# Smart Spa Remote Installation Guide

# **Alexa-Jandy 8**

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For Assistance email: support@smartsparemote.com

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# **1** Installing the Smart Spa Remote – Jandy/Alexa circuit board

- Suggest you watch the Smartsparemote Jandy 8 install video @ www.Smartsparemote.com before starting!
- Jump to section 3.3 and program your Jandy Power Center to support the Smartsparemote by adding the Spalink to your Jandy configuration.
- Connect the Smart Spa Remote circuit board as shown below

To avoid damaging the Smart(Alexa) Spa Remote PCB from Static Electricity Steps:

- Please wear shoes with rubber soles
- avoid dragging board
- hold board on green sections only
- avoid touching components
- LASTLY TURN THE JANDY OFF BY UNPLUGING FROM POWER/BREAKER
  - You are inserting the Smart Spa Remote wires along with the existing Jandy wires already in your power center. Connect the Spa control wires, see diagrams below.
  - Connect the Spa Control Wires , see below, red to red and black to black, green to green and yellow to yellow.
  - Power Jandy power center back up. Red led will light up on smart spa PCB with power connected to Jandy.
  - Place circuit board in controller where you can extend the external antenna to the outside of the Jandy Control Box, We recommend putting sticky tape on back of board and mounting to left inside of aqualink metal enclosure so that antenna can extend out one of the bottom cut outs. Place or mount card where PCB metal pins do not touch the Jandy Power Center metal box.

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## Wiring Diagram Figure Below

- Smart Spa Remote 4 wires for Power & Control to Jandy 4 pin red Terminal
- Temperature and Thermostat control comes directly from Jandy via communications connections (Jandy #2 & #3).
- You may have 2 RED 4 pin blocks on your Jandy, like in picture above, choose the far left RED block to connect your smartsparemote

Smart Spa Remote	Green to Jandy #4
Smart Spa Remote	Yellow to Jandy #3
Smart Spa Remote	Black to Jandy #2
Smart Spa Remote	Red to Jandy #1

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# 2 Setting Up Smart Spa Remote

Once the Smart Spa Remote circuit board has been installed you will want to begin the software setup and configuration.

- 1. Power on the Smart Spa Remote by plugging in the power as shown in figure 1 above. You should see a red light on the circuit board. Once the red power led is on you may proceed to configuring Alexa to discover the pool devices.
- 2. Configure the smart Spa Remote by using your smart phone. Confirm the smartphone has access to the home owner wifi by entering setup on your phone. If you don't see the homeowner wifi displayed when scanning for SSID's you will need the home owner to add a range extender inside the home near the Jandy Aqualink.
- 3. The smart Spa Remote PCB once powered up will begin broadcasting as a hot spot with the name "pooltimer".
- 4. You will select **pooltimer** SSID from your phone.

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Once initially selected the smart Spa Remote will try to connect over the internet so that it can communicate with Alexa and Smart Spa Remote as part of the registration process. Once you select the pooltimer SSID the phone should automatically launch a configuration screen from your default browser. If the browser does not appear you may begin the registration process by going to your favorite web browser like Chrome or Safari.

1. Enter **pooltimer.local**/ into the browser where you would normally enter something like http://www.test.com

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2. Once you enter **pooltimer.local**/ a screen will pop up that will allow you to enter the correct wifi SSID for the home where you have installed the smart Spa Remote. You will want to verify the SSID and password on your own phone 1<sup>st</sup> to insure the SSID is accessible from the location of the smart Spa Remote.

See Below:

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•••IT-Mobile LTE	2:30 PM 192.168.4.1 pooltimer	<b>1</b> 98% <b>()</b>
	Log In	Cancel
<b>po</b> wiFi	oltimer Manager	
	Configure WiFi	
Co	nfigure WiFi (No Sc	an)
	Info	
	Reset	

- 1. Select Configure Wifi, this will cause the Smart Spa Remote to begin scanning for SSID's. It will show signal strength. If the SSID of the homeowner does not appear you do not have a strong enough signal to complete the install. You will need to have the home owner acquire a SSID signal enhancer inside the home near where you are installing the smart Spa Remote.
- 2. When your SSID appears, you will select it. In this sample case it is ATTjX8PGX.

a. NOTE: Smartsparemote only supports 2.4ghz WIFI do not select a 5ghz SSID

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••II T-Mobile LTE	2:30 PM 192.168.4.1 pooltimer	<b>4</b> 97% 🔳	II T-Mobile LTE	2:30 PM 192.168.4.1 pooltimer	4' 97% 🔳
$\langle \rangle$	Log In	Cancel	$\langle \rangle$	Log In	Cancel
ATTjX8PGXi DIRECT-61-HP NETGEAR89 DIRECT-LO-VI xfinitywifi SSID	PoskJet 3700 -	<ul> <li>▲100%</li> <li>series Ø</li> <li>42% ▲ 56%</li> <li>▲ 30%</li> <li>28%</li> </ul>	ATTJX8PGXi	save Scan	
password			$\land$ $\lor$		Done
	save			• Passwords	
	<u>Scan</u>		qwe asc &z>	rtyu fghj cvbn	i o p k l m 🗷
			.?123	space	Go

