



PENTAIR HOME FOR INTELLIFLO3[™] AND INTELLIPRO3[™] VSF VARIABLE SPEED AND FLOW PUMPS

USER'S GUIDE



IMPORTANT SAFETY INSTRUCTIONS READ AND FOLLOW ALL INSTRUCTIONS SAVE THESE INSTRUCTIONS

CUSTOMER SERVICE / TECHNICAL SUPPORT

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INTRODUCTION

The Pentair Home app is the perfect solution for remotely monitoring and controlling your pool equipment from anywhere.

This guide provides instructions on creating an account and using Pentair Home to get the most out your Pentair Home account and your connected pool products.

Home Dashboard

From the Home Dashboard you can remotely monitor and control your pool and equipment. Press a specific equipment tab to display controls. From any other screen, press the Dashboard Icon [7] to return to the Home Dashboard.

After a compatible device has been added to your Pentair Home account, the Home Dashboard can be accessed by tapping the corresponding device tab. For an overview of the Pump Dashboard, refer to *Pump Dashboard, page 4*.

- 1- Dashboard Settings: Press to access pool info, notification settings and equipment warranty information, or log out of Pentair Home. The Home Dashboard can be customized by pressing EDIT DASHBOARD.
- Contact Pentair: Press to open the Contact Pentair screen.
 Send a message to Pentair general or device support, or report bugs within the app.
- **3- System Status/Alerts:** Displays current system alerts. Press to open a list of alerts.
- Add a Device: Press to open the Add a Device screen.
 Choose a device to add to your Pentair Home Account. For example; ChemCheck,

IntelliConnect, IntelliSync, etc.

- 5- Control System Tab: Displays current system/ device operation mode.
 PRESS THIS TAB TO ADD EQUIPMENT TO A DEVICE.
- Equipment Tabs: Displays individual equipment status (pump, heater, salt chlorinator, etc.).
 Press a specific tab to open its Equipment Settings screen.
- 7- Dashboard Icon: Press to return to Home Dashboard from any screen.
- **Bevices Icon:** Press to open the Devices screen.
 View all connected devices and equipment.
 Press an equipment tab to open its Settings screen.
- 9- Schedule Icon: Press to open the Schedules calendar.
 Displays active schedules for connected equipment.
- **10-** Notifications Icon: Press to open the Alerts screen.

Displays past and present system alerts.



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Creating a Pentair Home Account

 From your chosen smart device, download Pentair Home from the Google Play[®] store (Android[®] devices) or Apple[®] app store (iOS[®] devices).

Note: Apple operating systems must be **iOS**[®] **11 or later.** Android operating systems must be **version 6.0 or later**.

- 2. Open the Pentair Home app (() from your smart device.
- 3. A series of marketing screens will display. Press SKIP to jump to account creation.
- The Email Entry screen will display. Enter your email address and press GET STARTED.
- 5. The Password Creation screen will display. See **FIGURE 1**.
- 6. Enter your desired password in both entry fields (1).
- Review the terms of service by pressing TERMS OF SERVICE. Check the Terms of Service Box (2) to acknowledge you have read the Terms of Service.
- 8. Press CREATE MY ACCOUNT (3).
- 9. The Verify Your Email screen will display and a verification email will be sent to the provided email address.
- 10. Verify your account using the link in the verification email.

Note: If you do not receive a verification email press I DIDN'T GET THE EMAIL at the Check Your Email screen and follow on-screen instructions.

- 11. After verification, the Create Profile screen will display. See FIGURE 2.
- 12. Enter your profile information.
- 13. Press the STANDARD or METRIC tab to choose which units the app will display.
- 14. Press SAVE to save entries.
- 15. Continue to Pairing Devices to your Account, page 3.



| Create profile | | | | |
|--|---|--|--|--|
| Upload a profile photo | | | | |
| | | | | |
| First Name | | | | |
| John | | | | |
| Last Name | | | | |
| Watson | | | | |
| Country | | | | |
| United States | ~ | | | |
| Primary Address | | | | |
| 1620 Hawkins Ave | | | | |
| Address 2 | | | | |
| Sanford | | | | |
| NC ~ 27330 | | | | |
| Mobile Phone Number | | | | |
| + 1 800 831 7133 | | | | |
| Select Units | | | | |
| U.S. Standard "F, Ibs, Inch "C, kg, mm | 1 | | | |
| Save | | | | |
| FIGURE 2 | | | | |



Pairing Devices to your Account

Several smartphone functions will be used to successfully pair your pump to your Pentair Home account. Before signing into the app ensure:

