STEP 1
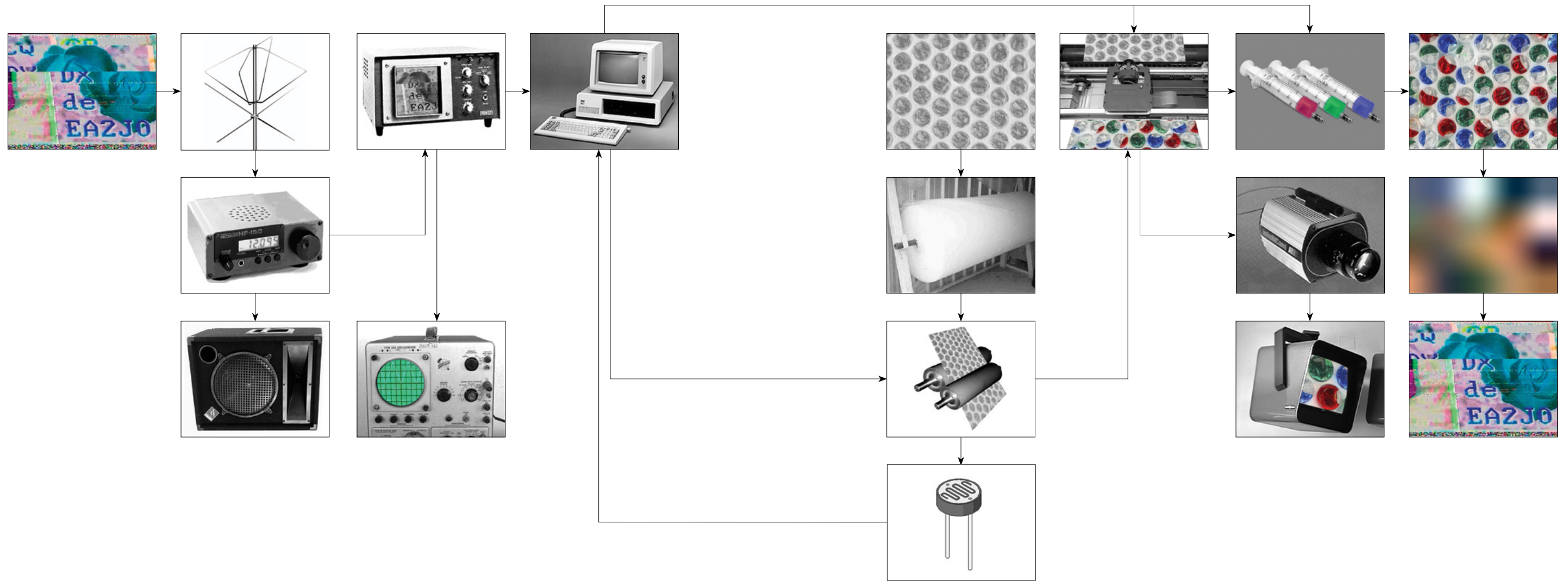SSTV (Slow Scan Television) signals are continually broadcast by Ham Radio operators around the world on several short wave bands used for voice communications (e.g. 3.845 MHz, 7.171 MHz, 21.340 MHz).

STEP 2
An open-air antenna, together with a short wave radio receiver, tunes into the SSTV band and receives the Ham Radio signals. Speakers play back the sound signals to illustrate the process.

STEP 3
An SSTV scan-converter recognizes and decodes the images carried by the sound signal. A monitor displays the images while an oscilloscope renders individual scanlines, making visible the gradual flow of the image (X-resolution: amplitude, Y-resolution: time).

STEP 4
The image processing PC selects a random sequence of individual pictures from the SSTV converter. A program rasterizes these images into pixels and breaks them down into their RGB components. The same PC also takes on the role of process controller in the following steps.

STEP 5
The mechanics: Bubble wrap sheeting (width: 2 m. in bulk from roll) is fed between two cylinders for horizontal transport. A photo sensor, together with the PC controlling the process, manages the exact, real-time positioning of the sheeting via a feedback loop.

STEP 6
The mechanics: a carriage (also controlled by the PC) vertically positions the print head.

STEP 7
The print head consists of three needles fed by three tanks holding red, blue, and green ink. Controlled by the PC, these needles inject the bubbles with the exact amount of colored ink corresponding to the brightness and hue of the pixel. A miniature, closed-circuit video camera mounted on the print head captures the process and the resulting image is displayed on a video monitor.

STEP 8
Pixel by pixel, line by line, the bubble wrap is colored in accordance with the underlying SSTV image. Assuming 10 seconds per pixel, this will result in a new VSSTV display every 20 hours (75 lines per image). Viewed from an appropriate distance (approximately 5 meters), the individual dots of ink resolve into distinct colors. An overall image emerges and becomes visible.