

KY\_GUI\_MOVE\_SCAN\_XYZ\_V0

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XYZ position

|               | X[mm]                                  | Y[mm]                                  | Z[mm]                                  |   |
|---------------|--|--|--|---|
| Current       | <input type="text" value="current x"/> | <input type="text" value="current y"/> | <input type="text" value="current z"/> | <input type="button" value="Read XYZ"/> |
| Limit         | <input type="text" value="start x"/>   | <input type="text" value="start y"/>   | <input type="text" value="start z"/>   |   |
|               | <input type="text" value="end x"/>     | <input type="text" value="end y"/>     | <input type="text" value="end z"/>     | <input type="button" value="Set XYZ"/>  |
| Absolute Move | <input type="text" value="abs x"/>     | <input type="text" value="abs y"/>     | <input type="text" value="abs z"/>     | <input type="button" value="Move XYZ"/> |
| Relative Move | <input type="text" value="rel x"/>     | <input type="text" value="rel y"/>     | <input type="text" value="rel z"/>     | <input type="button" value="Move XYZ"/> |

Motorized Positioner

| X range [mm]         | Y Range [mm]         | Z Range [mm]         |   |
|----------------------|----------------------|----------------------|---|
| <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="button" value="XY SCAN"/>  |
| Number of X Points   | Number of Y Points   | Number of Z Points   | <input type="button" value="YZ SCAN"/>  |
| <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="button" value="XYZ SCAN"/> |

Filename

RS\_Scope

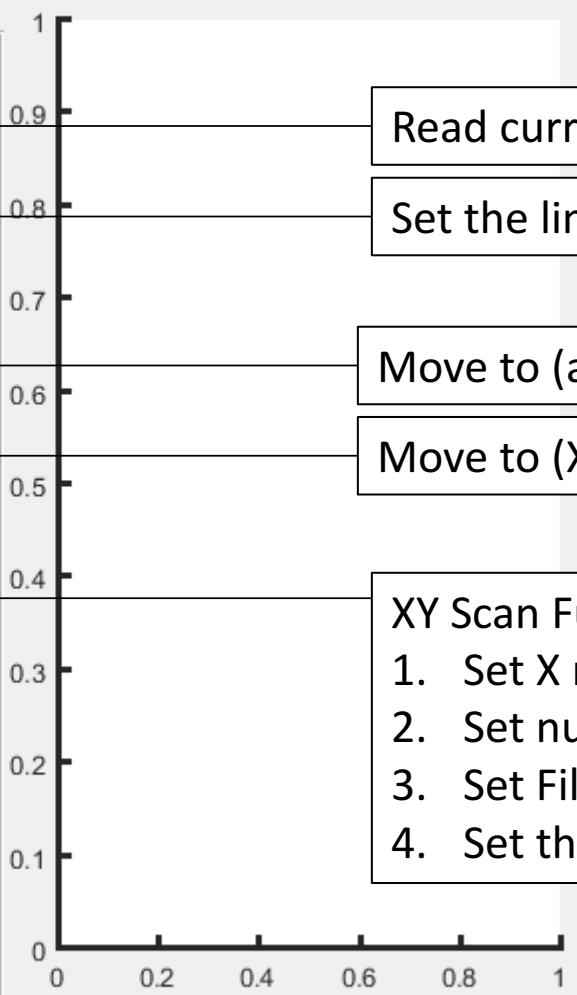
▼

☒ Ch1 ☐ Ch2 ☐ Ch3 ☐ Ch4

Scope Sample Size

RS\_Scope[IP]

HP\_Scope[GPIB]



Read current XYZ position

Set the limitation of XYZ positioner

Move to (abs\_X, abs\_Y, abs\_Z)

Move to (X0+relx,Y0+rely,Z0+relz)

XY Scan Function (Similar for YZ and XZ Scan Function)

1. Set X range and Y range
2. Set number of points for X range and Y range
3. Set Filename where to save the scan files
4. Set the sample size for one acquisition from the scope

