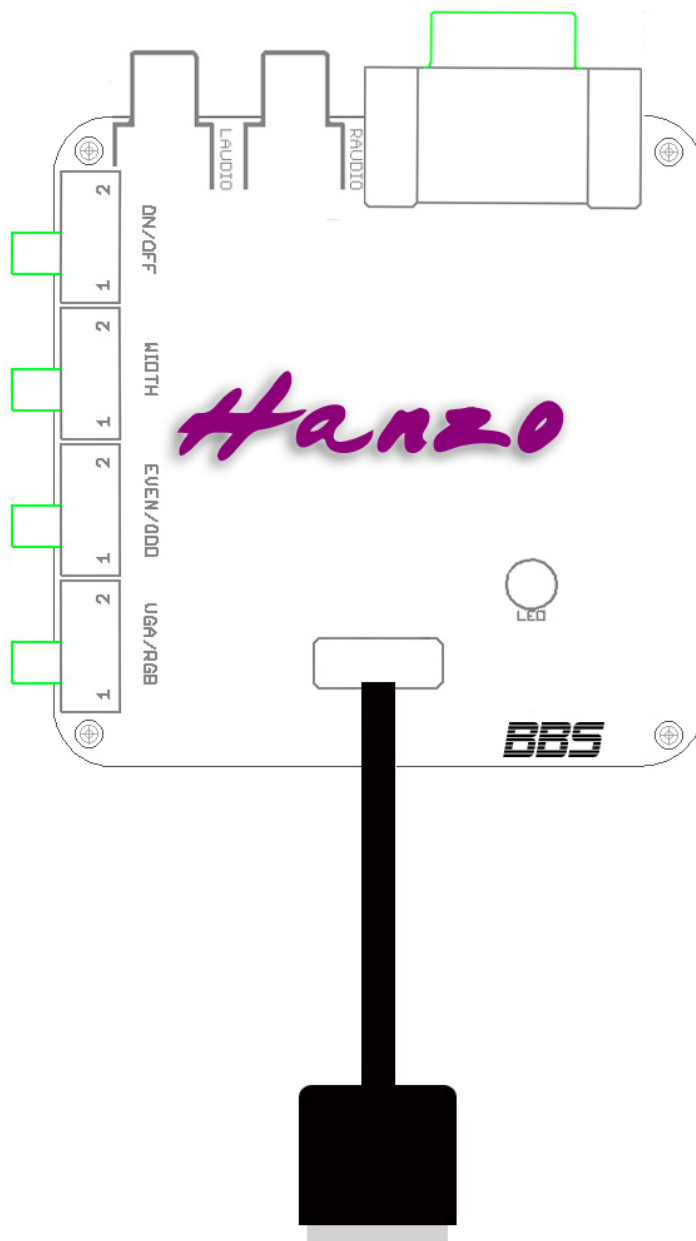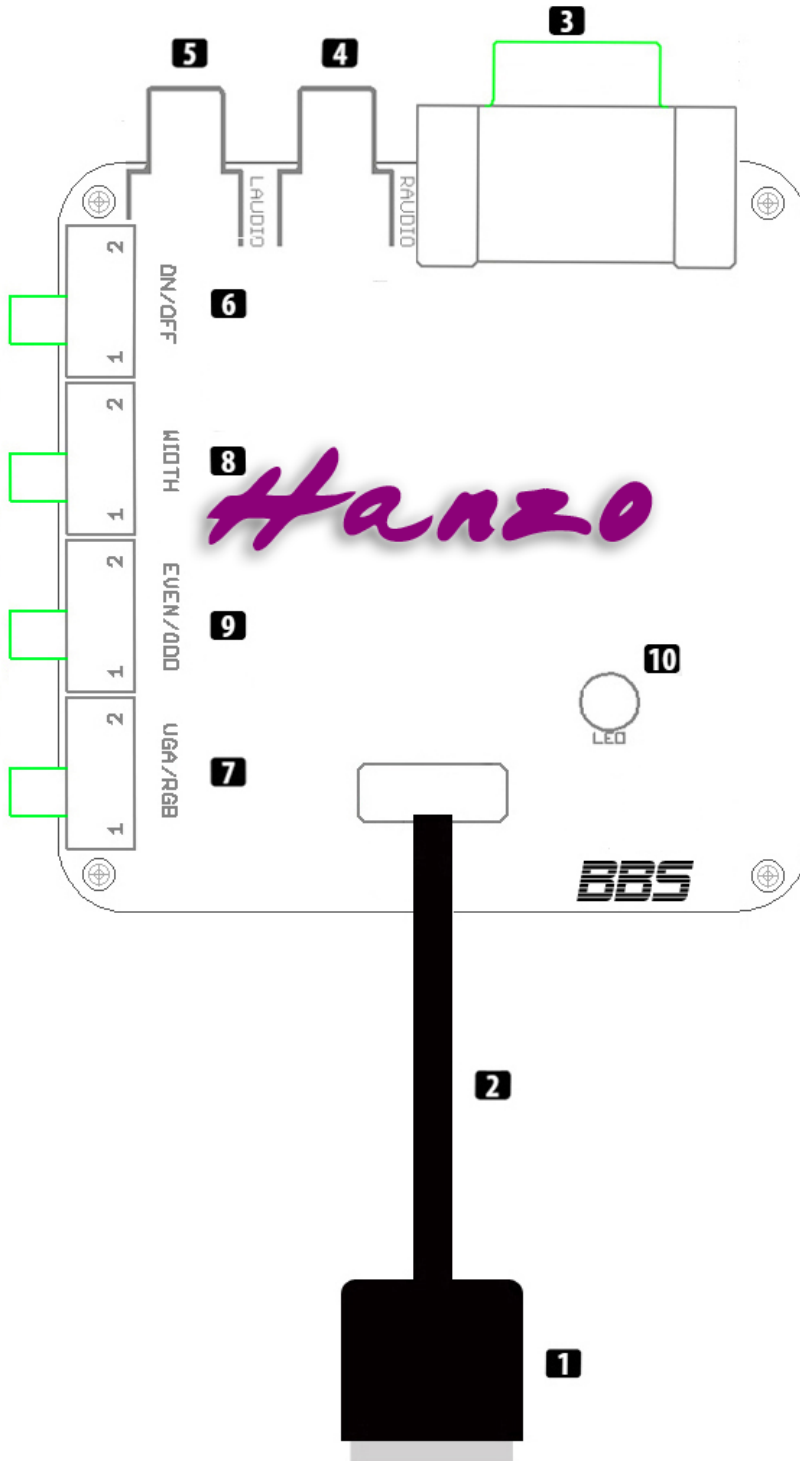# THE ULTIMATE DREAMCAST VGA BOX WITH SCANLINER

