

SMSQ V2.98

Warning

For most machines and applications, V2.98 of SMSQ does not represent any improvement over V2.91 (which was quite a good version!). The purpose of versions since V2.91 have been twofold.

- Introduction of higher colour resolution drivers for some systems
- Bringing the initialisation, the screen drivers, the keyboard drivers, the filing system drivers and the serial port drivers of all machines into line.

The second of these was always bound to cause some problems without bringing any advantages to users, but was necessary to ensure that the system (now on 6 platforms with a number of variants) could be maintained.

Extension of the DISP_xxx command set

The DISP_xxx command set has been extended to allow the colour depth to be specified. Note that the Pointer Interface was not designed to put up with colour depth changes and that, for the moment, the restoration of the screen on changing the colour depth is about as pathetic as the original QL mode call.

The DISP_COLOUR command follows the same principles as the other DISP commands.

DISP_COLOUR *colour depth*

Specifies the colour depth to be used - 0 for QL, 3 for 16 bit (also 1 for 4 bit, 2 for 8 bit and 4 for 24 bit - but these do not exist).

It is possible to specify the display size immediately after the colour depth.

DISP_COLOUR 3, 800, 600 *specifies a 800x600 16 bit display*

Naturally, since the DISP_SIZE size definition can also followed by the frame and line rates, the DISP_COLOUR definition can also specify the frame rate, the line rate and the x and y blank.

DISP_COLOUR *colour depth* [,xsize [,ysize [,framerate [,linerate [,xblank [,yblank]]]]]]

DISP_SIZE *xsize* [,ysize [,framerate [,linerate [,xblank [,yblank]]]]]

DISP_RATE *framerate* [,linerate [,xblank [,yblank]]]

DISP_BLANK *xblank* [,yblank]

Any parameter can be left undefined, thus

DISP_SIZE , ,72, , , 30

specifies that the frame rate will be 72 Hz and the y (frame) blanking period will be 30 lines - leaving all the other parameters unchanged.

Note that on most machines, most parameters will no effect at all!

Common keyboard driver

The keyboard drivers have been rationalised. This means that some special keystrokes may have moved on some versions and some "special features" have disappeared.

Pause / break on IBM keyboards has been made equivalent to Undo on the Atari keyboards (it is in the same place).

NUMLOCK on IBM keyboards has no effect - the keypad is always a keypad!

Special actions

SCROLL LOCK (IBM)	freeze screen
CTRL F5	freeze screen
CTRL SCROLL LOCK (QXL)	freeze QXL PC communications
CTRL SPACE	break
CTRL BREAK (IBM)	break
CTRL UNDO (Atari)	break
CTRL SHIFT ALT TAB	soft reset (restarts current SMSQ)
CTRL SHIFT ALT BREAK (IBM)	hard reset (restarts host system)
CTRL SHIFT ALT UNDO (Atari)	hard reset (restarts host system)

All of these actions (and the switch job CTRL-C action) can be suppressed, but for obvious reasons the mechanism is not published: ask Jochen Merz for details if you have a "commercial system" that must be immune from soft resets!

Caps Lock

At last SMSQ has a workaround for the QDOS caps lock routine bug!

The long word at \$84 in the system variable which was previously 0 (normal machines) or negative (Thors), has been taken for the address of a caps lock routine which is called

- on reception of a Caps lock code in the keyboard polling interrupt routine,
- in supervisor mode,
- with A6 pointing to the system variables,
- with A3 pointing to the keyboard linkage block.