

# Technovision Inc.

## HEX DOWNLOAD

### Reference Guide

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A program such as HyperTerminal or TeraTerm can be used to transfer the HEX (TXT) file from your PC to the KPC2.

Process for downloading:

1. Launch terminal Program and load/create the proper session file for the KPC2.
2. Start up the KPC2 with the BOOTSTRAP button pressed.
3. Transfer the HEX (TXT) KPC2 program file using the "Send Text File" option in the terminal program.
4. Repeat 2&3 if transfer failed.

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### Downloading programs into the KPC2

You will require a KPCPRG cable to download programs from your computer to the KPC2 - this cable is available from Technovision.

Even though the extension of the program file is .HEX, you can either rename the program file with a .TXT extension or simply select the \*.HEX option when viewing the files available to download in HyperTerminal or TeraTerm.

You transfer the new program (HEX) file to the KPC2 by using HyperTerminal (or any Terminal program such as TeraTerm). If this is your first time downloading a HEX file, set up the parameters in HyperTerminal or TeraTerm and then save the session file as "KPC2" for use the next time.

### **Communications Settings:**

BAUD: 57600

BITS: 8

Parity: NONE

STOP BIT: 1

FLOW CONTROL: HARDWARE (If using a standard DB9M serial port). If using an USB-RS232 adapter, set the Flow Control to NONE and then set char and line delays to 5ms.

LOCAL ECHO: Unchecked (or OFF)

You must first remove the lid from the KPC2 to access the BOOTSTRAP ENABLE button.

To begin downloading the HEX file to the KPC2 you must hold down the "BOOTSTRAP ENABLE" button within the KPC2 **WHILE POWERING UP THE KPC2**. Once you press the BOOTSTRAP ENABLE button, the current program within the KPC2 is erased and the controller will enter download mode

You then download the new program (HEX) file to the KPC2 by using the "SEND TEXT FILE" option in your terminal program and then select the correct

program file from the directory listing of where you saved the KPC2 program(s).

<b>THE TRANSFER DOES NOT USE A TRANSMISSION PROTOCOL - JUST THE BASIC "SEND TEXT FILE" OPTION.</b>
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Once the program file (.HEX) is chosen, the transfer will start and the KPC2 will start sending "." to your terminal screen. At the end of the transfer, an "S" will indicate a successful transfer. If you receive a "F" (failure) or do not get the "S", repeat the bootstrap/download process.

Here are additional notes:

Using a Windows 98 machine you must ensure that the FIFO buffers are disabled.

### You can verify this by:

- 1) Open the "Control Panel" window and double click on the "System" folder
- 2) Select the "Device Manager" page
- 3). Double click on the "PORTS (COM & LPT) devices menu option to expand the menu to show the individual ports on the machine.
- 4) Double click on the "COM PORT" that will be used for downloading the program to open the "Communications Port (x) Properties" window
- 5) Select the "Port Settings" page
- 6) Click on the "Advanced" box to open the "Advanced Port Settings" window
- 7) Within this window the "Use FIFO Buffers (requires 16550 compatible UART)" option must be DISABLED - make sure there is no tick in the box.