

| Designator | Footprint | LibRef | Value | Count | Conrad | | Display | | Farnell | |
|---|--------------|----------------------------|-------|-------|-------------|--------|----------------|-------|---------|--------|
| | | | | | Art.nr. | Price | Art.Nr. | Price | Art.Nr. | Price |
| Q5P, Q6P | TO92 | BC327 | | 2 | 154563 - 89 | € 0.18 | 01.40.BC327.25 | | 1097285 | € 0.07 |
| Q1D, Q1P, Q2P, Q2D | TO92 | BC337 | | 4 | 154598 - 89 | € 0.18 | 01.40.BC337.25 | | 8734666 | € 0.11 |
| C10P, C11P, C16P, C17P, C22P | CAPRAD-RM3.5 | Cap Pol1 | 100uF | 5 | 442055 - 89 | € 0.12 | 81.01.100U.35 | | 1144627 | € 0.32 |
| C3D | CAPAX-RM15 | Cap Pol1 | 22uF | 1 | 471658 - 89 | € 0.30 | 81.00.22U.35 | | 9418890 | € 0.16 |
| C12P, C13P, C14P, C15P, C18P, C19P, C20P, C21P | CAPRAD-RM5 | Cap Pol1 | 470uF | 8 | 446134 - 89 | 1.26 | 81.01.470U.35 | | 1144629 | € 0.68 |
| Or alternative: | | | | | 441987 - 89 | € 0.15 | | | | |
| C5P | CAPRAD-RM2.5 | CapCer | 100nF | 1 | 453099 - 89 | € 0.29 | 81.15.100N | | 1200403 | € 0.39 |
| C1L, C1R, C2L, C2P, C2R, C4P, C7P, C9P | CAPRAD-RM2.5 | CapCer | 10nF | 8 | 453064 - 89 | € 0.21 | 81.15.10N | | 1216435 | € 0.18 |
| C1D, C1P, C2D, C3P, C6P, C8P, C23P, C24P, C25P, C26P, C27P, C28P | CAPRAD-RM2.5 | CapCer | 47nF | 12 | 453080 - 89 | € 0.26 | 81.15.47N | | 1216437 | € 0.18 |
| C30P, C33P, C35P, C37P | CAP-MKS-RM5 | CapMKS | 1nF | 4 | 450320 - 89 | € 0.27 | 81.40.1N.100 | | 1005992 | € 0.28 |
| C29P, C31P, C32P, C34P, C36P, C38P | CAP-MKS-RM5 | CapMKS | 1uF | 6 | 450481 - 89 | € 0.84 | 81.40.1U.63 | | 1006040 | € 1.42 |
| Or alternative: | | | | | 450306 - 89 | € 1.23 | | | | |
| C39P | CAP-MKS-RM5 | CapMKS | 330nF | 1 | 455423 - 89 | € 0.55 | 81.40.330N.63 | | 1166040 | € 0.28 |
| D9P, D10P, D1D, D2D, D3D, D4D | DIO-RM4 | Diode 1N4148 | | 6 | 162280 - 89 | € 0.05 | 1.60.1N4148 | | 9843680 | € 0.01 |
| D1P, D2P, D3P, D4P, D5P, D6P, D7P, D8P | DIO-RM4 | Schottky rectifier MBR1100 | | 8 | 163680 - 89 | € 0.15 | 01.60.STPS2H1 | | 4897432 | € 0.08 |
| L1D, L2D | DIL10 | 7-segment CA ('c' at pin7) | | 2 | 156389 - 89 | € 1.15 | 71.50.4801RD | | 1241271 | € 1.38 |
| J3D | SIL2 | Header 2, 0.1" pitch | | 1 | | | 05.58.202 | | 1056394 | € 0.23 |
| Or alternative: | | | | | 744018 - 89 | € 0.81 | 05.88.1336 | | 588398 | € 0.17 |
| J1P, J2P | SIL4 | Header 4, 0.1" pitch | | 2 | | | 05.58.204 | | 588490 | € 0.57 |
| Or alternative: | | | | | | | | | 588416 | € 0.52 |
| J1D, J2D | SIL5 | Header 5, 0.1" pitch | | 2 | 741230 - 89 | € 1.54 | 05.58.205 | | 588507 | € 0.75 |
| Or alternative: | | | | | | | | | 588428 | € 0.65 |
| Q3P, Q4P | TO92 | J310 | | 2 | 160822 - 89 | € 1.29 | 01.40.J310 | | 1364035 | € 0.18 |
| L1P | RM2.5 | LED1 | | 1 | 184376 - 89 | € 0.11 | 71.54.2014RD | | | |
| U1L, U1R, U1P, U2P | DIP8 | LM4562 | | 4 | NA | | NA | | NA | |
| U6P | TO220-flat | L4940V5 | | 1 | 156045 - 89 | € 1.67 | 01.00.4940.50 | | 1077215 | € 0.80 |
| U5P | TO220-flat | LM7812CT | | 1 | 179230 - 89 | € 0.58 | 01.00.7812.80 | | 9666109 | € 0.53 |
| U1D, U2D | DIP18 | PIC16F819-I/P | | 2 | | | | | | |
| R5D, R6D | SIL8 | Bourns 4608X-102-221 | 220R | 2 | | | 51.76.220E | | 9356584 | € 0.28 |

