

BIANCO iCON SERIES CONTROLS

BIA-iPRESSPRO (802776)

DIGITAL PUMP CONTROLLER (AUTO RESTART)

USER MANUAL

(Please read carefully before using)



2018

 **WHITE**
INTERNATIONAL

BIA-iPRESSPRO_IM_20180119

1. Technical data:

Voltage:	240V
Frequency:	50Hz
Power:	2.2kW max
Current:	16 A Max
Rating:	IP65
Min differential pressure:	0.3 bar
Max Working pressure:	10 bar
Cut out pressure:	0.8 – 9.8 bar
Max Ambient temperature:	60°C
Cut in pressure:	0.5 – 6 bar
Max differential pressure:	9.3 bar
Inlet/outlet:	1" BSP male

2. Control Characteristics

The BIA-IPRESSPRO is an adjustable digital pump pressure controller. It starts and stops the pump according to the detected water pressure and flow through the pipe. This controller can be used to replace a conventional pressure tank, pressure switch installation (Mode 1), In Mode 2 a pressure tank is required. Electric components are completely isolated from the pipe work.

- Digital display gives you a real time indication of the pressure in the pipeline.
- Two working modes which can easily be changed with the push of a button.
- Overload protection
- Over pressure protection
- Built in protection to prevent the motor from starting and stopping too often.
- Anti-seize function if pump has not operated for some time.
- Auto restart function when supply tank re-fills

3. Installation

Installation and maintenance of the controller must be performed by a qualified professional. This controller has been designed to work with clean water. The user should check the water source. Iron oxide will cause failure.

This controller is only to be installed on pumps that meet its requirements. It is suggested that the user check the pump is free of defects before installation.

The controller is to be installed on the discharge of the pump before any outlets/taps.

Direction of flow is indicated by an arrow on the inlet and outlet.

Avoid any debris in the pipeline and controller to prevent failure.

The controller must be installed vertically.

Refer to Diagram 1, 2 and 3 on the following page for further information.

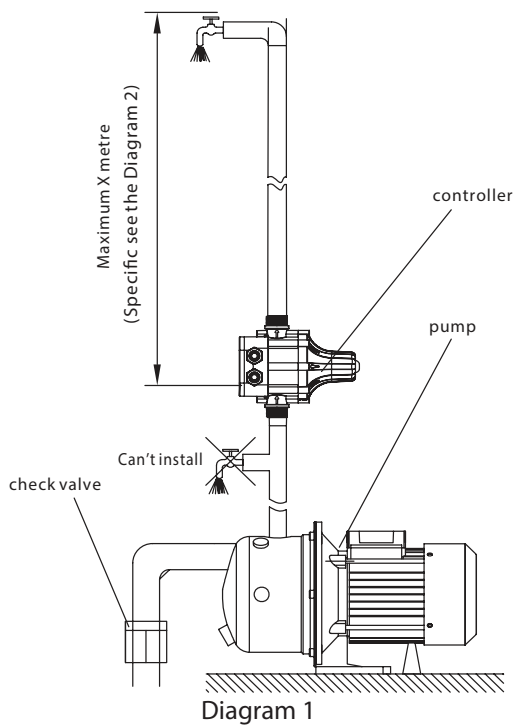


Diagram 1

Starting Pressure (Bar)	The distance between highest position of the tap and the controller - no more than (M)	Theoretical value of the lowest head for corresponding pump	Suggested value of the lowest head
1.2	12	15	18
1.5	15	18	21
2.2	22	25	28

