WAVE 200 **XL**

Dolphin WAVE 200 XL
Pool Cleaner

User Manual

Dolphin™ | by maytronics

Dolphin WAVE 200 XL Pool Cleaner
User Manual

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IMPORTANT SAFETY INSTRUCTIONS

READ AND FOLLOW ALL INSTRUCTIONS.

Please adhere strictly to the following WARNINGS:

⚠️ **WARNING** — Take the Robot Pool Cleaner out of the pool before allowing people to enter the pool.

⚠️ **WARNING** — When examining the Robot Pool Cleaner, disconnect the main power supply.

⚠️ **WARNING** — Ensure that children do not attempt to access Robot Pool Cleaner while it is operating.

⚠️ **WARNING** — Keep the Robot Pool Cleaner out of the reach of children or persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction.

⚠️ **WARNING** — Only an original power cable must be used, at all times. Replaced by a Robot Pool Cleaner certified technician, in case of need to avoid hazard.

⚠️ **WARNING** — The unit must be connected only to a supply circuit that is protected by a ground-fault circuit interrupter (GFCI). This GFCI should be tested on a routine basis.
To test the GFCI, push the test button. The GFCI should interrupt power.
Push the reset button. Power should be restored. If the GFCI fails to operate in this manner, the GFCI is defective. If the GFCI interrupts power to the power unit without the test button being pushed, a ground current may be flowing, indicating the possibility of an electric shock. Do not use the power unit. Disconnect the power unit and contact the manufacturer for assistance.

⚠️ **WARNING** — To reduce the risk of electric shock replace damaged cord immediately. Do not use extension cord to connect unit to electric supply; provide a properly located outlet.

Please ensure that the following PRECAUTIONS are implemented:

△ **CAUTION** — Only a trained operator should operate the Robot Pool Cleaner.

△ **CAUTION** — Operator should keep hands away from driving belt mechanism.

△ **CAUTION** — Position the Caddy and power supply at least 3.5 m / 12 ft from pool's edge – during operation.

△ **CAUTION** — For continued protection against possible electric shock, the power supply unit should be placed at least 11cm / 4'' above ground.

⚠️ **CAUTION** When lifting the Robot Pool Cleaner, take care to prevent back injury.

⚠️ **CAUTION** Do not bury cord – locate cord to minimize abuse from lawn mowers, hedge trimmers and other equipment.

⚠️ **CAUTION** This Robot is for use with permanently installed pools. Do not use with storable pools. A permanently installed pool is constructed in or on the ground or in building such that it cannot be readily disassembled for storage and reassembled to its original integrity.

SAVE THESE INSTRUCTIONS

FCC STATEMENT

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications to this equipment not expressly approved by the party responsible for compliance (Maytronics Ltd.) could void the user's authority to operate the equipment.

1. INTRODUCTION

This user guide describes how to operate your WAVE 200 XL Robot Pool Cleaner and how to use the pool cleaner's Maytronics Machine Interactive (MMI) console. The interactive, state-of-the-art MMI control console Provides full control of the robot and enables you to configure the cycle time, operation delay, and cleaning scan. It also enables you to diagnose various technical functions and parameters. The console houses a remote control unit for manual operation and for temporarily overriding the automatic cleaning operations.

The WAVE 200 XL is designed to handle four different swimming pool configurations that are set by your Maytronics dealer, and stored in the MMI's memory.

The robot is preset at the factory with specific default pool settings that can be reset.

1.1 Specifications

- Motor protection: IP 68
- Minimum depth: 0.40 m / 1.3 ft
- Maximum depth: 7 m / 22.96 ft

Power supply

- Input: 100-250 AC Volts
- 50-60 Hertz
- Output: <30 VDC
- IP 54

1.2 Water Conditions

Use the Pool Cleaner in the following water conditions only:

- Chlorine: Max 4 ppm
- pH: 7.0 - 7.8
- Temperature: 6°-35°C / 43°-95°F
- NaCl: Maximum = 5000 ppm

2. UNPACKING YOUR POOL CLEANER

Before you start the assembly process, carefully remove all the items from the shipping box and check them against the packing list.
The box should contain:

- Documentation and accessories
- Un-assembled Caddy for storing and carrying the WAVE 200 XL
- MMI console (includes remote control unit) assembled to the Caddy's handle
- WAVE 200 XL and floating cable rolled on the Cable roller
- Power supply unit assembled to the Caddy base

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3. ASSEMBLING THE POOL CLEANER

This section describes how to assemble your pool cleaner.