| | | | | | | | | | |
|---|---------------------|--------------------------|--------------------------|----|-------------|--------|---------------|-------------------------|--------|
| J1L, J1R, J2L, J2R, J3L, J3R | Cinch | Wire to chassis | | 6 | | | | | |
| R1D, R15P, R1P, R20P, R24P, R28P, R30P, R8P, R9P | AXIAL-0.4 | Res1 | 100R | 9 | 403920 - 89 | € 0.02 | 51.04.100E | 9339043 | € 0.02 |
| R12P, R16P, R19P, R31P, R6P | AXIAL-0.4 | Res1 | 1K (1%) | 5 | 408166 - 89 | € 0.02 | 51.11.1K | 9341102 | € 0.03 |
| R10P, R17P, R23P, R26P, R2P | AXIAL-0.4 | Res1 | 1K5 | 5 | 404063 - 89 | € 0.02 | 51.04.1K5 | 9339183 | € 0.02 |
| R11P, R14P, R21P, R3P | AXIAL-0.4 | Res1 | 2K2 | 4 | 404080 - 89 | € 0.02 | 51.04.2K2 | 9339302 | € 0.02 |
| R22P, R4P | AXIAL-0.4 | Res1 | 330R | 2 | 403989 - 89 | € 0.02 | 51.04.330E | | |
| R18P, R25P, R29P, R5P | AXIAL-0.4 | Res1 | 3R3 | 4 | 404560 - 89 | € 0.02 | 51.04.3E3 | | |
| R27P | AXIAL-0.4 | Res1 | 47R | 1 | 403881 - 89 | € 0.02 | 51.04.47E | 9339523 | € 0.02 |
| R13P, R2D, R3D, R4D, R7P | AXIAL-0.4 | Res1 | 5K6 (1%) | 5 | 408255 - 89 | € 0.02 | 51.11.5K6 | 9342060 | € 0.03 |
| R13L, R13R, R16L, R16R, R18L, R18R, R32L, R32R | AXIAL-0.7 | Res2 | 100K | 8 | 419800 - 89 | € 0.15 | 51.14.100K | 9339795 | € 0.04 |
| R15L, R15R, R20L, R20R | AXIAL-0.7 | Res2 | 100R | 4 | 419443 - 89 | € 0.15 | 51.14.100E | 9339760 | € 0.04 |
| R10L, R10R, R29L, R29R | AXIAL-0.7 | Res2 | 10K (11K) | 4 | 419680 - 89 | € 0.15 | 51.14.10K | 9339850 | € 0.04 |
| R22L, R22R, R3L, R3R | AXIAL-0.7 | Res2 | 10K | 4 | 419680 - 89 | € 0.15 | 51.14.10K | 9339787 | € 0.04 |
| R27L, R27R, R8L, R8R | AXIAL-0.7 | Res2 | 15K | 4 | 419702 - 89 | € 0.15 | 51.14.15K | 9340009 | € 0.04 |
| R28L, R28R, R9L, R9R | AXIAL-0.7 | Res2 | 15K (13K) | 4 | 419702 - 89 | € 0.15 | 51.14.15K | 9339957 | € 0.04 |
| R24L, R24R, R5L, R5R | AXIAL-0.7 | Res2 | 2K2 | 4 | 419605 - 89 | € 0.15 | 51.14.2K2 | 9340203 | € 0.04 |
| R12L, R12R, R31L, R31R | AXIAL-0.7 | Res2 | 2K7 | 4 | 419613 - 89 | € 0.15 | 51.14.2K7 | 9340319 | € 0.04 |
| R25L, R25R, R6L, R6R | AXIAL-0.7 | Res2 | 27K | 4 | 419737 - 89 | € 0.15 | 51.14.27K | 9340327 | € 0.04 |
| R17L, R17R, R1L, R1R | AXIAL-0.7 | Res2 | 2K21 | 4 | 419591 - 89 | € 0.15 | 51.14.1K8 | 9340106 | € 0.04 |
| Or alternative: | | | 2K21/4K42 can be 1K8/3K6 | | | | | | |
| R11L, R11R, R23L, R23R, R30L, R30R, R4L, R4R | AXIAL-0.7 | Res2 | 47K | 8 | 419761 - 89 | € 0.15 | 51.14.47K | 9340637 | € 0.04 |
| R19L, R19R, R34L, R34R | AXIAL-0.7 | Res2 | 4K42 | 4 | 408654 - 89 | € 0.02 | 51.11.3K6 | 9340475 | € 0.04 |
| Or alternative: | | | 2K21/4K42 can be 1K8/3K6 | | | | | | |
| R26L, R26R, R7L, R7R | AXIAL-0.7 | Res2 | 5.6K | 4 | 419656 - 89 | € 0.15 | 51.14.5K6 | 9340734 | € 0.04 |
| R21L, R21R, R2L, R2R | AXIAL-0.7 | Res2 | 82K | 4 | 419796 - 89 | € 0.15 | 51.14.82K | 9340955 | € 0.04 |
| S1D | RotarySwitch | Alps STEC11B03 | | 1 | 700697 - 89 | € 5.70 | 03.49.770 | 1367413 | € 1.29 |
| | Or: Piher ci-11 | Or: DDM Hopt-Schuler 427 | | | 705594 - 89 | € 7.15 | | | |
| | HQ non-print-mount: | Alps RK097-10ELC07 | | | | | | | |
| U3D | SFH | SFH5110/TSOP4838 | | 1 | 156406 - 89 | € 1.36 | 01.00.5110.38 | 4913190 | € 1.15 |
| U3P, U4P | TO92 | TL431ACL P | | 2 | 155635 - 89 | € 0.15 | | 9593543 | € 0.29 |
| | | TL431CLP | | | 155641 - 89 | € 0.15 | 01.00.431.51 | | |
| K1, K2, K3, K4L, K4R, K5L, K5R, K6L, K6R, K7L, K7R, K8L, K8R, K9L, K9R, K10L, K10R, K11L, K11R, K12L, K12R, K13L, K13R | DIL10 | TQ2-12VDC | | 23 | 505036 - 89 | € 3.11 | 03.20.512' | 1200949 | € 4.01 |

