



For additional information, please visit the Bybee web site at www.BybeeLabs.com

We recommend the following distributors for parts & accessories.

USA

Michael Percy Audio

<http://www.percyaudio.com/Catalog.pdf>

CANADA

Parts Connexion

http://www.partsconnexion.com/resistors_mills_mra5.html

UNITED KINGDOM

Audiocom International Ltd

<http://www.audiocominternational.com>

Power Resistors (R1)* Available from Distributors listed above.

For power resistors we recommend Caddock, Vishay, and Mills, available from the distributors listed above. Alternates listed below.

For power resistors up to 3W we recommend the following series:

<http://www.vishay.com/docs/28729/28729.pdf>

For power resistors up to 5W:

<http://www.koaspeer.com/products/resistors/leaded-resistors/mos/>

For power resistors up to 20W:

http://www.ohmite.com/catalog/pdf/200_series.pdf

For non-inductive power resistors up to 50W:

<http://www.percyaudio.com/Catalog.pdf>

For vertical mounting types:

http://www.ohmite.com/catalog/pdf/tww_twm_series.pdf

* To select R1 from a table, see app note J0413: R1 Selection Chart.
To calculate R1 see Bybee Technical Data

Capacitors (C1) Available from distributors listed above.

For noise drain capacitors (C1) we recommend the following: any wideband or low-inductance 1uF film caps rated for the rail voltage. For compact high-voltage applications we recommend Solen "Fast Cap" polypropylenes. These are rated at 250V, 400V, or 630V. Specifications can be found at <http://www.solen.ca/pdf/solen/fastcap.pdf>

Other caps may be used, but to obtain maximum noise drain bandwidth, they should be low-inductance film types.

Zener Diodes (D1, D2)

24V, 1W zener diodes (D1 & D2) are common and can be found almost anywhere. The generic part number is 1N4749A.

Terminal Strips Available from distributors listed above.

For terminal strips we recommend Grennan, IAG, and Yammamoto. Available from the recommended distributors listed at the top of this sheet.

For compact layouts we recommend the 3000 series from HH Smith (now Abbatron). This strip has a top & bottom thru-hole on every contact, which allows component stacking & staggering. The contact count is built into each part number, e.g., 3003, 3004, 3005, etc. The 3006 can be seen at <http://www.abbatron.com>

We recommend the 3008 or 3010 (10-lug) when stringing 20W resistors in series for voltages above 300V (see app note J0417: >300V Supply). All of these strips, and other electronic hardware, are available from: <http://www.electronichardware.com>

For the most compact layouts vertical strips can be used. These have become nearly obsolete, but are currently available from Antique Audio Supply. They carry a 3-lug vertical terminal strip (P-0300V). This can be cut down to 2 or 1 as necessary. Go to: <http://tubesandmore.com/>

Mounting Hardware

Fasteners for mounting are typically 4-40 or M3 and are available from McMaster-Carr at: <http://www.mcmaster.com>

Fasteners & Standoffs

Below are some typical SAE fasteners & standoffs suitable for mounting Music Rails, along with their

McMaster part numbers:

- 1 [92311A108](#) 1 Pack Type 18-8 Ss Cup Point Socket Set Screw, 4-40, 3/8" L
- 2 [92311A110](#) 1 Pack Type 18-8 Ss Cup Point Socket Set Screw, 4-40, 1/2" L
- 3 [92311A107](#) 1 Pack Type 18-8 Ss Cup Point Socket Set Screw, 4-40, 5/16" L
- 4 [92510A030](#) 100 Ea Aluminum Unthreaded Round Spacer, 1/4" Od, 5/32"L, #4
- 5 [92510A420](#) 100 Ea Aluminum Unthreaded Round Spacer, 1/4" Od, 1/8"L, #4
- 6 [91251A113](#) 2 Packs Black-oxide Socket Head Cap Screw, 4-40, 3/4" L
- 7 [91770A096](#) 1 Pack 18-8 Ss Truss Head Phillips Machine Screw, 4-40, 1/2" L
- 8 [91770A113](#) 1 Pack 18-8 Ss Truss Head Phillips Machine Screw, 4-40, 3/4" L
- 9 [93330A463](#) 10 Each Alum Threaded Round Standoff, 1/4" Od, 2" L, 4-40
- 10 [93330A439](#) 10 Each Alum Threaded Round Standoff, 1/4" Od, 1" L, 4-40
- 11 [93330A437](#) 10 Each Alum Threaded Round Standoff, 1/4" Od, 3/4" L, 4-40
- 12 [93330A462](#) 10 Each Alum Threaded Round Standoff, 1/4" Od, 1-1/2" L, 4-40
- 13 [93330A435](#) 10 Each Alum Threaded Round Standoff, 1/4" Od, 1/2" L, 4-40
- 14 [91757A101](#) Internal-Tooth Lock Washer #4, .27" OD, packs of 100
- 15 [95584A200](#) External-Tooth Lock Washer #4, 0.26" OD, packs of 100

Demo Strap

Our recommended bypass strap for before & after demos is made by E-Flite:

<http://www.e-fliterc.com/Search/Default.aspx?SearchTerm=ec3+connector>

These 60A twin connectors can be clipped in half, giving two straps, or used in parallel.

The part numbers for pre-made 13AWG mating connectors are:

EFLAEC304

EFLAEC305

The part numbers for pre-made 16AWG mating connectors are:

EFLAEC309

EFLAEC310

If you need additional help, please e-mail techsupport@bybeelabs.com

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MUSIC RAILS are manufactured in the United States.

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