- · Your smartphone's Bluetooth® wireless technology is turned on
- · Your smartphone's location service is on
- · Pentair Home has your smartphone's camera permissions

TO PAIR A PUMP TO YOUR ACCOUNT:

- 1. Sign into your Pentair Home account.
- 2. The Home Dashboard screen will display (FIGURE 3). Press ADD A DEVICE [1].
- 3. The Add a Device screen will display (FIGURE 4). Select your pump from the list of devices.
- 4. The Installation screen will display. Press CONTINUE.
- 5. At the pump, press the CONNECT button on the drive.
- 6. The pump will enter *Bluetooth* Pairing Mode and the Connect LED will begin pulsing Blue.
- 7. Select your pump to begin *Bluetooth* pairing.
- 8. Wait for the Connect LED to turn solid Blue, then press CONTINUE.
- 9. Once a *Bluetooth* connection has been established and confirmed, press CONTINUE.
- 10. The Connect Your Device to WiFi screen will display (FIGURE 5). Select your WiFi network and enter the password. Press CONTINUE.
- 11. The Device Address screen (FIGURE 6) will display. Select your address from the Device Address drop down menu and press CONTINUE.
- 12. The Nickname screen will display. Enter the name you would like your pump to go by within Pentair Home. Press SAVE.
- 13. Installation Completed will display. Press CONTINUE.
- 14. Your pump is now paired to Pentair Home and ready to use.

Note: When restarting the pump after a power outage or after it has been powered off, the Connect LED will pulse yellow. This indicates that the pump needs to be re-paired with your smartphone. Press the CONNECT button to allow your smartphone to recognize the pump.





| Connect Your Device to WiFi | IntelliFlo | | |
|--------------------------------|---|--|--|
| NETWORK | Please add a location of your IntelliFlo | | |
| 🛜 Telecom | Device Address | | |
| Password | 1620 Hawkins Ave, Sanford, NC | | |
| | CONTINUE | | |
| CONTINUE | CONTINUE | | |
| FIGURE 5 | FIGURE 6 | | |

OPERATION

Pump Dashboard

The Pump Dashboard is your pump's home page. Basic pump info, run status and programming can be viewed from this screen.

If any pump alerts and problems are present they will also display at the top of this screen.

 Device Settings: Tap to display the Device Settings screen.
 Most of the pump features and settings can be accessed from the Device Settings screen. Refer

to Device Settings, page 6.

Enabled/Disabled Toggle: Tap to enable or disable your pump.

A DISABLED pump will not start until this toggle is switched to ENABLED or the pump ON/STOP button is pressed.

3- Current Status: Displays the current pump state.
 IDLE: The pump is not currently running a program.

PROGRAM: Displays the program currently running.

4- Next Program: Displays the next program scheduled to run after completion of the current program or idle.

If all programs are programmed manual or timer "No Programs are Scheduled" will display.

- **Run Data:** Displays estimates of the pump's current flow, power consumption and overall system pressure.
- **Program Tabs:** Displays all pump Programs and their individual settings.
 Tap a Program Tab to edit or start a program.

Refer to *Program Setup, page 5* for programming instructions.

Note: Quick Clean will always display as a program tab and cannot be removed from the Pump Dashboard. Quick Clean is programmed similarly to a Timer program.

7- Edit/Run Program Tabs: Displays when a Program Tab is pressed.

EDIT: Tap to open the Program Setup screen. Refer to *Program Setup, page 5*. **RUN NOW/STOP:** Tap to manually start or stop

a pump program.



Program Setup

The pump allows you to create and customize up to 8 unique programs.

The pump also features a default Quick Clean program that can be customized, but not renamed or deleted.

1- Schedule Enabled/Disabled Toggle: Tap to enable or disable a Schedule Program.

If disabled, the schedule program is inactive and will not run until it is re-enabled.

This toggle will only appear if a program is Schedule Mode.

- Program Nickname: Displays the name a specific program will display on the Pump Dashboard.
 Tap the entry field to edit the program name.
- **3- Program Mode:** Displays the current Program Mode. Tap a mode tab to select a mode.
 - **MANUAL:** A manual program must be manually started and stopped from the Pump Dashboard. The program will not repeat and will run until it is manually stopped.
 - **TIMER:** A timer program must be manually started from the Pump Dashboard but will automatically stop at the end of its set duration. The program will not repeat and will only run for its set duration.
 - SCHEDULE: A schedule program will automatically start and stop based on its day, start time and end time settings. The program will repeat at the same time each day on each day selected.

