

# MRT-1048 SWAK-OS 3.0 Calibrating Offsets

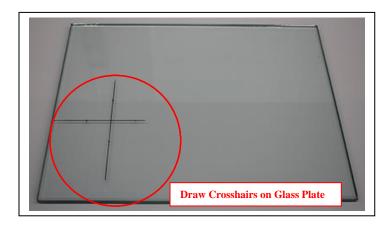
#### **Tool List:**

#### Glass plate

For calibration with cross hairs drawn on it.

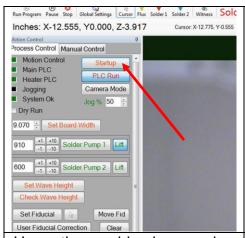
#### Notes:

- Make sure PC is booted and the Nordson SELECT Kiss Teach Software is running.
- You will need to have Administrator access to the SWAK-OS 3.0 software.

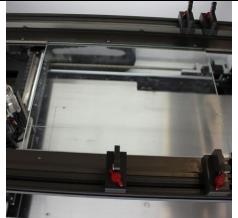


# NOTE: For dual pumps both nozzles must be calibrated!

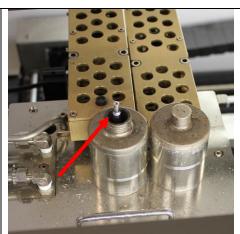
# **Step 1 Offset Preparation**



Home the machine by pressing the "Start Up" button in the upper left of the screen.



Locate **glass plate** with crosshairs on rails against stop fingers or stop pins.

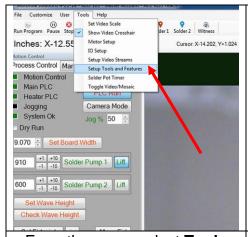


Place a **4.5mm** or **6mm** bullet nozzle on the solder pump riser.

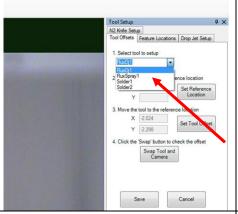
"Larger nozzles are not recommended!"

# NOTE: For dual pumps, select tool will be: Solder1 & Solder2

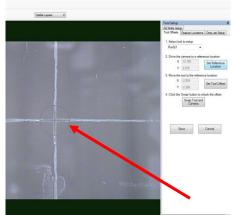
# Step 2 Set reference location with the teach camera.



From the menu select **Tools** and scroll down and open the "**Setup Tools and Features**"

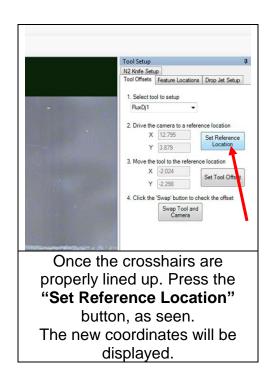


Select the **Tool Offsets** tab.
Then go to **"1. Select tool to setup"** Use the drop down and choose the proper tool for calibrating offset. Example: **FluxDj1(Drop Jet 1)** 



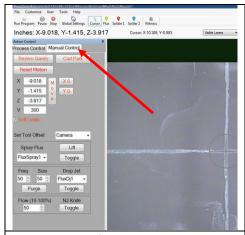
Using the arrow keys, center the camera crosshairs on the glass plate crosshairs, as shown. Drive the camera to a reference location.

Press and hold the Ctrl key then use the arrow keys for more precise movement.



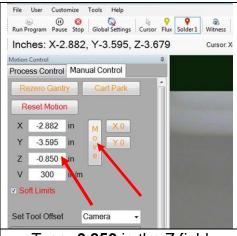
#### **NOTE: Make sure path is clear before pressing the MOVE button!**

#### **Step 3 Drop-Jet Offset**



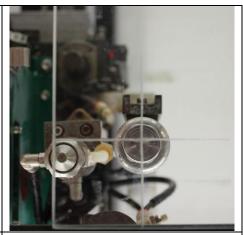
Note: The following steps are for the **Drop-Jet**.

