

## Re: passing a struct with an array by reference

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*Source:*

<http://www.tech-archive.net/Archive/DotNet/microsoft.public.dotnet.languages.csharp/2007-05/msg00383.html>

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  - *Date:* Thu, 3 May 2007 13:29:14 -0400
- 

There are a few things going on here. The first is that you are declaring the `rem` parameter as an out parameter. This means that you are not expecting a value to always be passed in. This is why you are getting the errors.

What you want to do is something like this:

```
public void getData(out micDataReturn rem)
{
    // Assign the new instance.
    rem = new micDataReturn();

    // Set the noiseValue.
    rem.noiseValue = <some value>;

    // Allocate the array.
    rem.micData = new double[10];
}
```

Of course, if you are just initializing the structure with 0 for the double values, you really don't need to do anything but declare the array. If you have other values you want to set, then you will have to do that in your method.

Then, your client code becomes:

```
static void main()
{
    X myx = new X();
    micDataReturn res;
    X.getData(out res)
}
```

Hope this helps.

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– Nicholas Paldino [.NET/C# MVP]

## Re: passing a struct with an array by reference

– mvp@xx

"abhiM" <abhi.menon@xxxxxxxx> wrote in message  
[news:1178211210.757401.31490@xx](mailto:news:1178211210.757401.31490@xx)

I have a struct that has an array in it. I need to assign space to the array in a function and pass the corresponding struct by reference to another function so that it can store values into the array. When I try it with the following code i get these errors

1. Use of possibly unassigned field 'micData'
2. The out parameter 'rem' must be assigned to before control leaves the current method

Could someone point out how to do this and what I am doing wrong. Any help is greatly appreciated.

-----CODE-----

```
Class X{
public struct micDataReturn
{
public double[] micData;//data from the microphone
public double noiseValue;//noise in dB of the data
}

public X()
{

}

public void getData(out micDataReturn rem)
{
try{
rem.micData[0] = 0;
rem.micData[1] = 0;
rem.micData[2] = 0;
}
catch(Exception e)
{
}
}

static void main()
{
X myx = new X();
micDataReturn res = new micDataReturn();
res.micData = new double[10];
X.getData(out res)
}
}
```

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Thanks in advance.