## NAME

xgl_stroke_text – renders 2D and 3D stroke text

## SYNOPSIS

**#include <xgl/xgl.h>**

```
void  xgl_stroke_text (
        Xgl_ctx           ctx,
        void              *str,
        Xgl_pt_f{2,3}d    *pos,
        /* f2d for 2D text, f3d for 3D text */
        Xgl_pt_f3d        dir[] );
        /* Ignored for 2D text */
```

## DESCRIPTION

**Purpose**

This Context operator renders the text indexed by *str*, using the Context attributes within *ctx*.

**Parameters**

*pos* is the 2D or 3D reference point for the rendered text. When using this operator in a 3D environment, *dir* defines the two vectors used for the orientation of the 2D plane on which the text sits. The first vector defines a logical horizontal direction that supports the text, and the second vector gives a logical vertical direction to define an orientation for the text. Each point within the stroke character is transformed through the XGL transformation pipeline. Depending on the character-encoding scheme defined by the Context attribute **XGL_CTX_STEXT_CHAR_ENCODING**(3)**,** the *str* parameter will represent a *NULL-terminated* C-style string of characters, or a pointer on a structure of type *Xgl_mono_text_list*.

If the string-encoding scheme used is of type XGL_SINGLE_STR, at least one font can be selected to render the characters in ISO or EUC/multi-byte character-encoding schemes:

**XGL_CTX_SFONT_0**(3)

When the character-encoding scheme used is of type XGL_CHAR_MBY, the fonts used to render the string are selected depending on the character code adding the following Context attributes:

**XGL_CTX_SFONT_1**(3)
**XGL_CTX_SFONT_2**(3)
**XGL_CTX_SFONT_3**(3)

If the string-encoding scheme used is of type XGL_MULTI_STR, the structure passed in parameter contains the XGL font Object used to render the characters. Both character-encodings ISO or MBY can be used.

The application can control the geometrical characteristics of the text using the following attributes:

**XGL_CTX_STEXT_CHAR_HEIGHT**(3)
**XGL_CTX_STEXT_CHAR_SPACING**(3)
**XGL_CTX_STEXT_CHAR_EXPANSION_FACTOR**(3)

The text orientation is controlled by changing the components of the **XGL_CTX_STEXT_CHAR_UP_VECTOR**(3) attribute. An inclination can be added to the orientation by using the **XGL_CTX_STEXT_CHAR_SLANT_ANGLE**(3) attribute.

The text presentation, with respect to the position given by the parameters *dir* and *pos*, is managed by the following attributes:

**XGL_CTX_STEXT_ALIGN_HORIZ**(3)
**XGL_CTX_STEXT_ALIGN_VERT**(3)
**XGL_CTX_STEXT_PATH**(3)

The color of the text can be modified with the **XGL_CTX_STEXT_COLOR**(3) attribute. The way that stroke text is clipped on the Device is controlled by the **XGL_CTX_STEXT_-PRECISION**(3) attribute.

XGL stroke text is rendered as a set of polylines. The width of the lines is fixed, and no pattern can be applied to the rendering of stroke text. The ROP, plane mask, and depth-cueing apply, as for any other rendering primitive, and can be modified with the following attributes, respectively:

**XGL_CTX_ROP**(3)
**XGL_CTX_PLANE_MASK**(3)
**XGL_3D_CTX_DEPTH_CUE_MODE**(3)

## RETURN VALUE

Nothing is returned.

## SEE ALSO

**XGL_3D_CTX_DEPTH_CUE_MODE**(3)
**XGL_CTX_PLANE_MASK**(3)
**XGL_CTX_ROP**(3)
**XGL_CTX_SFONT_0**(3)
**XGL_CTX_SFONT_1**(3)
**XGL_CTX_SFONT_2**(3)
**XGL_CTX_SFONT_3**(3)
**XGL_CTX_STEXT_CHAR_ENCODING**(3)
**XGL_CTX_STEXT_CHAR_EXPANSION_FACTOR**(3)
**XGL_CTX_STEXT_CHAR_HEIGHT**(3)
**XGL_CTX_STEXT_CHAR_SLANT_ANGLE**(3)
**XGL_CTX_STEXT_CHAR_SPACING**(3)
**XGL_CTX_STEXT_CHAR_UP_VECTOR**(3)
**XGL_CTX_STEXT_ALIGN_HORIZ**(3)
**XGL_CTX_STEXT_ALIGN_VERT**(3)
**XGL_CTX_STEXT_COLOR**(3)
**XGL_CTX_STEXT_PATH**(3)
**XGL_CTX_STEXT_PRECISION**(3)

## NOTES

For XGL stroke text, the character up vector, defined by the **XGL_CTX_STEXT_CHAR_UP_-VECTOR**(3) attribute is independent of the VDC orientation (defined by **XGL_CTX_VDC_-ORIENTATION**(3) ) and should always be interpreted as if the Y axis was ALWAYS pointing up.