

# BuddhaBrot-MT manual

Table 1: Changing layer mode, changing color table (noncycle and cycle) (ct), changing BuddhaBrot (bb) type (0=BuddhaBrot, 1=Anti-Buddhabrot, 2=Anti-Buddhabrot with some lobes cut), permutating layer color, changing info displayed in title bar

	F1	F2	F3	‘	Tab	Esc
-	layer mode	noncycle ct	cycle ct	bb type	perm layer color	title bar info

Table 2: Saving, loading, calculation thread handling, changing animation frame rate

	F9	F10	F11	F12
-	save status	load status	pause calculations	1 fps
Shift		load parameters	threads += 3	10 fps
Ctrl		load status (threads=3)	threads -= 3	30 fps

Table 3: Writing window, tiled (T) render, full render to PNG in working directory, changing auto write mode (awm) (0=no auto write, 1=auto write based on elapsed time, 2=auto write based on number of paths plotted), changing tile size

	Backspace	\	Return	;	,
-	write window	write render tiled	write render	inc T width	inc T height
Shift	awm window	awm render tiled	awm render	dec T width	dec T height

Table 4: Changing time between each auto PNG write ( $t_{\Delta}$ ), changing number of paths plotted difference between each auto PNG write ( $Pp_{\Delta}$ )

	-	=	[	]
-	$t_{\Delta} /= 10$	$t_{\Delta} *= 10$	$Pp_{\Delta} /= 10$	$Pp_{\Delta} *= 10$

Table 5: Changing render (R) size, zooming BuddhaBrot (bb), panning window (W) in render, panning BuddhaBrot

	Page Up	Page Down	←	→	↑	↓
-	inc R size	dec R size	pan W ← 10%	pan W → 10%	pan W ↑ 10%	pan W ↓ 10%
Shift	zoom in bb	zoom out bb	pan bb ← 10%	pan bb → 10%	pan bb ↑ 10%	pan bb ↓ 10%
Ctrl			pan W ← 1%	pan W → 1%	pan W ↑ 1%	pan W ↓ 1%
Shift+Ctrl			pan bb ← 1%	pan bb → 1%	pan bb ↑ 1%	pan bb ↓ 1%

Table 6: Changing BuddhaBrot parameter: bailout (bail)

	1	q	a	z
-	layer 123 bail += 1	layer 1 bail += 1	layer 2 bail += 1	layer 3 bail += 1
Shift	layer 123 bail *= 10	layer 1 bail *= 10	layer 2 bail *= 10	layer 3 bail *= 10
Ctrl	layer 123 bail -= 1	layer 1 bail -= 1	layer 2 bail -= 1	layer 3 bail -= 1
Shift+Ctrl	layer 123 bail /= 10	layer 1 bail /= 10	layer 2 bail /= 10	layer 3 bail /= 10

Table 7: Changing BuddhaBrot parameter: path plot start (pps)

	2	w	s	x
-	layer 123 pps += 1	layer 1 pps += 1	layer 2 pps += 1	layer 3 pps += 1
Shift	layer 123 pps *= 10	layer 1 pps *= 10	layer 2 pps *= 10	layer 3 pps *= 10
Ctrl	layer 123 pps -= 1	layer 1 pps -= 1	layer 2 pps -= 1	layer 3 pps -= 1
Shift+Ctrl	layer 123 pps /= 10	layer 1 pps /= 10	layer 2 pps /= 10	layer 3 pps /= 10

Table 8: Changing BuddhaBrot parameter: path plot end (ppe)

	3	e	d	c
-	layer 123 ppe += 1	layer 1 ppe += 1	layer 2 ppe += 1	layer 3 ppe += 1
Shift	layer 123 ppe *= 10	layer 1 ppe *= 10	layer 2 ppe *= 10	layer 3 ppe *= 10
Ctrl	layer 123 ppe -= 1	layer 1 ppe -= 1	layer 2 ppe -= 1	layer 3 ppe -= 1
Shift+Ctrl	layer 123 ppe /= 10	layer 1 ppe /= 10	layer 2 ppe /= 10	layer 3 ppe /= 10

Table 9: Changing BuddhaBrot parameter: path minimum n\_inf (minn)

	4	r	f	v
-	layer 123 minn += 1	layer 1 minn += 1	layer 2 minn += 1	layer 3 minn += 1
Shift	layer 123 minn *= 10	layer 1 minn *= 10	layer 2 minn *= 10	layer 3 minn *= 10
Ctrl	layer 123 minn -= 1	layer 1 minn -= 1	layer 2 minn -= 1	layer 3 minn -= 1
Shift+Ctrl	layer 123 minn /= 10	layer 1 minn /= 10	layer 2 minn /= 10	layer 3 minn /= 10

Table 10: Changing coloring method (cm) (0=rank-order mapping, 1=histogram equalization, 2=linear), changing coloring sum function (csf) (0=none, 1=log)

	5	t	g	b
-	layer 123 cm	layer 1 cm	layer 2 cm	layer 3 cm
Shift	layer 123 csf	layer 1 csf	layer 2 csf	layer 3 csf

Table 11: Changing coloring sum function parameter1 (csfp1)

	6	y	h	n
-	layer 123 csfp1 += 1	layer 1 csfp1 += 1	layer 2 csfp1 += 1	layer 3 csfp1 += 1
Shift	layer 123 csfp1 *= 10	layer 1 csfp1 *= 10	layer 2 csfp1 *= 10	layer 3 csfp1 *= 10
Ctrl	layer 123 csfp1 -= 1	layer 1 csfp1 -= 1	layer 2 csfp1 -= 1	layer 3 csfp1 -= 1
Shift+Ctrl	layer 123 csfp1 /= 10	layer 1 csfp1 /= 10	layer 2 csfp1 /= 10	layer 3 csfp1 /= 10

Table 12: Changing scale factor of index in color table (ct.f)

	7	u	j	m
-	layer 123 ct.f += 0.1	layer 1 ct.f += 0.1	layer 2 ct.f += 0.1	layer 3 ct.f += 0.1
Shift	layer 123 ct.f -= 0.1	layer 1 ct.f -= 0.1	layer 2 ct.f -= 0.1	layer 3 ct.f -= 0.1
Ctrl	layer 123 ct.f = 1.0	layer 1 ct.f = 1.0	layer 2 ct.f = 1.0	layer 3 ct.f = 1.0

Table 13: Changing color table offset (ct.o)

	8	i	k	,
-	layer 123 ct.o += 1	layer 1 ct.o += 1	layer 2 ct.o += 1	layer 3 ct.o += 1
Shift	layer 123 ct.o += 10	layer 1 ct.o += 10	layer 2 ct.o += 10	layer 3 ct.o += 10
Ctrl	layer 123 ct.o = 0	layer 1 ct.o = 0	layer 2 ct.o = 0	layer 3 ct.o = 0

Table 14: Changing color table cycle speed (ct.v)

	9	o	l	.
-	layer 123 ct.v += 1	layer 1 ct.v += 1	layer 2 ct.v += 1	layer 3 ct.v += 1
Shift	layer 123 ct.v -= 1	layer 1 ct.v -= 1	layer 2 ct.v -= 1	layer 3 ct.v -= 1
Ctrl	layer 123 ct.v = 0	layer 1 ct.v = 0	layer 2 ct.v = 0	layer 3 ct.v = 0