



2D Navigation

LMB	select object drag to move
MMB	drag to pan
WHEEL	zoom
F1	operations menu
TAB	toggle 3D view
1..9	grid size
Ctrl-z	undo
Ctrl-y	redo
Ctrl-a	select all
Ctrl-i	invert selection
` (back quote)	clear selection
HOME	zoom to fit
END	pan to camera
' (quote)	place camera at cursor
f	toggle free / grid snapping
g	toggle grid display
a	pan with mouse
\	toggle recently used
b	toggle browser panel
N	next map
P	previous map

2D Edit Modes

t	Thing mode
l	Linedef mode
s	Sector mode
v	Vertex mode

Tagging

;+f	Apply a fresh tag
;+l	Apply latest tag

Selections

o	copy and paste
c	copy props of selected to focused
C	copy props of focused to selected
H	mirror horizontally
V	mirror vertically
q	snap to grid (quantize)

Mouse Transforms

r	ratio scale
R	free scale
Ctrl-r	rotate
K	shear

Things Edit Mode

SPACE	add thing
w	rotate 45 deg acw
x	rotate 45 deg cw
d	separate stacked things
m	merge into stack

Vertice Edit Mode

SPACE / RMB	draw line
d	disconnect
m	merge selected
l	reshape into line
O	reshape into circle
D	reshape into half-circle
C	reshape into 120 deg arc
Q	reshape into 240 deg arc

Linedef Edit Mode

e	select chain
E	select chain by texture
w	flip
k	split
A	auto align offsets
d	disconnect
m	merge one-sided into two-sided

Sector Edit Mode

SPACE	add sector
d	disconnect
m	merge selected
e	select by same floor height
E	select by same floor tex
D	select by same ceil tex
w	swap floor / ceil tex
, and <	lower floor
. and >	raise floor
[and {	lower ceil
] and }	raise ceil
F8	cycle sector render mode

3D View

Arrows / WASD	move
LMB	select sides
MMB	pan
PGUP/PGDN	move up / down
g	toggle gravity
r	adjust offsets with mouse
c	clear offsets
l	toggle lighting
t	toggle texturing
o	toggle objects
x	align x offset to left wall
y	align y offset to left wall
z	align x and y offset to left wall
X/Y/Z	align offsets to right wall