

Latest Docs

- [duckyPad User Manual](#)
- [duckyScript Instructions](#)

Key Combos

- Easiest to Write
- For Shortcuts & Hotkeys
- Any Combo of:
- Special Keys / Letters / Numbers

ENTER

CTRL s

COMMAND SHIFT 4

Type Key Name in ALL CAPS

Available Special Keys	
CTRL / RCTRL	(media keys)
SHIFT / RSHIFT	MK_VOLUP
ALT / RALT	MK_VOLDOWN
WINDOWS / RWINDOWS	MK_MUTE
COMMAND / RCOMMAND	MK_PREV
OPTION / ROPTION	MK_NEXT
ESC	MK_PP (play/pause)
ENTER	MK_STOP
UP/DOWN/LEFT/RIGHT	
SPACE	(numpad keys)
BACKSPACE	NUMLOCK
TAB	KP_SLASH
CAPSLOCK	KP_ASTERISK
PRINTSCREEN	KP_MINUS
SCROLLLOCK	KP_PLUS
PAUSE	KP_ENTER
BREAK	KP_0 - KP_9
INSERT	KP_DOT
HOME	KP_EQUAL
PAGEUP / PAGEDOWN	
DELETE	(Japanese IME)
END	ZENKAKUHANKAKU
MENU	HENKAN
POWER	MUHENKAN
F1 - F24	KATAKANAHIRAGANA

duckyScript Commands

Typing

STRING <i>text</i>	Type text AS-IS
STRINGLN <i>text</i>	Same as above Press ENTER at end
STRING_BLOCK END_STRING	Type text block AS-IS
STRINGLN_BLOCK END_STRINGLN	Same as above Press ENTER after each line

Timing

DELAY <i>n</i>	Wait <i>n</i> Milliseconds
DEFAULTDELAY <i>n</i>	How long to wait between each non-letter keypresses
DEFAULTCHARDELAY <i>n</i>	How long to wait between each letter
CHARJITTER <i>n</i>	Additional random delay between 0 and <i>n</i> ms after typing each letter

Mouse

LMOUSE MMOUSE RMOUSE FMOUSE BMOUSE	Left / Middle / Right Forward / Backward Mouse Button Click
MOUSE_MOVE <i>x y</i>	Move Mouse in Pixels <i>x</i> : + Right - Left <i>y</i> : + Up - Down
MOUSE_SCROLL <i>h v</i>	Scroll horizontal <i>h</i> lines vertical <i>v</i> lines

OLED

OLED_CLEAR	Clear Screen
OLED_CURSOR <i>x y</i>	Set Cursor <i>x y</i> : 0 to 127 (0,0) = Top Left
OLED_PRINT <i>text</i>	Print Text at Current Cursor
OLED_CIRCLE <i>x y radius fill</i>	<i>x y</i> : Position <i>radius</i> : In Pixels <i>fill</i> : 0 or 1
OLED_LINE <i>x1 y1 x2 y2</i>	<i>x1 y1</i> : Start <i>x2 y2</i> : End
OLED_RECT <i>x1 y1 x2 y2 fill</i>	Draw Rectangle <i>x1 y1</i> : Start <i>x2 y2</i> : End <i>fill</i> : 0 or 1
OLED_UPDATE	Commit Changes to Screen
OLED_RESTORE	Show Default Screen

RGB Backlight

SWC_SET <i>n r g b</i>	Change RGB Colour <i>n</i> : Key ID (0 for current switch) <i>r g b</i> : 0 to 255
SWC_FILL <i>r g b</i>	Change ALL RGB <i>r g b</i> : 0 to 255
SWC_RESET <i>n</i>	Reset RGB to Default <i>n</i> : Key ID 0 = Current Key 99 = All keys

Pressing Keys

Key Combos	See Page 1
KEYDOWN <i>key</i>	Hold key
KEYUP <i>key</i>	Release Key
<i>key</i> can be letter, number, or special key.	

Profile Switching

PREV_PROFILE	
NEXT_PROFILE	
GOTO_PROFILE <i>name</i>	Case sensitive
Also check out duckyPad Autoswitcher!	

