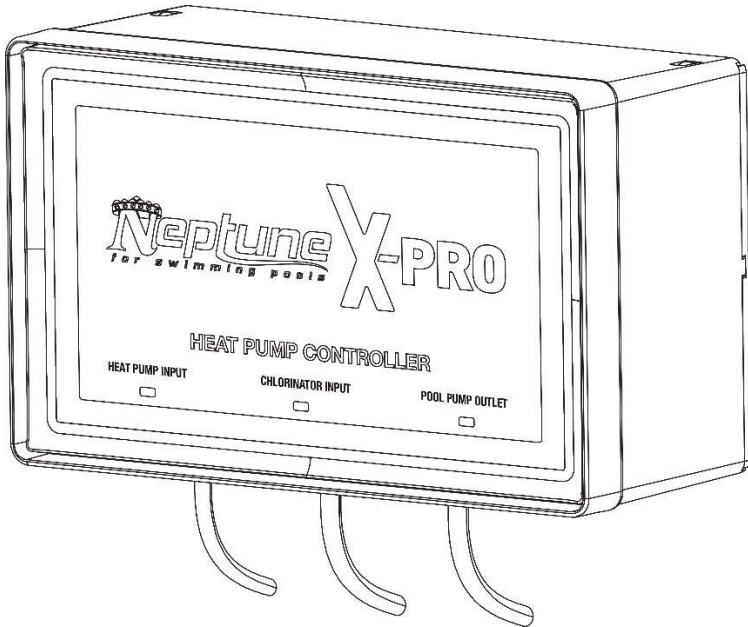


Neptune
for swimming pools

By **Pool
Pro**

NEPTUNE X-PRO HEAT PUMP CONTROLLER



INSTALLATION GUIDE AND USER MANUAL



TABLE OF CONTENTS

1. SAFETY	3
2. GENERAL OVERVIEW	3-4
3. SPECIFICATIONS	4
4. MAINTENANCE	4
5. HELPFUL HINTS	4
6. CONTENTS	4
7. TOOLS NEEDED	5
8. INSTALLING THE HEAT PUMP CONTROLLER	5-7
9. OPERATION OF THE HEAT PUMP CONTROLLER	7
10. TROUBLESHOOTING	7
11. PART NUMBERS	8
12. WARRANTY	8
13. PRODUCT REGISTRATION	8

DISCLAIMER: Information in this guide is intended to provide general information on a particular subject(s) in good faith and is not an exhaustive treatment of such subject(s). Its use is beyond the control of the author, contributor, publishers, and distributors and should not be relied upon without consulting your local Professional for comprehensive advice. This guide includes subject(s) that should only be performed by or under the direction and advice of your local Professional and under no circumstances should the guide be used as a substitute for such professionals. No representations or warranties are made that the content, advice, and recommendations in this guide are current, free from errors or omissions, or appropriate for the user's circumstances or abilities. No liability is accepted for any loss suffered as a result of any user's reliance on such content.

1. SAFETY

Important Warnings: This manual contains important information about the installation, operation, and safe use of this product. This information should be given to the owner and/or operator of this equipment. When installing and using this electrical equipment, basic safety precautions should always be followed. Failure to follow safety warnings and instructions in this manual can result in serious injury and/or damage to your equipment. Read and follow all warning notices and instructions which are included in this manual.

- The Neptune X-Pro Heat Pump Controller's case internally contains live components. There is a danger of electric shock if opened. If the power cord is damaged then it should be replaced by the manufacturer, their agent or similar qualified person, to avoid a hazard.
- The product shall be installed by a qualified person in according to AS/NZS 3000 wiring rules.
- The Neptune X-Pro Heat Pump Controller should be installed in the correct pool zone and connected to supply via a power outlet that is protected by a residual current device (RCD) having a rated residual operating current not exceeding 30mA. The power outlet should have a degree of protection suitable for the pool zone.
- To reduce the risk of injury, do not permit people (including children) with lack of experience and knowledge, to use this appliance unless they have been given supervision or instruction concerning use of the appliance.
- To reduce the risk of accidents or incidents, service on the unit should only be performed by a qualified pool service professional, after disconnecting it from the mains power supply.

