

---

Subject: Re: signed character

Posted by [Dick Jackson](#) on Thu, 25 Apr 2002 13:19:58 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

"Carmen" <cambicambi@hotmail.com> wrote in message  
news:8128b197.0204250239.509a20fb@posting.google.com...

> Hello,

>

> I am trying to access information stored in a matrix, byte per byte.

> If I were using C, I should read every byte as SIGNED CHARACTERS.

> But, IDL has not that definition.

>

> I would appreciate a lot if you can tell me what should I do in order

> to read the data correctly.

Signed characters represent values -128 to 127, but IDL Bytes are treated as 0 to 255. I'd convert them to (short) integer, the simplest IDL data type that can express -128 to 127, as in this example:

```
IDL> a = [128B, 255B, 0B, 127B]
```

```
IDL> b = fix(a) + ([0, -256])[a GT 127B]
```

(convert to integer, subtract 256 from elements where needed... I think this will be the fastest method of doing this)

```
IDL> Print, b
```

```
  -128  -1    0   127
```

```
IDL> Help, b
```

```
B          INT    = Array[4]
```

If you've read data into a byte array, you may want a function to convert it:

```
FUNCTION SignedCharToFix, a
```

```
Return, fix(a) + ([0, -256])[a GT 127B]
```

```
END
```

Hope this helps.

Cheers,

--

-Dick

Dick Jackson / [dick@d-jackson.com](mailto:dick@d-jackson.com)

D-Jackson Software Consulting / <http://www.d-jackson.com>

Calgary, Alberta, Canada / +1-403-242-7398 / Fax: 241-7392

---