

Uniden WDECT2315 phone LCD initialisation sequence

v1.2 8 Feb 2021

Phone was manufactured about 2017.

Display is a character module, 3 lines of 16 character, but seems to be addressed as 1 line of 48 characters. Characters are formed from a 5x7 pixel grid.

LCD 8 pin, 4 wire SPI interface : CS, DATA, CLK, RS, , RESET, Vcc, GND, Vlcd

with Vbat = 3.3V

CS	Chip select, active low asserted 7uS before first CLK pulse held low for duration of a byte until 583nS after last CLK rising
DATA	Data, write clocked on rising edge of CLK. Sent most-significant-bit first, 8 bit words, 1000uS delay between bytes.
CLK	Clock, 5uS (214kHz), only present when clocking data bits.
RS	Register select Low = command High = data asserted 333nS to 667ns before CS
RST	0V jumps to 3.24V after short delay on powerup
Vcc	3.24V
GND	0V (battery -ve)
Vlcd	-2.65V

LCD initialisation:

(each byte is a command, unless designated with a “d” as data)

31

6mS delay

31
31
08
01

4mS delay

06

Store programable character patterns

C0 Set CGRAM addr register to 0000000

08d	. . . .
0Cd	. . . .
0Ed	. . . .
0Fd	. . . .
0Ed	. . . .
0Cd	. . . .
08d	. . . .
00d	. . . .
08d	. . . .
0Cd	. . . .
0Ed	. . . .
0Fd	. . . .
0Ed	. . . .
0Cd	. . . .

20d
20d
20d
20d
20d
20d
20d
20d
20d

400mS delay
31

6mS delay
31
31
06

2mS delay

Store programmable character patterns

C0 Set CGRAM addr register to 0000000

08d
0Cd
0Ed
0Fd
0Ed
0Cd
08d
00d
08d
0Cd
0Ed
0Fd
0Ed
0Cd
08d
00d
08d
0Cd
0Ed
0Fd
0Ed
0Cd
08d
00d
08d
0Cd
0Ed
0Fd
0Ed
0Cd
08d
00d

0C

`` ``
`` **Welcome!** ``
`` **Please Wait...** ``

02 Home cursor
20d
20d
20d

20d
20d
20d
20d
20d
20d
20d
20d
20d
20d
20d
20d
20d


20d
20d
20d
20d
57d W
65d e
6Cd l
63d c
6Fd o
6Dd m
65d e
21d !
20d
20d
20d
20d

20d
50d P
6Cd l
65d e
61d a
73d s
65d e
20d
57d W
61d a
69d i
74d t
2Ed .
2Ed .
2Ed .
20d

31
31
31
06

Store programmable character patterns
C0 Set CGRAM addr register to 0000000

0Ed .
11d .
13d .
17d .
1Fd .
1Fd .
1Fd .
00d



08d
0Cd
0Ed
0Fd
0Ed
0Cd
08d
00d
08d
0Cd
0Ed
0Fd
0Ed
0Cd
08d
00d
08d
0Cd
0Ed
0Fd
0Ed
0Cd
08d
00d

0C

“ SUN 12:00A ”
“ BUS STUD #1 ”
“ ”

02 Home cursor
20d
20d
20d
53d S
55d U
4Ed N
20d
31d 1
32d 2
3Ad :
30d 0
30d 0
41d A
20d
20d
00d battery symbol

20d
20d
42d B
55d U
53d S
20d
53d S
54d T
55d U
44d D
20d
23d #
31d 1
20d
20d

20d

20d

20d

20d

20d

20d

20d

20d

20d

20d

20d

20d

20d

20d

20d

20d

20d