, the Heritage unit will not act on the “Operate” command.

Unsolicited Message Setting:

The parameters in this section determines if unsolicited reporting for Class 1, Class 2 and Class 3 events are supported or not.

For the address parameter, this is the DNP 3.0 master address. It ranges from 1 – 65534.

Event Scan Period Setting:

For binary and analogue inputs where unsolicited reporting is enabled, this parameter is useful in staggering the reporting back to the DNP 3.0 master so that it is not overwhelmed by the alarms from the same event. For example, if there is a black out within a certain of the power grid, the Heritage units in the region will all report back to the DNP 3.0 master. Rather than flooding the DNP 3.0 master with all the alarms at the same time, the user can configure the Heritage units to send back the alarms in a staggered regime. It is useful in “prioritising” the alarms back to the DNP 3.0 master.

General Buttons:

The general buttons on the right hand side are related to parameters collectively:

- **Open File**
Open an existing file where the parameters are stored. This is useful in programming the Heritage units when the parameters are the same.
- **Save File**
Save the existing parameters into a file.
- **Verify Config**
Verifies the parameters entered to ensure the correctness of each field.
- **Download**
Download the parameters into the Heritage unit. It will check that the unit is in “Config Mode” before downloading the parameters. Otherwise, an error message will appear to indicate the problem.
- **Upload**
It is possible to upload the existing parameters from the Heritage unit and saves the parameters into a file.

DNP 3.0 Slave Settings:

HERITAGE - I/O V5.0.4

System Settings | Modbus Slave Settings | **DNP3 Slave Settings**

Slave Device

Address :

Description :

GSM Auto Time Sync :

Open File

Save File

Verify Config

Download

Upload

IO Setting

No. of Binary Inputs :

#	Type	Description	Class	Unsolicit	
1	BI	BinaryInput_1	1	ENABLE	-
2	BI	BinaryInput_2	1	ENABLE	-
3	BI	BinaryInput_3	1	ENABLE	-
4	BI	BinaryInput_4	1	ENABLE	-
5	BI	BinaryInput_5	1	ENABLE	-
6	BI	BinaryInput_6	1	ENABLE	-

Reset

No. of Binary Outputs :

#	Type	Description	Class		
1	BO	BinaryOutput_1	0	-	-
2	BO	BinaryOutput_2	0	-	-
3	BO	BinaryOutput_2	0	-	-
4	BO	BinaryOutput_4	0	-	-
5	BO	BinaryOutput_5	0	-	-
6	BO	BinaryOutput_6	0	-	-

Reset

No. of Analog Inputs :

#	Type	Description	Class	Unsolicit	Deadband
1	AI	AnalogInput_1	2	ENABLE	300
2	AI	AnalogInput_2	2	ENABLE	300
3	AI	AnalogInput_3	2	ENABLE	300
4	AI	AnalogInput_4	2	ENABLE	300

Reset

Select/Operate Arm Setting

Timeout (ms) :

Unsolicited Message Setting

Address :

Class 1 :

Class 2 :

Class 3 :

Event Scan Period Setting

Binary & Analog Change Event (Delay Interval) :