

# Convert Thermo fisher RAW file

.RAW -> .indx

# Start IMDX converter, select RAW file

The screenshot displays the IMDX Converter application window. The interface is divided into two main panels: 'Input' and 'Output'.

**Input Panel (KBD/imzML/analyze/RAW):**

- Target Data:** Includes a 'Folder:' field, a 'File Name:' field (highlighted with a yellow box and a hand cursor), and a 'Measurement Range: m/z 0 - 0' field. Below these are radio buttons for 'Profile' (selected) and 'Centroid'.
- Reference Image:** Includes 'Folder:' and 'File Name:' fields.

**Output Panel (IMDX):**

- Output Data:** Includes a 'Folder:' field and a 'File Name:' field.
- Conversion Parameter:** Includes:
  - m/z Range:** Radio buttons for 'All Areas (Auto Calculation During Conversion)' (selected) and 'm/z' with input fields for '0' and '0'.
  - Noise Cut:** Radio buttons for 'None' (selected) and 'Cut Below Specified Percentage' with a '10' % input field.
  - Downsampling:** 'Bin Size' input field with '1'.
- Mass Compensation:** 'Peak Setting' checkbox.
- Intensity Correction:** 'Intensity Correction TOF' checkbox.
- Sample Information:** 'Polarity' dropdown (Unknown), 'Matrix' dropdown, and 'Comments' text area.

An 'Add to Conversion List' button is located at the bottom right of the interface.

The number of data points will be displayed.

File Conversion List Help

### Input KBD/imzML/analyze/RAW

**Target Data**

Folder: C:\temp\test\ThermoFisherRAW

File Name: small.RAW

Number of Data Points: 48

Number of Pixels: 0 (x 0 , y 0 )  
*Out of range. (1-48)*

Number of Omit Data Points: 0 ( Head 0 , Tail 0 )  
*This value must be total number of data points - total number of pixels.*

Pitch: (x 10.0 , y 10.0 ) [um]

Scan Setting: Scan Pattern Fly Back

Scan Direction ( Left to Right ), Scan Sequence ( Top to Bottom )

Measurement Range: m/z 140 - 2000

m/z: Processed

Profile

Centroid

Enter the horizontal (x) and vertical (y) numbers of the MS image.

File Conversion List Help

**Input** KBD/imzML/analyze/RAW

**Target Data**

Folder: C:\temp\test\ThermoFisherRAW

File Name: small.RAW

Number of Data Points: 48

Number of Pixels: 48 (x  , y  )

Number of Omit Data Points: 0 ( Head  , Tail  )

Pitch: (x  , y  ) [um]

Scan Setting: Scan Pattern  ▾

Scan Direction (  ), Scan Sequence (  )

Measurement Range: m/z 140 - 2000

m/z: Processed

Profile

Centroid

If there are extra measurement points at the beginning or end of the data, enter "Number of Omit Data points".

File Conversion List Help

### Input KBD/imzML/analyze/RAW

**Target Data**

Folder: C:\temp\test\ThermoFisherRAW

File Name: small.RAW

Number of Data Points: 48

Number of Pixels: 36 (x  , y  )

Number of Omit Data Points:  ( Head  , Tail  )

*This value must be total number of data points - total number of pixels.*

Pitch: (x  , y  ) [um]

Scan Setting: Scan Pattern  ▾

Scan Direction ( Left to Right ), Scan Sequence ( Top to Bottom )

Measurement Range: m/z 140 - 2000

m/z: Processed

Profile

Centroid

“Number of Data Points” must be equal to the sum of “Number of Pixels” and “Number of Omit Data Points”.

