



# LKHQ-12

## GPU Cheatsheet V1.2

### ► Colors

```
color(id)
id = color()
pushColor()
popColor()

pal(false,false,[p])
pal(c,false,[p])
pal(c0,c1,0) - Draw
pal(c0,c1,1) - Image
pal(c0,c1) - Both
palt(c,transparent)

colorPalette(id,[r],[g],
[b])
r,g,b = colorPalette
(id)
```

```
pushPalette()
popPalette()
```

### ► Dimensions

```
sw, sh = screenSize()
sw = screenWidth()
sh = screenHeight()

tw, th = termSize()
tw = termWidth()
th = termHeight()

fw, fh = fontSize()
fw = fontWidth()
fh = fontHeight()
```

### ► Matrix Camera

```
cam("translate",[x],[y])
cam("scale",[sx],[sy])
cam("rotate",[r])
cam("shear",[kx],[ky])
cam() - Reset

pushMatrix()
popMatrix()

clearMatrixStack()
```

### ► Printing

```
print(text, x,y, false,false, [r], [sx],[sy], [ox],[oy], [kx][ky])
print(text, x,y, limit,[align], [r], [sx],[sy], [ox],[oy], [kx][ky]) -
Align can be: "left", "center", "right".

_systemMessage(msg,[time],[textC],[bgC],[hideInGif])
```

### ► Image

```
img = image(lk12Image)
img = image(pngImage)

img:draw([x],[y],[r],[sx],[sy],
[imgquad])
img:refresh()
w,h = img:size()
w = img:width()
h = img:height()
imgdata = img:data()
imgquad = img:quad(x,y,[w],[h])
objtype = img:type() - GPU, image,
GPU.image, LK12
```



### ► Terminal Printing

```
print(text).
print(text,false) - No newline.
print(text,false,true) - Normal
print but on grid.

printBackspace([bgColor])
printBackspace
([bgColor],true) - No pervious
line.

printCursor([cx],[cy],
[bgColor])
cx, cy, bgColor = printCursor()

lines, maxLength = wrapText
(text,length)
```

### ► Screen State

```
flip()
didIt = _hasFlipped()
isit = isGifRecording()

clip(x,y,w,h)
x,y,w,h = clip() - Reset

patternFill(imgdata)
patternFill() - Reset
```



### ► ImageData

```
imgdata = imagedata(lk12Image)
imgdata = imagedata(pngImage)
imgdata = imagedata(w,h)
imgdata = screenshot([x],[y],[w],[h])
imgdata = getLabelImage()

w,h = imgdata:size()
w = imgdata:width()
h = imgdata:height()
imgdata:map(function(x,y,c) return c
end)
imgdata:paste(imgData,[dx],[dy],[sx],
[sy],[sw],[sh])
imgquad = imgdata:quad(x,y,[w],[h])
img = imgdata:image()
lk12Image = imgdata:encode()
pngImage = imgdata:export()
pngImage = imgdata:exportOpaque()
objtype = imgdata:type() -
GPU.imagedata
isit = imgdata:typeOf() - GPU,
imagedata, GPU.imagedata, LK12
```

### ► Mouse & Cursor

```
isMDown(b) - 1(left), 2(middle), 3(right)

name = cursor()

cursor(name)
cursor("none")
cursor(name,true) - Grapped to the
pixelated screen.

cursor(imgdata,name,[hx],[hy])
```

### ► Drawing

```
point / points(x,y,[x2,y2],...,[c])
line / lines(x1,y1,x2,y2,[x3,y3],...,[c])
rect(x,y,w,h,[l],[c])
triangle(x1,y1,x2,y2,x3,y3,[c])
polygon(x1,y1,x2,y2,x3,y3,[x4,y4],...,[c])
circle(x,y,r,[c],[s])
ellipse(x,y,rx,ry,[l],[c],[s])
clear([c])
```

### ► ImageQuad

```
imgquad = quad(x,y, w,h, srcW,srcH)

srcW,srcH =
imgquad:getTextureDimensions()

x,y,w,h = imgquad:getViewport()

imgquad:setViewport(x,y,w,h)
```