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 JNIORsales@integpg.com 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.

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.

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).

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

<table>
<thead>
<tr>
<th>Duration</th>
<th>Time</th>
<th>Percent Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.
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.

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.

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.
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.

<table>
<thead>
<tr>
<th>Pin</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Voltage (5V Vcc)</td>
</tr>
<tr>
<td>2</td>
<td>GND</td>
</tr>
<tr>
<td>3</td>
<td>1-WIO (1-Wire Data)</td>
</tr>
<tr>
<td>4</td>
<td>GND (1-Wire Return)</td>
</tr>
<tr>
<td>5</td>
<td>NC (No Connection internally to the Expansion Module)</td>
</tr>
<tr>
<td>6</td>
<td>Unregulated DC</td>
</tr>
</tbody>
</table>

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

RJ12 Modular

RJ12 Modular