INSTRUCTION MANUAL

Thank you very much for purchasing this product and supporting the legendary Dreamcast console. Please read this manual before use and retain it for future reference.

Introduction

Hanzo is a Dreamcast VGA box with built-in scanline generator. Dreamcast natively supports VGA output mode however you need a special cable to enable it. So you can enjoy your favourite arcade games in higher (480p) resolution on VGA monitors, modern displays like plasma and lcd screens. Hanzo has another built-in feature called Scanliner, which adds scanlines effect to your display.

This product is designed and manufactured by Team Beharbros, Dreamcast is a trademark of Sega Enterprises Ltd.

Specifications

1. Supports resolutions up to 480i/480p.

2. RGB/VGA switch to select the 15khz RGB mode or the 31khz VGA mode.

3. VGA female connector (HD15) for connecting to your video display.

4. High quality Stereo RCA audio output jacks for plugging to a Hi-Fi system(amplifier) or TV.

5. Scanliner ON/OFF switch to turn it on or off.

6. Scanliner Width switch for selecting thin or thick scanlines for a resolution like

    640x480(default) or 1024x768 when upscaling.

7. Scanliner Even/Odd switch for selecting even or odd scanlines.

8. Luminosity adjustment as a bonus feature.

9. Blue power led.

10. High quality custom made Dreamcast audio/video cable.

11. Durable plexi case with laser etched Hanzo logo.

12. Small form factor: 2.9x2.9x0.78 inches or 7.5x7.5x2 cms, around 100 grams or 3.5 ounces.

Parts

* Parts list as figured on the 2nd page.

1. Dreamcast AV plug

2. Dreamcast AV cable

3. Female VGA port (HD15) for video output

4. Right Audio output jack.

5. Left Audio output jack.

6. Scanliner feature ON/OFF switch to turn it on or off.

7. VGA/RGB mode select switch. (15/31khz)

8. Scanliner Width Select switch for selecting thin or thick scanlines.

9. Scanliner Even/Odd Select switch for selecting even or odd scanlines.

10. Blue power led

PRIMARY INSTRUCTIONS

1. **Make sure your TV and Dreamcast is turned off**

2. **Connect your Hanzo's Dreamcast AV plug (1) to your console's AV port on the back.**

3. **Connect your VGA cable (male to male, not included) between your Hanzo (3) and your display (plasma, LCD, monitor etc.)**

4. **Connect your RCA audio cables to your Hanzo (4 & 5). You can get stereo sound from your TV or an amplifier for a better gaming experience. You should turn off your stereo system (amplifier) before connecting your cables to eliminate the risk of damaging your speakers.**

5. **Adjust the settings (RGB mode/scanlines) you prefer by the help of switches.**

6. **Turn on your TV and Dreamcast (amplifier too) and enjoy your VGA box with different settings.**

SETTINGS

RGB MODE

RGB mode can be set by the help of RGB/VGA Switch (6). When it's in position 1, it displays 15khz RGB video, or 480i. If you change it to position 2, it will display 31khz VGA video or 480p. Some games are not compatible with the VGA mode, and the console checks the type of cable plugged while booting, so it refuses to boot if the game doesn't support the VGA mode. To eliminate this problem you can trick the console while booting(after the beep sound) by switching to position 2 (VGA mode). This can work on most of the games, however some games still may not support it, please check the incompatibility list on the web.

SCANLINES ON/OFF

Scanliner function can be turned on or off by the ON/OFF switch (6). When it's in position 2, scanlines will be displayed, when it's switched to position 1, scanlines won't be displayed.
This feature can be used on the fly, however it's recommended to do it while the console is turned off.

SCANLINES WIDTH SELECT

It's possible to change the width of the scanlines, position 2 is the default mode which is thinner scanlines (single line), position 1 is for the thicker scanlines (double lines). When using your Hanzo with upscalers, position 1 can be better for higher resolution(1024x768).

EVEN / ODD SCANLINES

EVEN/ODD switch is used for selecting either even scanlines to be displayed or odd ones according to your preferences.

BONUS MODE : LUMINOSITY ADJUSTMENTAs a bonus feature, while the EVEN/ODD switch is set to position 1, and the scanlines are turned off (position 1) Hanzo can display a darker image without scanlines and when the EVEN/ODD switch is set to position 2 again, it will display in its normal brightness.

WARRANTY

All our products are handmade using high quality imported components. Every component is tested multiple times and chosen carefully for its longevity. When it's totally assembled and ready to use, we test it again for enough time before shipping it. However sometimes malfunctions can be occured because of the workmanship or human errors by usage. We warrant our products to be free of defects in materials and workmanship that result in failure during normal usage for 1 year. In case of a malfunction, we advise you to consult us before trying to repair or replace any component. You can send it back for repair or replacement. However you are free to modify your Hanzo, this doesn't end its warranty. After this duration we will still keep standing back of our products, even they are discontinued. Because your satisfaction is too important for us.

THANKS

SEGA, for creating this awesome console!

All the Dreamcast scene supporting this legendary console from the day one :
sites, modders, everyone...

Our friends and family for always believing and supporting us.

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