

# Using the Control Panel

INTEG Process Group, Inc.  
2919 East Hardies Rd, First Floor  
Gibsonia, PA 15044

PH (724) 933 - 9350  
FAX (724) 443 - 3553

[www.integpg.com](http://www.integpg.com)  
[support@integpg.com](mailto:support@integpg.com)  
[sales@integpg.com](mailto:sales@integpg.com)

© 2021 INTEG Process Group, Inc.  
All Rights Reserved

Last updated on: February 6, 2021

The following information describes how to utilize the JNIOR Control Panel with the JNIOR. For additional questions or assistance, email [support@integpg.com](mailto:support@integpg.com).

## Software Options

The control panel can be implemented with either the Tasker or Cinema applications. These can both be grabbed from our site at [integpg.com](http://integpg.com).

Before addressing how these software applications work with the Control Panel, you'll want to make sure its connected properly. You can do so by using the extern command. When you are sure the Control Panel is correctly connected you'll be able to implement it.

**NOTE: Series 3 JNIOR's are not able to run Tasker. If you are looking to implement a control panel with your series 3 JNIOR, please skip to using the Control Panel with Cinema.**

## Control Panel with Tasker

Tasker is an application that allows tasks on the JNIOR to be carried from watching and listening to different events on the JNIOR. To start, we are going to lookin to the task that you can add to a workspace in the Task tab to perform task actions. Here we are going to look at the different actions for the control panel that you can add to a task.

### Using the Visual Indicators in a Task

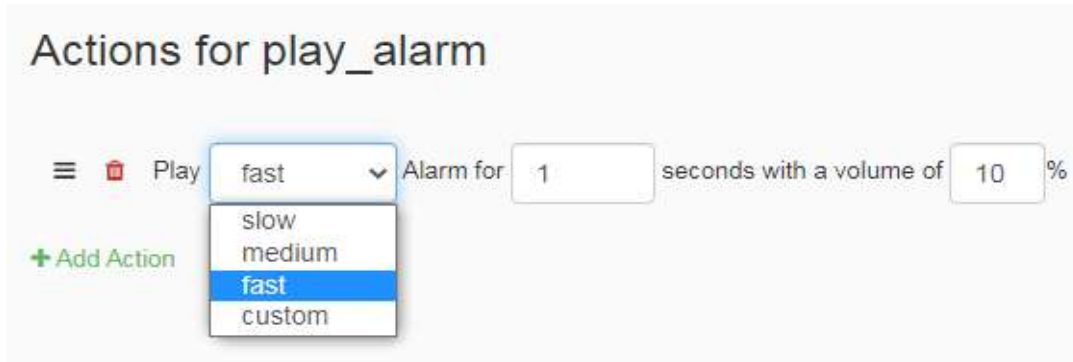
The Visual Indicators on the Control Panel are the the 12 LEDs labeled L1 through L12. The LEDs can be controlled by setting them to be OFF, ON, or to flash at different rates. The LED will be on or flashing until it is turned off.



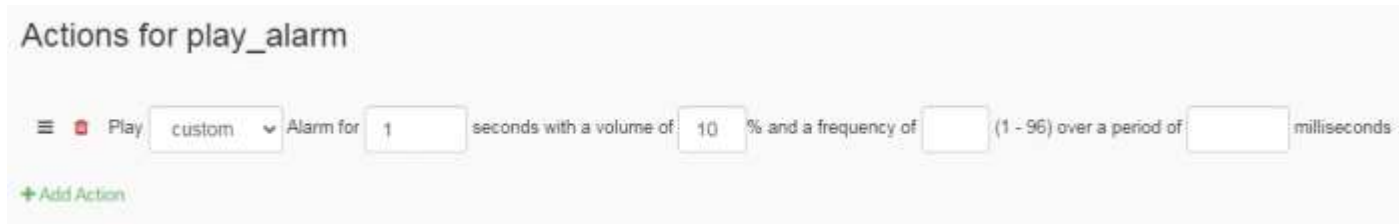
### Using the Audio Alarm in a Task

The Control Panel has a PC speaker on the back on the unit that can produce an audible alarm. This is great for alerting people without the person needing to be looking at the Control Panel already. Here is the setup when configuring the Alarm to be played.

