# HAYWARD<sup>®</sup>

# **Wireless Remote Terminal**

Touchscreen Terminal for OmniLogic

## **Owner's Manual**



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**HLWIRELESS** 



see back of manual for details

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## **IMPORTANT SAFETY INSTRUCTIONS**

When using this electrical equipment, basic safety precautions should always be followed, including the following:

- READ AND FOLLOW ALL INSTRUCTIONS
- Warning To reduce the risk of injury, do not permit children to use this product unless they are closely supervised at all times.
- Dry Handheld unit before charging.
- Do not allow charging base to come in contact with water.

## SAVE THESE INSTRUCTIONS

#### FCC Statement

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by Hayward could void the user's authority to operate this equipment.

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.

### Industry Canada Statement

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

The term "IC" before the certification / registration number only signifies that the Industry Canada technical specifications were met.



## Description

The OmniLogic HLWIRELESS Wireless Terminal is a rechargeable touchscreen remote control for Hayward OmniLogic pool automation controls. The terminal is wireless and portable. Its unique watertight housing and floating design allows it to be used outdoors, even while inside the pool or spa.

## Before You Begin

## Wireless Signal

The Wireless Terminal is 802.11 b/g/n compatible and communicates with the OmniLogic through your home network's wifi system with a "line of sight" range of 300 feet to your network's access point or router. To verify that there is adequate wifi coverage where the Wireless Terminal will be used, check the signal with a smartphone or other mobile device connected to your home's wireless network. If signal strength is weak, run a speedtest using a mobile speedtest app such as Speedtest by OOKLA. Make sure your wifi download speed is at least 5mb/sec. If speed is too low or variable, a wireless repeater should be installed in the home's network at a location that will provide good signal strength where the Wireless Terminal is to be used.

## Update MSP Firmware

The Wireless Terminal can only communicate with OmniLogic pool controls running firmware version R2.0.0 or later. Because the firmware version on the Wireless Terminal must always match the OmniLogic MSP, both must be updated to the latest available version. To update the MSP, follow the firmware upgrade procedure described in the OmniLogic Operation Manual.

### Verify OmniLogic Connectivity

Before attempting to connect the Wireless Terminal to the OmniLogic, verify that the OmniLogic is connected to the home's wireless network. This can be done easily by sending it a command through the user's online account via a web browser or the mobile app.

## Dock and Charge the Wireless Terminal

Before use, fully charge the Wireless Terminal for up to 8 hours or until the battery icon on the screen shows full. Plug the charging cradle into a standard 120 VAC wall outlet, away from the pool area, preferably indoors. The power cord is designed to insert into channels on the underside of the cradle and exit out of the left side, right side or rear. Route the cord through the preferred channel depending

where the charging cradle will be located. Insert the Wireless Terminal into the charging cradle. A "Charging" message will be displayed to confirm that the HLWIRELESS is charging. If a message is not seen, make sure that the unit is seated properly and there is power at the wall. Always charge the Wireless Terminal at temperatures above 50°F (10°C). Note that the Wireless Terminal can be used while in the cradle no matter what state the battery is in.



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## Installation

## Connect Wireless Terminal to OmniLogic

Before using the Wireless Terminal, it must be configured to operate on your home's wifi network and associated with the OmniLogic. Perform the functions shown below while the unit is fully charged or placed into the charging cradle.



After pressing OK at the "Welcome" screen, the Wireless Terminal will display the network name and an icon showing security type and signal strength of all access points within range. Select your home network's name. A pop-up will appear on the screen, prompting you to input the password for the selected access point. Use the keypad to input your password and then press the check mark to save your selection. Your Wireless Terminal is now configured to your home wireless network and will automatically pair with your OmniLogic system. The Wireless Terminal will only connect to an OmniLogic that is on the same network.

## Verify, Delete or Change a Currently Configured Access Point





The Network Connections screen allows you to change access points easily. You can also turn the radio on/off using the toggle. The wifi options button gives you the following functionality:

**Change Password** - Use this option if you've changed the wifi password on your router. The HL-WIRELESS will continue to try to connect using the old password until you use this function to update to the new password.

Forget Network - Use this option if you no longer want the HLWIRELESS to automatically connect to the previously selected access point.

Network Properties - This option will show the IP addresses of various network components as well as other related information.

### Update Wireless Terminal Firmware

Now that the Wireless Terminal is connected to the OmniLogic, check that the firmware version number matches that of the MSP. In order to check the version number, follow the screen procedure on page 4. The Wireless Terminal is displayed as "Wi-Fi Term" under System Info. If the firmware version numbers differ, upgrade the Wireless Terminal by following the firmware upgrade procedure described in the OmniLogic Operation Manual or the included Quickstart Guide.

#### IMPORTANT: the Wireless Terminal must be in the charging cradle while performing a firmware upgrade.

When searching Hayward's website for the latest firmware, note that the Wireless Terminal uses the same firmware file as the Wired Terminal. If a Wired Terminal is also used in the system, the firmware should always be upgraded at the same time as the Wireless Terminal. A small character next to the component name indicates the device you are using.

msp id:3233

0-0-0-0

compone

MSF

After firmware upgrades are complete, the firmware version of the MSP. Wired and Wireless Terminals should all be the same.



