Brother FAX-645 LCD initialisation sequence

LCD 6 pin interface : DATA, CLK, STB, GND, +5V, GND

DATA	Data, write clocked on rising edge of CLK.
	Sent least-significant-bit first, 8 bit words, 800uS delay between bytes.
CLK	Clock, 28uS (35.714kHz), only present during STB period.
STB	Strobe, active low, transitions on the falling edge of CLK. Held low for duration of a
	byte, or continuously for duration of a byte sequence.
GND	0V
VDD	+5V

LCD initialisation:

```
08 20 F8 01

06 0C 40 0A 00 0E 01 0F 11 0F 00 0A 00 0E 11 11 11 0E 00 0A 00 11 11 11 13
0D 00 06 09 1C 80 1C 09 06 00

0C 80 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 80 0C

...

0C 80 50 4C 45 41 53 45 20 57 41 49 54 20 20 20 20 20 8F 0C

...
```

Initial code, each byte written with a single pulse to the STB line,

08 - Display off, cursor off, blink off

20 - Mode 4 bit, 1 line, 5x7 font

F8 - Set Data cursor to 0x78 (but writes no data as strobe goes high again)

01 - Clear display. 20mS delay before next sequence.

Second initialisation sequence after 24mS, 800uS between bytes

06 - Right data entry, no scroll

0C - Display on, cursor off, blink off

The following bytes are written with STB held low for the duration

`40` - Write to character generator (characters 0, 1, 2, 3 written)

`0A 00 0E 01 0F 11 0F 00` -
```
.■.■.
.....
.■■..
.....
..■..
.■■..
.■■■.
.....
```

`0A 00 0E 11 11 11 0E 00` -
```
.■.■.
.....
.■■..
.■.■.
.■.■.
.■.■.
.■■..
.....
```

`0A 00 11 11 11 13 0D 00` -
```
.■.■.
.....
.■.■.
.■.■.
.■.■.
.■.■■
.■■.■
.....
```

`06 09 1C 80 1C 09 06 00` -
```
..■..
.■.■.
■■...
.....
■■...
.■.■.
..■..
.....
```

First displayed data written at 100mS after initialisation start, then repeated again at 131mS and 165mS

`0C` - Display on, cursor off, blink off

The following bytes are written with STB held low for the duration

`80` - Write characters to display starting at cursor position 0

`20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20` - " ", blank

The following two bytes are written with separate strobes and terminate the displayed character write

`80` - Position cursor to position 0, but writes no characters as strobe goes high again

`0C` - Display on, cursor off, blink off

Text written at 198mS, then repeated sequence of blanking and rewriting again at 2.9S, 3.6S and 4.0S

`0C` - Display on, cursor off, blink off

The following bytes are written with STB held low for the duration

`80` - Write characters to display starting at cursor position 0

`50 4C 45 41 53 45 20 57 41 49 54 20 20 20 20 20` - **"PLEASE WAIT   "**

The following two bytes are written with separate strobes and terminate the displayed character write

`8F` - Position cursor to position 15, but writes no characters as strobe goes high again

`0C` - Display on, cursor off, blink off

At 4.5S Display then blanked again and "**TELEPHONE   **" displayed