## KY\_GUI\_PLOT\_SCAN\_XYZ\_V0

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Plot scan data

Scope Ch ☒ Ch1 ☐ Ch2 ☐ Ch3 ☐ Ch4

Plot\_scan\_data

Scan Data C:\Users\JiHoon\Documents\MATLAB\KY\_SCAN\_DATA\2017\_09\_02\NW

Directory \_SCAN\_DATA\2017\_09\_02\NWW1\_D6\_oil\_HIFU\_AC20\_2017921543\_xy

Message 1656 is selected

Num of X

11

Num of Y

11

Num of Z

X point

8

Y Point

5

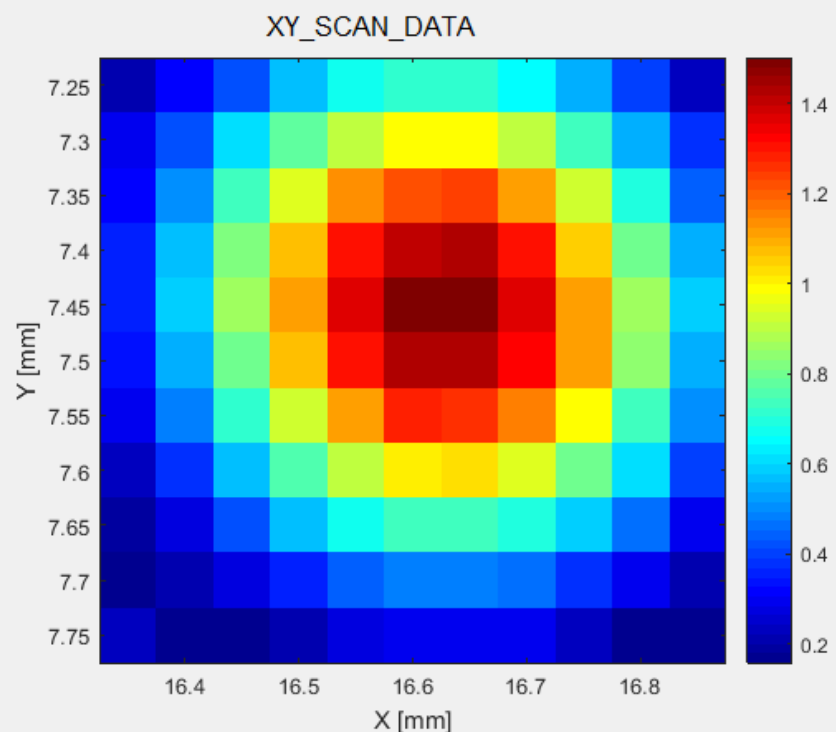
Z Point

Plot\_waveform

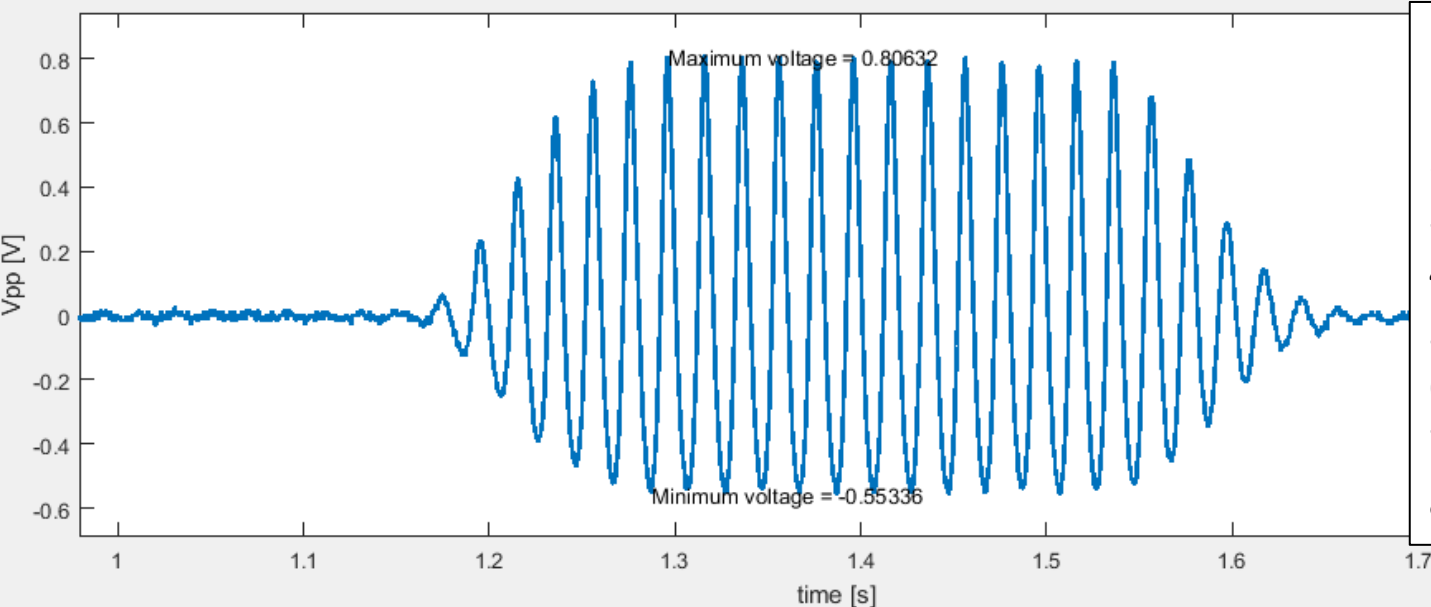
Pick Hydrophone

New Hydrophone

Convert\_pressure



Acquired Waveform



## How to load files and plot the scan data

1. Set the hydrophone channel
2. Set Scan Data and Directory of the scan files
3. Click Plot\_scan\_data button
4. Another window pops up
5. Set where to find the peak-to-peak voltage
6. Plot XY/XZ/YZ scan
7. Set X point and Y point to load the waveform
8. Convert it to the pressure by clicking the button