Klicky-00 software

Tuesday, 1 August 2023 10:00 PM

klicky-variables.cfg

```
# This macro was provided by discord user Garrettwp to whom i give my thanks for sharing it with me.
# I have tweaked it a lot.
# They are based on the great Annex magprobe dockable probe macros "#Originally developed by Mental,
# modified for better use on K-series printers by RyanG and Trails", kudos to them.
# That macro as since evolved into a klipper plugin that currently is pending inclusion in klipper,
# more information here, https://github.com/Annex-Engineering/Quickdraw_Probe/tree/main/Klipper_Macros
# User richardjm revised the macro variables and added some functions, thanks a lot
# by standing on the shoulders of giants, lets see if we can see further
#
# the current home for this version is https://github.com/jlas1/Klicky-Probe
# the 1000 values below is to give an error instead of doing something wrong, hopefully, this won't be used is a printer larger than 1 meter

[gcode_macro _User_Variables]
variable_verbose:            False    # Enable verbose output
variable_debug:              False    # Enable Debug output
variable_travel_speed:         250    # how fast all other travel moves will be performed when running these macros
variable_move_accel:          2000     # how fast should the toolhead accelerate when moving
variable_dock_speed:           80 #200   # how fast should the toolhead move when docking the probe for the final movement
variable_release_speed:       100    # how fast should the toolhead move to release the hold of the magnets after docking
variable_z_drop_speed:         20    # how fast the z will lower when moving to the z location to clear the probe

variable_safe_z:               25 #5     # Minimum Z for attach/dock and homing functions
# if true it will move the bed away from the nozzle when Z is not homed
variable_enable_z_hop:       True    # set this to false for beds that fall significantly under gravity (almost to Z max)

variable_max_bed_y:           300    # maximum Bed size avoids doing a probe_accuracy outside the bed
variable_max_bed_x:           300    # maximum Bed size avoids doing a probe_accuracy outside the bed

# if a separate Z endstop switch is in
# use, specify the coordinates of the switch here (Voron). 206.7,305
# Set to 0 to have the probe move to center of bed
variable_z_endstop_x:         0 #206.5
variable_z_endstop_y:         0 #305

#Check the printer specific documentation on klipper Dock/Undock configuration, these are dummy values
#dock location
variable_docklocation_x:      87 #43      # X Dock position
variable_docklocation_y:      307 #310     # Y Dock position
variable_docklocation_z:      -128    # Z dock position (-128 for a gantry/frame mount)

#The following variables are used if the dock is deployed and retracted via a servo motor
variable_enable_dock_servo:  False    # Set to true if your klicky dock is servo-controlled
variable_servo_name:        'NAME'    # The name of the dock servo defined in printer.cfg under [servo]
variable_servo_deploy:         10    # This EXAMPLE is the value used to deploy the servo fully
variable_servo_retract:        11    # This EXAMPLE is the value used to retract the servo fully (initial_angle in [servo] config)
variable_servo_delay:         250    # This is a delay to wait the servo to reach the requested position, be carefull with high values

#Dock move, final toolhead movement to release the probe on the dock
#it's a relative move
Variable_dockmove_x:           60
Variable_dockmove_y:           0
Variable_dockmove_z:           0

#Attach move. final toolhead movement to attach the probe on the mount
#it's a relative move
Variable_attachmove_x:         0
Variable_attachmove_y:         30
Variable_attachmove_z:         0
```

*** Will be z_offset + 5

printer.cfg *

```
[stepper_z]
step_pin: PF11
dir_pin: PG3
enable_pin: !PG5
rotation_distance: 40
gear_ratio: 80:16
microsteps: 64 #original 32
#endstop_pin: PG10

#For Klicky-00
endstop_pin: probe:z_virtual_endstop
```

```
##--------------------------
position_min: -5
homing_speed: 12
second_homing_speed: 12
homing_retract_dist: 1
```

****for setup only set "position_min: -25" (in the stepper_z section)
** DANGER: set this back to -5 after setup. You need to be able to go much further below zero when first doing "probe_calibrate" with Klicky-00

```
#####################################################################
# Klicky-00
[probe]

###--------------------------------------------------------------------
pin: ^sht:PROBE_1  #PCB_Klicky sht:PROBE_1 #unTAP ^sht:PROBE_1  #TAP ^sht
###--------------------------------------------------------------------

x_offset: 0 #-2
y_offset: 0 #22  #19.75  #0  #25.0

speed: 12 #10
lift_speed: 24
samples: 3
samples_result: median
sample_retract_dist: .8
samples_tolerance: 0.05
samples_tolerance_retries: 3
```

```
[quad_gantry_level]
```

```
horizontal_move_z: 21
```

* [z_offset] +5 is pretty safe

```
[bed_mesh]
speed: 250
horizontal_move_z: 18.621
```

*[z_offset] + retract distance gives fasted mesh

****** After running probe_calibrate locate z_offset that was saved at the end of printer.cfg

```
#*# [probe]
#*# z_offset = 17.210
```