To assemble the Dolphin WAVE 200 XL Pool Cleaner:

1. Attach the Caddy handle to the Caddy base and fasten with the four screws and four nuts provided.

2. Attach the cable roller in its designated place, and fasten with two screws.

MMI remote control unit

MMI

MMI communication cable

Cable roller

Main power supply cable

Four screws

Power supply

Figure 1: Assembling the Dolphin WAVE 200 XL - 1

MMI

Caddy handle

Floating cable

Cable roller handle

Two screws

Connection cable between power supply and cable roller

Top cover

Caddy base

Figure 2: Assembling the Dolphin WAVE 200 XL - 2

3. Connect the MMI communications cable to the power supply unit.

4. Connect the connection cable between the power supply and the cable roller.
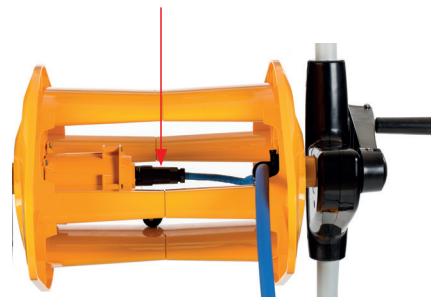
Roller inner connection

Figure 3: Roller Inner Connection

4. WORKING WITH THE MMI CONSOLE

This chapter describes how to work with the MMI console and includes the following sections:

- MMI Console Overview, page 6
- MMI Alerts, page 7
- MMI Functions, page 7
- WAVE 200 XL Parameters, page 7
- Choosing Additional Pool Profiles, page 9

4.1 MMI Console Overview

The interactive MMI control console provides easy access to the robot's settings, functionality, and LED indicators.
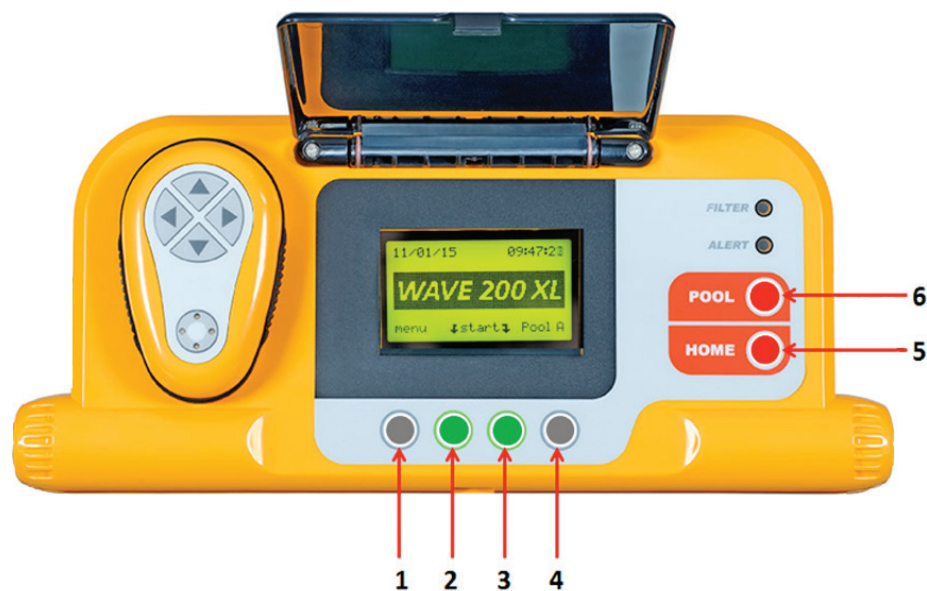

Figure 4: MMI Console

- In this user manual, the term **Press Start** means to simultaneously press both green buttons on the MMI console (marked **2** and **3** in the Figure **4**).

- The MMI is equipped with a screensaver that is displayed after 5 minutes of idle time. Press the **POOL** and **HOME** buttons (marked **5** and **6** in Figure **4**) to exit the screensaver mode.