The alarm plays with an oscillating sound. You can select between slow, medium, fast, or custom. Then a duration is needed in seconds followed by the volume on a scale of 0 - 100%.



If the custom option is selected then then additional options of the audio frequency to use and the duration of each beep are presented.

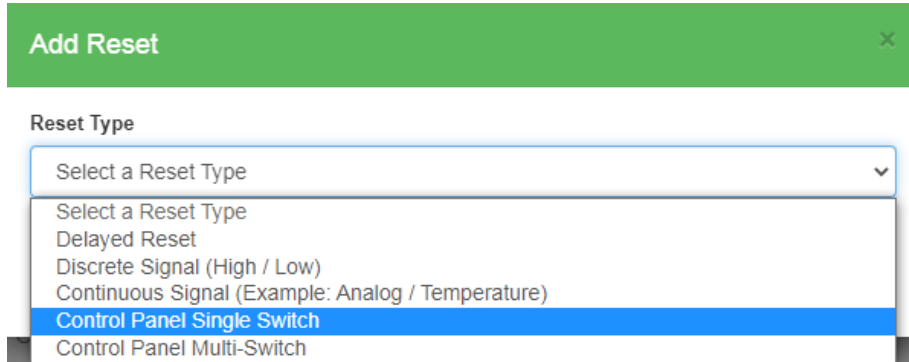


### Using the Control Panel Switches as a Trigger/Reset

To enable the Control Panel Switches to be Triggers that will be used to activate Tasks is a very short process. You only need to go to the trigger tab and add a trigger type set to the control panel switches.



Once you've added the triggers, you can then add an optional reset value. The reset value makes it so that rather than the trigger activate everytime a selected control panel switch is pressed, the reset value makes it so that once the trigger activates it won't activate again until the reset value happens. The values you can have set for a reset option can also be control panel switches.



Lastly, triggers assign tasks created in the Task tab of Tasker to begin executing when a trigger happens, this is also what the reset value prevents the trigger from doing until the reset value happens.

### Examples

Here are some triggers to implement two different scenarios. The first one is switching a water pump on and off. The water pump is turned on by pressing switch 1 on the control panel, which will activate the turn\_on\_water\_pump task from the Task Tab. Since the switch to turn the water pump on has no reset, it can be pressed as many times as the user wants. The same goes for turning the pump off, except to turn it off requires switch 2 and 3 to be pressed at the same time. However, the alarm scenario is different. The alarm sounds when output 1 on the JNIOR goes high. It does have a reset, which is also used as a trigger for the silence alarm trigger as well. So in order for you to stop the alarm, you have reset the trigger for the alarm as well.

**Triggers**

Triggers are where Signals are used to monitor a signal for a certain condition to be met. Once that condition is met a Task is executed. A Task is a set of Actions. To prevent a Trigger from being 'noisy' and executing rapidly, for example when a temperature was hovering around the Trigger set point, we allow you to create a Reset set point. This will ensure that the Trigger will not execute again until the signal has met the Reset conditions.

Name	Trigger	Reset	Task Name
water_pump_on	On Control Panel Switch Press 1	Add Reset	turn_on_water_pump
water_pump_off	On Control Panel Switches 2 and 3	Add Reset	turn_off_water_pump
sound_alarm	On output_1 High	On Control Panel Switches 5 and 7	sound_alarm
silence_alarm	On Control Panel Switches 5 and 7	Add Reset	silence_alarm

