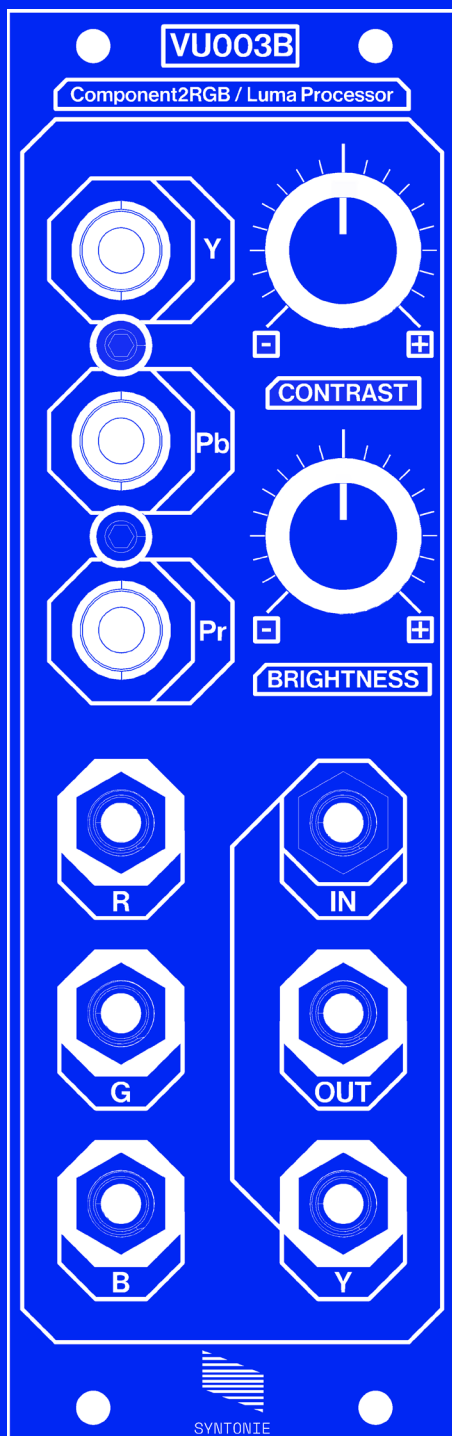
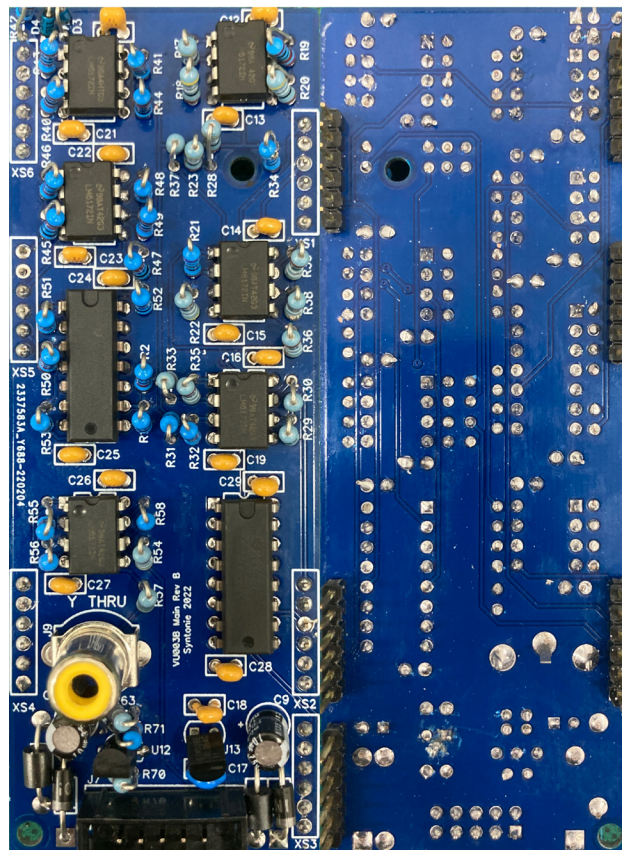


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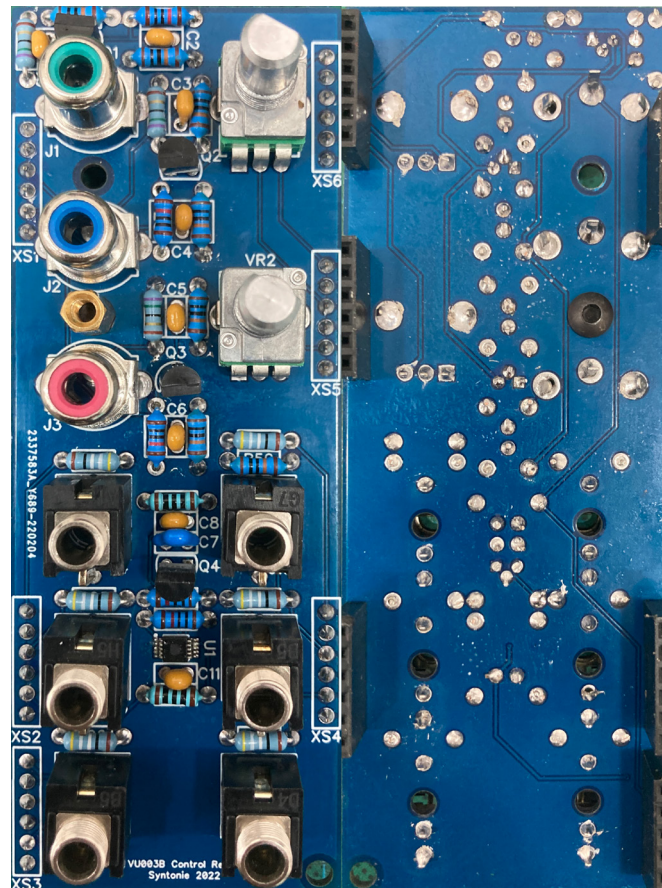


