

ELEX K2

(Hohner Stringvox)



(revision 3)

Drawings, Schematics, & Notes

electropict

Version 1.3, 2024-01-11

The **K2** is an electronic piano & strings keyboard produced in different versions between 1975 and about 1980. It was designed and manufactured by *ELEX S.p.A.*, a company owned by *Excelsior*, a musical instruments manufacturer based in Castelfidardo, Ancona, Italy.

Excelsior, who had mostly produced acoustic and electromechanical instruments, appear to have set up ELEX (*Eletronica Excelsior*) as an electronics division some time prior to 1975. Products included electronic pianos and organs as well as string machines. It was closed down as a separate entity around 1980 or shortly thereafter, and their last K2s were sold under the Excelsior brand. Excelsior did continue to produce some electronic instruments, and the K2 was replaced with the EK2 before they exited the market along with most other European manufacturers during the mid-1980s.

Throughout its production the K2 was also sold in many other countries by Hohner, under their *Hohner International* brand, using the model name *Stringvox*. The majority of surviving K2s appear to be Hohner-branded. Some were also produced with the badge *String Orchestra*; available information about who sold these, when, or where, is uncertain. (It has been suggested by multiple sources that they were sold by Farfisa, but no documentary evidence has been cited.)

The K2 followed the earlier ELEX K1 electronic piano, and incorporates parts of its circuit design. It was followed in the series by the K3 piano/organ and the K4 string machine. (The K4 is basically a smaller and simpler version of the K2 strings section.) The K1, K2, and K4 were re-released with significant design updates in 1979. [1]



'Silvertop String Orchestra'

The K2 has at least three distinct versions (based on circuitry and/or structural but not cosmetic changes). The original and the rev.2 were sold as 'String Orchestra', some of which were clad in wood rather than tolex. Rev.2 moved the pedalboard connector and trimmer from the underside to the rear panel and introduced a mains power socket. Rev.3 is the 1979 model, and incorporates significant case and circuit changes to earlier versions.

(*n.b.* if new information comes to light about the history of the K2, further revisions may need to be added; rev.3 may become a rev.4, for example.)

As original schematics for the K2 seem rare to the point of unavailability, and may not entirely cover rev.3, these **drawings** and **schematics** have been compiled as part of a repair undertaken by the drafter. [2] They are made available to anyone who's interested, under the [Creative Commons BY-NC-SA 4.0 licence](#). [3]

The drawings are compiled as a multilayer PDF. That is, most PDF-reading software will show all layers, but software with layer display (e.g. Adobe Reader, but perhaps not the mobile version) allows individual layers to be switched off. For example, components or text can be hidden in some drawings, and some schematics have colour highlight layers for incoming power and ground. The **terminology** used in these drawings may be a little confusing. The main points to watch for are:

- There are two *strings* voices (in lower case), and one of them is called *Strings* (capitalised). The other is *Cello*.
- The keyboard is split between *bass* (in lower case) and *treble* sections. There is also a *Bass* voice (capitalised). And there is a *Bass Mode* in which the Bass voice can be used, and a Bass output socket. There is also a Full Keyboard Mode in which the bass signals are unified with the treble signals and operated by the treble controls.
- There is an *Ensemble Mode*. Strings keyboards are often called *String Ensembles*, and the chorus effects which largely distinguish them from other instruments may be called *ensemble effects*. But in the K2 (and K4), ELEX used *Ensemble* as the name of a mode which combines multiple octaves of the strings voices. So in these drawings the effect is called *chorus*.

The **drawings** are based on the revision 3 Stringvox. Components found here may not all be original, and the originals may have been what was available, rather than those specified in the original schematics. Or they may have been updated in later revisions. Different K2s had different power ratings on their labels, but it is not currently clear how this relates to circuitry or power supply design.

The more visual drawings are fairly rough tracings from photographs, and prioritise clarity over precision. Proportionally, they are not precisely to scale. Different

versions of original circuit boards may have visibly different components, especially capacitors.

Some information here has been taken from a set of ELEX K4 schematics, where it seems to be relevant. In particular, ELEX appear to have used the term 'Matrix' for different boards which might be called a backpane or motherboard by other manufacturers. But most board titles and many terminal descriptions are the drafter's interpretation.

Where information is available regarding differences from earlier designs, notes have been added. (Further information is welcome.) Nevertheless, the drawings here are only a general guide, and no warranty can be given regarding their accuracy or applicability to a particular repair task.

That said, while the K2 is not the best designed keyboard from the late 1970s, and while care must be taken in handling its unusual weight, it is an interesting and occasionally very musical instrument. Enjoy!

electropict

zasm.earth

[1] For more information about the K1–K4 series see:

zasm.earth/hipstrs

[2] Articles describing the repair start at:

zasm.earth/hohner-stringvox-repair-notes-1

[3] Note however that ELEX and Excelsior are believed to be trademarks of Excelsior and Pignini srl, and Hohner remains a trademark of Hohner Musikinstrumente GmbH & Co. KG.