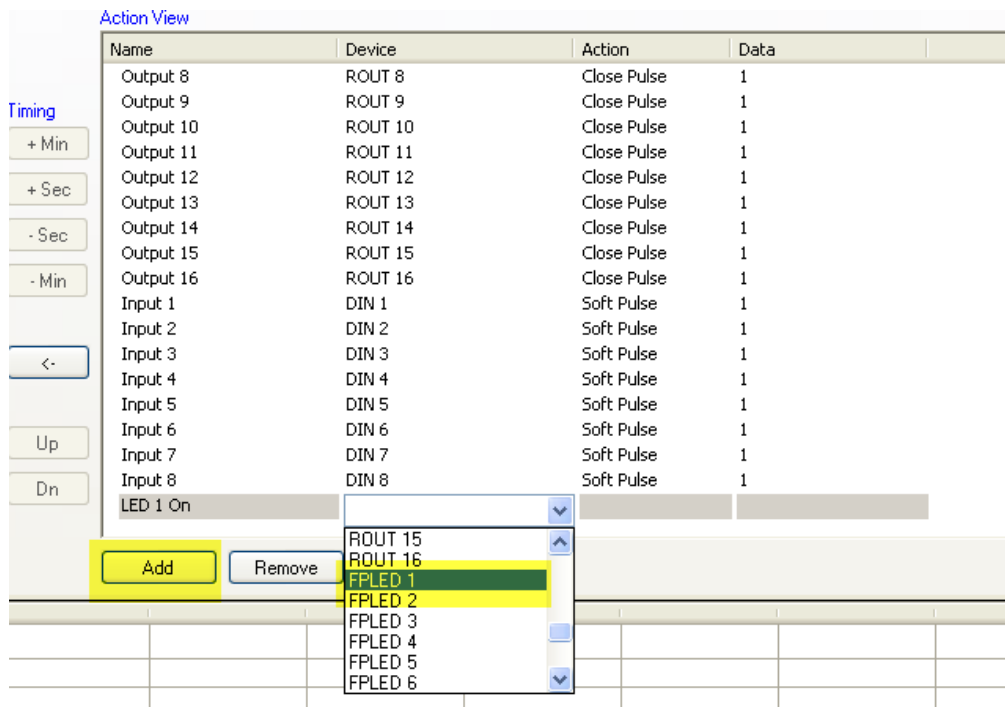
Add Trigger

## Control Panel with Cinema

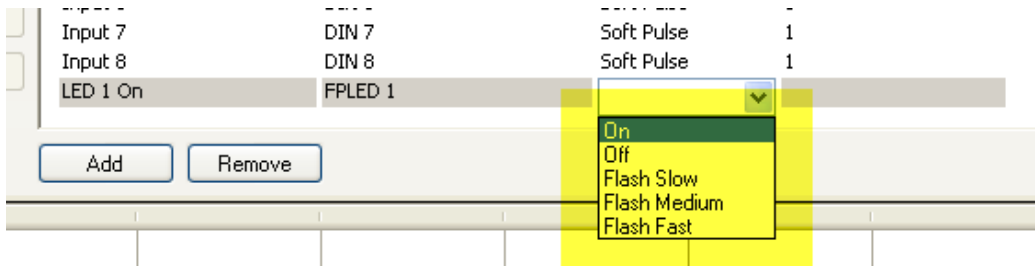
For Cinema, the JNIOR Control Panel can have two types of functionality be configured. The first is to identify the Macro that will be executed each time a switch is pushed and the second is to define the LEDs and sound operation.

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.

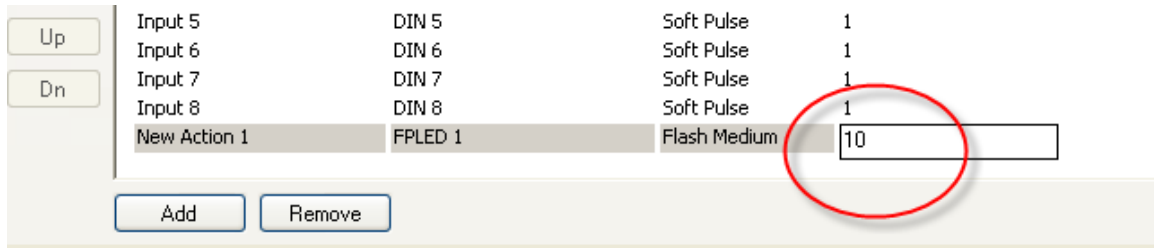
To add the LED Actions, you must click on the Add button, give your action a description (for example, LED 1 On, or Lights High) and select the appropriate LED.



