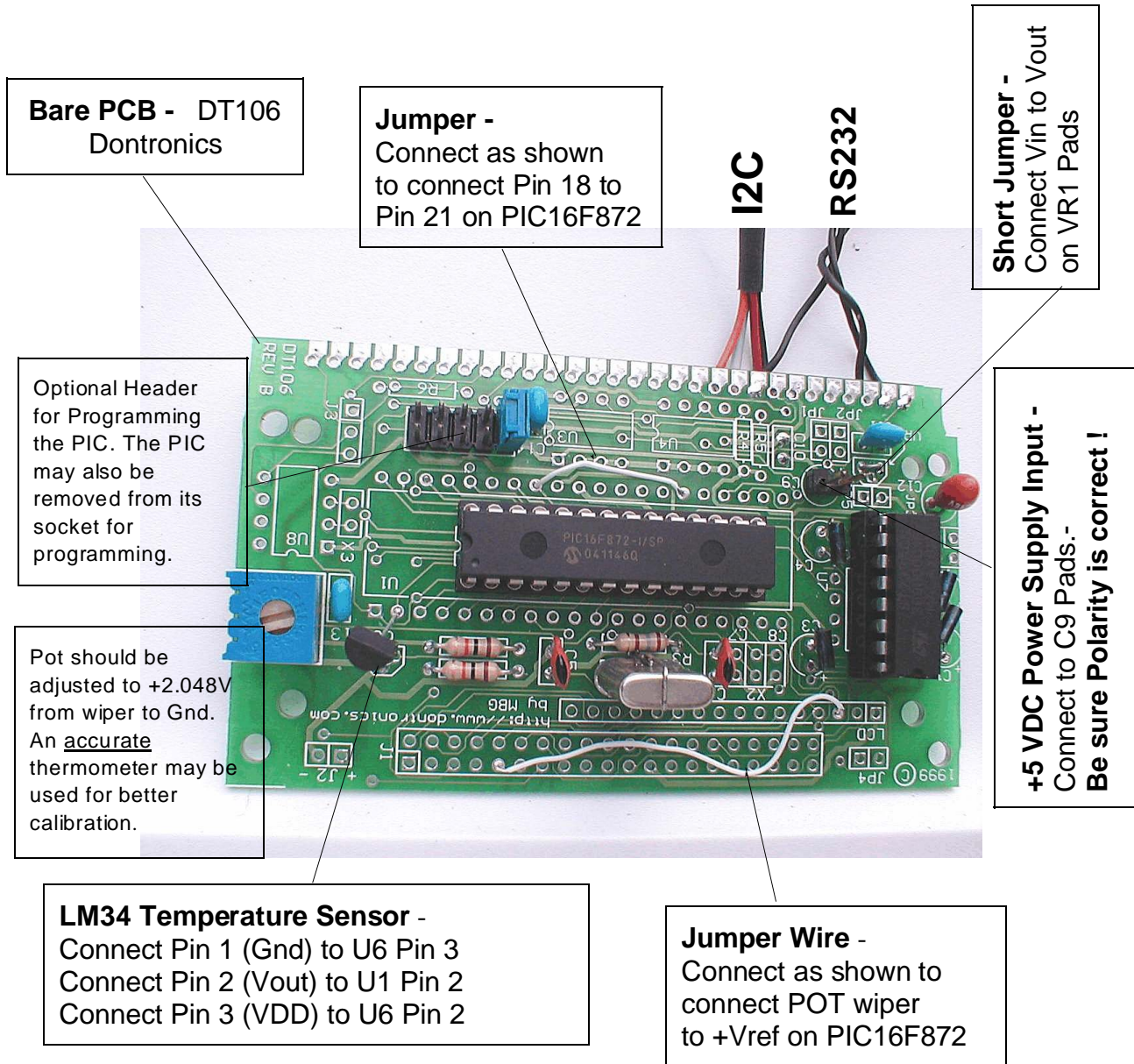


**Assembly of
RS232 to I2C Adapter
on Dontronics PN DT106 General Purpose PCB**



TARETRONICS, Inc.

www.taretronics.com
info@taretronics.com

Configuring HyperTerminal

Open Hypertrm.exe and establish a New Connection for the RS-232 to I2C Adapter, with the following properties:

1. Direct Connect to ComX (your choice of available Com Ports on the PC).
2. Bits per second: 9600
3. Data bits: 8
4. Parity: None
5. Stop bits: 1
6. Flow Control: None
7. Keys: Windows
8. Backspace: Ctrl+H
9. Emulation: ANSI

Operation (Assumes that at least one SMART LED Display Module is connected to the I2C Bus):

- **Status upon Power-Up of the RS-232 to I2C Adapter (application of +5 VDC)**
 - HyperTerminal displays '**TareTronics, Inc.**'
 - SMART LED Display Modules display '----'
 - PC keyboard is ready to input Hex Data Bytes
- **PC Keyboard Procedures**
 - **Esc** Resets the RS-232 to I2C Adapter, and erases transmission buffer - does NOT reset the SMART LED Display Modules.
 - **ctrl+A** Toggles between hex data entry & ASCII character or string entry -
 - **Backspace** Erases previous keyboard entries ONLY when in ASCII entry mode.
 - **Hex Data Byte Entry** Precede hex data byte with 0x
 - **ASCII Character Entry** No prefix or suffix needed.
 - **Return** Data bytes or ASCII characters that have been entered (50 maximum) are transmitted over the I2C bus.
 - **ctrl+T** Data entry mode is exited and Ambient Temperature Display mode is entered. The word '**Temperature**' will be displayed on HyperTerminal. Temperature is measured every 0.52 seconds, and the SMART LED Display Modules are updated every 2..1 seconds - for example, 75°F. Strike any key to exit the temperature display mode and re-enter the data entry mode.
- **HyperTerminal Display Glossary**
 - **>Clr** After entering 'Esc', or upon exit from Temperature Display mode.
 - **OK** Successful I2C transmission
 - **-Fail** Unsuccessful I2C transmission
 - **"** After entering 'Ctrl+A', when hex data entry mode is begun
 - **'** After entering 'Ctrl+A', when ASCII character entry mode is begun
 - **Str** Adapter failed to access the I2C bus, after 10 attempts
 - **Ack** Adapter failed to read an Acknowledge bit after a transmission
 - **Stp** Adapter failed to send a Stop bit sequence at a transmission end
- **Example**
 - Enter (after Adapter power-up, or Esc): **0x60 0x00 ctrl+A YEOW Return**
 - HyperTerminal Display: **0x60 0x00 'YEOW OK**
 - SMART LED Display Module display: **YEOW**