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With the Wireless Terminal now communicating with the OmniLogic, verify that it is responsive at the locations where it will be used. Send commands and evaluate performance at all locations. If there are issues with signal strength, you may need to consider adding a repeater or relocating your home's access point.

## Operation

## Daily Use

The Wireless Terminal has been tested to be water resistant to 1 foot (12") submersion and is designed to float if placed into the pool or spa. For best results, and to protect it from accidently exceeding its rated depth, we advise that the unit be kept by the pool or spa, rather than in the water. This location offers maximum convenience and is still safe if splashed. For best results, limit exposure to direct sun and prevent leaving the Wireless Terminal in an area that will get excessively hot. At the end of the day, return it to its charging cradle which should be located indoors or out of the elements. To prevent corrosion, always dry off the Wireless Terminal before inserting it into the cradle.

### Function

The HLWIRELESS Wireless Terminal provides the same functionality as the OmniLogic's Local Terminal except for the following:

- No Service Mode The OmniLogic Service mode is only accessible from the Local Terminal.
- Limited Configuration options Full access to all OmniLogic configuration settings is only available at the Local Terminal.
- Storage Mode Capability Storage Mode allows the user to turn off the Wireless Terminal completely (similar to removing batteries) for storage, shipping, etc. Refer to page 8 for more information.
- Additional icons The Wireless Terminal will have some additional screens and icons to control the radio and manage the battery. These new icons are shown below:

#### Battery Level



#### **Remote Connection**

**RED** the Wireless Terminal does not have a connection to your home's network **YELLOW** the Wireless Terminal is connected to your home's network, but not connected to the OmniLogic MSP

*WHITE* the Wireless Terminal is connected to the OmniLogic MSP, this is normal operation

## **Display Options**

The Wireless Terminal offers additional options found in the Display Menu.

#### Mode

Use the Mode selection to choose daylight or daylight off view. Depending on your selection, the backlight will be dark or light.

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#### Idle

The Idle selection determines the amount of time before the Wireless Terminal returns to the Idle Screen after a period of inactivity. Selection options are 30 seconds, 1 minute, 2 minutes, 5 minutes or always on (never return to the Idle Screen).

#### Charger

When the Wireless Terminal is in the charging cradle, the display will remain on by default. If you'd like the display to turn off after a defined time, go to the Charger selection. Options are 30 seconds, 1 minute, 2 minutes, or always on. Note that even when the display is off in the charging cradle, the Wireless Terminal is still connected to OmniLogic and can respond to commands instantly.

#### **Battery Power**

When the Wireless Terminal is in the charging cradle, the unit uses wall power while also charging the battery. It will always be "awake" and connected to the OmniLogic (even if the display is off), as long as it's sitting in the charger. The Wireless Terminal can not be overcharged and is safe to leave it in the charging cradle when not in use. The Wireless Terminal should be returned to the charging cradle after each day's use.

When the Wireless Terminal is not in the charging cradle, it uses battery power and will take steps to extend battery life. While awake, it will be connected to the OmniLogic. After a user defined time interval, the Wireless Terminal will go to "sleep", turning off its display and disconnecting from the OmniLogic. To awaken it from sleep, simply touch the display. Even though the display will turn on immediately, the Wireless Terminal will take about 5-8 seconds to reconnect to the OmniLogic. Wait until the Remote Connection icon turns white before sending commands to the OmniLogic.

To set the sleep time interval, refer to the diagram below. Select 30 seconds, 1 minute or 2 minutes.





## Care and Maintenance

## Cleaning

During normal use, the Wireless Terminal will require minimal cleaning. The body of the unit can be cleaned using a mild detergent. If you'd like to clean the touchscreen, use products designed for that application such as computer screen/flat screen TV cleaner. Never use abrasive material or cleaners on the Wireless Terminal.

### Improving Touchscreen Performance

The Wireless Terminal uses a resistive touch display screen suitable for environments in and around the pool. Compared to many mobile devices, it requires a deliberate touch when making selection. If you are having trouble with touchscreen, it can be calibrated using the following procedure:





## Storage Mode

Storage Mode allows the user to completely turn off the Wireless Terminal, preventing the battery from discharging. This feature is useful for storing the Wireless Terminal or just temporarily removing power to save the battery from draining. To enter Storage Mode, locate the charging pins on the handheld unit and the reset magnet on the underside of the charging cradle.



Swipe the charging pins across the reset magnet as shown below. Note that you MUST swipe from left to right. When shut down, there is no battery drain and the unit can be stored or shipped. To exit Storage Mode, place the Wireless Terminal into the charging cradle. Note that the Wireless Terminal can sometimes go into Storage Mode if it is subjected to a sudden shock or drop. Placing it back in the charging cradle will restart the unit.





## Troubleshooting

#### My Wireless Terminal will not turn on.

Place the Wireless Terminal in the charging cradle and charge for at least 30 minutes. If that doesn't work, make sure that it's properly seated and that the charging pins on the Wireless Terminal are touching the two pins in the charging cradle. Also confirm that there is input power to the charging cradle from the wall.