File Conversion List Help

### Input KBD/imzML/analyze/RAW

**Target Data**

Folder: C:\temp\test\ThermoFisherRAW

File Name:  small.RAW

Number of Data Points: 48

Number of Pixels: 36 (x  , y  )

Number of Omit Data Points: 12 ( Head  , Tail  )

Pitch: (x  , y  ) [um]

Scan Setting: Scan Pattern  

Scan Direction ( Left to Right ), Scan Sequence ( Top to Bottom ) 

Measurement Range: m/z 140 - 2000

m/z: Processed

Profile

Centroid

Enter the pitch of the measurement point.

The screenshot shows a software window titled "Input" with a menu bar containing "File", "Conversion List", and "Help". The main content area is titled "Target Data" and contains the following fields and options:

- Folder: C:\temp\test\ThermoFisherRAW
- File Name:  small.RAW
- Number of Data Points: 48
- Number of Pixels: 36 (x  , y  )
- Number of Omit Data Points: 12 ( Head  , Tail  )
- Pitch: (x  , y  ) [um]** (highlighted with a yellow box)
- Scan Setting: Scan Pattern  
- Scan Direction ( Left to Right ), Scan Sequence ( Top to Bottom ) 
- Measurement Range: m/z 140 - 2000
- m/z: Processed
- Profile
- Centroid

# Enter the information for “Scan Setting”

File Conversion List Help

## Input KBD/imzML/analyze/RAW

**Target Data**

Folder: C:\temp\test\ThermoFisherRAW

File Name:  small.RAW

Number of Data Points: 48

Number of Pixels: 36 (x  , y  )

Number of Omit Data Points: 12 ( Head  , Tail  )

Pitch: (x  , y  ) [um]

Scan Setting: Scan Pattern  

Scan Direction (  ), Scan Sequence (  ) 

Measurement Range: m/z 140 - 2000

m/z: Processed

Profile

Centroid

Scan Setting 

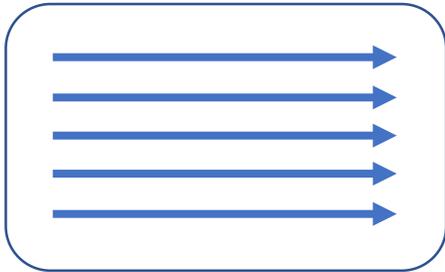
Scan Direction   , Scan Sequence  

- Left to Right
- Right to Left
- Top to Bottom
- Bottom to Top

- Left to Right
- Right to Left
- Top to Bottom
- Bottom to Top

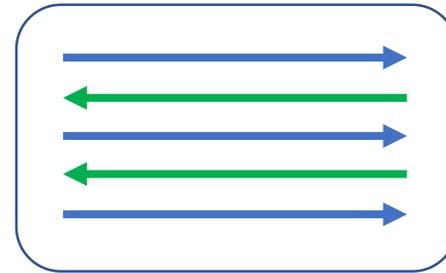
# Scan pattern: flyback and zigzag

flyback



Scan direction is constant

zigzag



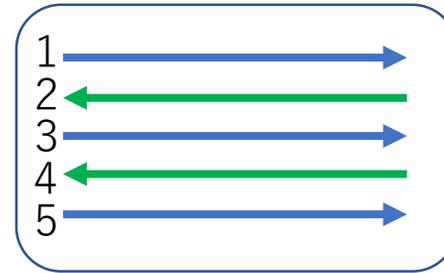
Scan direction is alternating

# Scan direction = direction of the 1<sup>st</sup> scan

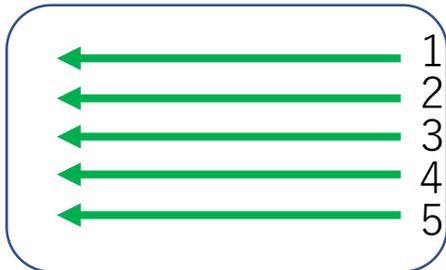
Scan pattern : Flyback  
Scan direction: Left to right



