Isomet Studio GUI

Example: Tone Buffer Mode

Create Buffer with 16 tones on 2 channels. Channel 1: Linear frequency increments, 150-90MHz Channel 1: Linear amplitude slope : 100 – 70% Channel 2: Static frequency increments, 120MHz Channel 2: Static amplitude : 55% No Compensation LUT applied iMS4 only. No connected power amps. Tones are selected using the GUI software (USER) Example not appropriate for beam steered AO deflectors e.g. D1384

1: Click in the Tone Buffer window, bottom left of main window . Edit the name if desired. or click " + " to add another buffer file. A Tone Buffer tab is created

The input array will fill with 256 rows = 256×4 channel F/A/P data points Not all 256 need be used.

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In this example we are not applying compensation table.

- 2: Uncheck Amplitude Compensation box, Phase Compensation box
- 3: In the *Control Source*, select *User*

For external control, select **Extended Control** (disregard **External**). Apply external inputs to the LTB address pins on connector J8 (See J8 Connector Pin out table, Alternate Use colomn) Note: unterminated LTB address bits are pulled high. The 256 possible F/A/P tones may be addressed at up to 90KHz rate using the 8x external LTB address bits on connector J8, (pins 3,4,5,6,16,14,7,8). See page 31 for further details.

- 4: **Ch1 Frequency,** enter end point values Tone 0, enter 150.00 MHz 9 (Start) ; Tone 15, enter 90.00 MHz (End)
- 5: **Ch1 Amplitude** , enter end point values Tone 0, enter 100 % ; Tone 15, enter 70 %
- 6: **Ch2 Frequency**, enter end point values Tone 0, enter 120.00 MHz 15 (Start) ; Tone 15, enter 120.00 MHz (End)
- 7: **Ch2 Amplitude**, enter end point values Tone 0, input 55 % ; Tone 15, input 55 %
- 8: Repeat for **Ch3** and **Ch4** fields if required.

Use the Interpolate feature to fill the remaining 14 cells For each column:

- Left click on Start cell
- Hold down the shift key
- Navigate to the end cell and left click
- (This should select and highlight all 16 cells)
- Right click to open sub window
- Select Interpolate

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8: Set power levels

In this example for iMS4 (revB)

DDS power to 63%

Amplitude Control Source is Wiper 1

Wiper 1 setting = 80%



9: Enable output



10: Tone Selection

Click on then desired Row to output that frequency set

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11: To disable output

Click as shown

