

PCGET and PCPUT for the Sol-20

These programs make it easy to load a file from the PC into the Sol-20 (PCGET) or write a file from the Sol-20 to a PC (PCPUT) over the serial port on the Sol-20. The XMODEM protocol is used for file transfer.

Once PCGET is on the Sol-20, subsequent file transfer – including retrieval of the PCPUT program – is simple. However, getting PCGET onto the Sol-20 to begin with is the classic chicken and egg quandary. Following is a way to get PCGET onto the Sol-20 for the first time using PIP and LOAD over the serial port. This technique requires a terminal emulator or file transfer program that can insert a delay between each character sent.

PIP is used to copy the Intel Hex version of PCGET to the CP/M system and save it as PCGET.HEX, then LOAD is used to create the executable PCGET.COM. Under Lifeboat CP/M for Micropolis drives, both the "CRT:" and "RDR:" devices are mapped to the Sol-20 serial port. The CRT: device echos each character received so the file load progress can be seen, while the RDR: device does not echo. Different device assignments and behavior may be seen under different versions of CP/M.

A>PIP PCGET.HEX=CRT: *(press RETURN and wait for CP/M to load PIP at which time you'll see a line-feed)*

Assuming Tera-Term, use the "Setup->Serial Port..." menu option to set the transmit delay for "msec/char" to 10. Then send the file "PCGET.HEX" using simple ASCII transfer. After the file transfer dialog box closes, type Ctrl-Z to signal end-of-file. Note that the actual file transfer may continue for 15 or more seconds after the file transfer dialog box closes. This is normal due to buffering in the PC. CP/M will eventually receive the Ctrl-Z you typed earlier, close the file, and exit to the A> prompt.

After file transfer is complete, turn off the character delay in the terminal emulator.

A>LOAD PCGET *(create PCGET.COM)*

FIRST ADDRESS 0100
LAST ADDRESS 03CC *(you may see different values than shown here)*
BYTES READ 02CD
RECORDS WRITTEN 06

A>PCGET PCPUT.COM *(use PCGET to retrieve PCPUT)*
Send the file now using the XMODEM protocol...