Utilizing the JNIOR Control Panel

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The following information describes how to utilize the JNIOR Control Panel with the JNIOR Model 310 and Model 312.

Please contact INTEG via e-mail at <u>JNIORsales@integpg.com</u> or via phone at 724-933-9350 extension 20 with any questions.



Installation and Wiring

The JNIOR Control Panel provides the user with 12 input switches (6 - 2 position switches), 12 LED status indicators and an alarm horn (speaker). The switches, LEDs and sounds are integrated with the JNIOR via the cinema.jnior program. All functionality is set-up via the software. The JNIOR Control Panel connects to the JNIOR via the Sensor Port along the top edge of the JNIOR, next to the power connector.

The JNIOR Control Panel can be located up to 25 feet away from the JNIOR. INTEG provides a 6 foot connection cable between the JNIOR and JNIOR Control Panel. The user can make a custom cable that is described at the end of this document.

NOTE: The green 'Ready' LED at the top left of the JNIOR Control Panel will only turn on when the cinema.jnior program is loaded and running on your JNIOR. That is your indication that the software is loaded and READY to use. NOTE: It will also illuminate when you go to the External tab on the JNIOR web page indicating it is recognized.

Software Versions

For the JNIOR Control Panel to operate, the JNIOR must be running JNIOR Operating System version 4.2.929.1229 or later, and Cinema.jnior version 2.9.926.839 or later. You must also have the latest JNIOR Support Tool version 4.1.926.1358 or later to configure a macro to utilize all the features of the JNIOR Control Panel. INTEG provides an Update project to use with the JNIOR Support Tool to load the correct software versions and set several default configuration items.

Please contact INTEG for the latest Cinema Update project and JNIOR Support Tool.

Software Configuration

The JNIOR Control Panel requires two items to be configured. The first is to identify the macro that will be executed each time a switch is pushed and the second is to define the LEDs and sound operation within a macro.

The macros are configured using the JNIOR Support Tool. A macro can be configured to control outputs on the JNIOR, control the LEDs on the JNIOR Control Panel, control the sound on the JNIOR Control Panel and communicate with digital projectors, cinema servers and other devices in the theatre.

Control Panel LEDs

To add the LED Actions, you must click on the Add button, give your action a description (for example, LED 1 On, or Lights High) and select the appropriate LED.

	Action View				
	Name	Device	Action	Data	
	Output 8	ROUT 8	Close Pulse	1	
Timing	Output 9	ROUT 9	Close Pulse	1	
	Output 10	ROUT 10	Close Pulse	1	
+ Min	Output 11	ROUT 11	Close Pulse	1	
+ Sec	Output 12	ROUT 12	Close Pulse	1	
	Output 13	ROUT 13	Close Pulse	1	
- Sec	Output 14	ROUT 14	Close Pulse	1	
	Output 15	ROUT 15	Close Pulse	1	
- Min	Output 16	ROUT 16	Close Pulse	1	
	Input 1	DIN 1	Soft Pulse	1	
	Input 2	DIN 2	Soft Pulse	1	
<-	Input 3	DIN 3	Soft Pulse	1	
	Input 4	DIN 4	Soft Pulse	1	
	Input 5	DIN 5	Soft Pulse	1	
Up	Input 6	DIN 6	Soft Pulse	1	
	Input 7	DIN 7	Soft Pulse	1	
Dn	Input 8	DIN 8	Soft Pulse	1	
	LED 1 On		×		
		ROUT 15	~		
	Add Remo	ve ROUT 16			
	<u> </u>	FPLED 7			
		FPLED 3			
		FPLED 4			
		FPLED 5	~		
		FPLED 6			

You must then select how you want the LED to operate – On, Off, Flash Slow, Flash Medium or Flash Fast.



With the Flash function (Slow, Medium, Fast) you can add a value in the last column (the data column) that will indicate the number of times the LED will flash. If you leave the data column blank, then the LED will flash until the Off action for the specific LED is executed within a macro. The Off action can be within the same macro turning On the LED or within a separate macro.