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

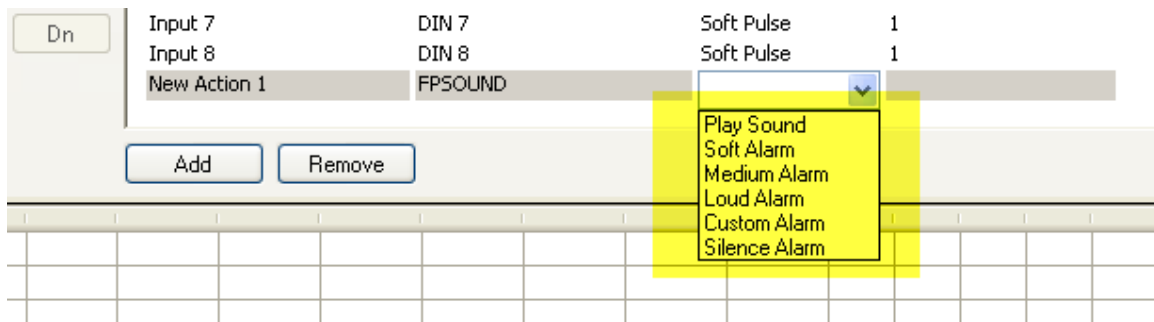
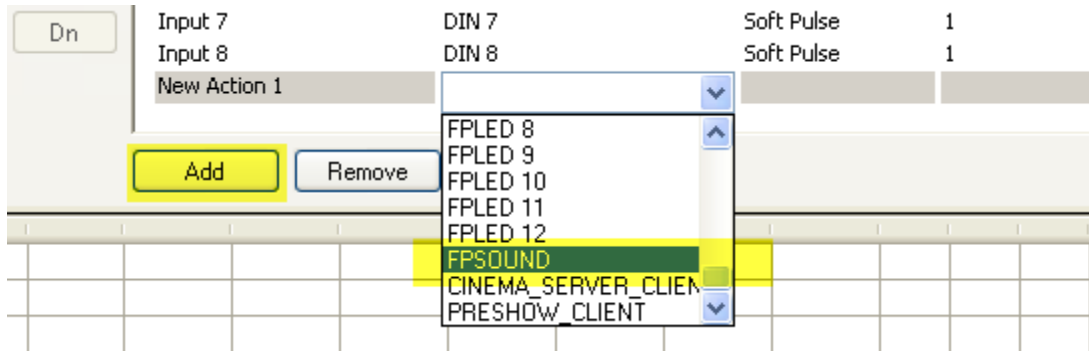


With the Flash function (Slow, Medium, Fast) you can add a value in the last column (the data column) that will indicate the number of times the LED should flash. If you leave the data column blank, then the LED will flash until the Off action is received. If you enter a number, the LED will flash that many times.



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

### Control Panel Sounds



**Play Sound** – this will play a ‘raw’ sound file that is stored in the JNIOR Control Panel. The Control Panel includes one sample called Sound3.raw. INTEG will be providing more updates and information related to this feature. With the current software release,

you can put 3 in the data column and this Action will then play the Sound3.raw file when the macro is executed. This feature is being developed should the user have their own sounds they would like to use.

