




- 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

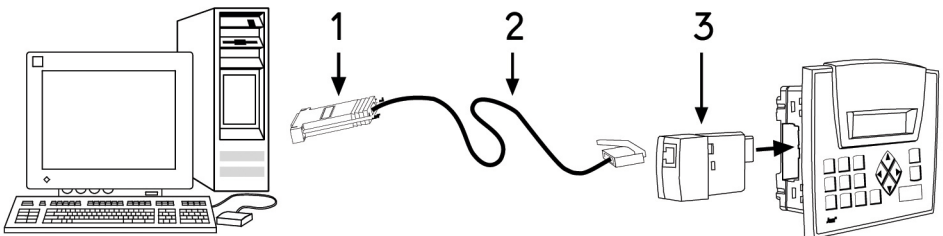
 ▪ Do not install in areas with: excessive or conductive dust, corrosive or flammable gas, moisture or rain, excessive heat, regular impact shocks or excessive vibration.

 ▪ 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.



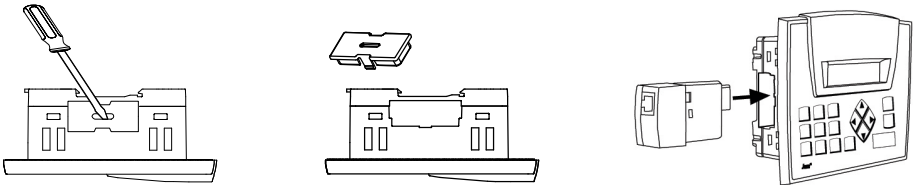
## About the RS232 Programming Port

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.

MJ10-22-CS10 D-type adapter			MJ20-PRG RS232 Programming Port		RJ11 MJ20-PRG – cable interface
Pin #	Description		Pin #	Description	
7	RTS	→	1	RS232 Power in*	
5	GND	—	2	GND	
2	RXD	←	3	TXD	
3	TXD	→	4	RXD	
5	GND	—	5	GND	
4	DTR	→	6	RS232 Power in *	

\* 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.

The information in this document reflects products at the date of printing. Unitronics reserves the right, subject to all applicable laws, at any time, at its sole discretion, and without notice, to discontinue or change the features, designs, materials and other specifications of its products, and to either permanently or temporarily withdraw any of the foregoing from the market.

All information in this document is provided "as is" without warranty of any kind, either expressed or implied, including but not limited to any implied warranties of merchantability, fitness for a particular purpose, or non-infringement. Unitronics assumes no responsibility for errors or omissions in the information presented in this document. In no event shall Unitronics be liable for any special, incidental, indirect or consequential damages of any kind, or any damages whatsoever arising out of or in connection with the use or performance of this information.

The tradenames, trademarks, logos and service marks presented in this document, including their design, are the property of Unitronics (1989) (R<sup>g</sup>) Ltd. or other third parties and you are not permitted to use them without the prior written consent of Unitronics or such third party as may own them.

DIG-JAZZ-PRG 10/09