- Some options in the MMI (pool profile setup) menus are blocked with a code to prevent changing the setting accidentally. The code sequence for unblocking these options is: **3**, **2**, and **1** (Figure 4).

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4.2 MMI Alerts

The WAVE 200 XL has the following alert LEDs:

- **Filter:** This Filter LED lights up when the filter is full and needs to be cleaned at the end of the cleaning cycle. If this LED lights up mid-cycle, you do not need to immediately stop the operation; you can wait until the cycle is completed. This LED indicator automatically resets when the robot starts a new cycle with a clean filter.

- **Alert:** This Alert LED lights up to indicate an error that stops the robot from functioning. In such cases, inspect the robot to locate the problem and if it can be fixed, start the robot again. If the error repeats itself, then details of the specific error are displayed on the MMI screen (Figure 4). If this occurs, contact your Maytronics dealer immediately.

4.3 MMI Functions
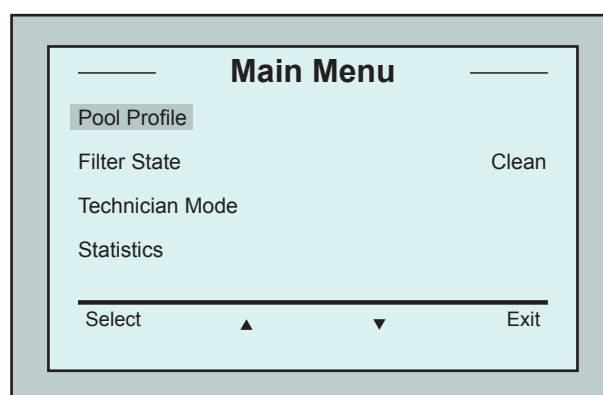
The following functions are available on the MMI console.

Command	Description
Menu	From the *Wave 200 XL* screen, press **Menu** to access the *Main Menu* screen
▲	Scroll up
▼	Scroll down
⌐ **Start** ⌐	Press both green buttons simultaneously to start pool cleaning
Select	Press **Select** to confirm your selection after using the scrolling buttons
Modify	Press **Modify** to change settings after making a selection
Back	Press **Back** to return to the previous screen
Exit	Press **Exit** to return to the *Wave 200 XL* screen

4.4 WAVE 200 XL Parameters

You can view and edit many of the WAVE 200 XL parameters from the MMI *Main Menu* screen.

To view the WAVE 200 XL parameters:

1. Switch on the power supply. The *Wave 200 XL* screen is displayed in the MMI.
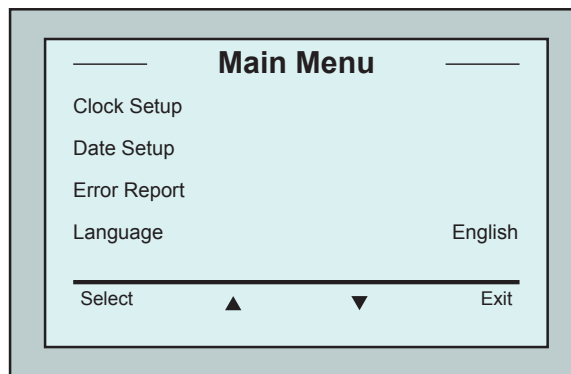2. Press **Menu** to access the *Main Menu* screen.

Main Menu

Pool Profile

Filter State   Clean

Technician Mode

Statistics

Select   ▲   ▼   Exit

First *Main Menu* screen

The following parameters are available on the first *Main Menu* screen:

Parameter	Description
Pool Profile	Press the down arrow ▼ or up arrow ▲, to highlight **Pool Profile**, and press **Select** to access the Pool Profile screen. The Pool Profile screen displays the four different configured Pool Profiles. **Note:** The WAVE 200 XL is delivered with a default pool profile parameter. To change the pool profile parameter, see Choosing Additional Pool Profiles on page 9.
Filter State	Reports on the filter's condition: • **Clean:** Filter is ready for use. • **Full:** Clean filter. The filter warning light on the console also indicates when the filter needs cleaning.
Technician Mode	Press the down arrow ▼ or up arrow ▲, to highlight **Technician Mode**, and press **Select** to enter the *technician* screen with restricted access.
Statistics	Press the down arrow ▼ or up arrow ▲, to highlight **Statistics**, and press **Select** to review data on usage.