Up	Input 5 Input 6	DIN 5 DIN 6	Soft Pulse Soft Pulse	1
Dn	Input 7 Input 8	DIN 7 DIN 8	Soft Pulse Soft Pulse	
	New Action 1	FPLED 1	Flash Medium	10
(Add Remove]	(

You can continue to Add Actions in the right box for your various LED functions.

Control Panel Sounds

To add the Sound Actions, you must click on the Add button, give your action a description (for example, Alarm On) and select FPSOUND (Front Panel Sound).

Dn	Input 7 Input 8		DIN 7 DIN 8			Soft Pulse Soft Pulse		1 1	
	New Action 1				¥				
[Add	Remove	FPLED 8 FPLED 9 FPLED 10 FPLED 11		>				
- I I -	1	1	FPLED 12			1	1	1	1
			FPSOUND CINEMA_SE PRESHOW	RVER_CLIEN					

You must then select how you want the Sound to operate.

Dn	Input 7 Input 8	DIN 7 DIN 8	Soft Pulse Soft Pulse	1 1
	New Action 1	FPSOUND	~	
(Add Remove	ן און און און און און און און און און או	Play Sound Soft Alarm Medium Alarm Loud Alarm	
I. I.	I I	- E - E - E - E - E - E - E - E - E - E	Custom Alarm	
			Silence Alarm	

Play Sound – this will play a 'raw' sound file that is stored in the JNIOR Control Panel. The JNIOR Control Panel includes one sample sound called Sound3.raw. INTEG will be providing more updates and information related to this feature in the future. With the current software release, you can put 3 in the data column and the Play Sound Action will then play the Sound3.raw file when the macro is executed. The user will be able to add custom sound files.

Soft Alarm, Medium Alarm and Loud Alarm – these actions will play a predefined sound according to the following format:

Duration Time Percent Volume

The Soft Alarm uses a setting of 500 3 25 which means the alarm will be on for 500 milliseconds per second, for a total of 3 seconds and at 25% of total volume.

The Medium Alarm has a default setting of 500 3 50 and the Loud Alarm has a default setting of 500 3 100.

Custom Alarm - this action allows the user to enter their own numbers for the Duration, Time and Percent Volume. The duration is in milliseconds, the time on is in seconds and the percent volume is a number from 1 to 100 where 100 is maximum volume.

Silence Alarm – this will silence an alarm that has been set for a long 'time'.

After you have added the Actions (and you can add more as you need them), you can build your macros that utilize the LEDs and sounds. Below is a sample macro called Test.

acroView AacroName 🔺	Timing	Action Description		Action View	Device	Action	Data
 test LED 1 On Output 1 Output 4 Output 8 LED 5 On Flash Play Alarm Medium LED 1 Off LED 5 Off 	00:00 00:03 00:06 00:09 00:12 00:15 00:19 00:22	FPLED I On ROUT 1 Close Pulse 1 sec(s) ROUT 4 Close Pulse 1 sec(s) ROUT 8 Close Pulse 1 sec(s) FPLED 5 Flash Medium PFDCUND Medium Alarm 500 3 50 FPLED 1 Off FPLED 5 Off	Timing + Min + Sec - Sec - Min <- Up Dn	Output 11 Output 12 Output 13 Output 14 Output 15 Output 16 Input 2 Input 2 Input 3 Input 4 Input 5 Input 6 Input 7 Input 8 LED 1 On LED 1 Off LED 5 On Flash LED 5 Off	ROUT 11 ROUT 12 ROUT 12 ROUT 13 ROUT 14 ROUT 15 ROUT 15 DIN 1 DIN 2 DIN 3 DIN 4 DIN 5 DIN 6 DIN 7 DIN 6 DIN 7 DIN 8 FPLED 1 FPLED 1 FPLED 5	Close Pulse Close Pulse Close Pulse Close Pulse Close Pulse Soft Pulse Soft Pulse Soft Pulse Soft Pulse Soft Pulse Soft Pulse Soft Pulse Soft Pulse Soft Pulse On Off Flash Medium Off	

Control Panel Pushbuttons

To trigger your macro using the JNIOR Control Panel pushbuttons, you must go to the Registry Editor tab on the JNIOR Main Web Page and go to the AppData – Cinema folder and then into the Panel folder. There are 12 Registry Keys, one for each input switch. Edit the key that you want to trigger your macro when the input switch is pushed. Enter your macro name in the Registry Key value.

