

BABBAGE LOVELACE, TEXT STREAM 5

BY RAFAEL LOZANO-HEMMER



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GENERAL IMPORTANT INFORMATION

This short section must be read for proper operation.

BABBAGE LOVELACE, TEXT STREAM 5 (2019)

BY RAFAEL LOZANO-HEMMER

Technique

Computer with 4 outputs, custom made software, projectors [1 to 4].

Description

The full text of the collected works of Charles Babbage and Ada Lovelace is turned into a stream of letters. Babbage Lovelace Text Stream is a generative artwork that lives through projected images on 1 to 4 surfaces (flat version / immersive version).

Operation

Please refer to [Appendix I - Installation](#) for detailed system information and wiring diagram.

1. Connect the computer and the projectors to electrical power. Use the supplied power cables.
2. To turn the piece ON, press the power button on the computer for one second, then release it. Important note: Please do not push the button again as this will shut down the piece. Wait at least two minutes before pressing it again as the computer might take that long to boot. After two minutes (maybe less), you should see the piece appearing.
3. To turn the piece OFF, it is best practice to use the remote supplied with the manufacturer to turn OFF the projector. The computer will reboot itself daily at 1AM and therefore does not need to be shut off manually.
4. If the piece does not start by itself within two minutes, try turning ON the piece again. If it still does not turn ON, then hold the power button all the way down for 10 seconds. Then, wait at least three seconds and press the power button all the way down for one second and you should be up and running again.

Do not worry if you see a window that reads: "Your PC encountered a problem and had to restart". Simply click: "Don't send details" and then the piece will play back normally. Any error like this can usually be fixed by restarting the computer; using the keyboard, press the **Windows key** in the bottom left of the keyboard (next to the **CTRL** button) and then navigate to the power icon at the top right of the screen, and, finally, click **RESTART**.

Maintenance

Please keep the computer somewhere the dust will not accumulate too easily.

Placement Instructions

The placement of the artwork depends on the venue space. Discussions should be held between the studio and collector or institution prior to installation. Consult the Installation Layout Section to understand how the setup should be done.

