

PIXEL·LOGIC

The PDF archives



Thank you for backing the project.
Hope you enjoy these PDFs over the next few months <3



Pixelart finds its roots in video games.

As a result most sprites featured in this guide
will serve as **study, reference and analysis.**



Pixel art is not a style. It is a *medium*.

In order to make decent pixelart,

**DRAWING AND ART FUNDAMENTALS ARE
ABSOLUTELY NECESSARY**

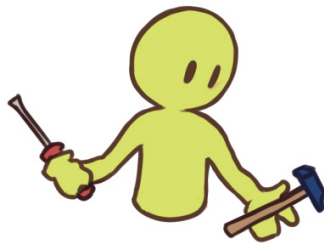
This guide will **not** teach you how to draw!!

Introduction



What programs do I use?

Some artists are already familiar with programs. Others don't know what program would suit them. It doesn't matter how advanced your fancy technology is. Even MS Paint does the trick! Check the software list in the later updates. There will also be in depth tutorials made for certain programs later on this year.



Why is pixel art different from other pixelated art?

Advanced tools will **not** do the job. You have total control and can manipulate every single pixel yourself. Of course, that makes some pixel art sharper because you don't have the soft blur. But it's not just about the tools. Learning techniques will help you manipulate and manage how your stuff looks.

**You control the pixels.
The tools don't control you.**

It doesn't mean you have to place every single pixel like a brick.

There are shortcuts, don't worry!



Non Pixel-Art:

Doesn't require you to zoom in much.

Doesn't require pixel-precision

Uses brush strokes and pen pressure

Pixel art was born from *limitations*.

That's why many manual techniques are still used today.

As technology advanced, it gave new possibilities in 2D games: digitized pictures, prerendered 3D models, full motion video and more. Once sprites stopped being edited on pixel level, they weren't considered pixel art anymore. They are still sprite objects on screen, but not **manually** created pixel art.



non-pixelart



oekaki or binary art

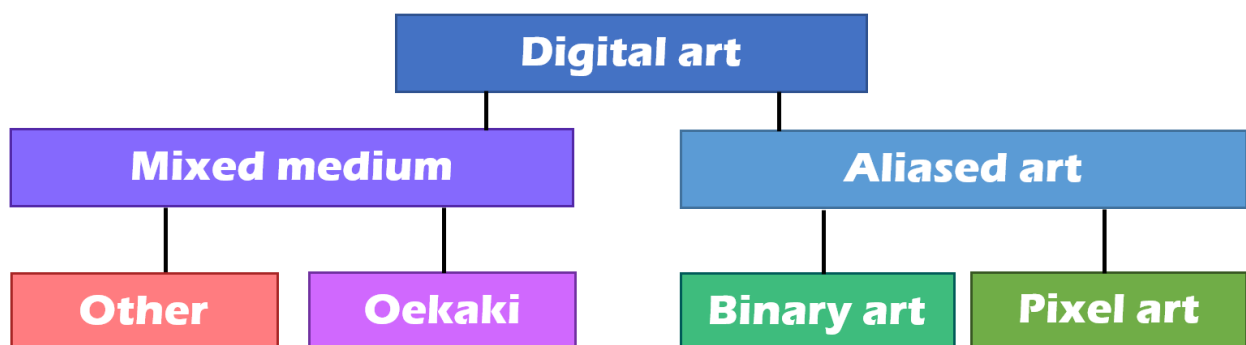


pixel-art



Pixel art is often confused with other art mediums such as *Oekaki* or *Binary art*. The reason is they often use aliased graphics: Art made with non smoothing tools. [Regular art smooths out your curves](#). Aliased art keeps everything jaggy & sharp.