4- Set Schedule/Timer:

- **MANUAL MODE:** This option will not display for manual mode programs.
- **TIMER MODE:** Set the run duration for timer mode programs.
- SCHEDULE MODE: Select which days of the week you want the pump to run and set the duration of these daily runs.
- **Pump Speed/Flow:** Displays the Speed (percentage of maximum speed) or the Flow (m³/h) set for the program. Tap the Speed or Flow tab to determine which of these measurements is displayed.

Use either the +/- buttons to edit the speed/flow setting in minor increments or the slider to edit in larger increments. The Activated/Deactivated toggle shows the state of the pump. If ACTIVATED, the pump is currently active and able to run a program.

- 6- Relay Toggles: Tap a relay toggle to determine whether a wired device is active during the program run time.
 If a device relay is Activated, the device will run along with pump the entirety of manual, timer or schedule program.
 These toggles only display if the Relay Control Board (P/N 356365Z -- sold separately) has been installed.
- 7- Save: Tap to save edits made to program settings.
 The SAVE button must be pressed in order to save edits to settings; otherwise they will be lost.
- 8- **Remove Program:** Tap to permanently delete a program from the Pump Dashboard.



Device Settings

Device Settings can be accessed by pressing the Device Settings gear icon (()) in the top-right of the Device Dashboard.

- 1- **Product Overview:** View and edit general information about your IntelliFlo3 VSF such as device nickname or address.
- 2- Notifications: Control where and how device notifications are delivered.
- 3- Product Support: Opens <u>www.pentair.com</u>
- 4- Remote Monitoring: Use your address to find and contact local pool professionals offering to monitor your pump remotely.

Search results will only contain professionals offering remote monitoring.

Remote monitoring permissions can be given and revoked from this screen at any point.

5- Contact a Professional: Use your address to find a local pool professional.
Search require util contain all local professionals

Search results will contain all local pool professionals.

- 6- WiFi: View and update the WiFi network you are currently paired to, as well as signal strength.
- 7- Direct Connect: Setup the Direct Connect feature. This feature allows you to control your pump without an internet connection. Refer to *Direct Connect, page 7.*
- 8- **Programs:** View and edit your pump's current programs. Refer to *Program Setup, page 5.*
- **Relays:** View and edit your current pump relay device settings and nicknames. This functionality is only available if the Relay Control Board (P/N 356365Z -- sold separately) has been installed. Refer to *Relays, page 7*.
- **10- Priming Parameters:** View and edit your pump's priming settings.

Refer to Priming Parameters, page 8.

- 11- Limits Parameters: View and edit your pump's speed, flow and pressure limits. Refer to *Limits Parameters, page 8*.
- 12- Thermal Mode: View and edit the your pump's Thermal Mode temperature set point and speed/flow settings. Refer to *Thermal Mode, page 9.*
- 13- Ramping Speed: Determine how quickly your pump will ramp up or down on startup or when changing speeds/flows. Ramping Speed can be set to FAST, MEDIUM or SLOW.
- 14- Automation Configuration: View and edit the pump address associated with your automation system.
 The pump address entered on this screen must match the address in the automation system. If addresses do not match, the pump can not communicate with an automation system.
- 15- Remove Device: Remove the pump and pump relay devices from your Pentair Home account.

| E Product Overview | > |
|--------------------------------------|---|
| Diffications | > |
| O Product Support | > |
| ිරි Remote Monitoring | > |
| Scontact a Professional | > |
| ᅙ WiFi | > |
| Direct Connect | > |
| O Programs | > |
| Relays | > |
| C Priming Parameters | > |
| - Limits Parameters | > |
| Le Thermal Mode | > |
| 🚱 Ramping Speed | > |
| Beneficiary Automation Configuration | > |
| Remove Device | |

Direct Connect

Pump Dashboard > Device Settings > Direct Connect.

Place your pump into Direct Connect mode to program and operate your pump without a WiFi connection via a *Bluetooth*[®] wireless technology connection.

To setup and operate the pump through Direct Connect your phone must be within *Bluetooth* range of the pump and the phone's *Bluetooth* must be enabled.

SET-UP WIFI: Tap to establish a WiFi internet connection between your phone and the pump. WiFi will now be your primary connection.

ALWAYS USE DIRECT CONNECT: Tap to ensure your pump and phone will communicate in Direct Connect Mode when within range of each other.

DISCONNECT: Tap to disconnect your *Bluetooth* wireless connection.

Note: When restarting the pump after a power outage or after it has been powered off, the Connect LED will pulse yellow. This indicates that the pump needs to be re-paired with your smartphone. Press the CONNECT button to allow your smartphone to recognize the pump.

