

HomeSeer 4

ScreenLogic Plugin

User Guide

v2.1.x.x

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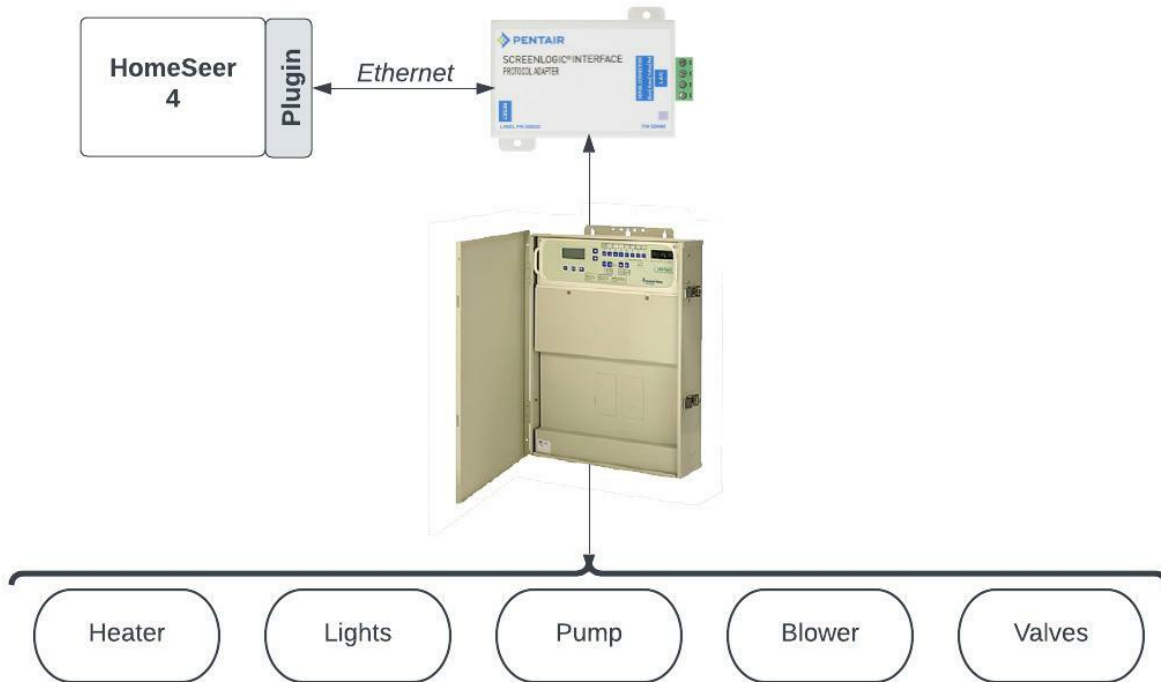
Introduction

The ScreenLogic Plugin integrates HomeSeer 4 with the **Pentair ScreenLogic Protocol Adapter** over your local area network to manage and monitor the **Pentair EasyTouch Controller**. Once started, the Plugin performs Auto Discovery to locate the Adapter hardware on the network. The HomeSeer root Device is created and named with the familiar “Pentair: XX-XX-XX” format, where the XX’s represent the last 6 digits of the Adapter’s network MAC address. The Plugin then periodically polls the Adapter to create and update the configuration information. Some Feature values are settable as described in the tables below. The ScreenLogic Root Device (ie Pentair: 11-22-33) may be renamed should you prefer.

ScreenLogic V2 Plugin debuts with

- **C# Network Stack:** Utilizes a native *C# Network Stack* to communicate with the Adapter, which eliminates the restrictions imposed by the Python implementation in V1, and also paves-the-way for adding new features in future releases.
- **Performance:** Polling boasts a *10 fold performance increase* on all platforms, and plugin size is reduced dramatically.
- **New Platforms:** HomeTroller running *Windows 7 is now supported..!*
- **Instant Updates:** The most requested feature, the Adapter’s *instantaneous updates* are now processed by the Plugin which receives changes from the Controller and immediately updates HomeSeer. [See details below](#)
- **Product Improvement Opt-In:** This major release also allows *opting into Product Improvement Analytics*. [See details below](#)

HomeSeer 4 Pentair ScreenLogic Plugin



Manual Configuration

Auto Discovery could fail if HomeSeer is not on the same network segment as the Adapter, for example if they are on different VLANs. Should this occur an Error is written to the HomeSeer Log and also the Device Status. The ScreenLogic Settings page contains a section to manually configure the Adapter. The page includes an example to cut, paste and edit to specify the Pentair Adapter name (ie, "Pentair: 11-11-11") and IP Address (ie, 192.168.1.1) .. *the formatting is critical* and typos will cause Discovery to fail and write errors in the Log.