Important Safety Instruction: To reduce the risk of injury, do not permit young children to use this product unless they have been trained by the person responsible for their safety and they acknowledge their ability to use such equipment. To reduce the risk of accidents or incidents, service on the unit should only be performed by a qualified pool service professional.

DO NOT PLUG IN IF CARTON IS WET.



When using the Neptune X-Pro Heat Pump Controller:

- Observe all applicable local, state, and federal safety regulations.
- Take proper precautions with prescribed environmental and operational conditions.

2. GENERAL OVERVIEW

Congratulations on your recent purchase of your Neptune X-Pro Heat Pump Controller. Please take a moment to read through the entire manual before installing your new unit. Your Neptune X-Pro Heat Pump Controller must be installed and operated as specified.

While every effort has been made to ensure that the information contained in this guide is accurate and complete, no liability can be accepted for any errors or omissions. Pool Pro reserves the right to change the specifications of the hardware and software described herein at any time without prior notice.

The Neptune X-Pro Heat Pump Controller is a heat pump and chlorinator interface that enables smart pump switching with an isolated circuit between chlorinator and heat pump inputs, saving you money on your swimming pool running costs.

3. SPECIFICATIONS

Volts Input (Vac)	220-240
Amps Input - Max. (Aac)	10.00
Amps Output Pump Max. (Aac)	9.90
Total Power Consumption (W)	24
Frequency (Hz)	50/60
HP Box Dimensions (mm)	220W x 135H x 90D
Power Cord	10A Australian Approved + piggy-back type
Wall Mounting	Simple Click On – Clip Off
Ingress Protection Rating	IP35
Unit Shipping Dimensions (mm)	310W x 230H x 115D
Net Weight (kg)	1.0

***NOTE:** Certain specifications may change without notice for reasons of improvement or better performance.

4. MAINTENANCE

It is important to maintain your Neptune X-Pro Heat Pump Controller, please periodically check for any wear on the leads to and from your box, and for any leaks from any associated close-by pool equipment which may impact it.

5. HELPFUL HINTS

Read and Keep your Manual in a safe place.

