Early Video Tools (Listed chronologically)

Early 1960s
  Don Buchla  Sound synthesizer

Mid 1960s
  Sid Washer  Scan device
  Nam June Paik  Television with magnets installation
  Nam June Paik  "Wobbulator"

Late 1960s
  Eric Siegel  Colorizer
  Aldo Tambellini/Black Spiral Installation
  Bob Diamond  Cloud Machine
  Bill Hearn  Vidium

Circa 1970
  Eric Siegel  Synthesizer
  Stephen Beck  Synthesizer

Circa 1971
  Nam June Paik & Shua Abe  Paik/Abe Keyer & Colorizer
  "Videola" (cathode ray tubes w/mirrors)
  Don Hallock  Installation

Circa 1972
  George Brown  Multilayered Keyer
  Dan Sandin  Image Processor (IP)

Circa 1973
As per Woody, 1/15/92

The Systems
The generic distinction of early video tools can be characterized as:
1. Video signal manipulation sync
2. Timing Control, e.g. drift, roll
3. Scan processing - modulation
4. Tape manipulation
e.g. Seale - Generation Accumulation
   Gillette/Schneider - Wipe Cycle
   Vasulkas - Descents

Method of Recording
1. Direct:
   Video to Video
2. Re-scanned:
   Video to Monitor to Camera to Video
3. Temporary:
e.g. - Tambellini Installation
   Videola
   IP

Re Woody:
The key to the curatorial attitude is the recognition of works conceived and controlled electronically (electro-magnetically), appearing on the CRT as non specific to timing sequences or specific to the TV raster. The time non-specific manifestation is the one where the image may not be organized in frames, where X, Y, Z position and intensity may appear on the surface of the CRT in a non-line forming fashion - most characterized by the images produced on an oscilloscope by the beam trace at random, or chosen, in waveform organization. Contrary to that, standard TV provides an unambiguous set of rules for the image forming process, creating a field/frame structure modulated by a representation of light space as "portrayed" by the camera, i.e. synthetically.
Collection of the Vasulkas

Late 1960s

Eric Siegel  Dual Colorizer

Circa 1972

George Brown  Programmable Field Switcher
George Brown  Programmable Multiple keyer
Stephen Beck  Graphic Outliner

Circa 1973

Bill Etra & Steve Rutt  Rutt/Etra Scan Processor (Modulator)

Donald McArthur
& Jeffy Schier  First Generation Digital Image Generator
Early Video Tools (Listed chronologically)

**Early 1960s**
- Don Buchla  
  Sound synthesizer

**Mid 1960s**
- Sid Washer  
  Scan device
- Nam June Paik  
  Television with magnets installation
- Nam June Paik  
  "Wobbulator"

**Late 1960s**
- Eric Siegel  
  Colorizer
- Aldo Tambellini/Black Spiral Installation
- Bob Diamond  
  Cloud Machine
- Bill Hearn  
  Vidiun

**Circa 1970**
- Eric Siegel  
  Synthesizer
- Stephen Beck  
  Synthesizer

**Circa 1971**
- Nam June Paik & Shua Abe  
  Paik/Abe Keyer & Colorizer
- Don Hallock  
  "Videola" (cathode ray tubes w/mirrors)  
  Installation

**Circa 1972**
- George Brown  
  Multilayered Keyer
- Dan Sandin  
  Image Processor (IP)

**Circa 1973**
- Bill Etra & Steve Rutt  
  Rutt/Etra Scan Processor