

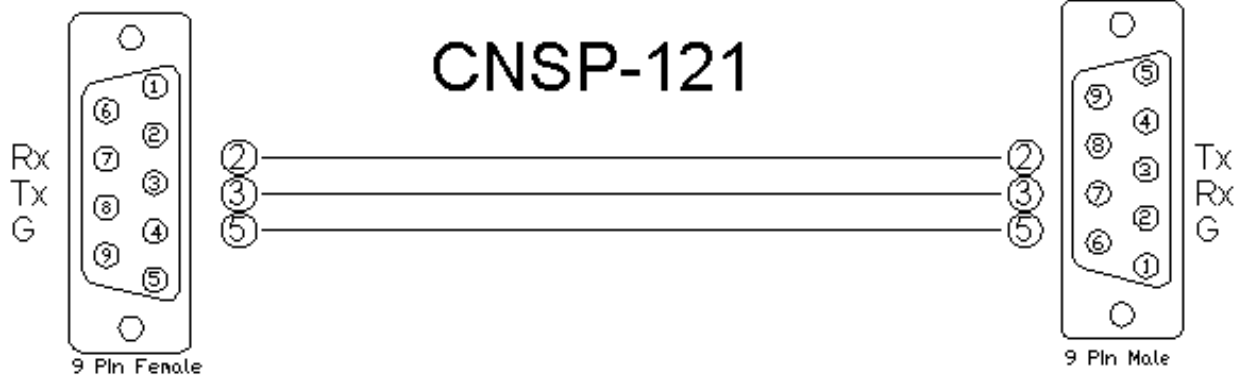
Partner: Jandy  
 Model: AquaLink RS  
 Device Type: Poll & Spa Control



**GENERAL INFORMATION**

<b>SIMPLWINDOWS NAME:</b>	Jandy AquaLink RS v4.0
<b>CATEGORY:</b>	Miscellaneous
<b>VERSION:</b>	4.0
<b>SUMMARY:</b>	This module provides serial control and feedback for the Jandy AquaLink RS pool and spa controller.
<b>GENERAL NOTES:</b>	This module provides control for the Jandy AquaLink RS pool and spa controller. It also provides true feedback. Aux 1 and Cleaner controls will not both work in the same system. If Option_Switch_1_Is_On is low and the Display_Aux_1_Subpage is high, aux 1 controls will work and the cleaner controls will not work. If Option_Switch_1_Is_On is high and Display_Cleaner_Subpage is high, aux 1 controls will not work and the cleaner controls will work. Aux 2 and Filter Pump Low Speed are also mutually exclusive. Aux 3 and Spillover Waterfall are mutually exclusive.
<b>CRESTRON HARDWARE REQUIRED:</b>	C2I-COM, ST-COM, C2-COM-*
<b>SETUP OF CRESTRON HARDWARE:</b>	RS232 Baud:9600 Parity: None Data Bits: 8 Stop Bits: 1
<b>VENDOR FIRMWARE:</b>	Cxx
<b>VENDOR SETUP:</b>	The Jandy 7620 has a 4 connection bus, similar to Cresnet. This Jandy RS-232 serial adapter simply connects to this bus, pin to pin. The RS-232 serial adapter has a DB-9 connector that is connected to the serial port on the control system. Jandy and Crestron recommend using an optical isolator between the Crestron and the Jandy. ***NOTE*** If the unit is in service mode or timeout mode the 232 communication between the unit and the Crestron processor is stopped.
<b>CABLE DIAGRAM:</b>	CNSP-121

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**CONTROL:**

<b>Initialize_Jandy</b>	D	Pulse to initialize communications with the Jandy. This will also get the initial status of the Jandy system.
<b>Aux_&lt;1..7&gt;_&lt;On/Off/Toggle&gt;</b>	D	Pulse to turn the aux outputs on and off.
<b>Filter_Pump_&lt;On/Off/Toggle&gt;</b>	D	Pulse to turn the filter pump on and off.
<b>Cleaner_&lt;On/Off/Toggle&gt;</b>	D	Pulse to turn the cleaner on and off. These controls will only work if the Option_Switch_1_Is_On output is high and the Display_Cleaner_Subpage output is high.
<b>Filter_Pump_Low_Speed_&lt;On/Off/Toggle&gt;</b>	D	Pulse to turn the filter pump low speed on and off. These controls will only work if the Option_Switch_2_Is_On output is high and the Display_Filter_Pump_Low_Speed_Subpage output is high.
<b>Spillover_Waterfall_&lt;On/Off/Toggle&gt;</b>	D	Pulse to turn the spilloverwaterfall on and off. These controls will only work if the Option_Switch_3_Is_On output is high and the Display_Spillover_Waterfall_Subpage output is high.
<b>Pool_Heat_&lt;On/Off/Toggle&gt;</b>	D	Pulse to turn the pool heater on and off.
<b>Spa_&lt;On/Off/Toggle&gt;</b>	D	Pulse to turn the spa on and off.
<b>Spa_Heat_&lt;On/Off/Toggle&gt;</b>	D	Pulse to turn the spa heater on and off.
<b>Pool_Set_Point_&lt;Up/Down&gt;</b>	D	Pulse to adjust the pool set point temperature. Each pulse will adjust the set point by one degree. The set point will be sent 2.0 seconds after the last release of either the Pool_Set_Point_Up or Pool_Set_Point_Down input.
<b>Pool_Set_Point_Request_In</b>	A	Analog input to allow preset pool set point values to be sent to the Jandy. This should be driven from an Analog Initialize symbol. Valid range is 34F to 104F or 1C to 40C.

