

The first table summarises the planned versions of button-Dasher and suggests a radio-button menu layout. The button-modes themselves are explained in another paper:

<http://www.inference.phy.cam.ac.uk/mackay/abstracts/dasherButtons.html>

Button Dasher Menu									Key		
	No Timing					Timing				sl	short and long presses used
# Buttons	1sl	2	2sl	3		1d	1sl	1du	d	only timings of <u>down</u> events used	
menu mode	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	static	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	du	timings of down and up events used	
direct mode	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	dynamic	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	an available method	
									<input checked="" type="checkbox"/>	favourite method	
									<input checked="" type="checkbox"/>	runner-up method	
									<input type="checkbox"/>	this choice is available, but has defects	

Options for Menu mode		Options for static mode	
B	Number of boxes	ϕ	zoom-in factor
\mathbf{p}	The probabilities (p_1, p_2, \dots) (allow to select uniform \mathbf{p} , or dial up a geometric series)	E	time taken for pointer to do one sweep
$1/p_{\max}$	unzoom factor	Options for dynamic mode	
s	cushion parameter	Speed	(uses the normal speed slider)
		Rotation rate	as a multiple of speed
		...	additional parameters associated with long presses (1sl only)

Options for Direct mode			Options for all modes	
\mathbf{p}	The probabilities (p_1, p_2) (allow to select uniform \mathbf{p} , or dial up a geometric series)	[1sl, 2 only]	Button 1	Definition
\mathbf{p}	The probabilities – with $p_1 = p_4, p_2 = p_3$	[2sl only]	Button 2	Definition
$1/p_{\max}$	unzoom factor	[3 only]	Button 3	Definition
s	cushion parameter		Frames	How many intermediate frames to render when a click initiates a 16x zoom.
1/0	Whether to show the two options by dividing line (default) or by boxes	[1sl, 2, 3]	s:l boundary	time defining short:long
			1/0	Whether to show top and bottom of the ‘official’ canvas

The 13-option radio-button menu could be included in the current Control menu. All the buttons options are mutually exclusive alternatives to Normal Mouse Mode, One-dimensional

Mode, and Eyetracker Mode. Alternatively, we could have a single option, ‘Button mode’ sitting in a four-way radio button: Normal Mouse Mode, One-dimensional Mode, Eyetracker Mode, or Button mode; then a separate 13-choice radio-menu (at the bottom of the Control menu) would be used to specify which of the button modes the user wants. The other options could all go in Advanced, in principle, but it won’t be big enough to hold them all. So I think we need to replace Advanced by, or divide Advanced into, **Miscellaneous**, **Buttons**, and **Model**. Model is where we put the radio-button to choose between various language models, and the Smoothing slider. Miscellaneous gets Timestamp, the OneDimensionalMode slider, and the Start-on-mouse-position slider. Buttons gets everything in this document. While we do this, I think we should put the “Control Mode” switch into the “Control” menu, under Starting and Stopping.

Here is an alternative orientation for the button menu.

Button Mode				
	No Timing			
Buttons	1sl	2	2sl	3
menu mode	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>
direct mode	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Timing			
Buttons	1d	1sl	1du	
static	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
dynamic	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	