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; Version 1 02/11/2016
;
; Modifications to PIP to enable communication between
; 2 CP/M machines via serial port or modem
;
; Before starting serial ports need to be setup on each
; computer. If using a modem then a connection needs to be established
;
; Files to be transfered need to be converted using UNLOAD on the sending
; system to hex format and then converted back to the original file using LOAD
; on the receiving machine
;
; Handshaking is accomplished as follows:
;
; Receiver: Send ^B (Ascii 2), wait for character from remote
; Sender: Wait for ^B, send character to remote

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.org      0103H
Inp:     jp      DataIn
Out:     jp      DataOut

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CharIn:      ; Data storage
.db      0

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; Send character in 'C' out to the serial port

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DataOut:
    push    af
DataOut_1:
    call    SerialIn    ; Check for ^B handshake
    cp     2
    jr     NZ,DataOut_1; No go check again
    call    SerialOut   ; Yes, send character
    pop    af
    ret

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; Receive a character from serial port and save it in CharIn (0109H)

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DataIn:
    push    af
    push    bc
    ld     c,2          ; ^B, handshake
    call    SerialOut   ; Send handshake
    call    SerialIn    ; Get character
    ld     (CharIn),a   ; Save it for PIP
    pop    bc
    pop    af
    ret

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    nop
    nop
    nop
    nop
    nop

```

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; *****
; Patch area

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; *****

; MyZ80 CP/M emulator setup

; Wait for a character from the serial port and return it in 'A'

SerialIn:
    in        a,(05h)      ; Read line status register
    and       1           ; Check bit 0. If it is set then data is available
    jr       z,SerialIn   ; Wait for a character
    in        a,(00h)      ; Character is available. Get it
    ret

; Send a character in 'C' out the serial port

SerialOut:
    in        a,(05h)      ; Read line status register
    and       20h         ; Check bit 5. If it is set then we can transmit
    jr       Z,SerialOut  ; Wait until the port is clear
    ld       a,c
    out      (00h),a
    ret

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