instant hard copy.

For details of how to enter this program into your machine, see the assembler section of the Memotech manual.

Program notes

The program is label-driven and is totally independent of its position in memory, hence the lack of memory locations to the left of the assembler. Consequently, the program will run on any MTX regardless of its memory capacity.

This program was written by a member of the Memotech Owners' Club. Anyone wishing to enquire further about the activities of the club should send an SAE to: MOC, 23 Denmead Rd,

Harefield, Southampton SO2 5GS. The annual subscription is £7. Any other Memotech submissions are always welcome.

Label explanations STRT-FINI: set system variable FEXPAND

PANEL: check for P key press START: main program loop

Subroutines LADDR: set VPD to VRAM

read mode DUMP: set screen width to 29

characters

LOOP2: read screen and send to printer

BUFFER/STATUS: output to

printer

LPRINT: cause line feed and

carriage return

WAIT/LOOP1: idle loop

STRT: LD A,£C3

; PANEL LPRINT DUMP

FINI:

PANEL:

START:

LADDR:

: jump code for panel

extension

LD (£FA9E),A

LH HL, PANEL; address for panel extension

LD (£FA9F),HL; set fexpand CP £50 ; is key 'P'

RET NZ ; if so then continue LD A, 14 ; screen lines PUSH AF

LD HL,£1C00 LD DE,40 CALL LADDR

POP AF

; start of name table in VRAM ; skip to next screen line ; set up address for VRAM

read CALL DUMP

; print out one line

DEC A ; keep line countdown CP 0 ; has it finished ; finish routine after 14 lines RETZ

PUSH AF ADD HL, DE ; address of next screen line JR START ; do until finished

LD A,L OUT (2),A LD A,H

; set up VRAM address ; LS byte first ; now set MS byte

OUT (2),A CALL WAIT RET

; timing pause for VDP

DUMP: LD B,29 LOOP 2: INA,(1)CALL WAIT

; set screen width for dump ; read screen character

CALL BUFFER; load printer buffer

DJNZ LOOP2; get next character CALL LPRINT; LPRINT one line of the

screen

; pause

BUFFER: STATUS:

RET OUT (4),A INA,(4)AND £1

; latch char into printer buffer ; is PTR ready

; ready bit check

JRNZ,STATUS CALL WAIT INA,(0)

; pause for printer ; strobe data into printer buffer

CALL WAIT IN A, (4)

; pause ; reset strobe signal

RET LPRINT LD A, 10

; line feed CALL BUFFER; send to printer ;carriage return

LD A, 13 CALL BUFFER; send RET

WAIT:

LOOP 1:

LD B,50 DJNZ LOOP1 POP BC

PUSH BC

; pause for a period ; of time to allow ; the printer and the ; VRAM to respond

RET

PANEL EXPANSION

Anyone who has spent time roaming around their memory via the PANEL command will find this assembler program of much use, as it allows the disassembled code to be printed out by using the

A point to note is that this program is designed for use with the DMX80 printer; other printers may require a different bit check in the status routine (see your printer manual for further details). This program is executed (after typing RUN to reset the FEXPAND variables) by entering PANEL, then using the list command L to disassemble an area of RAM. Execution of the utility then requires only a press of the P key (make sure your printer is switched on!), and you get an

system variable FEXPAND.