Relays

Pump Dashboard > Device Settings > Relays

The following functionality is only available if the Relay Control Board (P/N 356365Z -- sold separately) has been installed.

The relay board includes two high-voltage terminals capable of controlling pool lights, salt chlorine generators or other filtration system components. One terminal is intended for 5A max low-current connections and the other for 16A max high-current connections.

- 1- Device Type: Select the device connected to a particular relay.
 - RELAY 1 Options: Lights, Salt Cell or Other
 - RELAY 2 Options: Lights, Salt Cell, Booster Pump or Other
- 2- Device Nickname: Enter the name you want your device to display on Program Setup screens.
- **3- Speed/Flow Dependent:** Check this box to ensure the relay is only activated when the pump is running.
- 4- Add/Remove: Tap to add or remove a relay.

Direct Connect

You are currently using Direct Connect. This allows you to temporarily program and operate IntelliFlo3 through your phone's Bluetooth connection, without internet access.

You can Direct Connect permanently through Bluetooth wireless when you are within range of the Intelliflo3 by choosing Always use Direct Connect. This will automatically connect when your phone is within range.



| Relay 1 (5 Amp) | R | emove |
|------------------|----------------|-------|
| Device | Others | |
| Nickname | Lights | |
| Speed/Flow Der | Salt Cell | |
| | Others | |
| Relay 2 (16 Amp) | R | emove |
| Device | Others | |
| Nickname | Hi Power Relay | |

Priming Parameters

Pump Dashboard > Device Settings > Priming Parameters

All priming settings can be edited and set from this screen. Tap a specific setting on the right-side of the screen to edit.

- Enabled/Disabled: ENABLED allows the pump to detect whether or not the system is properly primed for pump startup.
 If prime is not detected the pump will enter a priming cycle, based on the settings below.
- **2- Priming Speed:** Set the speed the pump will run during a priming cycle.
- Max Priming Duration: Set the maximum amount of time the pump will attempt to prime.
 If the pump does not achieve prime during this time a priming error will display and the pump will stop.
- **4– Priming Range:** Set the sensitivity of pump prime detection. Lower settings require higher flow to detect a successful prime.
- **5- Priming Delay:** Set the amount of time the pump remains at priming speed before transitioning to the run program.
- **6-** Loss of Prime: ENABLED allows the pump to detect low-flow or no-flow situations while running.

If a loss of prime is detected the pump will pause and attempt to prime, based on the settings above. If priming is successful the pump will continue programmed operation.

Limits Parameters

Pump Dashboard > Device Settings > Limits Parameters.

Set and edit pump speed, flow and pressure limits. These settings will ensure your pump does not operate outside of the programmed parameters.

- 1- Minimum/Maximum Speed: Set the absolute minimum and maximum speeds the pump will be allowed to run. Pump run speed will never run under or over these two settings.
- Minimum/Maximum Flow: Set the absolute minimum and maximum flow rate the pump will be allowed. Pump m³/h will never fall under or exceed these two settings.

Note: These minimum and maximum flow rates only apply to Flow Programs. To apply these settings to Speed Programs as well, the next setting (Flow Limit - Speed Programs) must be enabled.

- **3-** Flow Limit (Speed Programs): Enable or disable minimum and maximum flow rate limits for Speed Programs.
- 4- Max Pressure: Set the absolute maximum system pressure the pump will be allowed to produce. Pump system pressure will never exceed this setting.

Note: The maximum pressure setting only applies to Flow Programs. To apply these settings to Speed Programs as well, the next setting (Pressure Limit - Speed Programs) must be enabled.

5- **Pressure Limit (Speed Programs):** Enable or disable maximum system pressure limit for Speed Programs.





Thermal Mode

Pump Dashboard > Device Settings > Thermal Mode.

Thermal Mode is intended to help protect the pump during freezing or near-freezing conditions.

Note: Do not depend on this feature for freeze protection of the entire filtration system and pool.

Certain situations could cause the pump to sense a different temperature than actual air temperature. Your automation system air temperature sensor should be used to sense actual temperature. For example, if the pump is located indoors, the temperature of the room does not indicate the outdoor temperature.

Note: The pump does NOT sense water temperature.

- 1- Enable/Disable: Enable or disable Thermal Mode protection.
- **2- Temperature Set Point:** Set the temperature at which the Thermal Mode program will initiate.
- 3- Speed/Flow Display: Determines whether the Speed/Flow setting below is displayed as a percentage of max speed or in m³/h.
- 4- **Speed/Flow Setting:** Set the Speed% or m³/h the pump will run when Thermal Mode is triggered.
- 5- Save: Saves edits to Thermal Mode settings.



