## Using the GDC Cinema Server with the JNIOR 410/412

### Last updated: December 2<sup>nd</sup>, 2019

The following information describes the slight difference in utilizing the JNIOR Models 410 and 412 with the GDC Cinema Server when compared to the JNIOR 310 and 312.

Please contact INTEG via e-mail at support@integpg.com or via phone at 724-933-9350 with any questions.

#### Instructions

The GDC can interact and control the JNIOR 410/412 via two methods. You can use one method or both methods.

- 1) Make a Modbus connection to the JNIOR using port 502 on the JNIOR and logging in with username: jnior and password: jnior
- 2) Use the Cinema.JAR program to have the GDC send specific commands, like 'run macro', to the JNIOR via a Network Socket Connection.

This document describes how to enable the Modbus server on the JNIOR and it is ONLY required if you are using method 1 described above.

If you are using the Cinema.JAR program described in method 2 above, it works the same as the Cinema.JNIOR program used on the JNIOR 310/312. Please consult the Cinema manual and GDC-JNIOR manual for additional details.

For method 1, the GDC Server makes a connection to the JNIOR using the Modbus protocol for direct relay control. With the JNIOR Models 310 and 312, the Modbus Server was 'enabled' and running by default. With the new JNIOR Models 410 and 412, the Modbus Server is 'disabled' and not running by default.

Therefore, when you first install your JNIOR 410/412, you MUST enable the Modbus Server to work with the GDC Cinema Server if you are using Method 1 described above. To make sure you understand what is meant by Method 1, below is a screen picture of an example using Method 1 showing how to configure the COIL command on the GDC. This command will directly control relay output 1 on the JNIOR using the Modbus protocol.



# **Enabling the Modbus Server on the JNIOR Series 4**

#### 1) Using the JNIOR Web page

The easiest method to enable the Modbus Server is to use the JNIOR web page. Please go to the Beacon tab in the JNIOR Support Tool and 'right click' on your JNIOR and select Tools - Open Web Page.

Or you can type your JNIOR IP address into your web browser address line.

**NOTE:** You should update your JNIOR to the latest software using the All In One Update project for the Series 4. This will insure that you have the latest JNIOR web page with the needed feature described below to 'enable' the Modbus server.

You can get the All In One update project from the Cinema Automation support page on the INTEG website at the following link:

https://www.integpg.com/category/news/janos-news/

Below is a picture of the JNIOR Support Tool showing how to launch the JNIOR web page. Right-click on your JNIOR and the pop-up will be displayed.

0		10.0.0.105	255.255.255.0	9C:8D:1A:00:07:F3	v1.7.1
Query		10.0.0.79	255.255.255.0	9C:8D:1A:02:09:98	v1.7.1
Configure	•	10.0.0.70	255.255.255.0	9C:8D:1A:02:09:AF	v1.7.1
Tools	•	Open Web Page		:09:B3	v1.7.1
JNIOR List	•	Open Telnet		14:D7	v1.6.1
	· ·	open remet		16:92	v1.7.1
Reboot		Open FTP		:18:E2	v1.7.1
		Open Classic Monitor, Co	nfigure, Control App	lication	
		Open Task Manager Appli	cation		
		and the second second second second second second			
		Macro Execution			
		Show JniorSysLog			
nior Count: 36 (410: 12,	, 412: 9, 4	Set Time			

After opening the JNIOR web page, go to the Configuration tab and the Applications web page and check the box for the Modbus Server as shown below.



Then reboot the JNIOR to start the Modbus Server. You can do this by going to the Console tab in the JNIOR web page and typing reboot

Input/Output Configuration Console Folders Registry Syslog	Peers About
	Clear End Session
<pre>Welcome to the JNIOR Model 414 (S/N 817120011) running JANOS v1. Copyright (c) 2012-2018 INTEG Process Group, Inc., Gibsonia PA UL Local time: Tue Jan 15 15:56:56 UTC 2019 Process ID: 7 Record up time: 17:19.043 jr817120011 login: jnior jr817120011 password: ***** jr817120011 /&gt; reboot Warning: About to reboot the system. OK to proceed? [Y/N]:  </pre>	

After the reboot, you can verify that the Modbus Server is running and that the GDC Server has properly connected.

Input/Output	Configuration	Console	Folders	Registry	Syslog	Peers	About		
						Clear	End S	Session	]
1: Ne 2: Sy 3: Ru 4: We	le Process twork Service	12:61783	1	Type to verify n server is i	nodbus				^
jr817120011	(> notetat								
LAN connect Server/Conn Local Por 1: 2 2: 920 3: 8 4: 44 5: 2 6: 8 7: 50 * encrypted	ion active (10) ection count: t Remote Port 1 0 3* 3 0 61783 2 socket	7 Remote IP  	Ty GE sho	pe netstat )C IP addre own as con port 5(	ss will be nected to	Stat LISI LISI LISI LISI EST LISI	TEN TEN TEN TEN TEN ABLISHEI	D	~
LAN connect Server/Conn Local Por 1: 2 2: 920 3: 8 4: 44 5: 2 6: 8 7: 50	ion active (10) ection count: t Remote Port 1 0 3* 3 0 61783 2 socket	7 Remote IP  	Ty GE sho	OC IP addre own as con	ss will be nected to	LIST LIST LIST LIST LIST ESTA	TEN TEN TEN TEN TEN ABLISHEI	D	~

#### 2) Using the JNIOR Update Project for Multiple JNIOR

If you have multiple JNIORs to enable and they are all on the network with different IP addresses, you can download an Update project from the INTEG website on the Cinema Automation Support page at the following link.

http://www.integpg.com/support/cinema-jnior/

NOTE: Please download the zip file, but do NOT unzip it. Open the JNIOR Support Tool, go to the Update tab, click on Open Project and navigate to where you saved the zip file. Then click on Publish and select 1 or more JNIORs to update.

As shown below, this is a simple two-step update project that sets the Modbus run key and reboots the JNIOR to start the Modbus server. The advantage of using the update project is you can update all of your JNIORs at a specific location all at once. You can then use the update project at various theatre locations.



#### 3) Using a Telnet/Command Line Session

If you launch a Telnet or Command Line session, you will set the 'run' Registry Key so that the Modbus Server will run each time the JNIOR boots up. Please type the following and as shown in the screen picture below.

#### registry Run/ModbusServer = flash/modbusserver.jar

Then type **reboot** and enter a **Y** to reboot

After the reboot the Modbus server will be running.

JNIOR Command Line

Welcome to the JNIOR Model 414 (S/N 817120011) running JANOS v1.7.1 Copyright (c) 2012-2018 INTEG Process Group, Inc., Gibsonia PA USA. Local time: Tue Jan 15 16:51:16 UTC 2019 Process ID: 4 System up time: 00:21.768
jr817120011 login: jnior jr817120011 password: *****
jr817120011 /> registry Run/ModbusServer = flash/modbusserver.jar
jr817120011 /> reboot Warning: About to reboot the system.
OK to proceed? [Y/N]:
Disconnect TCP / IP ▼ 10 0 201 23