Diagram 2

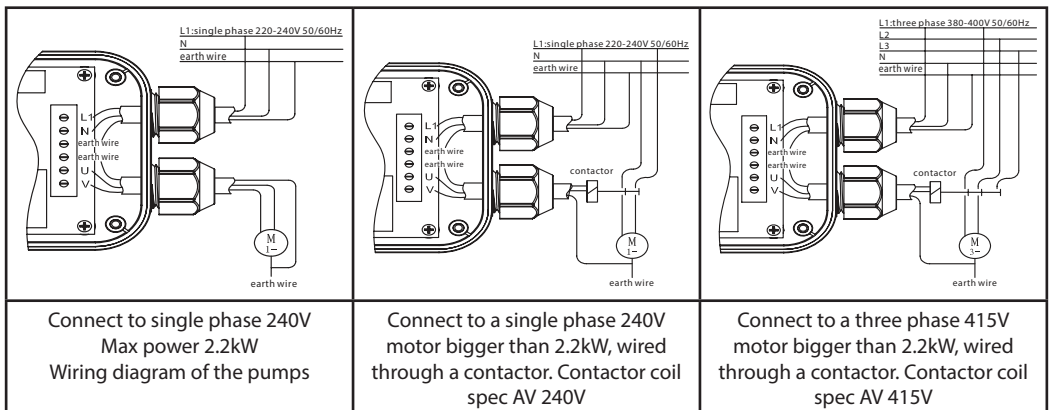
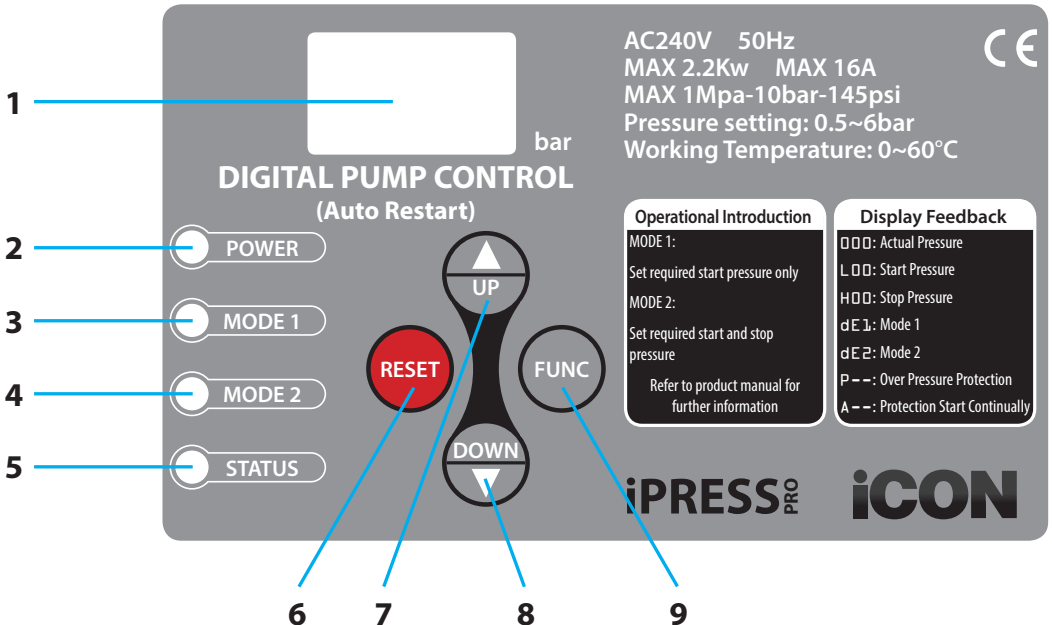


Diagram 3

3. Control Functions

No.	Name	Function
1	Digital Display	<ol style="list-style-type: none"> 1. Real time pressure 2. Start pressure 3. Stop pressure 4. Mode 1 - Electronic Pump Control 5. Mode 2 - Electronic Pressure Switch 6. Overpressure protection 7. Frequent start protection
2	Power	LED constant - Power connected
3	Mode 1	<ol style="list-style-type: none"> 1. LED constant - Pump is in precise control mode 2. Start pressure can be set
4	Mode 2	<ol style="list-style-type: none"> 1. LED constant - Pump is in precise control mode 2. Start/Stop pressure can be set
5	Status LED	<ol style="list-style-type: none"> 1. LED constant - Pump working 2. LED off - Pump stopped 3. LED flashing - Pump short of water
6	Reset	Restart the pump at any time
7	Up Arrow	Adjust up
8	Down Arrow	Adjust down
9	Function	Set mode and pressure



4. Operating instructions

Please note the factory default setting for BIA-IPRESS is mode 1 with a cut in pressure of 1.5bar. No adjustment is required if replacing a standard Auto Restart Pump Controller.