- 1. Once you select your SSID the screen automatically fills in the SSID with your selection. It will then tab to password where you will enter your SSID password an select the "SAVE" button.
- 2. This will allow the Smart Spa Remote to logon to the smart Spa Remote server and discover the devices you will now activate in the Amazon Alexa App. A blue led will light up on the smart spa circuit card when connected. If the Blue LED does not light up you will need to verify you entered the correct SSID and Password. Then once connected (blue led is on) you will need to download the Amazon Alexa app to your phone.
- 3. Note : If the blue light occasionally goes off it is an indication your wifi signal at the Jandy Power center is not strong enough. Wifi does not penetrate walls very well, we recommend you add a wifi range extender near your Jandy power center to boost the wifi signal to insure the Smart Spa Remote remains connected to the Alexa server.
- 4. You will need to use your (homeowners) Amazon sign on to link the Amazon Alexa App to the Smart Spa Remote. If the homeowner doesn't have an amazon account, you will need to create a new "**amazon account**" see below:



 Once the account has been created, sign on to your amazon Alexa app. You will then see a screen to configure Alexa, see below". Before you can add devices, you need to add a Smart Skill, select enable smart home skills and search for "SMART SPA REMOTE". This will allow Alexa to discover the Smart Spa Remote devices.



2. The Enable Screen will appear, select enable to use.

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- 3. Enter the email and password that comes with your Smart Spa Remote. Each Smart Spa Remote will have a unique email and password and will be taped on the Smart Spa Remote unit.
- 4. Enter login and you should then see the screen that Smart Spa Remote has been successfully linked.



5. Now that the Smart Spa Remote has been successfully linked to Alexa its time for Alexa to discover the Smart Spa Remote devices. Select Discover button. You will see Alexa discovering devices. You should see 9 devices discovered. 8 Spa/Pool Functions and 1 Pool/Spa Thermostat widget.



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# **3** Configuring Smart Spa Remote Discovered Devices:

# 3.1 How to Configure Alexa discovered devices

The Smart Spa Remote contains:

## **Discovered Devices (8)**

Note : Occasionally Alexa will say no devices discovered when it actually did, if this happens select the devices tab at the bottom of the Alexa app. It should then display the 8 new devices.

## Relays #1-#8 plus Temperature Sensor

- 8 Button Spa Remote Functions(Smart Alexa Spa Remote) emulated
  - These functions can be configured for your requirements
  - Default Settings
    - Button 1 comes set for Pool Pump
    - Button 2 is set for Spa Pump
    - Button 3 is set for Aux 1
    - Button 4 is set for Aux 2
    - Button 5 is set for Aux 3
    - Button 6 is set for Aux 4
    - Button 7 is set for Aux 5
    - Button 8 is set for Aux 6
    - Temperature Sensor is set for Spa/Pool. When Pool pump is on the temperature sensor will show Pool temp. When Spa pump is on the temperature sensor will show Spa temp. When both Pool and Spa pumps are on the sensor will show spa.
    - To get Temp and Thermostat you must have pool or spa pumps on otherwise you will get 1 degree..
      - You need to go to Thermostat widget and turn from OFF to ON. If already in ON position, turn OFF and back ON !

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- If the Smart Spa Remote card was disconnected from the Amazon Alexa server you may need to reset by changing on to off and back to on.
- The Jandy 8 is configured at the factory to emulate the 8 button spa remote at address #1. If you have an existing 8 button spa remote you will need to notify Smart Spa Remote so that your PCB can be configured with a new address or you can change your 8 button to address #2.
  - It also means when setting up which button you want mapped to each Jandy feature you go into the One Touch or All in One remote console and will configure the Smart Spa Remote as Spalink #1 and buttons 1-8.
- The new Alexa names may not match the Jandy feature, for example Pool Pump on Alexa app turns on the Jandy Spa Pump. This is normal and you will want to map the Jandy to the Alexa app.
  - $\circ$  1<sup>st</sup>
- Program the Jandy Spalink buttons 1-8 for the features you want Alexa to manage, see video at <u>www.smartsparemote.com</u> How to program the Jandy. The instructions are also in section 3.3 of this manual.
- $\circ$  2<sup>nd</sup>
- Select each of the devices in the Alexa app on/off, note what actual Jandy feature is activated. Then go in the Alexa app and edit the Alexa name to match the feature.