Press the "Manual Control Tab" in the upper left of the screen.



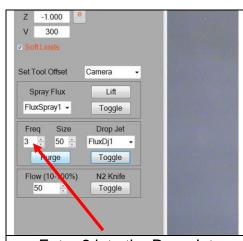
Type **-0.850** in the Z field
Then Press the "**MOVE**" button
Pressing the MOVE button is a
direct command.

Make sure path is clear! Drop-Jet will move 1 inch below board zero!

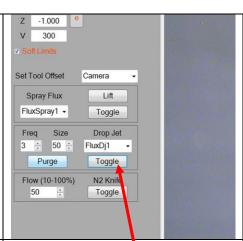


Using arrow keys on keyboard, center the Drop-Jet to the crosshairs on the glass plate. Press the Ctrl key then use the arrow keys for more precise movement.

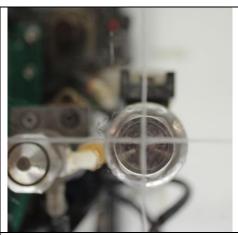
**NOTE:** Frequency needs to be set to a small number between 2 and 5 and the Dot size will need to be set at 50 as this is the calibration size and dot should be 2mm in diameter. If the dot size is not 2mm at a 50 dot size then calibrate your drop jet using MRT-1120 SWAK-OS 3.0 Drop Jet Calibration document.



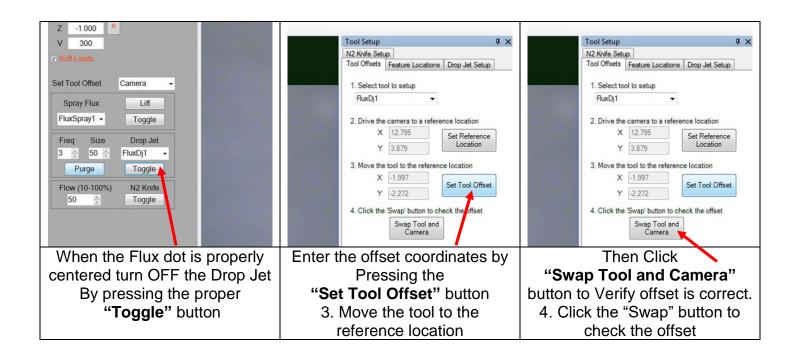
Enter 2 into the Drop-Jet frequency field and 50 into the Size field in the lower left of the screen as seen.



Press the Drop-Jet
"Toggle" button
To turn ON the Drop-Jet!



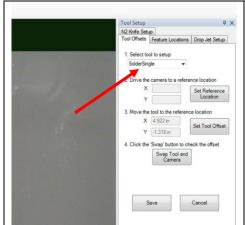
Next center the flux dot on the glass plate crosshairs!
On the keyboard press the Ctrl button then use the arrow keys for more precise movement.





# NOTE: Whenever solder pots or pumps are changed out. You will need to calibrate offsets!

#### **Step 4 Solder Nozzle Offset**



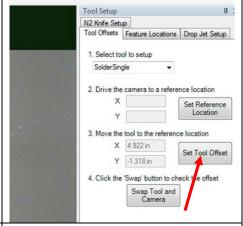
Follow Steps 1 & 2.
When following Step 2
1.Select tool to setup
Select: Solder Single
For standard Pumps.
Use Solder1 & Solder2 for
dual pumps.



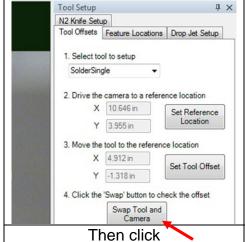
Next bring the nozzle up to the bottom of the glass plate.

Center the nozzle on the glass plate crosshairs!