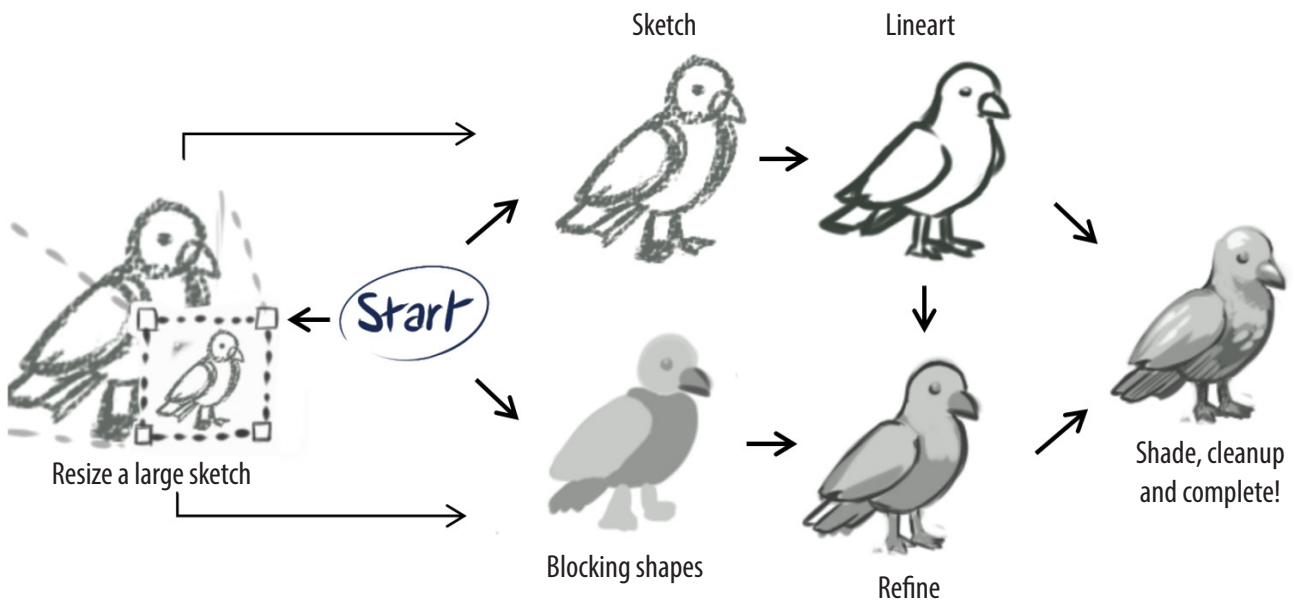
This diagram is a summary. For more info, check the tools page!





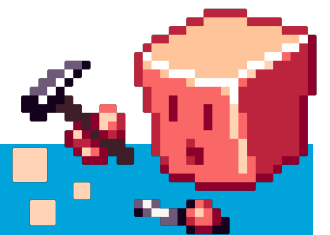
So how do I start?

There are multiple ways to start. Let's compare it to something *more familiar*: drawing & painting! The methods aren't all that different from pixel art! You'll see.



You can start multiple ways and take different paths. You can even mix paths. **If you already make illustrations, stick to your method of preference!** If you feel adventurous, try something new. However, pixel art is *usually* 1 single layer.

If you're not comfortable working on 1 single layer, don't worry; you can still use layers, but make sure to combine them so you don't get too dependent. Especially with animation, having layers will hinder you more than anything. If you make entire scenes or screenshots, layers are necessary though! As a result, this brings pixel art closer to more traditional artwork.



**Pixelart is like 2D sculpting.
You start with a base, then chisel and add pixels!**

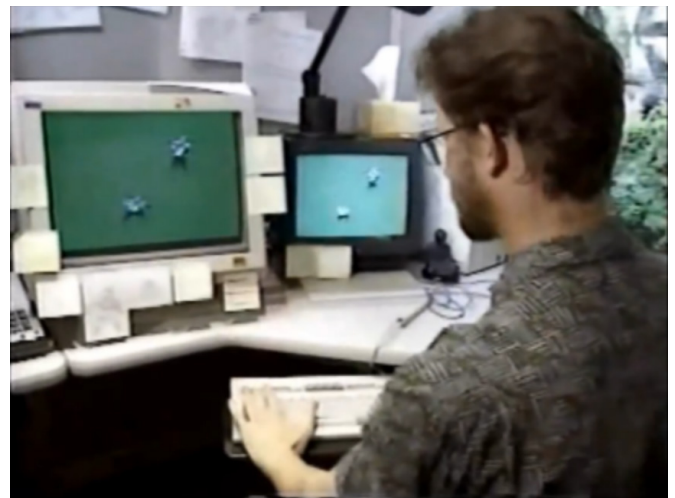
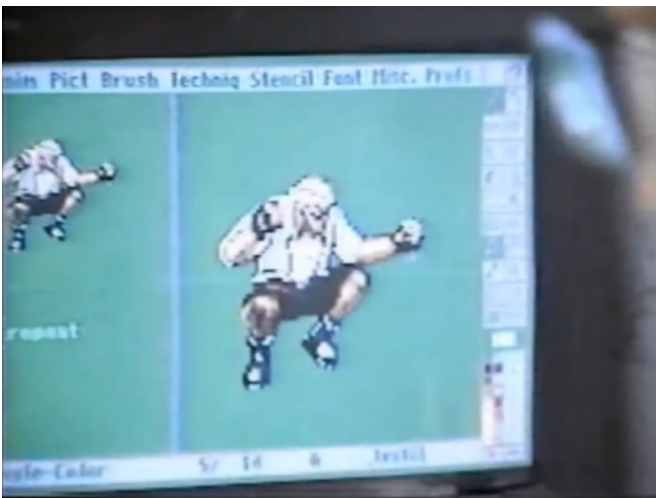
“Old school” methods... are still used!