| | | | | | | | | |
|-------------------------------------|------------|-------------------|-----|-------------|----------|---------------|---------|----------|
| U4D, U5D | DIP16 | ULN2003A | 2 | 177970 - 89 | € 1.25 | 01.00.2003.90 | 1077215 | € 0.80 |
| J4L, J4R, J5L, J5R, J6L, J6R | XLR Female | Neutrik NC3FAH1 | 6 | | | 05.03.383' | 724518 | € 1.28 |
| Or alternative: | | Neutrik NC3FAAH-0 | | | | | 1310009 | € 0.56 |
| J7L, J7R | XLR Male | Neutrik NC3MAH | 2 | | | 05.03.483' | 724543 | € 1.04 |
| Or alternative: | | Neutrik NC3MAAV-1 | | | | | 1310056 | € 0.63 |
| Optional IC socket | 8-pin DIL | | 4 | 189600 - 89 | € 0.29 | | 1103844 | € 0.43 |
| Optional IC socket | 16-pin DIL | | 2 | 189626 - 89 | € 0.46 | | 1103846 | € 0.72 |
| Optional IC socket | 18-pin DIL | | 2 | 189634 - 89 | € 0.52 | | 1103847 | € 0.77 |
| Sum PCB components: | | | 228 | | € 129.93 | | | € 140.12 |
| | | | | | Inc. btw | | | ex.btw |