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

Duration Time (seconds) Percent Loud

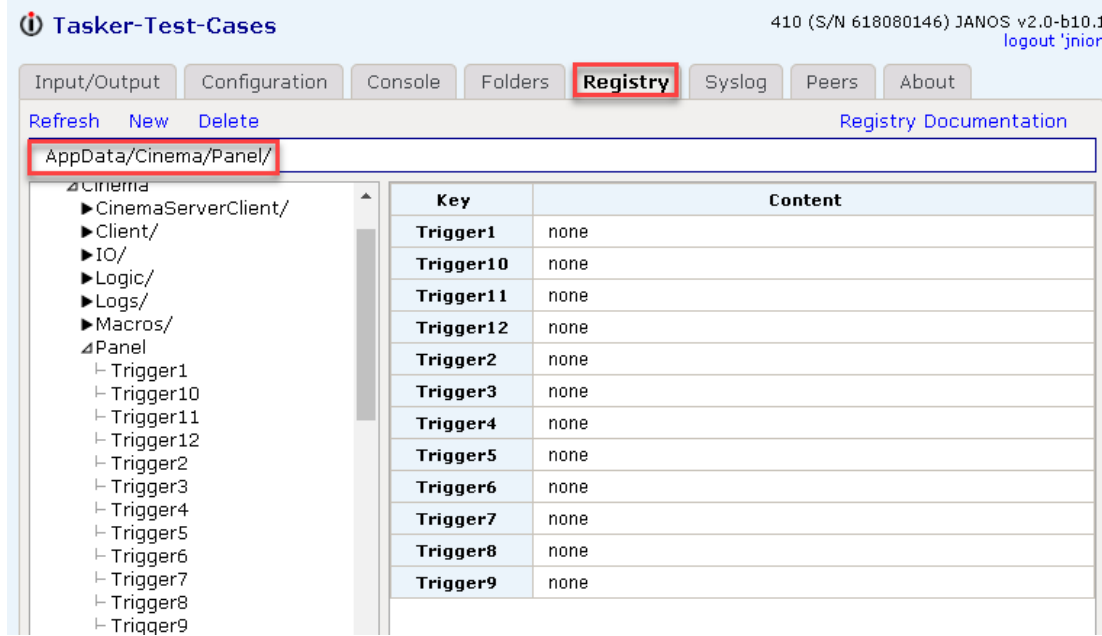
The Soft Alarm uses a setting of 500 3 25 which means the alarm will be on for 500 milliseconds per second for 3 seconds total at 25% of total volume.

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.



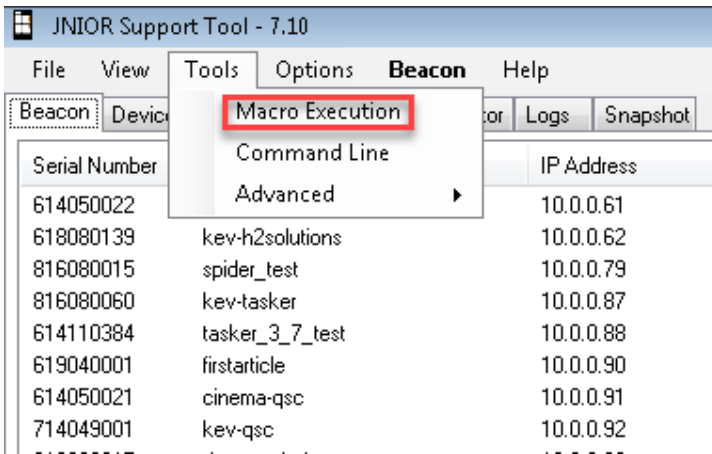
### Control Panel Triggers in Cinema

To trigger your macro using the JNIOR Control Panel pushbuttons, you must go the Registry tab on the JNIOR WebUI and go to the AppData/Cinema/Panel. 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.