3. There are two *Main Menu* screens. To access the second screen, press the scroll down arrow ▼.

```
┌──────────────────────────────────────────┐
│                                          │
│   ─────        Main Menu        ─────     │
│                                          │
│   Clock Setup                            │
│                                          │
│   Date Setup                             │
│                                          │
│   Error Report                           │
│                                          │
│   Language                      English  │
│                                          │
│   ─────────────────────────────────────  │
│   Select      ▲         ▼         Exit   │
│                                          │
└──────────────────────────────────────────┘
```

Second *Main Menu* screen

The following additional parameters are available on the second *Main Menu* screen:

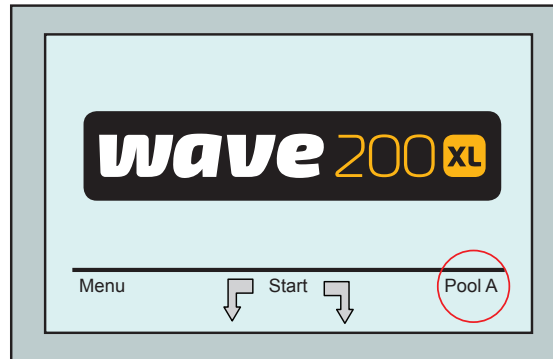| Parameter	Description
Clock Setup	Press the down arrow ▼ or up arrow ▲, to highlight **Clock Setup**, and press **Select** to access the *Clock Setup* screen and 12/24-hour mode.
Date Setup	Press the down arrow ▼ or up arrow ▲, to highlight **Date Setup**, and press **Select** to access the *Date setup* screen.
Error Report	Press the down arrow ▼ or up arrow ▲, to highlight **Error Report**, and press **Select** to display information for service technicians.
Language	Press the down arrow ▼ or up arrow ▲, to highlight **Language**, and press **Select** to enter the Language interface mode.

Note: To return to English from any other language, press and hold the **Menu** button on the *Wave 200 XL* screen for 3-4 seconds.

4.5 Choosing Additional Pool Profiles

The WAVE 200 XL can be configured for four different pool profiles by your dealer. The configured settings are stored in the MMI's memory. This section describes how to choose additional pool settings.
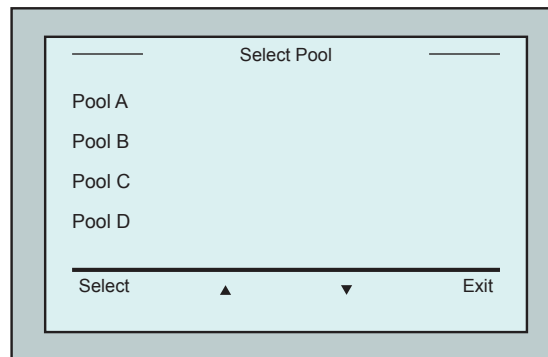
To add a new pool configuration:

1. Go to the *Wave 200 XL* screen. **Pool A** is displayed as the currently defined setting.

Wave screen showing Pool A as defult setting

2. Press **Pool A** to access the *Pool Profile* screen. The *Pool Profile* screen is displayed.

***Pool Profile* screen**

3. Choose a different pool profile (Pool B, Pool C, or Pool D) and press **Select**. The selected pool profile appears.

5. SETTINGS

The WAVE 200 XL is controlled from the MMI console. Four different swimming pool configurations can be defined and stored in the MMI's memory. You can customize the settings to match the specific type of swimming pool (A, B, C, or D) to be cleaned.