TROUBLESHOOTING

Alarms and Warnings

When an alarm is triggered the drive's ON/STOP LED will blink RED and a fault code will display. The pump will stop until the alarm is resolved.

When a Warning is triggered the drive's ON/STOP LED will blink GREEN/YELLOW and a fault coded will display.

Depending on your particular setup, fault codes will display on one or more of the user interfaces:

- Pentair Home App
- Automation System Interface
- Optional Touchscreen Controller (Almond P/N 356159Z, Black P/N 356348Z)

| ALARM / WARNING | DESCRIPTION | DEFINITION | |
|--|---|--|--|
| Weak Wi-Fi Connection | Weak Wifi connection detected. | Pump antenna may be obstructed or too far away from your router. The antenna wire can be extended. Refer to the pump <i>Installation and Maintenance Guide</i> for instructions. | |
| Offline | The pump is offline. | The Pentair cloud cannot connect to your pump. This could be caused by a power outage at the pump or router, or a loss of WiFi signal to the pump. | |
| Priming Failure | The pump has reported a Priming Failure Alarm. | Priming failure can be caused by lack of water in the volute strainer basket. | |
| Overheat | The pump has reported an Overheat Condition. | The pump motor has detected an abnormally high internal temperature. This can be caused by a blockage of the cooling fan inlet or outlet, or by excessively high ambient air temperature. The pump will attempt to protect itself by reducing the motor speed to give the motor and drive a chance to cool down. | |
| Over Current | The pump has reported an Over Current Condition. | Load has increased on the motor; due to debris, part interference, temperature issues, age of parts, or supplied voltage. Inspect the rotating parts of the pump for blockages or debris buildup. Refer to the pump Installation and Maintenance Guide for disassembly and reassembly instructions. | |
| Over Voltage | The pump has reported an Over Voltage Alarm. | Supplied voltage is outside of the proper range. When voltage returns to the normal the alert will clear and the pump will resume operation. | |
| Under Voltage | The pump has reported an Under Voltage Alarm. | Supplied voltage is outside of the proper range. When voltage returns to the normal the alert will clear and the pump will resume operation. | |
| Speed Limit | The pump has reported a Speed Limit Warning. | The pump is operating at the programmed maximum speed in order to achieve the desired speed/flow. Refer to <i>Limits Parameters</i> on page 8 for instructions on adjusting the Speed Limit. If this alert displays and the Speed Limit is already set to 100%, then the pump may not be capable of achieving the desired flow rate. | |
| Pressure Limit | The pump has reported a Pressure Limit Warning. | The pump is operating at the programmed maximum system pressure. The pump monitors Total Dynamic Head, and not outlet pressure, so it may differ from the reading on the filter gauge. Refer to <i>Limits Parameters</i> on page 8 for instructions on adjusting the pump Pressure Limit. | |
| Flow Limit | The pump has reported a Flow Limit Warning. | The pump is operating at the programmed maximum flow rate. Refer to <i>Limits Parameters</i> on page 8 for instructions on adjusting the pump Flow Limit. | |
| Internal Fault | The pump has an internal error. | This alert can be caused by a few different types of internal hardware or software errors in the drive. Disconnect power to the pump and reconnect after one minute. If the alert remains, contact a qualified pool professional. | |
| Drive is Derating (Warning) | The pump is slowing down to prevent the drive from overheating. | This alert usually accompanies an Overheat or Over Current alert. It is intended to note that the pump will continue to operate at a reduced speed as long as possible. After the drive has cooled enough it will automatically resume normal operation. | |
| Derating Alarm - Exceeded & Cut Off | The pump has stopped to prevent the drive from overheating. | The motor and drive are not able to reduce speed enough to protect themselves. The motor will stop and Pentair Home will display this alarm. When the drive has cooled enough, it will automatically resume operation and attempt to run the requested program. | |
| Thermal Mode | The pump operating in Thermal Mode. | The pump is operating in Thermal mode. Thermal Mode is controlled by the drive's internal temperature, not water temperature. This is intended to keep motor components from freezing, but should not be solely relied on for full filtration system freeze protection. | |



Waste treatment of electronic devices at the end of their service life:

The crossed-out bin placed on the main parts which make up the product indicates that it must not be disposed of together with the household waste. It must be returned to an appropriate collection point for electronic device recycling (information available from the local household waste collection service). This product contains potentially dangerous substances which may have adverse effects on the environment and humain health.

PENTAIR

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