

## AOZ Studio Beta - Bug #170

### Drawing commands (at least Bar, Box and Draw) are offset by 1 pixel in both X and Y.

02/09/2020 03:29 PM - Brian Flanagan

<b>Status:</b>	Resolved	<b>Start date:</b>	02/09/2020
<b>Priority:</b>	High	<b>Due date:</b>	
<b>Assignee:</b>		<b>% Done:</b>	0%
<b>Category:</b>		<b>Estimated time:</b>	3:00 hours
<b>Target version:</b>			
<b>Affected version:</b>	Beta 2		

#### Description

At first, I thought this was just the Bar command, but further testing showed that Bar, Box, and Draw (perhaps all?) drawing commands appear to be off by 1 pixel in both X and Y. (It might be good to check whether the screen or canvas is offset, just in case.)

The following example should produce solid vertical color bars all the way across the entire 320x200 drawing area with no space between them. Instead, you'll notice gray borders to the bottom and right of each bar:

```
#manifest: "amiga"  
#speed: "safe"
```

```
Screen Open 0,320,200,32,Lowres
```

```
Palette $000,$888,$CCC,$FFF, $004,$008,$00C,$00F, $040,$080,$0C0,$0F0, $400,$800,$C00,$F00, $440,$  
880,$CC0,$FF0, $044,$088,$0CC,$0FF, $404,$808,$C0C,$F0F, $F70,$0F7,$70F,$7F0
```

```
Flash Off
```

```
For C=0 To 31
```

```
Ink C,,3 : Bar C*10,0 To C*10+9,199
```

```
Next C
```

This example should draw a black box just inside the drawing area with a 1 pixel white border all the way around. Instead, you'll notice that the top and left edges are thin and barely visible since they're offset by a pixel. I think what is visible is just an artifact from anti-aliasing.

```
#manifest: "amiga"  
#speed: "safe"
```

```
Screen Open 0,320,200,32,Lowres
```

```
Palette $000,$888,$CCC,$FFF, $004,$008,$00C,$00F, $040,$080,$0C0,$0F0, $400,$800,$C00,$F00, $440,$  
880,$CC0,$FF0, $044,$088,$0CC,$0FF, $404,$808,$C0C,$F0F, $F70,$0F7,$70F,$7F0
```

```
Flash Off
```

```
Cls 3
```

```
Ink 0
```

```
Box 1,1 To 318,198
```

This last example illustrates the same problem with the Draw command. The results *should be* identical to the previous example, except that it is produced by Draw instead of Box:

```
#manifest: "amiga"  
#speed: "safe"
```

```
Screen Open 0,320,200,32,Lowres
```

```
Palette $000,$888,$CCC,$FFF, $004,$008,$00C,$00F, $040,$080,$0C0,$0F0, $400,$800,$C00,$F00, $440,$  
880,$CC0,$FF0, $044,$088,$0CC,$0FF, $404,$808,$C0C,$F0F, $F70,$0F7,$70F,$7F0
```

```
Flash Off
```

```
Cls 3
```

```
Ink 0
```

```
Draw 1,1 To 318,1
```

```
Draw To 318,198
```

```
Draw To 1,198
```

Draw To 1,1

Again, the result should be a uniform black box with a uniform white border, but the top and left are offset.

## History

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### #1 - 05/30/2020 08:55 AM - Brian Flanagan

- *Affected version changed from 0.9.4 to 0.9.9.1*

Re-tested this again in 0.9.9.1 Test 1.

Still broken.

### #2 - 10/04/2020 11:54 PM - Brian Flanagan

- *Priority changed from Normal to High*

- *Estimated time set to 3:00 h*

- *Affected version changed from 0.9.9.1 to Beta RC3*

Re-tested in Beta RC3. Still broken.

### #3 - 12/03/2020 11:10 PM - Brian Flanagan

- *Affected version changed from Beta RC3 to Beta 2*

I corrected the problem with Bar (and with Polygon - similar issue).

Some of the other issues still exist.

### #4 - 09/08/2021 11:42 AM - David Baldwin

- *Status changed from New to Resolved*