Note: Additional pool profiles can only be configured by an official Maytronics WAVE technician. In the event that permission for configuration is granted, select the pool you want to program (A, B, C, D). Refer to the diagram below for details.
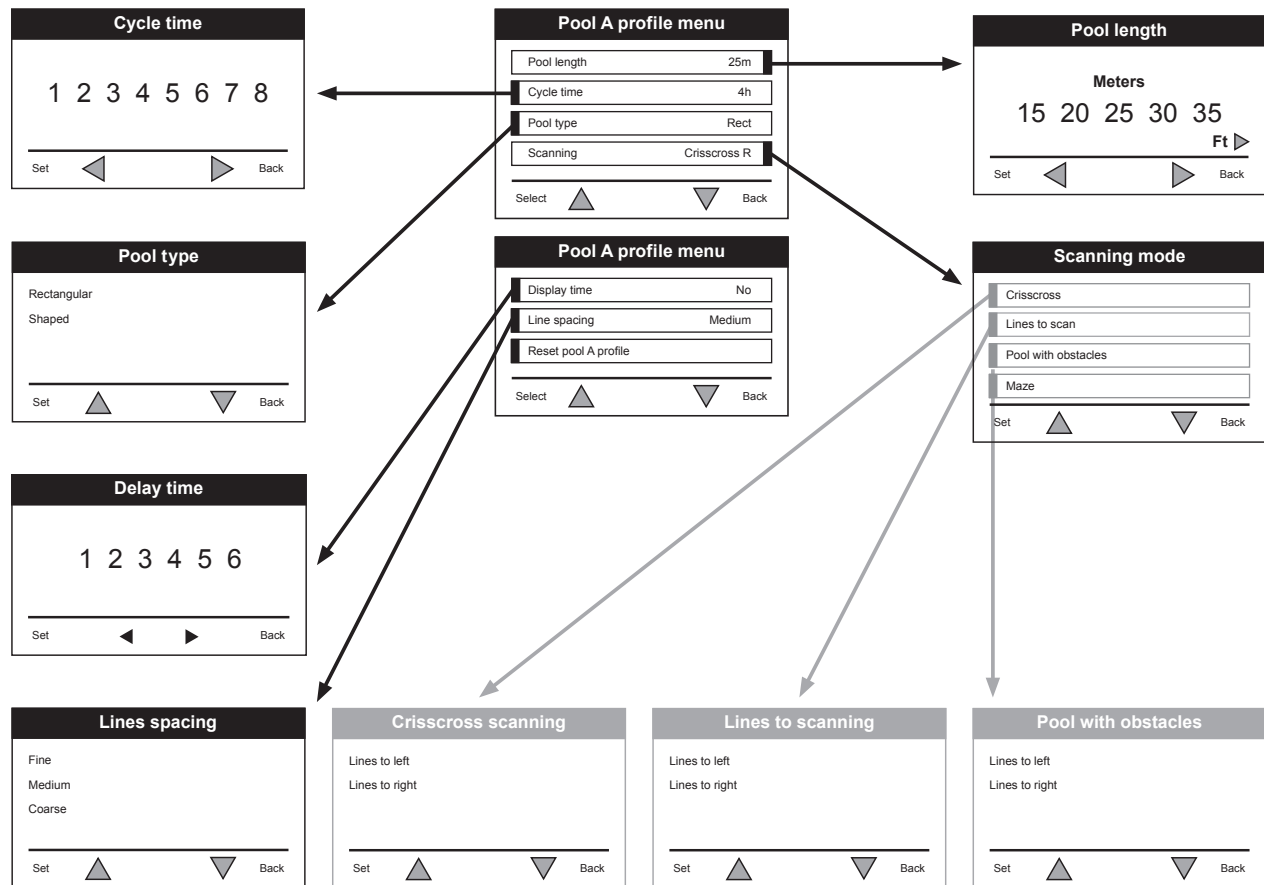

Figure 5: Manual Configuration of Pool Profiles

6. DAILY OPERATION

This chapter describes how to perform daily operational tasks with the WAVE 200 XL Pool Cleaner, and includes the following sections:

- Operating the WAVE 200 XL, page 11
- Using the Remote Control Unit , page 12
- Cleaning the Filter, page 13

6.1 Operating the WAVE 200 XL

To operate the WAVE 200 XL:

1. On the MMI, press the **POOL** button. The robot starts moves towards the pool, while pulling the floating cable, enters the pool, and positions itself on the pool floor. Make sure it aligns itself vertically to the wall of the starting point and that the angle from the wall is less than 45°.