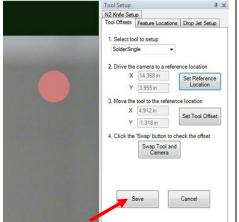
Press the Ctrl button then use the arrow keys for more precise movement.



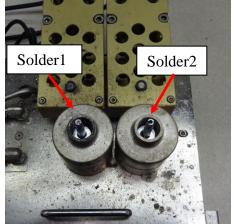
Enter the offset coordinates by pressing the 
"Set Tool Offset" button



"Swap Tool and Camera"
button to verify offset is correct.
4. Click the "Swap" button to check the offset.



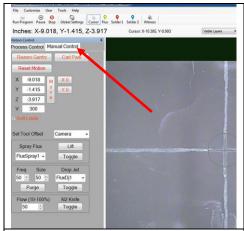
When Offset is verified good Press the "SAVE" button



For dual pumps use: Solder1 & Solder2 when selecting a tool for set up

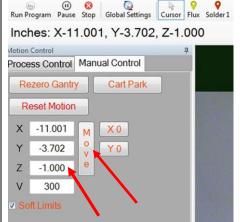
# NOTE: Follow steps 1 & 2 before starting step 5 (When following step 2 use SprayFlux1)

#### **Step 5 Spray Fluxer Offset**



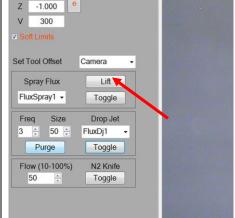
Note: The following steps are for the **Spray Fluxer.**Press the **Manual Control Tab,** upper left on screen.

Follow steps 1 & 2 before starting.

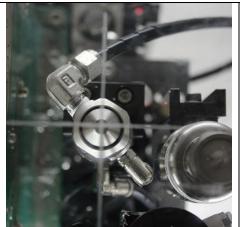


Type **-1.000** in the Z field.
Then Press the "**MOVE**" button pressing the MOVE button is a direct command.

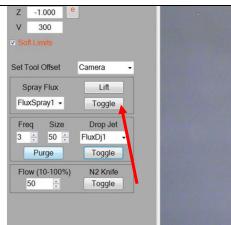
Make sure path is clear! "Spray Fluxer will move 1 inch below board zero."



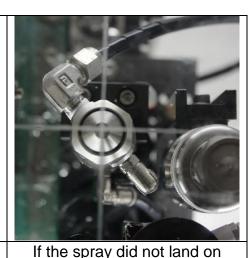
Press the "Lift" button to position the Spray Fluxer in the up position.



Using **arrow keys** on **k**eyboard center the Spray Fluxer to the crosshairs on the glass plate. Press the **Ctrl button** then use the **arrow keys** for more precise movement.

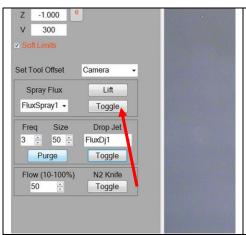


Press the Spray Flux
"Toggle" button
To turn on the Spray Fluxer,
then quickly press the toggle
button again to turn off the
fluxer.

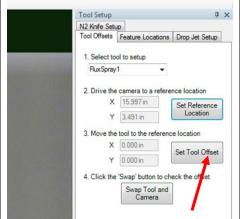


center of the crosshair, adjust position as needed and repeat the toggle on/off!

Press and hold the **Ctrl button** then use the **arrow keys** for more precise movement.

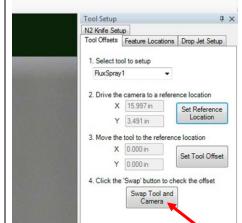


After you verify the flux cone is properly centered, make sure the spray fluxer is **turned off** by pressing the "**Toggle**" button.



Enter the offset coordinates by pressing the "Set Tool Offset" button.

3. Move the tool to the reference location.



Then Click "Swap Tool and Camera" button to verify offset is correct.

4. Click the "Swap" button to check the offset



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