What's new in NextZXOS v2.10

This document describes the main new features in *NextZXOS v2.10*. It is mainly intended for those people who have previously been using v2.09 and want to know what's changed.

If you are new to *NextZXOS* and *NextBASIC*, all the information in this document is also integrated into the main documentation files:

NextBASIC_File_Commands.pdf
NextBASIC_New_Commands_and_Features.pdf
NextZXOS_Editor_Features.pdf
NextZXOS_and_esxDOS_APIs.pdf

Code options

New bits have been added to the **%CODE** pseudo-variable:

Bit:	Feature:
3	Set to make **BEEP** and **PLAY** behave the same regardless of the speed set by **RUN AT**. (The default, of pitch/duration changing with speed, matches the Spectrum 48K and 128K personalities).
4	Set to control the index used for sprite transparency with **SPRITE OVER** and **SPRITE CLEAR.** If reset, the index for sprite transparency is the global transparency colour (set by **PALETTE OVER**). This bit is automatically set when the **SPRITE OVER** command is used.

Sprites

Previously, **PALETTE OVER** *n* and **PALETTE CLEAR** both set the sprite transparency index (nextreg 75) as well as the global transparency colour (nextreg 20).

A new command has now been added to independently set the sprite transparency index:

SPRITE OVER *n*

Additionally, **SPRITE CLEAR** will reset the sprite transparency index to its default value of 227 (but only if **%CODE** bit 4 is 1).

For backwards-compatibility, **PALETTE OVER** *n* and **PALETTE CLEAR** will continue to set the sprite transparency index if **%CODE** bit 4 is 0. This bit is automatically set to 1 whenever **SPRITE OVER** is executed.

Tiles (layer 2 and lo-res)

The transparency index for a tileset can now be specified as an optional **OVER** parameter in the **TILE BANK** command; if not specified, the transparency index will continue to be taken from the global transparency colour when each **TILE** command is issued.

TILE BANK *n*
TILE BANK *n* **OVER** *transp*
Define bank *n* as containing the tiles (up to 4 banks *n..n*+3 if 16x16 tiles)
Sets the transparency index for this tileset if the **OVER** parameter is supplied, otherwise the global transparency colour (which defaults to **227**) will be used as the index.

Miscellaneous new features

The **REG** and **OUT** commands can now both be provided with a list of values to be sent to the same register/port.

REG *reg,v1,v2,v3,v4,…*
OUT *port,v1,v2,v3,v4,…*

48K ROM entry points

The following routines in the 48K ROM are now layer-aware in *NextZXOS* and will operate on the current layer:

- **PLOT** ($22dc)
- **POINT_SUB** ($22cb)
- **CIRCLE_1** ($232d)
- **DRAW_LINE** ($24b7)

Earlier entry points into the **DRAW** and **CIRCLE** commands can also be used if desired.

Note that the later common entry point **PLOT_SUB** ($22e5) cannot be made layer-aware since it does not allow for coordinate values above 255.

System variables

The following new system variables are present (only used following a **TILE BANK** command with the optional **OVER** parameter):

1	5C3FH (23615)	TILETRNL	Transp for lo-res tileset (was LISTSP)
1	5C40H (23616)	TILETRN2	Transp for layer2 tileset (was LISTSP+1)