Scan pattern : ZigZag  
Scan direction: Left to right



Scan pattern : Flyback  
Scan direction: Right to left

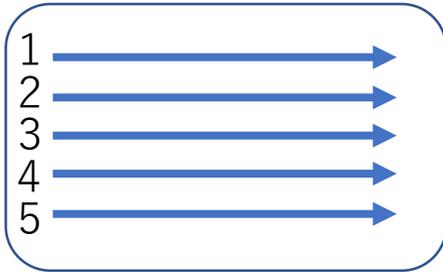


Scan pattern : ZigZag  
Scan direction: Right to left

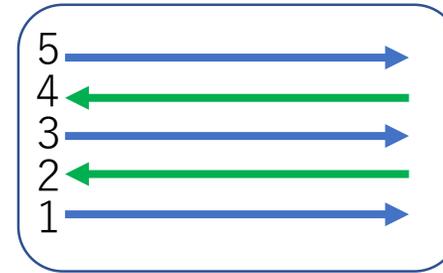


# Scan sequence = the direction of the 2<sup>nd</sup> and subsequent scans relative to the 1<sup>st</sup> scan

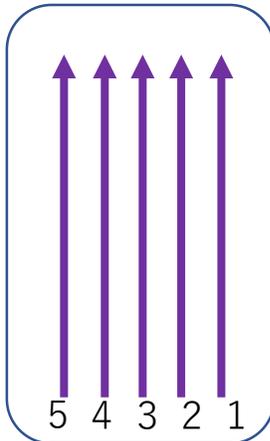
Scan pattern : Flyback  
Scan direction : Left to right  
Scan sequence : Top to bottom



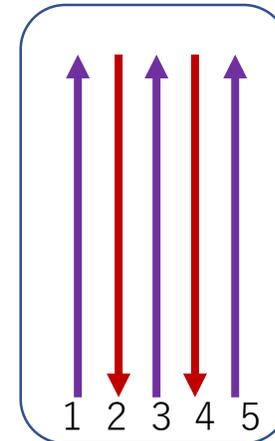
Scan pattern : Zigzag  
Scan direction : Left to right  
Scan sequence : Bottom to top



Scan pattern : Flyback  
Scan direction : Bottom to top  
Scan sequence : Right to left



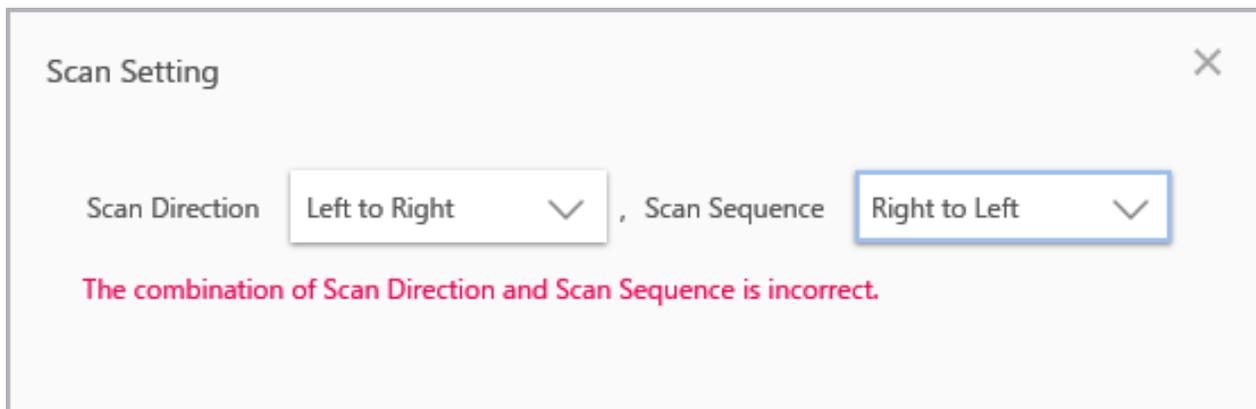
Scan pattern : Zigzag  
Scan direction : Bottom to top  
Scan sequence : Left to right



