

Uniden DECT3216 phone LCD initialisation sequence

v1.01 10 Feb 2019

LCD 10 pin, 4 wire SPI interface : RS, CS, DATA, CLK, ,,,,GND

RS Register select
 Low = command
 High = data
 asserted 333nS to 667ns before CS

CS Chip select, active low
 asserted 12uS before first CLK pulse
 held low for duration of a byte until 667nS 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, 4.7uS (214kHz), only present when clocking data bits.

GND 0V

Initialisation sequence:

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

20 4bits, 1 line, 5x8 dots?
0D Display ON, Cursor OFF, Cursor Blink ON?
28 4bits, 2 lines, 5x8 dots?
13 ?
50
12d
08
18
0E
24

100ms delay

26

10ms delay

27

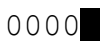


15ms delay


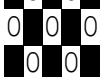
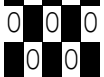
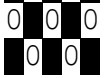
1C

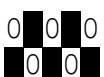
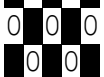
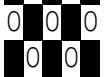
Store programmable character patterns

C0 Set CGRAM addr register to 0000000
04d 0000
0Ed 0000
1Fd 0000
11d 0000

15d 
1Fd
00d 00000

01d 0000
1Fd
11d 
11d 
1Fd
1Fd
1Fd
00d 00000

15d 
0Ad 0 0 0
15d 
0Ad 0 0 0
15d 
0Ad 0 0 0
15d 
00d 00000

0Ad 0 0 0
15d 
0Ad 0 0 0
15d 
0Ad 0 0 0
15d 
0Ad 0 0 0
00d 00000

40 Set Icon addr register to 0
00d
00d
00d
00d
00d
00d
00d
00d
00d
00d
00d
00d
00d
00d
00d
03d battery icon?
08d
00d

“ Welcome! ”

“ Please wait... ”

80 Set DDRAM addr register to 0000000

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 SP
77d w
61d a
69d i
74d t
2Ed .
2Ed .
2Ed .
20d

4.5s delay

13
1C
50
12d
08
29
0E
27

Store programmable character patterns

C0 Set CGRAM addr register to 0000000
04d 0000
0Ed 0000
1Fd
11d 0000
15d 0000
15d 0000
1Fd
00d 00000

```

01d  0000
1Fd
11d  000
11d  000
1Fd
1Fd
1Fd
00d  00000

```

```

15d  000
0Ad  000
15d  000
0Ad  000
15d  000
0Ad  000
15d  000
00d  00000

```

```

0Ad  000
15d  000
0Ad  000
15d  000
0Ad  000
15d  000
0Ad  000
00d  00000

```

```

40    Set Icon addr register to 0
00d
00d
00d
00d
00d
00d
00d
00d
00d
00d
10d   bell icon?
00d
00d
00d
00d
03d   battery icon?
08d
00d

```

```

"
" Out Of Range "
80    Set DDRAM addr register to 0000000
20d
20d
20d
20d

```

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

20d
20d
4Fd
75d
74d
20d
4Fd
66d
20d
52d
61d
6Ed
67d
65d
20d
20d

O
u
t

O
f

R
a
n
g
e