Dynamic Naming

The ScreenLogic Circuit Names are specified in the Pentair EasyTouch Controller. If a Circuit Name is changed in the Controller, the next poll will *dynamically update* the name in HomeSeer and a message written in the Log. The Feature Reference Id is not altered so that Events and HSTouch are not affected. **Dynamic Naming is disabled** by manually changing a Circuit's Name in the HomeSeer UI which will write a message to the Log. **Dynamic Naming is re-enabled** for a Circuit by manually changing the

Name to "*" (asterisk, without the quotes). During the next polling interval HomeSeer will be updated with the Circuit name specified by the Controller and a message written to the Log.

Note: *HomeSeer does not automatically refresh the web interface when the name changes. Manual page refresh is required.*

Windows and Linux

The ScreenLogic Plugin runs on Windows, Linux and the Raspberry Pi and Docker out of the Box. This includes older HomeTroller products running on Windows 7. Please post a message on the HS4 ScreenLogic forum If you experience any problems with your setup. A link to the [Forum](#) is on the ScreenLogic About page for your convenience.

Instantaneous Updates

The ScreenLogic Plugin is able to receive Instantaneous Updates sent asynchronously by the Adapter. The Adapter sends updates when things like the Air Temperature changes, or you've manually turned on the spa from the Controller or Pentair App. However, some data is only available during polling.

Note: *Some specific features are dependent on your ScreenLogic Configuration*

The data available in the Instant Update includes:

- Circuit State: On, Off and Delay
- Air Temperature
- Pool and Spa: Last Temperature, Heat Status, Heat Mode, Heat SetPoint, Cool SetPoint
- Delays: Pool, Spa and Cleaner
- Freeze Mode
- SaltPPM, pH, pHTank, ORP, ORP Tank, Saturation

Product Improvement Analytics

The Settings page contains a checkbox where you can opt into Product Improvement Analytics. This will help the development team to be more proactive at validating the different Pentair EasyTouch configurations. During plugin initialization, the JSON configuration of your EasyTouch is uploaded for analysis. This does not include any personal information. You can opt out at any time. The JSON configuration can be seen in Plugins → ScreenLogic → Export

Plugins → ScreenLogic → Settings

The ScreenLogic Settings page allows you to:

- Set the logging level: Error, Warning, Info, Debug, Trace
- Specify how often to poll the Adapter, from 10 to 300 seconds (default is 30)
- Enable or Disable Polling
- Manually configure the Adapter Name and IP Address
- Opting In or Out of Product Improvement Analytics
- Adapter-specific Settings for Salt Cell Calibration

HomeSeer HomeSeer Web Control

Devices Events Cameras Setup Tools Plugins

ScreenLogic Pentair

Plugin Settings: ScreenLogic

Logging Level

Debug

Polling Interval (10 to 300 seconds)
60

Polling Enabled

Manually Configured ScreenLogic Adapters. See About page

Example: { "adapters": [{ "Name": "Pentair: xx-xx-xx", "IPAddress": "192.168.1.1", "Port": 80 }] }

Product Improvement Analytics Opt-In

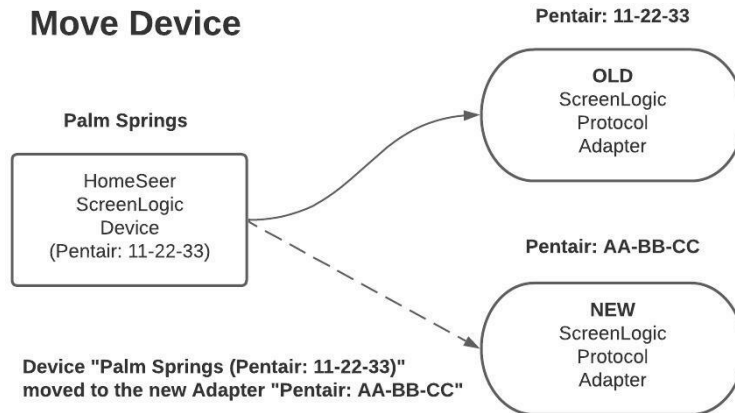
CANCEL SAVE

Plugins → ScreenLogic → Import / Export

Additionally, the ScreenLogic Plugin supports **Importing** and **Exporting** the configuration information in a JSON format. These functions are only needed if directed by Tech Support.

