Coupled with the same VoIP (Voice over Internet Protocol) technology used with the RVON-8, the RVON-I/O takes analog audio and converts it to digital VoIP audio. By being able to convert analog audio systems to digital VoIP audio, the RVON-I/O expands the boundaries of digital audio to include analog. There are many applications in which the RVON-I/O can be used, such as:

- The conversion from analog to VoIP digital audio (and vice versa)
- Zeus Matrix to RVON-I/O to RVON-1 or RVON-8, RVON-I/O to standard analog keypanel
- Zeus to RVON-I/O to RVON-1

RVON-I/O is fully compatible with following internationally recognized standards and protocols: G.711, G.729A, and G.723.

**Features**

- **Eight (8) individually addressable audio channels.** The RVON-I/O can feed simultaneously VoIP capable keypanels as well as various other matrix intercom systems.
- **The RVON-I/O supports ancillary data control for use with RTS Intelligent Trunking.**
- **The RVON-I/O provides a single RJ-45 Ethernet connection.**
- **The RVON-I/O uses standard Ethernet protocols and is compatible with 10 BASE-T and 100 BASE-TX Ethernet compliant devices and networks.**
- **The RVON-I/O has eight (8) GPIOs (General Purpose Input/Output).** There are three (3) modes the GPIOs can be configured:
  - Pass-Through Mode – GPIO status is sent over Ethernet, an IP Address must be set at the destination GPIO pass-through port.
  - 1 Keypanel Mode (single port mode) – All GPIOs on the RVON-I/O are associated with only one (1) keypanel.
  - All Keypanel Mode (multiple port mode) – Each keypanel is associated with its corresponding GPIO.
- **The RVON-I/O has two (2) relays.** Relay 1 is connected directly with the control for GPIO 1; while Relay 2 is connected directly with the control for GPIO 2.
Specifications

**GPIO Characteristics**
DB-9 Relay 1 & 2 contains a 12V power supply on Pin 3. The 12V power pin is capable of delivering a maximum of 12V @ 40mA. GPO outputs are connected to a 5V output with a maximum current of 800μA. GPI inputs are 5V tolerant 74HC14 parts that allow a maximum of 1uA input current.

**Connections**
- RJ-45 Ethernet
- DB-9 Serial port (8 AIO channels)
- DB-25 Serial port
- DB-9 Relay port

**Power Consumption**
- 30VA @ 120VAC, 32VA @ 220VAC

**Physical Dimensions**
- 1.72” H (44mm) 19” (482.6mm) W X 8” (203.2mm) D

**Digital**

<table>
<thead>
<tr>
<th>Compression</th>
<th>Audio Bit Rate</th>
<th>Coding Delay</th>
<th>Playout Delay</th>
<th>IP Bandwidth</th>
</tr>
</thead>
<tbody>
<tr>
<td>G.711</td>
<td>64k</td>
<td>125μs</td>
<td>20–60ms</td>
<td>160–224kbps</td>
</tr>
<tr>
<td>G.729 A</td>
<td>8k</td>
<td>10ms</td>
<td>20–120ms</td>
<td>32–112kbps</td>
</tr>
<tr>
<td>G.723</td>
<td>5.3k/6.3k</td>
<td>30ms</td>
<td>60–120ms</td>
<td>29–45kbps</td>
</tr>
</tbody>
</table>

**System Example**

- CRONUS with RVON-C
- ADAM with RVON-8 Card
- KP-32 with RVON-1
- VoIP Virtual Keypanel on Desktop PC
- LAN Network
- Legacy Analog
- RTS/McCurdy Keypanels
- RVON-I/O Interface
- Zeus

**Order Information**

RVON-I/O • RVON-I/O • Stand-alone 8-port RVON adapter for matrices & keypanels

The specification information is preliminary and is subject to change without notification. Brand names mentioned are the property of their respective companies.