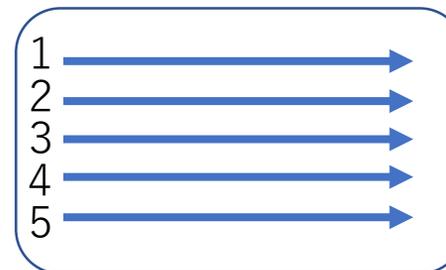
# “Scan direction” and “Scan sequence”

- Scan direction
  - The direction of the 1<sup>st</sup> scan
- Scan sequence
  - The direction of the 2<sup>nd</sup> and subsequent scans relative to the 1<sup>st</sup> scan

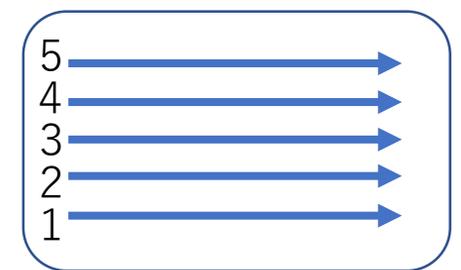
⇒ It is impossible to set the same type of orientation, such as “Left to Right” in Scan direction and “Right to Left” in Scan sequence.



If Scan direction was set to “Left to Right”, you should set Scan sequence to “Top to Bottom” or “Bottom to Top”



Top to Bottom



Bottom to Top

# Sampling Interval

**Output** IMDX

**Output Data**

Folder :  C:\temp\test\ThermoFisherRAW

File Name :

**Conversion Parameter**

**m/z Range**

All Areas (Auto Calculation During Conversion)

m/z  -

**Noise Cut**

None

Cut Below Specified Percentage  %

**Mass Compensation**

 Peak Setting

**Intensity Correction**

Intensity Correction TOF

**Sample Information**

Relative :

**Sampling Interval**

Auto  U

Manual  ppm 

Out of range. (0.001-1.21)

Comments :

Enter the upper limit of "ppm".  
In this example, "1.21".

# After completing the settings, press "Add to Conversion List" and "Run Convert."

The screenshot displays a software interface for data conversion, divided into several sections:

- Input KBD/imzML/analyze/RAW**:
  - Target Data**:
    - Folder: C:\temp\test\ThermoFisherRAW
    - File Name: small.RAW
    - Number of Data Points: 48
    - Number of Pixels: 36 (x: 6, y: 6)
    - Number of Omit Data Points: 12 (Head: 2, Tail: 10)
    - Pitch: (x: 10.0, y: 10.0) [um]
    - Scan Setting: Scan Pattern (Fly Back)
    - Scan Direction: (Left to Right), Scan Sequence: (Top to Bottom)
    - Measurement Range: m/z 140 - 2000
    - m/z: Processed (Profile selected, Centroid unselected)
  - Reference Image**: Folder:
- Output IMDX**:
  - Output Data**:
    - Folder: C:\temp\test\ThermoFisherRAW
    - File Name: small
  - Conversion Parameter**:
    - m/z Range**:
      - All Areas (Auto Calculation During Conversion)
      - m/z: 140 - 2000
    - Noise Cut**:
      - None
      - Cut Below Specified Percentage: 10 %
    - Sampling Interval**:
      - Auto  Use Common Sampling Interval
      - Manual: 1.21 ppm
    - Mass Compensation**:
      - Peak Setting
    - Intensity Correction**:
      - Intensity Correction TOF
    - Sample Information**:
      - Polarity: Unknown
      - Matrix: Unknown
      - Comments:

- Conversion List**:

| No. | Input File Name | Measurement Range | Output Destination Folder | Output File Name | m/z Range |
|-----|-----------------|-------------------|---------------------------|------------------|-----------|
|-----|-----------------|-------------------|---------------------------|------------------|-----------|

Two buttons are highlighted with yellow boxes: "Add to Conversion List" and "Run Convert".