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[How to find physical dimensions of .b8 images](#)

by [potto216](#) » Mon Mar 24, 2014 6:50 pm

Hi ,

We need to find the physical dimensions for frames being read from .b8 files using RPRead like code.

Currently we can read the header and successfully display the image but the way we are computing the pixel dimensions is:

====CODE START====

```
lateralTotalWidth_mm=header.probeInfo.elementPitch_mm*header.probeInfo.elementCount;
```

```
%The lateral size in relation to the header is the total elements times
```

```
%each pitch then divided by the header size listed
```

```
scale.lateral.value=lateralTotalWidth_mm/(header.ur(1)-header.ul(1)+1);
```

```
scale.lateral.units='mm';
```

```
%the pixels are square
```

```
scale.axial.value=scale.lateral.value;
```

```
scale.axial.units='mm';
```

=====CODE END=====

In the code "header.probeInfo.elementPitch_mm", and "header.probeInfo.elementCount" are variables we populate based on the header.probe number from the data file.

Is this the proper way to do this?

Also does the header.extra field mean anything for .b8 values?

Thanks,
Paul

[potto216](#)

Posts: 21

Joined: Thu Feb 18, 2010 4:52 am

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[Re: How to find physical dimensions of .b8 images](#)

by [Ali](#) » Wed Mar 26, 2014 9:28 pm

For linear probes, your calculation seems right to me. If it's a curved probe, it's more complicated...

Ali Baghani, PhD

Research Scientist

Ultrasonix Medical Corp.



[Ali](#)

Posts: 240

Joined: Mon Jun 11, 2007 6:30 pm

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[Re: How to find physical dimensions of .b8 images](#)

by [potto216](#) » Mon Mar 31, 2014 6:21 pm

Thanks, does the header.extra field mean anything for .b8 values?

[potto216](#)

Posts: 21

Joined: Thu Feb 18, 2010 4:52 am

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[Re: How to find physical dimensions of .b8 images](#)

by [Ali](#) » Wed Apr 02, 2014 5:22 pm

It is the micron per pixel of the image.

So you can use it to convert to actual physical distances from the pixels in the image.

Ali Baghani, PhD

Research Scientist

Ultrasonix Medical Corp.



[Ali](#)

Posts: 240

Joined: Mon Jun 11, 2007 6:30 pm

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