Miscellaneous

DP_SLEEP	RGB & Screen OFF Halts Execution
HALT	Halt Execution
REPEAT <i>n</i>	Repeat line above <i>n</i> times

Comments

//
REM
REM_BLOCK END_REM

Constants	
DEFINE	Define a Constant
Replaced AS-IS during preprocessing	
DEFINE MY_EMAIL bob@me.com STRING My email is MY_EMAIL!	

Variables	
VAR	Declare a 32-bit Variable
VAR foo = 10	
Default Mode: Signed	
Unsigned Mode: Set _UNSIGNED_MATH = 1	

Persistent Global Variables	
_GV0 to _GV31	
<ul style="list-style-type: none">Available across all profilesPersists over reboots	

Operators		
= Assign		&& Logical AND
+ Add	== Equal	Logical OR
- Subtract	!= Not equal	! Logical NOT
* Multiply	> Greater than	& Bitwise AND
/ Divide	< Less than	Bitwise OR
% Modulus	>= GTE	^ Bitwise XOR
** Exponent	<= LTE	<< Left Shift
>> Right Shift		
Augmented Assignments: +=, *=, etc		

IF Statement	
Code inside is executed If expression is non-zero	
IF expression code END_IF	
Additional Checks	ELSE IF ELSE

WHILE loop	
Code inside is repeated If expression is non-zero	
WHILE expression code END_WHILE	
Jump to start of loop	CONTINUE
Exit loop immediately	LBREAK

Functions	
FUN my_func(args) code RETURN END_FUN	
my_func() // call it	
Up to 8 args & 1 return value	
VARs declared inside have local scope	

Randomisation	
VAR foo = RANDINT(lower, upper)	
Range is inclusive	

Reading Buttons	
Blocking	VAR key = _BLOCKING_READKEY Wait until key is pressed, returns KeyID
Non-Blocking	VAR key = _READKEY 0 if no key pressed, KeyID otherwise
Bitfield	VAR key = _SW_BITFIELD 1 = Pressed, 0 = Released

Real-time Clock	
Automatically set when using Autoswitcher	
Check _RTC_IS_VALID first. Do not proceed if 0.	
_RTC_YEAR	_RTC_MINUTE
_RTC_MONTH	_RTC_SECOND
_RTC_DAY	_RTC_WDAY
_RTC_HOUR	_RTC_YDAY

VAR Print & Formatting	
VAR foo = 10 STRING Value is foo	
Format Specifiers: Add immediately after var name	%d: Signed Decimal %u: Unsigned Decimal %x: Hex Lower %X: Hex Upper
Zero-Pad	%02d, %08x, etc
Space-Pad	%2d, %8u, etc