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Spa_Set_Point_<Up/Down>	D	Pulse to adjust the spa set point temperature. Each pulse will adjust the set point by one degree. The set point will be sent 2.0 seconds after the last release of either the Spa_Set_Point_Up or Spa_Set_Point_Down input.
Spa_Set_Point_Request_In	A	Analog input to allow preset spa set point values to be sent to the Jandy. This should be driven from an Analog Initialize symbol. Valid range is 34F to 104F or 1C to 40C.
From_Device	S	Serial signal to be routed from a 2-way serial com port.

### FEEDBACK:

Initialize_Jandy_Is_Busy	D	High to indicate that the module is busy initializing communications with the Jandy.
Status_Poll_Is_Busy	D	High to indicate that the module is getting the initial status of the Jandy. This occurs automatically on the trailing edge of the Initialize_Jandy_Is_Busy signal.
Jandy_Reboot	D	High to indicate that the Jandy has rebooted.
Aux_<1...7>_Is_<On/Off>	D	High to indicate the current status of the aux outputs.
Filter_Pump_Is_<On/Off>	D	High to indicate the current filter pump status.
Cleaner_Is_<On/Off>	D	High to indicate the current cleaner status.
Filter_Pump_Low_Speed_Is_<On/Off>	D	High to indicate the current filter pump low speed status.
Spillover_Waterfall_Is_<On/Off>	D	High to indicate the current spillover waterfall status.
Pool_Heat_Is_<On/Off>	D	High to indicate the current pool heater status.
Spa_Is_<On/Off>	D	High to indicate the current spa status.
Spa_Heat_Is_<On/Off>	D	High to indicate the current spa heater status.
Pool_Temperature_Value	A	Analog signal indicating the current pool water temperature.
Pool_Set_Point_Value	A	Analog signal indicating the current pool set point value.
Spa_Temperature_Value	A	Analog signal indicating the current spa water temperature.
Spa_Set_Point_Value	A	Analog signal indicating the current spa set point value.
Air_Temperature_Value	A	Analog signal indicating the current air temperature.
Solar_Heat_Temperature_Value	A	Analog signal indicating the current solar heat temperature.

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Option_Switch_<1...8>_Is_On	D	High to indicate the current state of the option switches.
Display_Aux_<1/2/3>_Subpage	D	High to indicate that aux 1, aux 2 and aux 3 are currently controllable.
Display_Cleaner_Subpage	D	High to indicate that the cleaner is controllable.
Display_Filter_Pump_Low_Speed_Subpage	D	High to indicate that the filter pump low speed is controllable.
Display_Spillover_Waterfall_Subpage	D	High to indicate that the spillover waterfall is controllable.
Service_Mode_Is_On	D	High to indicate that the Jandy is currently in service mode. The Crestron cannot control the Jandy while it is in service mode.
Time_Out_Mode_Is_On	D	High to indicate that the Jandy is currently in time out mode. The Crestron cannot control the Jandy while it is in time out mode.
Units_Are_<Fahrenheit/Celsius>	D	High to indicate that all temperature values are either Fahrenheit or Celsius.
To_Device	S	Serial signal to be routed to a 2-way serial comport.

**TESTING:**

OPS USED FOR TESTING:	PRO2: v4.003.0015 MC3: 1.002.0000
SIMPL WINDOWS USED FOR TESTING:	3.11.06
DEVICE DB USED FOR TESTING:	40.05.009.00
CRES DB USED FOR TESTING:	30.05.013.00
SYMBOL LIBRARY USED FOR TESTING:	798
SAMPLE PROGRAM:	Jandy AquaLink RS v4.0 Demo
REVISION HISTORY:	v1.0 – Initial Release v2 - Added spa mode controls v3 - Added feedback to show when the unit is in service mode or in timeout mode and added feedback to show what mode the Jandy is in when the Crestron processor reboots. v4.0 – Changed the way that the Crestron module handles the set point values. Now the module will immediately show the new set point and the 2.0 seconds after the last release of the *_Set_Point_Up or *_Set_Point_Down inputs it will send the new value to the Jandy. Added feedback to indicate the current temperature units.