■ [Use the interactive BOM regarding component placement](#) / [Find the BOM here](#)

Place and solder the components in the following order:

- **1** Capacitors ([pay attention to the orientation of the electrolytic capacitors](#))
- **2** Resistors ([be careful not shorting leads as resistors are standing vertically](#))
- **3** Diodes ([pay attention to the orientation](#))
- **4** Ferrites
- **5** IC sockets/ICs /Regulators ([pay attention to the orientation](#))
- **6** 6-pin headers([check exploded view at the end of the document for orientation](#))
- **7** 10-pin power connector ([pay attention to the orientation](#))
- **8** RCA socket ([picture shows RCJ-024 \(Yellow RCA\), the BOM/kit includes RCJ-021 \(Black RCA\)](#))

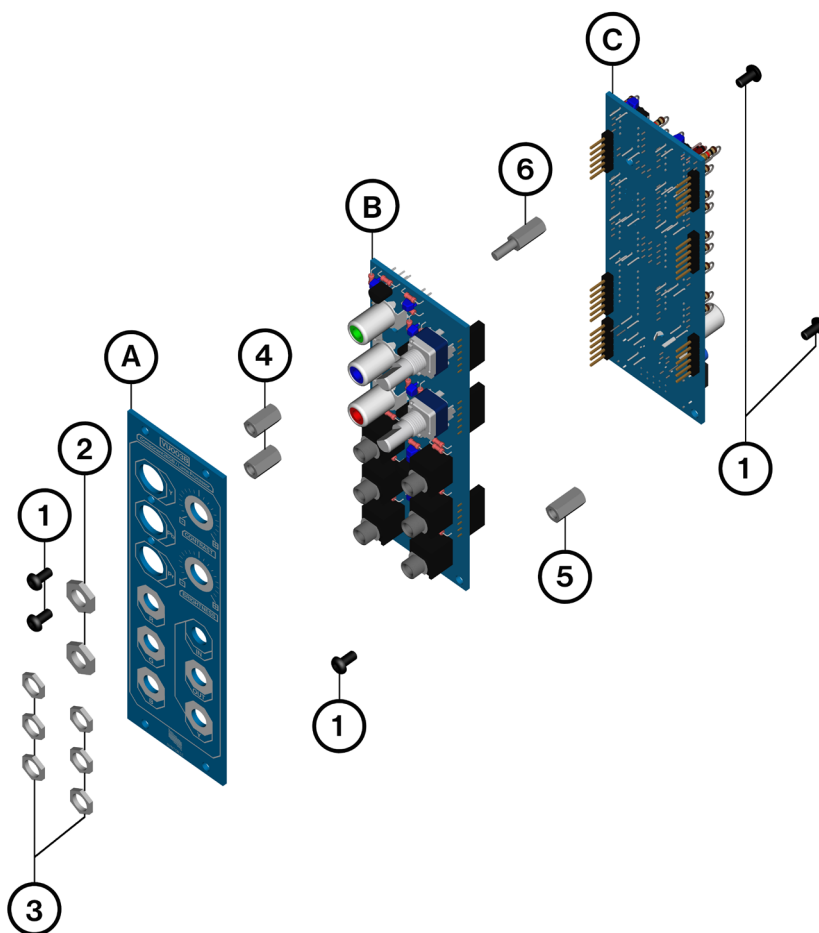
Note: Pay no attention to the reference designators on the picture of the board, it is an older revision so the board released has different reference designators, though the component placement is the same (check the BOM/iBOM).



■ [Use the interactive BOM regarding component placement](#) / [Find the BOM here](#)

Place and solder components in the following order:

- **1** Resistors
- **2** Capacitors
- **3** Transistors (**pay attention to the orientation**)
- **4** 6-pin sockets (**check exploded view at the end of the document for orientation**)
- **5** Jacks, RCA sockets
- **6** Potentiometers



- (A) Front panel
- (B) Control board
- (C) Main board

- (1) 6mm M3 screw
- (2) Potentiometer nuts
- (3) 3.5mm jack nuts
- (4) 10mm M3 FF spacer
- (5) 11mm M3 FF spacer
- (6) 11mm M3 MF spacer

- **Rev B**: initial release

References

- Video Demystified Fourth Edition – YCbCr Color Space, p.17
http://www.r-5.org/files/books/computers/algo-list/compression/Keith_Jack-Video_Demystified-EN.pdf
- Linear Technology Application Note 57 – Video Circuit Collection - Color Matrix Conversion, Figure 19
<https://www.analog.com/media/en/technical-documentation/application-notes/an57fa.pdf>
- elm-chan.org - YUV2RGB
<http://elm-chan.org/works/yuv2rgb/rw/yuv2rgb3.png>
- LZX - Cadet Video Input
<https://github.com/lzxindustries/lzxdocs/blob/master/Cadet%20III%20Video%20Input/Cadet%20III%20Video%20Input%20Schematics.pdf>
- LZX – Reference Designs
<https://github.com/lzxindustries/lzxdocs/blob/master/Reference%20Designs/LZX%20Interface%20Examples%20RevA.pdf>

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