Setting working parameters

- Press the **FUNC** button (9) **AND** the **UP** button (7) at the same time for 5 seconds. The screen will display "dE1" and Flash. "dE1" means the pump is working at its maximum cut out pressure. In this mode, only the starting or cut in pressure can be adjusted and the pump will stop working at its maximum head.
- "dE2" means the controller is in mode 2. In this mode, the cut in and cut out pressures can be set as desired. (Please note the maximum head height of the pump before adjusting the cut out pressure.) The modes can be changed between mode 1 and mode 2 by pressing the **FUNC** button (9) **AND** the **UP** button (7) at the same time for 5 seconds, then within 3 seconds the DOWN arrow. To change between mode 2 and mode 1 press the **FUNC** button (9) **AND** the **UP** button (7) at the same time for 5 seconds button then within 3 seconds the UP arrow.

4.1 Setting the pressure

Important Note: When making adjustments to the pressure settings, the controller will exit the adjustment state if no buttons have been pushed within 3 seconds.

- In mode "dE1", within 3 seconds press **FUNC** and the screen will display L1.5 where 1.5 indicates 1.5bar cut in (Factory Default). The cut in pressure can be adjusted **UP** or **DOWN** using the direction arrows (7 & 8). Press or hold the UP button to raise the cut in pressure, Press or hold the **DOWN** button to lower the cut in pressure. The adjustment range is 0.5-6 bar.

Mode 1, FUNC, L1.5, UP or DOWN arrow to adjust.

Important Note: Factory Default settings for mode 2 are L1.5 (1.5bar) cut in and H9.8 (9.8bar) cut out. If using mode 2 these settings must be adjusted to pump specifications. The controller will exit the adjustment state if no buttons have been pushed within 3 seconds.

- In mode "dE2", press **FUNC** within 3 seconds and the screen will display L1.5 (Factory Default). This means the cut in pressure can be adjusted **UP** or **DOWN** using the direction arrows (7 & 8). Press or hold the **UP** button to raise the cut in pressure, Press or hold the **DOWN** button to lower the cut in pressure.

Mode 2, FUNC, L1.5, UP or DOWN arrow to adjust.

- In mode "dE2" press **FUNC** within 3 seconds and the screen will display L1.5 (Factory Default). Press the **FUNC** button a second time and the screen will display H9.8 (Factory Default). This is the cut out pressure of the pump. Within 3 seconds Press or hold the **DOWN** button to lower the cut out pressure to an appropriate value for the pump being used. The adjustment range is 0.8 – 9.8 bar.

Mode 2, FUNC, H9.8, DOWN arrow to adjust.

- Pressure settings will be kept in the controller memory if a power failure should occur.
- Once working parameters have been set, they can be checked by pressing the **UP** and **DOWN** arrows. In mode dE1, only the cut in pressure can be checked, in mode dE2 press the **UP** arrow to check the cut out pressure and the **DOWN** arrow to check the cut in pressure.
- When the screen displays 'P—' or 'A—' and flashes, the pump will attempt restart in 30min
- If no water is supplied to the system, i.e no water in tank or closed supply/suction pipe, the system will run the following sequence: switch off after 20 seconds if no water detected, stop for 10 seconds, run for 40 seconds stop for 10 seconds, run for 40 seconds stop for 10 seconds, run for 40 seconds. If no water is detected after this initial sequence, the status light will begin flashing orange, indicating that it is now in a dry-running protection status. When the status light is flashing, it means the pump will restart after 24 hours in the sequence mentioned above. The system will repeat this every 24 hours until water is detected.
- The pump can be restarted at any time by pressing the reset button.

5. Operating Suggestion

When the device is used in mode 'dE2', the cut out/stop pressure must be lower than the max head pressure of the pump. The cut out/stop pressure must be 0.3 -0.5 bar lower than the maximum head pressure that the pump can generate, i.e if the max head of the pump is 40m, the stop pressure should be set between 3.5 and 3.7 Bar.