- Thermostat (Be patient with Thermostat and Temperature as it generally takes the Jandy and Alexa a few minutes to sync and recognize changes.)
  - ask Alexa "What is the Water temperature" if the spa pump is running then the temperature will be that of the spa if the pool pump then the temperature will be that of the pool
    - Either the pool or spa pumps need to be running to view temperature
  - To view or change Jandy Spa Thermostat(you cannot change pool thermostat):
    - Turn on SPA pump and Spa heater
      - This will let you view the current spa thermostat setting
    - To change the spa thermostat
      - Go to Thermostat devices. You will see water thermostat. Change OFF to ON.
      - Go to Water device to view thermostat setting and current temperature

- Press the + or buttons to change the spa thermostat to your new desired setting. The display will temporarily change back to the previous setting, wait a few minutes for the Alexa app to sync with the Jandy and display the new current setting.
  - If you change the desired spa thermostat setting but did not change thermostat from OFF to ON. Your changes will not take effect. You should only need to change Thermostat to on 1 time unless your card lost wifi. Then you will need to change from on to off to on to reset the thermostat.

SEE PICTURE BELOW	_	
10:16 -7	10:16 I 🔿 🔲 🔿 🔲	3:12 ∕
C THERMOSTATS	<ul> <li>ALL DEVICES</li> <li>Alexa on this Phone</li> <li>Online</li> </ul>	🔇 WATER 🏟
Water	•• Blower	
Water (110)	•• Heater	• 104 •
	•• Jets	Heat
	Landscape lights	
	•• Pool Lights	
	😶 Pool Pump	
	😶 Spa Pump	
	<b>∫</b> ⁼ Water	
	•• Waterfall	CREATE A ROUTINE
Home Communicate Play Devices More	Home Communicate Play Devices More	Home Communicate Play Devices More

- Alexa feature status may not match Jandy feature. For example, if you turn Aux 3 on at the Jandy console the Alexa app has no way to know this feature is on and therefore could show off. The Jandy 8 emulates the RS8 Spa Side remote, this device provides 3 status lights for buttons 1-3(see below). As such the smart spa pcb will query the Jandy periodically for this status and update the Alexa app. Meaning buttons 1-3 should stay in sync between the Alexa app and the Jandy.
  - We recommend you manually sync the Alexa app with the Jandy. Simply view the Alexa app and then manually change the Jandy feature to match the alexa app by pressing the appropriate button on/off via the Jandy console. Then set up Alexa routines to turn features on/off.



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- o Jandy Spalink RS Smart Spa Remote Jandy 8 emulation
- o Jandy Remote Spa Control Defaults

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- 1. Configure the discovered devices to match your specific needs. You may want to rename Function 1 to Spa Mode and Function 2 as Spa Lights as examples to match how you have configured the Aqualink Spa Side Switch Settings.
- 2. See example screens below:
  - a. Select Spa Function 1, then select the round nut icon in the top right portion of the screen.
  - b. Then Select Edit Name
  - c. Then type in the name you wish to use "Spa Mode'
  - d. Continue to do this for any discovered device for which you want to change the name



# 3.2 Creating automated routines

1. Set Spa Lights

To set automated routines for the devices you will create a routine. This will allow you to set automated times for the pool equipment to come on and off. You may want the Spa Lights to come on at 3am and go off at 11am. Create a routine for that devices. Also, put a 5 second delay between steps to give time for Alexa to command the Jandy.

See below:

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# 3.3 Jandy RS All in One Controller setup

You must program your Jandy to support the Smartsparemote. You do this by adding the Spalink configuration to your Jandy. The Smartsparemote emulates the Jandy RS8 Spalink.

Smart Spa Remote PCB will be Spalink #1 and buttons 1-8. If you already have a spalink you will need to add another spalink and configure your existing spalink to address #2 and buttons 9-16. Change your existing spalink from address #1 to Spalink address #2(see below) by moving the white wire from the green #4 location to red #1 location along with the red wires already there.



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## Adding Spalink configuration to your Jandy Power Center with All in one Keypad !!

#### About SpaLink RS Menu:

The SPA LINK Menu allows you to define which equipment is controlled by the buttons (8 buttons per SpaLink RS) on the optional SpaLink(s).

You may want to write down your SpaLink RS button assignments so that you can label the buttons on the switch with the label pack provided.

### How to set the SpaLink RS buttons:

- Press the MENU button, then press the FORWARD button and scroll through until you reach SYSTEM SETUP. Hit ENTER then FORWARD to SPA LINK. Hit ENTER again. The display will read 1 SPA LINK <->\*. Use the FORWARD and BACK arrows to move between 1 SPA LINKS, 2 SPA LINKS and 3 SPA LINKS. Depending on how many SpaLinks you have, choose an option and press ENTER.
- The AquaLink RS display will read SELECT DEVICE FOR BUTTON 1. Press the button on the Controller for the piece of equipment that you want to control from the first button of the SpaLink RS (e.g., press the Spa button).
- Repeat this process for each remaining button on the SpaLink RS. When you are finished, the AquaLink RS display will show the settings for each button.