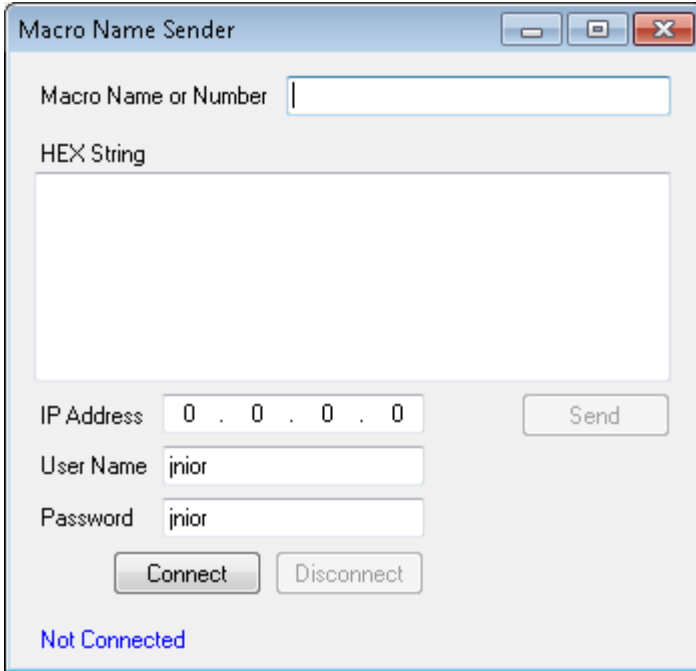


**NOTE: After you have completed your macros, you must Publish them to your JNIOR. And after you have modified any Registry Keys for Cinema, you must reboot your JNIOR for the new macros and settings to become effective. Please consult the Cinema.jar manual and JNIOR Support Tool manual for more details.**

For testing purposes, you can also use the Macro Execution tool that is part of the JNIOR Support Tool.







### 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 application. 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.



The JNIOR Control Panel can be located up to 50 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:**

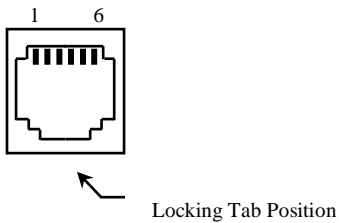
An RJ12 connector is the same size as an RJ11 connector except all 6 pins have copper pads to connect all 6 wires to the port.

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.

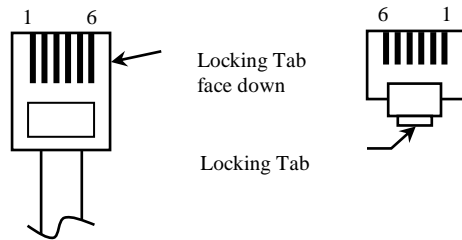
Sensor Port Pin-Outs – Use a 6 conductor wire and connect each colored wire to the same pin number on each connector.

<u>Pin</u>	<u>Description</u>
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

## Summary

Thank you for purchasing the **JNIOR**. Hopefully this manual made the getting-to-know process of your new **JNIOR** very quick and easy. The **JNIOR** has many more wonderful tools and features available, and are explained in detail in the supplied documents.

- Copyright            Copyright © 2021 INTEG Process Group, Inc.  
All rights reserved.
- Notice                Every effort was made to make this manual as accurate and useful as practical at the time of the writing of this manual. However, all information is subject to change.
- Trademarks          Trademarks are the property of their respective holders.  
Sun, Sun Microsystems, the Sun logo and Java are trademarks or registered trademarks of Sun Microsystems, Inc. in the United States and other countries.  
Microsoft, Windows, MS-DOS and Internet Explorer are registered trademarks of Microsoft Corporation.
- Use Restrictions     This User's Manual and the software contained in the **JNIOR** are copyrighted by INTEG Process group and may not be copied or reproduced without prior consent from INTEG Process Group, Inc. INTEG Process Group is not responsible for any errors or omissions that may be contained in this manual.

Please do not hesitate to contact our **JNIOR** team at **INTEG Process Group, Inc.** We can be reached via phone, fax or e-mail as follows:

INTEG Process Group, Inc.  
2919 East Hardies Road, First Floor  
Gibsonia, PA 15044

[www.integpg.com](http://www.integpg.com)  
[sales@integpg.com](mailto:sales@integpg.com)  
[support@integpg.com](mailto:support@integpg.com)

PH (724) 933-9350  
FAX (724) 443-3553