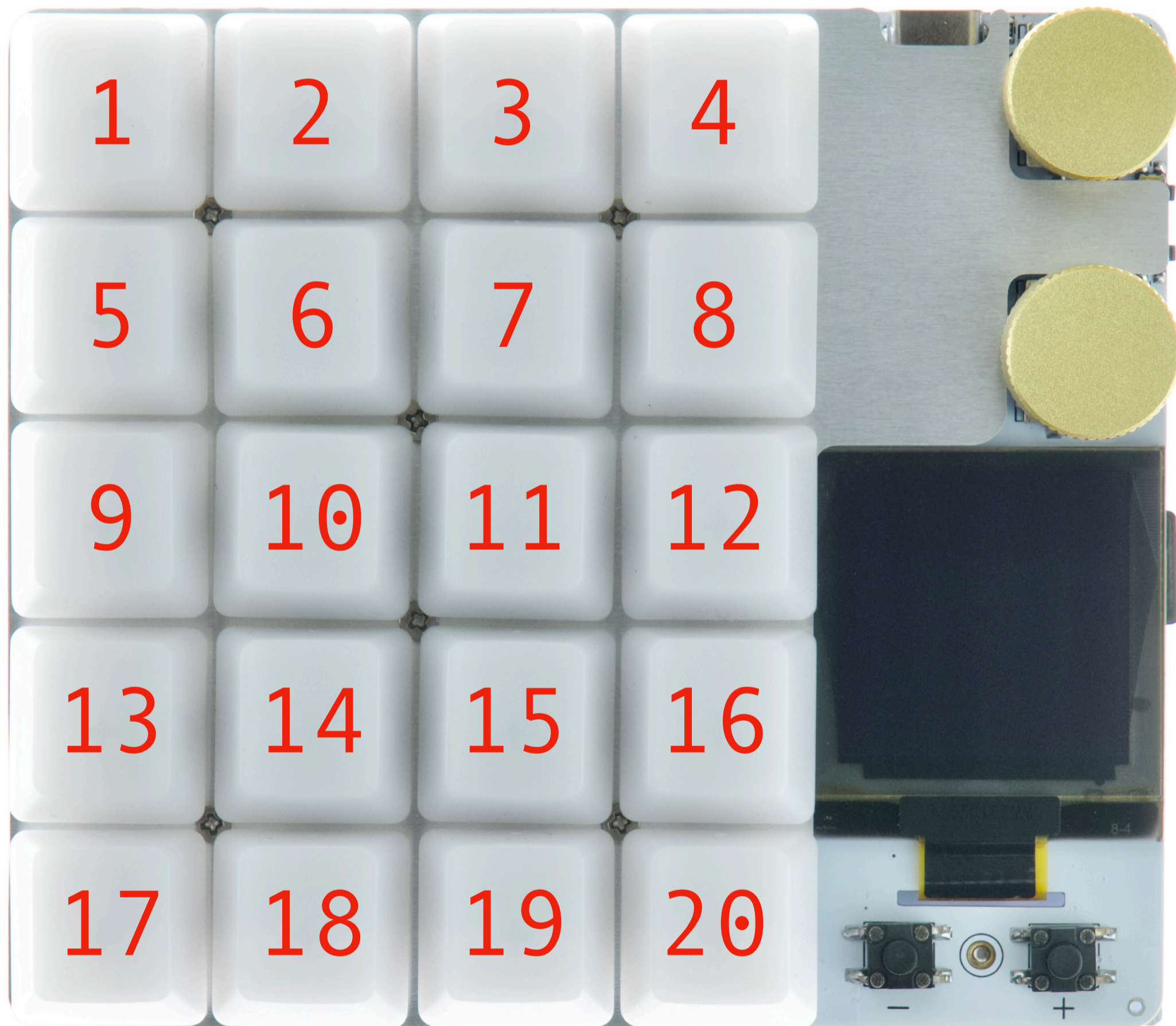
Built-in Functions	
Low-level Operations See Full Guide for details	
PEEK8(addr)	RANDINT(lower, upper)
POKE8(addr, value)	PUTS(value)
RANDCHR(value)	HIDTX(addr)

Random Letters	
Types a random character	
RANDOM_LOWERCASE_LETTER	RANDOM_NUMBER
RANDOM_UPPERCASE_LETTER	RANDOM_SPECIAL
RANDOM_LETTER	RANDOM_CHAR

Reserved Variables		
_TIME_S	R0	Elapsed time since power-on
_TIME_MS		
_BLOCKING_READKEY	R0	See “Reading Inputs”
_READKEY		
_SW_BITFIELD		
_IS_NUMLOCK_ON	R0	0: LED OFF 1: LED ON
_IS_CAPSLOCK_ON		
_IS_SCROLLLOCK_ON		
_ALLOW_ABORT	RW	0: Enable 1: Disable
_DONT_REPEAT		
_THIS_KEYID	R0	See “Key ID”
_DP_MODEL	R0	1: duckyPad, 2: duckyPad Pro
_KEYPRESS_COUNT	R0	
_RTC_IS_VALID	R0	Check this first before reading RTC
_RTC_YEAR		4 Digits, e.g. 2025
_RTC_MONTH		1 - 12
_RTC_DAY		1 - 31
_RTC_HOUR		0 - 23
_RTC_MINUTE		0 - 59
_RTC_SECOND		0 - 60
_RTC_WDAY		Day of Week, 0 = Sunday
_RTC_YDAY		Day of Year, 0 - 365
_RTC_UTC_OFFSET	RW	In Minutes
_UNSIGNED_MATH	RW	Math mode

Key IDs: duckyPad Pro

- Each key on duckyPad has a **unique ID**
- Used for **reading button status** and changing RGB colour



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Rotary Encoder	Clockwise	Counter Clockwise	Press
Upper	21	22	23
Lower	24	25	26

Expansion Module	CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8
Closest to duckyPad	37	38	39	40	41	42	43	44
2nd Closest	45	46	47	48	49	50	51	52
etc.								

Key IDs: duckyPad (2020)