NOTE: If there is more than one SpaLink RS on the system, the buttons on the second switch will be buttons 5-8, and the buttons on the third SpaLink will be buttons 9-12.

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## Adding Spalink configuration to your Jandy Power Center with One Touch Keypad !!

## 3.4 Jandy RS One Touch Controller setup

## 7.15 SpaLink® Menu

The SPALINK menu allows you to define which equipment is controlled by the buttons on the optional SpaLink<sup>®</sup>(s). Default settings are spa, spa heat, Aux1, Aux2, Aux3, Aux4, and Aux5. You can now assign a OneTouch<sup>™</sup> macro setting to any button on the SpaLink<sup>®</sup> remote.

You may want to write down your SpaLink® button assignments so that you can label the buttons on the switch with the label pack provided.

### 7.15.1 To set the SpaLink<sup>®</sup> menu

Highlight MENU/HELP and press SELECT, highlight SYSTEM SETUP and press SELECT, highlight SPALINK and press SELECT. Inside the SPALINK menu, highlight the number of SpaLink<sup>®</sup>(s) you have and press SELECT. Use the UP/DOWN arrow keys to move the highlight bar to choose what button number goes with what equipment, press SELECT. Use the UP/DOWN arrow keys to move the highlight bar to choose which piece of equipment will be associated with the button, press SELECT. After pressing SELECT on the piece of equipment, you will be returned one screen to continue assigning SpaLink<sup>®</sup> buttons.



Smart Spa Remote PCB will be Spalink #1 and buttons 1-8. If you already have a spalink you will need to add another spalink and configure your existing spalink to address #2 and buttons 9-16. Change your existing spalink from address #1 to Spalink address #2(see below) by moving the white wire from the green #4 location to red #1 location along with the red wires already there.

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#### Section 4. Wiring Configuration

#### 4.1 Bonding

Install the washer, bonding lug, and screw (included with the SpaLink RS package) to the Power Center enclosure. Connect the bond lug, using a #8 (minimum) solid copper core wire, to an approved earth ground (an approved ground stake, grid, or conducting metal water pipe buried to a sufficient depth).

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The bonding connection from the Power Center cabinet to an approved earth ground is intended to minimize the potential hazard of electrical shock to the user.

#### 4.2 Control Wiring

The wires coming from the SpaLink RS can be "doubled up" on the red terminal bar with the four wires coming from the Indoor Controller.

NOTE If you are installing more than two wires in each terminal, order and use a Jandy Multiplex PCB Kit (p/n 6584). Never put more than two wires into each of the pins of the terminal bar.

Up to three SpaLink RS Controls can be installed on one AquaLink RS system. Each SpaLink RS installed must be uniquely "addressed" for the system to properly recognize it. This is done by changing the white wire connection for each SpaLink RS installed. Follow the guide below:

First SpaLink RS - White wire paired with green wire

Second SpaLink RS - White wire paired with red wire

Third SpaLink RS - White wire not installed (cut off and cap end of wire)



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#### Jandy

Jandy controller where you connect the smart spa remote jandy 8 to red 4 pin connector along with existing wires. Recommend installing the card on far left compartment, use double sided tape provided in package.



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# 3.5 Troubleshooting

	RED LED OFF	Red LED ON BLUE LED OFF	Red LED and Blue LED ON	
Server Unresponsive Message in Alexa	There is no power to the PCB, check power Red and Green wires going to Jandy 4 pin connector	You have lost connection to the Alexa Server – Verify you have Wifi Signal then press reset button on PCB – see image below	Try resetting PCB if the problem persists notify Smart Spa Remote via text message to: 772-237-0506	
Blue light goes on for a period of time and then off		You generally need 3 or 4 bars of consistent wiff signal to maintain connection to the server. Wiff does not penetrate walls very well. Recommend putting extension on PCB Antenna and extending antenna outside of Jandy Power Center closer to Wifi equipment or add Wifi repeater to your home getting the access point closer to the jandy power center. If you lost wifi the PCB will hibernate for 10 minutes and try to restart continuously. Be patient and wait 10 minutes to see if they PCB reconnects. You can also push the reset button to accelerate the reconnect if wifi is hack un		
No devices discovered			Sometimes Alexa will display this message even though the devices are discovered. Go to devices tab at bottom of Alexa screen. The devices should show up there.	
Thermostat showing value 1			Go to Alexa app and turn Thermostat widget on or on to off to on	



## PCB RESET BUTTON

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