6. CONTENTS



Heat Pump
Controller Unit



The Installation
& Operating Instructions



2 x Red Wall
Plugs with Screws

7. TOOLS NEEDED

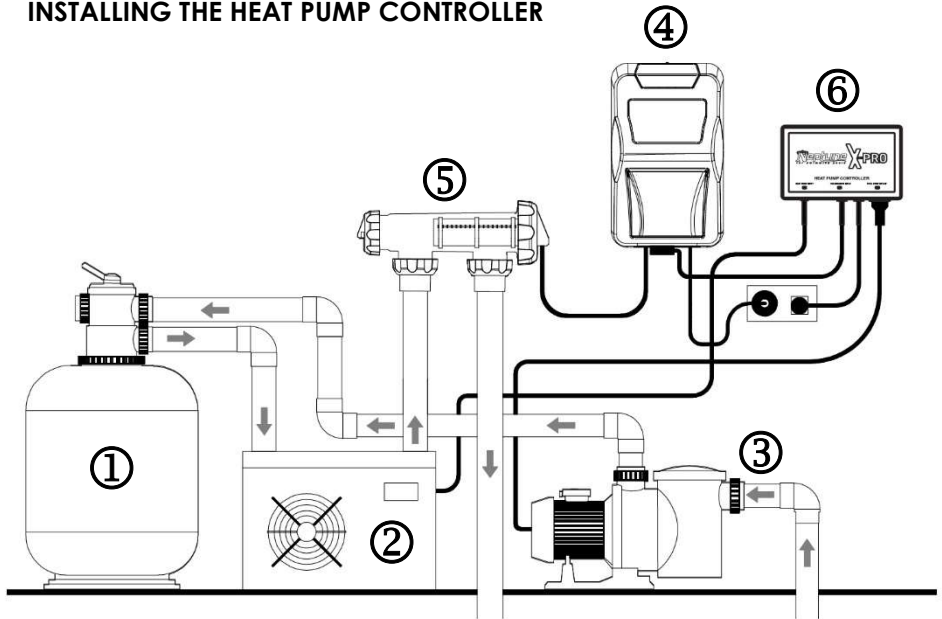


Drill with 6.0mm drill bit



No.2 Phillips head screwdriver

8. INSTALLING THE HEAT PUMP CONTROLLER



① Pool Filter

② Heat Pump

③ Pool Pump

④ Chlorinator

⑤ Cell Housing

⑥ Heat Pump Controller

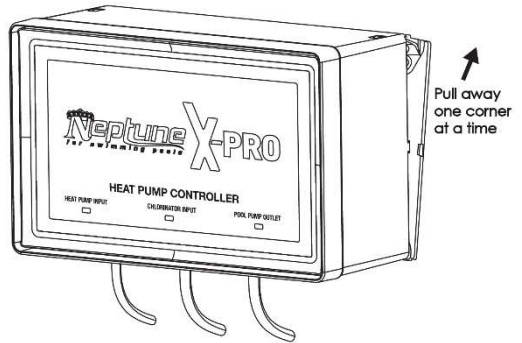
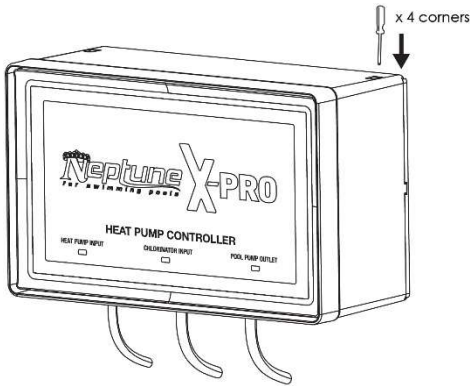
STEP 1: Remove the contents from the box and carefully plan all steps using the installation diagram and by reviewing the steps below.

STEP 2: Position the Heat Pump Controller as indicated in the installation diagram, ensuring it is NOT too close to other equipment or power outlets but close enough to the Chlorinator, Pump, and Heat Pump power supply so the piggy-back power cord can plug into its socket outlet and the Heat Pump Interface Cable can reach the heat pump.

STEP 3: Attach the Heat Pump Controller to the wall by removing the simple "Click ON – Click OFF" wall mounting bracket that is attached to the controller case. Use the wall plugs and screws provided.

3.1: Click OFF the wall bracket clip

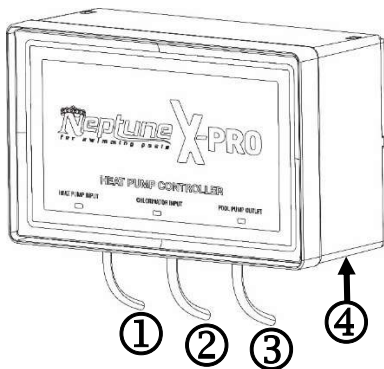
3.2: Pull the wall bracket away from case.



3.3: Mount the bracket to the wall

3.4: CLICK ON the case to the wall bracket

STEP 4: Connect the Heat Pump Controller



- ① Heat pump input cord (Dry/Free Contact)
- ② Chlorinator input cord
- ③ Controller power cord
- ④ Pool pump outlet socket



When connecting to the Heat Pump ensure the two pin terminals connect to a potential free contact. This connection must be performed by the Heat Pump installers only. Any voltage on this connection will lead to Heat Pump Controller failure and void warranty.

