Before using this product, the user must read and understand this document.

For additional information regarding this product, refer to the product’s user guide and technical specifications for the MJ20-PRG. All examples and diagrams are intended to aid understanding, and do not guarantee operation. Unitronics accepts no responsibility for actual use of this product based on these examples.

Please dispose of this product according to local and national standards and regulations.

Only qualified service personnel should open this device or carry out repairs.

Failure to comply with appropriate safety guidelines can cause severe injury or property damage.

Do not attempt to use this device with parameters that exceed permissible levels.

Environmental Considerations

Do not install in areas with: excessive or conductive dust, corrosive or flammable gas, moisture or rain, excessive heat, regular impact shocks or excessive vibration.

Do not place in water or let water leak onto the unit.

Do not allow debris to fall inside the unit during installation.

Kit Contents

The numbered elements in the next figure are described in this section.

1 MJ10-22-CS10
   D-type adapter, interface between the PC serial port and programming cable.

2 MJ20-CB200
   6-wire programming cable, two meters long. Use this to connect the PC serial port to the Jazz Programming Add-on Port, via adapter MJ10-22-CS10.

3 MJ20-PRG
   RS232 Programming Add-On Port. Insert this into the Jazz jack, to provide the serial interface for the programming cable.

   CD (not pictured)
   Contains application programming software, software utilities, and technical library, including technical specifications for the MJ20-PRG.
About the RS232 Programming Port

The port enables an RS232 communication link with a Jazz series OPLC. This link enables:

- PC-PLC communications
- Application program download into the OPLC
- RS232 communications with devices that supply active (RS232 positive voltage) DTR and RTS signals, such as most modems. Note that modems require an appropriate adapter.

Installation and Removal

1. Remove the cover from the Jazz jack as shown in the first two figures below.
2. Position the port so that the port's pin receptacles are aligned with the pins in the Jazz jack as shown in the third figure below.
3. Gently slide the port into the jack.
4. To remove the port, slide it out, and then re-cover the Jazz jack.

Pinouts

The pinout below shows the signals between the adapter and port.

<table>
<thead>
<tr>
<th>Pin #</th>
<th>Description</th>
<th>Pin #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>RTS</td>
<td>1</td>
<td>RS232 Power in*</td>
</tr>
<tr>
<td>5</td>
<td>GND</td>
<td>2</td>
<td>GND</td>
</tr>
<tr>
<td>2</td>
<td>RXD</td>
<td>3</td>
<td>TXD</td>
</tr>
<tr>
<td>3</td>
<td>TXD</td>
<td>4</td>
<td>RXD</td>
</tr>
<tr>
<td>5</td>
<td>GND</td>
<td>5</td>
<td>GND</td>
</tr>
<tr>
<td>4</td>
<td>DTR</td>
<td>6</td>
<td>RS232 Power in *</td>
</tr>
</tbody>
</table>

* Note that:
- Active RS232 positive voltage signals are required to ensure proper communications.
- Connecting the port directly to a power line may damage the port. If a direct connection is unavoidable, use a serial resistor. For example, in the case of 12V, use a 68Ω 1W resistor.
### MJ20-PRG Technical Specifications

#### Power supply
- Power is supplied via pins 1 and 6, located on the RJ11 connector. Active RS232 positive voltage signals ensure proper communications.
- Connecting the port directly to a power line may damage the port. If a direct connection is unavoidable, use a serial resistor. For example, in the case of 12V, use a 68Ω 1W resistor.

| Input voltage range | 5-15V (RS232 positive voltage) |

#### Communication
- **RS232**: 1 port
- **Galvanic isolation**: Yes
- **Baud rate**: 300, 600, 1200, 2400, 4800, 9600 bps
- **Input voltage**: ±18VDC absolute maximum
- **Cable length**: 3m maximum (10 feet)

#### Environmental
- **Operating temperature**: 0°C to 50°C (32°F to 122°F)
- **Storage temperature**: -20°C to 60°C (-4°F to 140°F)
- **Relative Humidity (RH)**: 10% to 95% (non-condensing)

#### Dimensions
- 71 mm (2.795"
- 20 mm (0.787"
- 38 mm (1.496"

#### Weight
- 30g (1.06oz.)

#### Pinout
- **MJ20-PRG RJ11 Connector**

<table>
<thead>
<tr>
<th>Pin #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>RS232 Power in</td>
</tr>
<tr>
<td>2</td>
<td>GND</td>
</tr>
<tr>
<td>3</td>
<td>TXD</td>
</tr>
<tr>
<td>4</td>
<td>RXD</td>
</tr>
<tr>
<td>5</td>
<td>GND</td>
</tr>
<tr>
<td>6</td>
<td>RS232 Power in</td>
</tr>
</tbody>
</table>

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