Here's two brief examples of how sprites were made back in the 90's.
Remember these sprites had a purpose and were made with hardware limitations



Capcom artists drew frames on grid paper and pixelated them on computers.

Felicia from Darkstalkers - Original Scan by @Akiman7



Other games with smaller sprites were drawn directly on computers with mouse and keyboard.

The example here is Sega's Comix Zone with animator Dean Ruggles

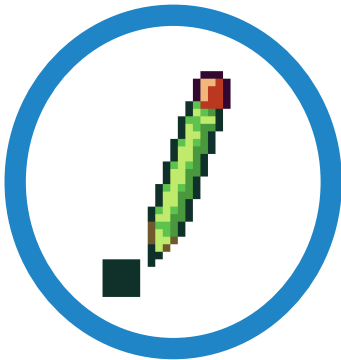


This is just scratching the surface on how you can make sprites.

In the end, there's a method for every type of artist!

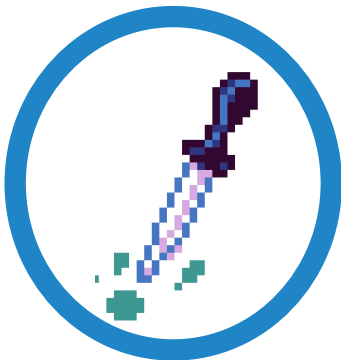
Tools

Regardless of the software, you will need **at least** these 4 tools.
These are the minimum **required** to make pixelart.



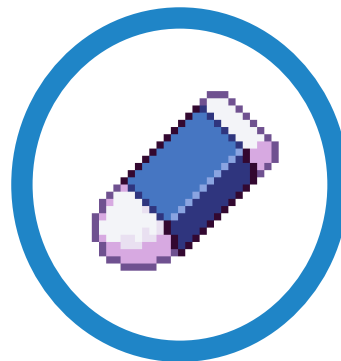
Pencil tool

Most basic tool. Some art programs have a brush .
It gives you a **1 px tool** of crisp and clean pixels.



Eyedropper

Absorbs a color. Sometimes assigned to the right click.
It allows you to **pick up colours** and make palettes.



Eraser

Erases your mistakes. Some softwares don't include it
because you can just **erase with white** or transparency.



Bucket tool

Makes your life easier. It fills an empty area with 1 solid color.
Watch out for gaps! Or it will fill the whole screen.



Some programs don't include an eraser and group the eyedropper with the brush.
That gives you 2 tools combining the power of 4!



Other must-have tools:

Selection tool Recolor tool Line tool etc

Use and edit manually:

Rotation tool Color settings Circle tool etc

Avoid

Blur Brushes Gradients Filters "Nearest neighbor"

➔ Anything that automatically smoothens pixels!

Why avoid automatic tools? Because the artist can't predict how it will turn out. Remember: Pixel art is about having 100% control over what you do.



This was just a warm-up for things to come.
Other topics will have their own chapters.

Hopefully you'll find what you need!

Links and extras

Examples of digitized pictures

Journey (Arcade, 1983), Wayne's World (SNES, 1993), Ace Attorney: Phoenix Wright (GBA, 2001)

Prerendered 3D models

Stardust (Amiga, 1993), Killer Instinct (Arcade, 1994), Donkey Kong Country (SNES, 1994)

Full motion video.

FMV Arcade machines, Sega CD (1991), Game Boy Camera (1998)

<http://youtu.be/-M8Rlc6Ek0Q>

SEGA Documentary 1993 part two - With Dean Ruggles

More examples of Capcom scans:

Cammy from Street Fighter Alpha 3

Mai-Ling from Red Earth.