Miscellaneous options, not on PCB:

| | | | | | | | | |
|---------------------------------------|---|-----------------|--|-------------|---------|---------------|---------|---------|
| Trafo 2x18V | (for an over-powered transformer, choose 2x15V) | | | 506443 - 89 | € 5.45 | 02.04.15.15 | 4334279 | € 9.60 |
| Trafo 2x7V | (for an over-powered transformer, choose 2x6V) | | | 506419 - 89 | € 5.45 | 02.04.15.6 | 9531572 | € 12.86 |
| Neutrik Cableplug Male Gold | | Neutrik NC3MXXB | | 736989 - 89 | € 3.58 | 05.03.203G | 9991816 | € 3.17 |
| Neutrik Cableplug Female Gold | | Neutrik NC3FXXB | | 736951 - 8A | € 4.09 | 05.03.103G | 9991786 | € 3.55 |
| XLR microphone cable | | | | 302791 - 8A | € 1.57 | 05.22.C208ZW | 3855570 | € 3.39 |
| | | | | 603774 - 89 | € 15.34 | 05.22.C208RD | | |
| Cinch connector chassis Red | | | | 731085 - 8A | € 1.32 | 05.06.515RD.G | 5008529 | € 0.84 |
| Cinch connector chassis Black | | | | 731071 - 8A | € 1.32 | 05.06.515ZW.G | 5008517 | € 0.84 |
| Power switch relay (250V, 12A) | | Coil 12Vdc | | 504742 - 89 | € 5.62 | 03.02.5012' | 9659234 | € 2.15 |
| Red plexiglass window | | | | 530700 - 89 | € 0.76 | | | |

Conrad is found at <http://conrad.com> and a set of per-country websites through Europe. Unfortunately, it seems that some country-sites show only a reduced set of articles.

Farnell is found at <http://www.farnell.com/>, also with a whole set of country-specific sites. Their website seems to discourage direct sales to private end-users, although in my experience they still support that for a properly sized order under advance payment.

Display is found at <http://www.display.nl>, and allows to order components through different shops in the Netherlands. I did not list prices, since the prices on the website are shop buying price and not end-user price.

Please regard this table only as helping guide for choosing your own components. I cannot take responsibility for the correctness of the shop component article numbers. The mentioned prices are to be considered as rough indication only, as these will change over time. Of course I welcome corrections to this table.

Note that the component selection in different shops results in different types. A direct shop price-level comparison from this table is not fair because of my personal preference to always choose the best quality components. Also, some (low cost) components are only available in larger quantities, which is not accounted for in above table.

The PIC 16F819 microcontrollers need to be programmed with the firmware for this preamp design. Upon request I can send pre-programmed parts. I do not intend to make their firmware available.

Success,

Jos van Eijndhoven

03/12/2008