① **Heat Pump Input Cord:** Connect this 2-pin terminal cable into the potential free dry contact on the Heat Pump. This is a signal from the heat pump to turn the pool pump on.

When connecting specifically to a **Neptune X-Pro Heat Pump**, the potential free dry contact is the P1 and P2 terminals, located in the Electrical Box of the heat pump. For full installation instructions, refer to the Neptune Heat Pump User Manual. For other branded heat pumps please refer to their respective manuals.

- ② **Chlorinator Input Cord:** Fit this plug to the AC Socket outlet on the Chlorinator.
- ③ **Controller Power Cord:** Connect the Controller's power cord to a wall power socket. Don't forget to also plug your Chlorinator into a wall power socket.
- ④ **Pool Pump Outlet Socket:** Plug the power cord from the pool pump into this AC Socket underneath the controller.

9. OPERATION OF THE HEAT PUMP CONTROLLER

The Heat Pump Controller will operate under the below conditions indicated by the LED display:

Heat Pump Demand	Chlorinator Demand	Pool Pump Status
OFF	OFF	OFF
OFF	ON	ON
ON	OFF	ON
ON	ON	ON

10. TROUBLESHOOTING

Fault Condition	Potential Cause	Remedy
Heat Pump Controller not turning pump ON.	Heat Pump Controller inputs not plugged in.	Check pool pump is securely plugged into Heat Pump Controller AC socket. Check that an input signal is getting received from Heat Pump Input or Chlorinator. Check the Heat Pump Controller power cord is plugged in to a wall socket and there is power at that point. Check pool pump turns on and runs, check wall power socket.
Heat Pump Input LED is not ON.	No demand ON signal from the Heat Pump.	Check Heat Pump Input cable is receiving a closed contact from the Heat Pump. The Heat Pump Controller sends a 5Vdc signal to the Heat Pump and receives it back to turn ON the pool pump.
Chlorinator Input LED is not ON.	Chlorinator power lead is not plugged in securely to the Chlorinator or no demand ON signal from the Chlorinator.	Check Chlorinator piggyback plug is securely fitted to the Chlorinator and that there is output from the Chlorinator to turn the pool pump ON.
Pool Pump Outlet LED is not ON.	No signal for it to turn on.	Check there is a demand ON signal from the Heat Pump and Chlorinator.

11. PART NUMBERS

CODE	DESCRIPTION
NHXN00305-1	Base Body
NHXN00306	Wall Bracket
NHXN01364	Power Cord – Heat Pump Controller c/w Piggyback Socket
NHXN01379	Front Sticker – Neptune Heat Pump Controller
NHXN01400	Case Front Cover
NHXN01401	PCB – Heat Pump Controller

12. WARRANTY

This product is warranted for (24) twenty-four months against defects in workmanship and materials if used for its intended purpose and maintained according to instructions. This warranty is limited to repair or replacement, depending on the problem of the product. If the product is found to have been misused or damaged due to water entry/mechanical damage/accidental damage, this will not be covered under warranty, and, in such cases, no warranty will apply. This warranty is not transferable under any circumstance. Defective equipment must be returned to the manufacturer or dealer as soon as the purchaser becomes aware of the defect and all transport must be prepaid. Neither the manufacturer nor the dealer shall be responsible for any goods damaged in transit. This is a back to base warranty.

What is covered? Repairs/parts/factory labour, or a replacement unit if applicable.

What is not covered? Damage due to accident, misuse, water penetration of the handheld enclosure, tampering, or lack of prescribed maintenance is not covered under this limited warranty.

Visit www.poolpro.com.au/serviceclaim to submit a warranty request.

This limited warranty is the sole and complete warranty for Pool Pro and shall be limited to the cost of the Controller. In no event shall Pool Pro be liable for incidental or consequential damages.

13. PRODUCT REGISTRATION

Please register your product online at www.poolpro.com.au/product-registration within 30 days from date of purchase, or any warranty claim may be voided.