2. Wait for the *Wave 200 XL* screens to appear. Press **Start** (press both green buttons, marked **2** and **3**, in Figure 4, simultaneously). The cleaning session begins.

3. To stop the cleaning session at any time, press the right grey button, marked **4**, in Figure 4.

4. Press the **HOME** button. The robot moves in the direction of the floating cable. Roll the floating cable neatly on the cable roller using the cable roller handle. Holding the floating cable, gently pull the robot upwards and towards the Caddy. As it reaches the side of the pool, pull the cable gently until the floating cable handle emerges. Grasp the handle and pull the robot out of the water. The robot shuts down automatically.

5. Use the remote control to drive the WAVE 200 XL to the Caddy outside the pool. Do not pull the robot towards the Caddy by rolling up the floating cable with the cable roller handle.

6. Clean the filter as needed. If the MMI displays Filter Full, you should clean it before the next operating cycle.

   Note: It is not necessary to stop the WAVE 200 XL in the middle of the cycle when the Filter Full indicator appears. Clean the filter before the next cycle.

7. Before each operating cycle, clean the robot body, brushes and driving belt area, and remove foreign objects, rubber bands, hair, etc.

8. Once a week, clean the impeller area:

   ⚠️ WARNING   Make sure the power supply is switched off and unplugged before service.

   - Open the top cover.
   - Remove the screws securing the cover of the impellers using a No. 2 Philips manual screwdriver.
   - Open and remove the cover.
   - Remove foreign objects from the impellers.
   - Replace the cover and secure it with the four screws.

9. Make sure the floating cable is not tangled so it can be rolled up easily.

   Important: Every two or three cleaning sessions, disconnect the floating cable from the roller inner connection (Figure 3), unroll the entire cable and re-arrange it on the roller as required.

10. A warning message to perform Preventive Maintenance appears on the MMI screen, when applicable. Preventive Maintenance service must be performed in a timely manner. Contact your dealer to arrange this service. Failure to perform the Preventive Maintenance service will void the warranty.

6.2 Using the Remote Control Unit

The remote control unit enables you to manually control the WAVE 200 XL to clean those hard-to-reach spots or places skipped during the standard cleaning cycle.
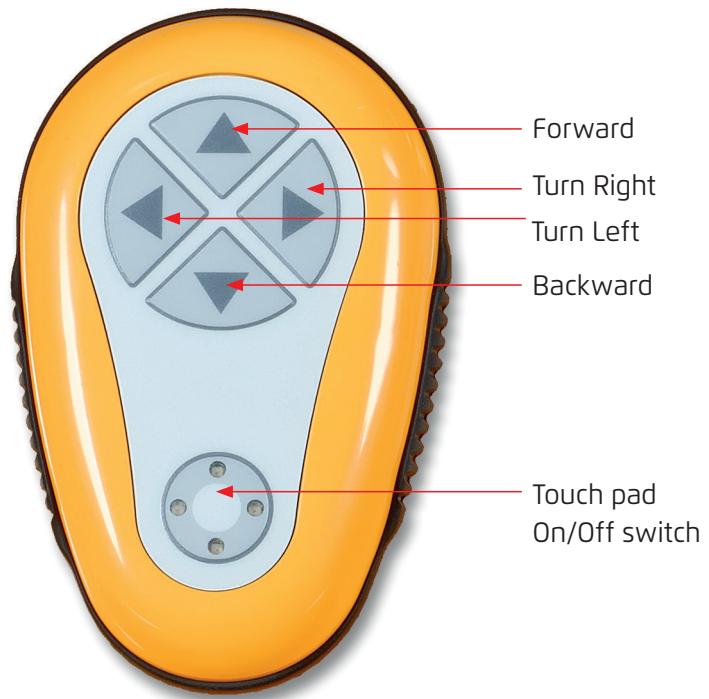Use the remote control unit only with non-rechargeable alkaline LR03 batteries 1.5V AAA.
Do not mix old and new batteries. Insert batteries in the correct direction with the correct polarity.
Exhausted batteries must be removed from the appliance and safely disposed of.
Remove the batteries if the appliance is to be stored unused for a long period. Do not short-circuit the supply terminals.