Plugins → ScreenLogic → Move

When the plugin discovers the ScreenLogic Adapter for the first time, a new HS Device is created, and associated-with and named-after the new Adapter using its unique Address (ie, Pentair: 11-22-33). In the rare event that you must replace your Adapter, the HS Device needs to be “moved” to the new Adapter, which will update the Device association to the new Adapter’s new unique Address.



FAQ: When should I move the ScreenLogic Device?

Perform the Move operation prior to installing the new Adapter; the Move tool has the instructions. Look on the Adapter for its Address (ie, Pentair: AA-BB-CC) and use this value when asked.

FAQ: I added the new Adapter before moving the Device

Failing to Move the Device prior to installation of the new Adapter breaks ScreenLogic Events, Scripts and HS Touch operations. This is because the Device is still referencing the old Adapter, which is no longer present in your configuration. Adding the new Adapter before moving will discover the new Adapter, create a new HS Device and associate it with the new Adapter. **You can still move the original Device**, but after the Move you should delete the new Device that was created; it is now orphaned with no associated Adapter. This can be done manually from the HS Device page, or use the Move tool toggle: “*Delete orphaned Device after Move?*”. When this toggle is enabled, after associating the original Device with the new Adapter, the Move tool will delete the newly orphaned Device. The toggle has no effect if the Move results in no orphaned Device.

After Moving a Device to a new Adapter, be sure to check the Log to verify Discovery completes properly and the new Adapter is now Connected.

ScreenLogic Features

- *Temperatures are displayed in degrees F or C depending on the EasyTouch configuration*
- *Temperature trending arrow is based on the previously received value*
- *Circuits and Features could vary depending on your specific EasyTouch configuration*

Name	Description	Example	Settable
Pentair: XX-XX-XX	Root Device, Pentair Controller Type	EasyTouch2 4	
Freeze Mode	EasyTouch Freeze Mode	Off	
Config Ok	EasyTouch Configuration is Ok	Yes	
Cleaner Delay	Pump Delay for Cleaner Mode	Off	
Pool Delay	Pump Delay for Pool Mode	Off	
Spa Delay	Pump Delay for Spa Mode	Off	
Equipment	Controller optional hardware	Chlorinator	
Status	Adapter IP address, or error (see Log)	192.168.27.129	
Air Temperature	Ambient air temperature	58 °F ↑	
Pool Heat Mode	Off, Solar, Solar Preferred, Heater	Off	✓
Pool Heat Status	Off, Cooling, Heating	Off	
Pool Heat Set Point	Pool Heater Temperature	85 °F	✓
Pool Cool Set Point	Pool Cooler Temperature	82 °F	✓
Pool Last Temperature	Pool water last temperature	72 °F ↓	
Spa Heat Mode	Off, Solar, Solar Preferred, Heater	Heater	✓
Spa Heat Status	Off, Cooling, Heating	Off	
Spa Heat Set Point	Spa Heater Temperature	97 °F	✓
Spa Cool Set Point	Spa Cooler Temperature	85 °F	✓
Spa Last Temperature	Spa water last temperature	80 °F ↑	
Spa	Toggles Spa Operation <ul style="list-style-type: none"> • May toggle Pool setting 	On, Off	✓
Air Blower	Configurable Circuit, example only	On, Off	✓
Pool High	Configurable Circuit, example only	On, Off	✓

Name	Description	Example	Settable
Pool	Toggles Pool Operation <ul style="list-style-type: none"> • May toggle Spa setting 	On, Off	✓
Feature 1 : Feature N	Optional Feature which the end-user can configure in their EasyTouch Controller. Note: <ul style="list-style-type: none"> • Your configuration may have more or less Features. • These Features can be hidden in HomeSeer to reduce UI clutter. 	On, Off	✓

Light Features (if so equipped)

Name	Description	Example	Settable
Pool Light	Turns Light On or Off Note: <ul style="list-style-type: none"> • Your configuration may contain zero or more Light Circuits, ie, Pool, Spa, Jets, ... • Each Light Circuit can be turned On and Off individually. 	Off	✓
Light Mode	Off, On, Set, Sync, Swim, Party, Romance, Caribbean, American, Sunset, Royal, Save, Recall, Blue, Green, Red, White, Magenta, Thumper, Next, Reset, Hold Note: <ul style="list-style-type: none"> • Changing the Light Mode will turn ALL Light Circuits On. • HomeSeer will remember the Light Mode <u>after</u> it is set. • EasyTouch supports a <u>single</u> Light Mode which controls ALL Light Circuits. 	Blue	✓

Chlorine Generator Features (if so equipped)