6. Possible Working Defects

Type of defect	Possible cause related to unit	Possible cause not related to unit
The pump does not start	<ol style="list-style-type: none"> 1. The controller is damaged 2. The restart button is jammed 3. Enter the parameter adjustment screen 	<ol style="list-style-type: none"> 1. The voltage is lower than 220V 2. The pump is no longer working 3. Electric cabled inverted (Line/motor)
The pump does not stop	<ol style="list-style-type: none"> 1. The controller is damaged 2. The check valve is jammed open 3. The water contains iron oxide 	Presence of leaks in the pipeline
The pump works intermittently	<ol style="list-style-type: none"> 1. The controller is damaged 2. The pressure range is not large enough 	Presence of leaks in the pipeline
Status light flashing	<ol style="list-style-type: none"> 1. The controller is damaged 2. Damaged suction pipe 	<ol style="list-style-type: none"> 1. Water shortage 2. Pump is broken 3. Leakage of pump inlet 4. Pump head lower than cut in pressure +0.3 bar (mode 1) 5. Pump head is lower than cut out pressure (mode 2)
Display – P--	<ol style="list-style-type: none"> 1. The controller is damaged 2. The pressure sensor is damaged 	The actual pressure in the pipe line is more than 9.9 Bar for longer than 5 seconds
Display – A--	<ol style="list-style-type: none"> 1. The controller is damaged 	Pump has cut in and cut out in intervals less than 30 seconds for the last 15 starts

7. Warning

- The controller must not be used in the medical industry or any system which will cause serious personal injury or property damage in the event of a failure.
- The controller itself has no spare parts supplied to the purchaser and must be maintained by a suitably qualified professional.
- The distributor / Manufacturer are not responsible for any damage caused by any direct or indirect influence to the controller.

All details in this manual are subject to change without prior notice.

12 MONTH WARRANTY

White International Pty Ltd
Limited Product Warranties
TERMS & CONDITIONS

This warranty is given in addition to the consumer guarantees found within the Australian Competition and Consumer Act 2010 (Cth) for goods purchased in Australia and the Consumer Guarantees Act 1993 NZ for goods purchased in New Zealand:

- 1) White International Pty Ltd / White International NZ Ltd (White International) warrant that all products distributed are free from defects in workmanship and materials, for their provided warranty period as indicated on the top or opposite side of this document. Subject to the conditions of the warranty, White International will repair any defective products free of charge at the premises of our authorised service agents throughout Australia and New Zealand if a defect in the product appears during the warranty period. If you believe that you have purchased a defective product and wish to make a claim under this warranty, contact us on our Sales Hotline on 1300 783 601, or send your claim to our postal address or fax line below and we will advise you as to how next to proceed. You will be required to supply a copy of your proof of purchase to make a claim under this warranty.
- 2) This warranty excludes transportation costs to and from White International or its appointed service agents and excludes defects due to non-compliance with installation instructions, neglect or misuse, inadequate protection against the elements, low voltage or use or operation for purposes other than those for which they were designed. For further information regarding the suitability of your intended application contact us on our Sales Hotline on 1300 783 601. If you make an invalid claim under this warranty, the original product will be sent back to you unrepai red.
- 3) This warranty refers only to products sold after the 1st January 2012, and is not transferable to another product type and only applies to the original owner, purchaser or end user, and is in addition to the consumer guarantees found within the Competition and Consumer Act 2010 (Cth) for goods purchased in Australia and the Consumer Guarantees Act 1993 (NZ) for goods purchased in New Zealand.
- 4) Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.
- 5) To the fullest extent permitted by law, White International excludes its liability for all other conditions or warranties which would or might otherwise be implied at law. To the fullest extent permitted by law, White International's liability under this warranty and any other conditions, guarantees or warranties at law that cannot be excluded, including those in the Competition and Consumer Act 2010 (Cth), is expressly limited to:
 - (a) in the case of products, the replacement of the product or the supply of equivalent product, the payment of the cost of replacing the product or of acquiring an equivalent product or the repair of the product or payment of the cost of having the product repaired, is at the discretion of White International or a 3rd party tribunal elected under the Competition and Consumer Act 2010 (Cth) for goods purchased in Australia and the Consumer Guarantees Act 1993 (NZ) for goods purchased in New Zealand; and
- 6) To the fullest extent permitted by law, this warranty supersedes all other warranties attached to the product or its packaging.
- 7) In the case of services, supplying the services again or the payment of the cost of having the services supplied again, is at the discretion of White International or a 3rd party tribunal elected under the Competition and Consumer At 2010 (Cth) for goods purchased in Australia and the Consumer Guarantees Act 1993 (NZ) for goods purchased in New Zealand.
- 8) Our warranty commences from the date of purchase of the above mentioned pumps. Proof of purchase is required before consideration under warranty is given. Record your date of purchase in the space below and retain this copy for your records.

Date of Purchase

Model Purchased: **BIA-iPRESSPRO**

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