To use the remote control unit

1. Press **Start** on the MMI console to start the automatic operations of the WAVE 200 XL.

2. Press the **On/Off** button to activate the remote control.

3. Press the Forward or Backward buttons to maneuver the WAVE 200 XL forward or backward at a faster speed.

4. Press the **Forward** or **Backward** buttons again to maneuver the WAVE 200 XL forward or backward at the standard cleaning speed.

5. To stop the WAVE 200 XL, press the button for the opposite direction to the direction in which the robot is currently moving (meaning that if the WAVE 200 XL is moving forward, you must press the **Backward** button to stop it).

6. When the robot is idle (standing still) and you press the **Turn Left** or **Turn Right** buttons, the robot turns left or right by moving one belt forward and one belt backward.

7. If you press the **Turn Left** or **Turn Right** buttons while the robot is driving forward or backward, the robot turns left or right by turning one belt and stopping the opposite belt.

Forward

Turn Right

Turn Left

Backward

Touch pad
On/Off switch

6.3 Cleaning the Filter

Clean the WAVE 200 XL filter after every cleaning cycle as follows:

1. Press the latch on the top of the WAVE 200 XL to open the top cover.

2. Remove the filter chamber from the robot and separate its parts (cyclone spiral and fine filter cartridge).

3. Wash the fine filter cartridge with water pressure from the inside out.

4. Wash the cyclone spiral from the inside out and the chamber.

5. Return all of the filter parts to the filter chamber and put the chamber back in the WAVE 200 XL.

6. The robot is ready for a new cleaning cycle.

Cover open latch

Fine filter

Cyclone spiral

Coarse filter

Filter chamber

7. TROUBLESHOOTING

A technician may request log files to aid in troubleshooting. To save a log file to a USB memory stick, from the main *Wave 200 XL* screen, press the green buttons in sequence – right-left-right-left, and follow the instructions displayed on the screen.

Error message	Possible Cause	Action
Imp overload	Is there dirt or other foreign matter in the impeller?	Disconnect the robot from the mains electricity, remove the screws and remove the impeller cover. Remove any dirt from around the impeller. Replace the impeller cover.
Imp overload	Does the problem reoccur with every operation?	Contact your Maytronics dealer.
Imp underload	Does the problem reoccur with every operation?	Contact your Maytronics dealer.
Right or left drive overload	Is there any interfering dirt in the driving belts, brushes, or drive axles?	Remove any dirt or foreign bodies that might have become entangled with the driving belts, brushes or drive axles.
Right or left drive overload	Does the problem reoccur with every operation?	Contact your Maytronics dealer.
Right or left drive underload	Does the problem reoccur with every operation?	Contact your Maytronics dealer.
Robot stuck on wall	Has the robot stopped in a vertical position of more than 45º? Is the robot stuck on an obstacle?	Move the robot from its position and remove the obstacle, then reactivate. If the problem persists, contact your Maytronics dealer.
Out of water	Was the robot operated out of the water for an extended time?	Check that the impeller is in order and that its blades are not broken, then reactivate. If the problem persists, contact your Maytronics dealer.
Robot is stuck	Is the robot stuck on an obstacle? Is there an obstruction in the water channel or in the robot's driving belts?	Move the robot from its position and remove the obstacle, then reactivate. If the problem persists, contact your Maytronics dealer.
Navigation System	Does the problem reoccur every operation?	Contact your Maytronics dealer.

The following errors may appear on the screen when the robot has stopped and the red error light on the MMI is on.

Error message	Possible Cause	Action
No Communication	Does the problem occur when pressing **POOL** or **HOME** on the MMI?	Contact your Maytronics dealer. **Step 1:** Disconnect the floating cable from the roller inner connection and connect the cable directly to the power supply. If the problem persists, go to Step 2. **Step 2:** You can work temporarily without using the MMI. Disconnect it from the power supply, thus disabling the **POOL/HOME** function, and use the remote control.
Over Current	Does the problem occur when pressing **POOL** or **HOME** on the MMI?	Contact your Maytronics dealer. Disconnect the floating cable from the roller inner connection and connect the cable directly to the power supply.
DC input	Is there an electrical short, or a partial or complete disconnection?	Contact your Maytronics dealer.

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