Name	Description	Example	Settable
Spa Chlorine Generator	Chlorine Generator percentage while in Spa Mode (0 to 100%)	0 %	✓

Pool Chlorine Generator	Chlorine Generator percentage while in Pool Mode (0 to 100 %)	15 %	✓
Salt PPM	Chlorine Generator Salt Parts Per Million	4,200 ppm	
Super Chlorinator Timer	Super Chlorination Timer Note: <ul style="list-style-type: none"> Setting timer may turn on the Pool or Spa 	0 hours	✓

Pump Features (if so equipped)

- *Multiple Pumps may be displayed depending on your configuration*
- *Pump name (ie, Pool Pump) is specified by the EasyTouch Controller*
- *Some Pump features are dependent on your configuration*

Name	Description	Example	Settable
Pool Pump	Turns Pump On or Off	On	
Pool Pump Current RPM	Pump current RPM <ul style="list-style-type: none"> If so equipped 	2,700 rpm	
Pool Pump Type	Pump Type	Intelliflo VS	
Pool Pump Current Watts	Pump current power consumption <ul style="list-style-type: none"> If so equipped 	1,137 W	
Pool Pump Current GPM	Pump current GPM <ul style="list-style-type: none"> If so equipped 	60	

IntelliChem Features (if so equipped)

Very limited testing of this feature

Name	Description	Example	Settable
Current pH			
Current ORP			
pH Setpoint			

Name	Description	Example	Settable
ORP Setpoint			
pH Last Dose Time			
ORP Last Dose Time			
pH Last Dose Volume			
ORP Last Dose Volume			
pH Supply Level			
ORP Supply Level			
Saturation			
Calcium Hardness			
Cyanuric Acid			
Total Alkalinity			
Salt/TDS			
pH Probe Water Temperature			
Flow Alarm			
pH Alarm			
ORP Alarm			
Ph Supply Alarm			
ORP Supply Alarm			
Probe Fault			
pH Lockout			
pH Daily Limit Reached			
ORP Daily Limit Reached			
pH Dosing State			
ORP Dosing State			
IntelliChem Firmware			

Example ScreenLogic Device:

Plugin ScreenLogic			
Pentair: 11-11-11			
EasyTouch2.4			
 Equipment	Solar, Chlorinator	Yesterday 3:58:40 PM	
 Status	192.168.27.169	Today 7:22:02 PM	
 Air Temperature	84 °F ↑	Today 7:21:55 PM	
 Pool Heat Mode	Heater	Yesterday 3:58:41 PM	<input type="button" value="OFF"/> <input type="button" value="SOLAR"/> <input type="button" value="SOLAR PREFERRED"/>
			<input type="button" value="HEATER"/>
 Pool Heat Set Point	85 °F	Yesterday 3:58:41 PM	<input type="button" value="75"/> <input type="button" value="80"/> <input type="button" value="85"/> <input type="button" value="90"/>
			<input type="range" value="85"/>
 Pool Last Temperature	85 °F ↓	Today 6:43:09 PM	
 Spa Heat Mode	Heater	Yesterday 3:58:42 PM	<input type="button" value="OFF"/> <input type="button" value="SOLAR"/> <input type="button" value="SOLAR PREFERRED"/>
			<input type="button" value="HEATER"/>
 Spa Heat Set Point	97 °F	Yesterday 3:58:42 PM	<input type="button" value="95"/> <input type="button" value="97"/> <input type="button" value="99"/> <input type="button" value="101"/>
			<input type="range" value="97"/>
 Spa Last Temperature	97 °F ↑	Yesterday 3:58:42 PM	<input type="range" value="97"/>
 Spa Chlorine Generator	0 %	Yesterday 3:58:42 PM	<input type="range" value="0"/>
 Pool Chlorine Generator	5 %	Yesterday 3:58:42 PM	<input type="range" value="5"/>
 Salt PPM	4,450 ppm	Yesterday 3:58:42 PM	
 Super Chlorinator Timer	0 hours	Yesterday 3:58:42 PM	
 Pool Pump	Off	Today 6:55:11 PM	
 Pool Pump Current RPM	0 rpm	Today 6:55:11 PM	
 Pump Type	Intelliflo VS	Yesterday 3:58:43 PM	
 Pool Pump Current Watts	0 W	Today 6:55:11 PM	
 Spa	Off	Yesterday 3:58:43 PM	<input type="button" value="OFF"/> <input type="button" value="ON"/>
 Pool Light	Off	Yesterday 3:58:44 PM	<input type="button" value="OFF"/> <input type="button" value="ON"/>