DETAILED TECHNICAL INFORMATION

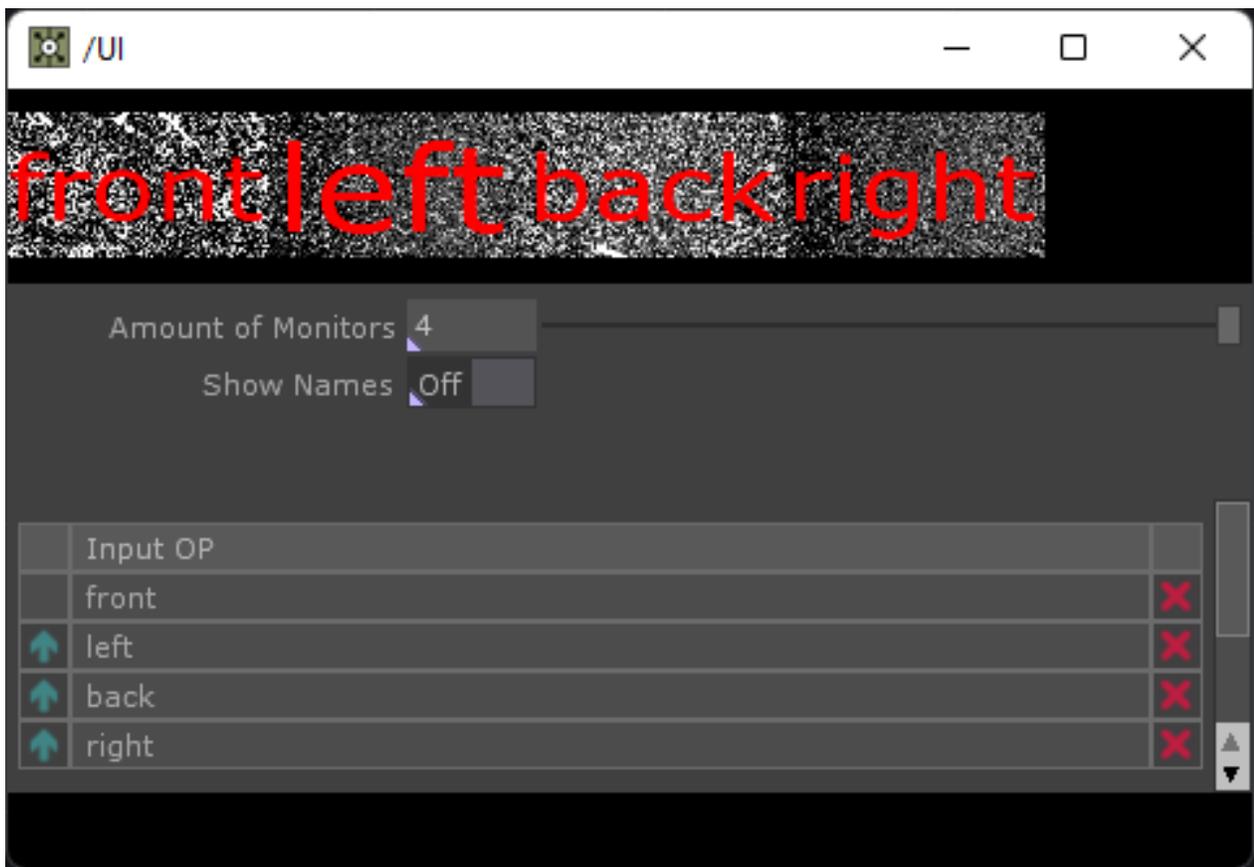
Normal Software Operation

This piece uses Touch Designer from Derivative as its primary software. By default, none of the artwork's software can be edited or manipulated, as it is running on TouchPlayer Commercial licence, which allows the playback of content at resolutions above 720p, but disables the usage of the TouchDesigner coding environment. Any software changes should be made by the studio.

Manual Software Calibration

Accessing the GUI

To access the user interface and modify the number or order of outputs, press 'G'. This window should pop on the main display :



Changing the number of outputs

By changing this number from 1 to 4, you can modify the number of outputs. For the change to take effect properly, you would need to close this menu pressing the X on the right corner, or 'esc' on the keyboard. Pressing 'esc' again will close the fullscreen mode. For the change to take effect, press 'ctrl + s' then 'f1' and the fullscreen mode will come back with the adjusted amount of monitors.



Changing the order of the outputs

Clicking the arrows, you can reorder the outputs. The top one being associated with the first monitor and the last one the 4th monitor. The 'Show Names' parameters would let you see the 'Front, Left, Back, Right' labels on the fullscreen mode. To save any changes follow the same procedure that is laid out above.



Remote Access to Artwork's Computer

There is a software installed on the computer running this artwork that allows the studio to connect remotely to the artwork. This feature is helpful when you require assistance from the studio, as we can remotely connect to it, do a quick inspection, and do a debugging session of your components, if needed. In order to enable this feature, the computer has to be connected to the internet at all times. Depending on the computer's operating system (Windows 7/8/10, OSX), the procedure to set the computer online will vary. Please look online for tutorials, if necessary.

Preliminary Troubleshooting Steps

After pressing the power button, nothing seems to happen.

If you press the power button and the piece does not start within two minutes, try turning on the piece again. If it still doesn't turn on, then hold the power button all the way down for 10 seconds. Then, wait at least three seconds and press the power button all the way down for one second and you should be up and running again.

Do not worry if you see a window that reads: "Your PC encountered a problem and had to restart". Simply click: "Don't send details" and then the piece will playback normally. Any error like this can usually be fixed by restarting the computer: using the keyboard, press the **Windows key** in the bottom left of the keyboard (next to the **CTRL** button) and then navigate to the power icon at the top right of the screen, and, finally, click **RESTART**.

The image displayed is in the wrong orientation/format.

If the piece appears to have the wrong orientation, press **ESCAPE** to exit to the desktop. Then right click anywhere on the background and from the menu click **SCREEN RESOLUTION**. Here you can adjust the **RESOLUTION** and **ORIENTATION**. Pressing **FN + F1** with the TouchDesigner application selected will put the project back into Perform Mode. Alternatively you can follow the steps above to restart the computer and the piece should open properly.

If the keyboard does not react.

If the keyboard is not working, turn over the keyboard and check to see if the keyboard is turned ON (there is a button that shows red or green; green is ON.) Also, check that the USB dongle is in the computer, and try putting it in different USB ports. You can also open the bottom of the keyboard and check if the batteries are dead, and replace them if necessary.

Troubleshooting Assistance

Prior to contacting the Antimodular Studio with a problem about your artwork, please ensure that you went through the preliminary troubleshooting steps outlined in the previous section.

The troubleshooting process will vary depending on the problem. In order to make the process easier, it is recommended that you collect and send the following information to the studio:

- Date and time when the problem first happened;
- Description of the problem;
- Actions taken so far and conclusions;
- Detailed photographs (or videos) displaying the problem;
- Detailed photographs (or videos) of the suspected faulty component;
- Detailed photographs (or videos) of the whole artwork and its surroundings;
- Personnel involved.

Support (Contact Us)

If you would like support for the piece, please feel free to call Lozano-Hemmer's studio in Canada:

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APPENDIX I - INSTALLATION

Description of Components

This artwork requires the following components:

Component	Description
Computer	Recommended specifications : Win 10 LTSC, i7 2.1GHz, 16Gb of RAM, 500Gb of SSD, RTX 3060
1 to 4 Video Cables	Connects the computer to the projector(s). Typically a HDMI cable but will depend on the ports available on the computer. You may need to use adapters.
1 to 4 Projectors	This artwork can be deployed on 1 to 4 surfaces. Resolution of each projector should be 1920x1080, optionally it could be 1920x1200.
Keyboard	While not required for normal use of the artwork, it allows you to troubleshoot the artwork.

Wiring Diagrams and Connections