NOTE: You do NOT have to reboot the JNIOR to utilize the new trigger values (macro name) for the control panel pushbuttons. The cinema.jnior program will recognize the new value for the trigger in less than one minute after saving the change. This will allow for easier testing.

I/O Control Configuration Reg	gistry Editor Command Line Applications About
	Add Key Edit Key Delete Folder Delete Key Refresh
	AppData/Cinema/Panel/Trigger5 = none AppData/Cinema/Panel/Trigger6 = none AppData/Cinema/Panel/Trigger7 = none

NOTE: After you have completed your macros, you must Publish them to your JNIOR. And after you have modified any Registry Keys for Cinema (except the Front Panel triggers), you must reboot your JNIOR for the new macros and settings to become effective. Please consult the cinema.jnior manual and JNIOR Support Tool manual for more details.

Macro Testing

For testing your macros, you can use the Macro Execution function that is part of the JNIOR Support Tool.

If you go to the Beacon Tab and 'right-click' on your JNIOR from the list, select Macro Execution from the list.

leacon Devices	Macro Update Log	gs Snapshot
> Serial Number	Hostname	IP Address
		10.0.0.255
4905003	Query	10.0.0.143
4905004	Query All	10.0.0.106
4905005		10.0.0.225
105100305	Query New	10.0.0.200
108040041	Auto Query	10.0.0.215
110100439	Identify	- 10.0.0.237
110100455	1	10.0.0.227
110100457	Set Hostname	10.0.0.251
210080682 210100097	Configuration	10.0.0.228
210100057	Manual Proceeding	- 10.0.0.220 10.0.0.142
210115084	Macro Execution	-10.0.0.142
211026823	Reboot	10.0.0.101
211020525		- 10.0.0.253
310090006	Telnet	10.0.0.226
311030015	Open FTP	10.0.0.250
311030020		- 10.0.0.214
311030076	Launch Web Page	10.0.0.148
	Manage IP List	

In the pop-up box, enter the macro name, to be executed, click on the Connect button to establish a connection to your JNIOR and then click on the Send button to execute the macro.

😸 Macro Name Sender
Macro Name or Number test
HEX String
01 00 0E FF FF FF 05 6D 61 63 72 6F 01 00 04 74 65 73 74
01000EFFFFF056D6163726F01000474657374
IP Address 10.0.0.148 Send
User Name inior
Password inior
Connect
Logged In as Admin

Sensor Port Cable

The JNIOR Control Panel can be located up to 25 feet from the JNIOR. In these instances, the user must make a custom cable to connect the control panel with the JNIOR. The pin out for the cable that connects the Sensor Port on the JNIOR with the control panel is the same on both ends. The connector is a standard RJ-12 connector on both ends. The cable is a standard 6-conductor, flat telephone cable.

Note:

An RJ12 connector is the same size as an RJ11 connector except all 6 pins have copper pads to connect all 6 wires to the port.

Please make sure that you orient the pins properly for each side of the cable. The cable will be twisted (or the one RJ12 connector will be upside down from the other) so that when you hold both ends of the cable side by side, the pin numbers will match. Please contact INTEG Process Group with any questions.

Sensor Port Pin-Outs – Use a 6 conductor wire and connect each colored wire to the same pin number on each connector.

- Pin Description
- 1 Voltage (5V Vcc)
- 2 GND
- 3 1-WIO (1-Wire Data)
- 4 GND (1-Wire Return)
- 5 NC (No Connection internally to the Expansion Module)
- 6 Unregulated DC

Reference the following diagrams to determine the proper pin numbers of the connectors:



RJ12 Modular

RJ12 Modular