#### I dropped my Wireless Terminal and now it won't work.

A sudden shock from a drop can actuate the internal Storage Mode switch. If this happens, placing the Wireless Terminal in the charging cradle should allow the unit to resume operation. **The Wireless Terminal displays the "Searching for OmniLogic" screen.** The OmniLogic system is not discovering the Wireless Terminal. To troubleshoot this issue, perform the following steps:

- Make sure you're within range of the home's wireless router. Refer to the Remote Connection icon to determine if the Wireless Terminal is connected to the home network. If not (red icon), resolve the connection issue according to the instructions on page 3. If the icon is yellow, proceed with the next step.
- 2. Make sure the OmniLogic is connected to your home network by sending commands through the user's online account via a web browser or the mobile app.
- 3. Follow the screens below to reestablish the connection to the network router and to the OmniLogic.



4. If the HLWIRELESS fails any of the tests above, there may be an issue with your home network setup or router settings. To verify that the HLWIRELESS and OmniLogic are working properly, you can "override" most router configuration issues by manually entering the OmniLogic's IP address into the HLWIRELESS. To do this go to the OmniLogic and find its IP address using the method below. Write down the IP address.



## From OmniLogic



5. At the HLWIRELESS, follow the screens below.

## From HLWIRELESS



After entering the OmniLogic's IP address into the HLWIRELESS, the Wireless Terminal should connect and communicate properly. This functionality is only temporary if your router is set up to dynamically assign IP addresses. If so, it may randomly change the IP address that is assigned to the OmniLogic. When this happens, the Wireless Terminal will no longer be able to connect to the OmniLogic until the old IP address is replaced with the new.

To ensure dependable communications, either a static IP address should be assigned to the OmniLogic or the network/router dynamic IP configuration issues must be fixed.

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#### My Wireless Terminal works in the charger but shuts off when removed.

This may be a battery issue. Contact Hayward Technical Support.

#### The Wireless Terminal is not behaving normally. Can it be power cycled?

To power cycle the Wireless Terminal, put it in Storage Mode (page 8) and then back into the charging cradle. This is similar to removing the batteries and then reinstalling, essentially "rebooting" the Wireless Terminal.

#### The Wireless Terminal won't enter Storage Mode.

Be sure to line up the charging pins with the reset magnet and swipe from left to right across the magnet. If the unit won't go into Storage Mode, contact Hayward Technical Support.

#### My battery doesn't hold a charge or no longer charges.

If the battery no longer charges, contact Hayward Technical Support.

#### How do I delete all previous settings on my Wireless Terminal.

You can reset the HLWIRELESS to the same state it was in when new by selecting "Factory Reset" within the Configuration menu. Factory Reset will erase any previous settings but will retain the latest firmware version.







**LIMITED WARRANTY** (effective 03/01/12) Hayward warrants its OmniLogic, Pro Logic, OnCommand and E-Command pool automation products as well as its Aqua Rite, Aqua Rite Pro, Aqua Plus and SwimPure chlorination products to be free of defects in materials and workmanship, under normal use and service, for a period of three (3) years. Hayward also warrants its Aqua Trol chlorination products to be free of defects in materials and workmanship, under normal use and service, for a period of one (1) year. These warranties are applicable from the initial date of purchase on private residential swimming pools in the US and Canada. Installations of product for use on commercial pools in the US and Canada is covered for a period of one (1) year for defects in materials and workmanship. Hayward warrants all accessories and replacement parts for the above-identified pool automation and chlorination products for a period of one (1) year. Accessories also include remotes, actuators, base stations, temperature sensors, flow switches and chemistry probes. Each of these warranties is not transferable and applies only to the original owner.

Hayward shall not be responsible for cartage, removal, repair or installation labor or any other such costs incurred in obtaining warranty replacements or repair.

Proof of purchase is required for warranty service. If written proof of purchase is not provided, the manufacturing date code will be the sole determinant of the date of installation of the product. To obtain warranty service or repair, please contact the place of purchase or the nearest Hayward authorized warranty service center. For more information on authorized service centers please contact the Hayward Technical Service Support Center (61 Whitecap Road, North Kingstown RI, 02852) or visit the Hayward web site at www.hayward.com.

#### WARRANTY EXCLUSIONS:

1. Material supplied or workmanship performed by others in process of installation.

2. Damage resulting from improper installation including installation on pools larger than the product rating.

3. Problems resulting from failure to install, operate or maintain the product(s) in accordance with the recommendations contained in the owners manual(s).

4. Problems resulting from failure to maintain pool water chemistry in accordance with the recommendations in the owners manual(s).

5. Problems resulting from tampering, accident, abuse, negligence, unauthorized repairs or alternations, fire, flood, lightning, freezing, external water, degradation of natural stone used in or immediately adjacent to a pool or spa, war or acts of God.

6. Use of a non-genuine Hayward replacement salt chlorination cell on any Hayward automation or chlorination product will void the warranty for that product.

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For further information or consumer Technical support, visit our website at **www.hayward.com** 





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