

## Mach3 Aqua Screenset V1.04

### Installation Notes:

Unzip all .png files to \Mach3\Bitmaps\Aqua\.

Unzip Aqua.set to \Mach3\.

Unzip Offset LEDs.brn and Spindle OR LED.brn to \Mach3\brains.

Start Mach3 and go to View>Load Screens and choose Aqua.set.

Go to Operator>Brain Control and enable Offset LEDs.brn and Spindle OR LED.brn

The Spindle OR brain lets the spindle override slider act the same as the FRO slider.

Note: This control may not work correctly if pulley speeds are not set correctly and/or no S word is specified. Once an S word is called, it should function properly. You may want to add an S word (ex., S15000) in the initialization string, so the Override LED is functioning when Mach3 starts.

### Operational Notes:

In the Load Programs screen (first screen at startup), the two left columns of DRO's display the program limits. The 3<sup>rd</sup> column displays the Axis position DRO's. The Axis Labels are LED's that turn green when the Axis' are homed (ref'd).

### **Ref All Home**

The “Ref All Home” button contains VB script, and can be modified to suit a particular machine using Operator>Edit Button Script.

To Home an individual axis, use DoButton(x). Axis numbers are as follows:

X=22

Y=23

Z=24

A=25

B=26

C=27

example: To Home Z, then X, then Y, the script would be:

DoButton(24)

DoButton(22)

DoButton(23)

To Home multiple axis' at the same time, use RefCombination(x). Add the axis codes together to get the value to use.

X=1

Y=2

Z=4

A=8

B=16

C=32

example: To home X and Y together, then Z, use:

RefCombination(3)

DoButton(24)

On the Run Programs and Settings screens, each axis can also be Homed individually by using the “Home” buttons to the left of each axis.

### **Jogging Controls**

When in incremental jog mode (Step Jog Button), the Inc. button cycles through the jog increments which are set on the general config page. The + and – button increase or decrease the amount.

When in continuous jog mode (Cont Jog Button), the + and – buttons increase or decrease the slow jog %.

### **Auto Tool Setting**

The Aqua screenset includes VB script for automatically setting Z axis height as well as X and Y probing for tool location. The probing tools are located on the flyout screen normally used for MPG and Jog controls in Mach3's standard screen. This can be accessed with either the TAB key, or the Artsoft logo above the reset button. When opening it for the first time, you may need to drag it to the left for optimal viewing. Once dragged, it should remember it's position. The probing scripts were graciously donated by Ernie at CNCZone.com

Demonstration videos and other info can be found at <http://cnczone.com/forums/showthread.php?t=56079>

Note: These scripts have NOT been tested as of version 1.4 of the Aqua Screenset.

### **Change Log**

V1.03 – Added G64 button, Jog ± buttons, Pause LED

V1.04 – Added Auto Tool Probing, Go To Safe Z, changed A axis Scale to Rotation Diameter