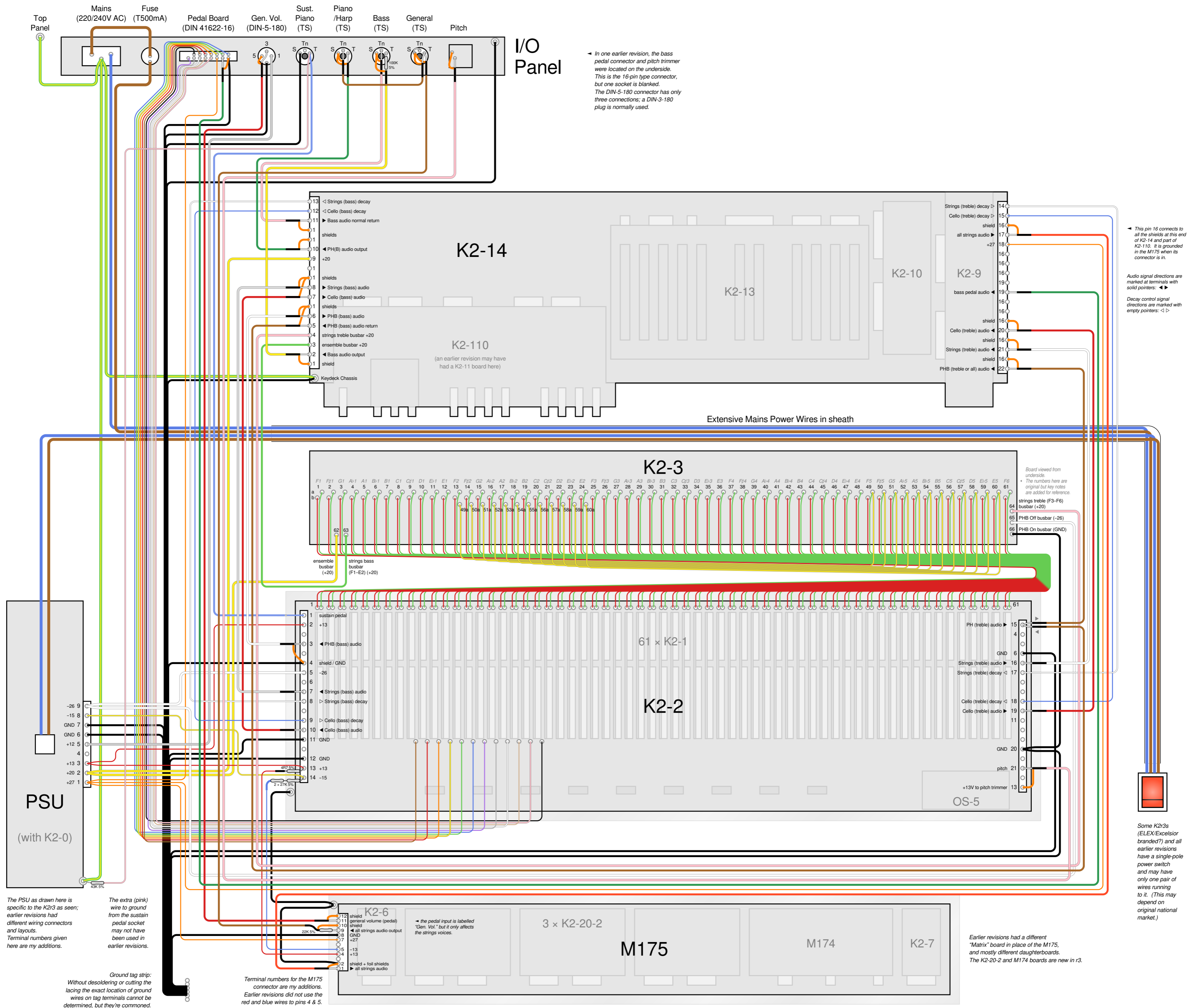
Contents

Introduction.....	2
Contents.....	6
Wiring Diagram.....	7
Tone Signal Route Diagram & Notes.....	8
K2-0 Power Regulator Board..... Drawing.....	9
Power Supply..... Schematic.....	10
K2-1 Voicing Board..... Drawing.....	11
↳ Schematic.....	12
↳ Component Variations.....	13
K2-2 Voicing 'Matrix' Board..... Schematic.....	14
↳ Divider Outputs.....	15
K2-3 Contacts Board..... Schematic.....	16
K2-6 & K2-7 Preampifier Boards..... Schematics.....	17
K2-9 & K2-10 Pianos & Bass Boards..... Drawings.....	18
↳ Schematics.....	19
K2-110 & K2-12 Switching Boards..... Drawing.....	20
↳ Schematic.....	21
K2-13 Control Board..... Drawing.....	22
↳ Schematic.....	23
K2-14 Controls 'Matrix' Board..... Schematic.....	24
K2-20-2 Modulator Board..... Drawing.....	25
↳ Schematic.....	26
M174 Modulation Oscillator Board..... Drawing.....	27
↳ Schematic.....	28
M175 Chorus 'Matrix' Board..... Schematic.....	29
OS-5 Oscillator and TOG Board..... Schematic.....	30

ELEX K2 (Hohner Stringvox) (r3): Wiring Diagram

designed c.1975-79 ELEX S.p.A. (Excelsior)

drawn 2024 electropict



◀ In one earlier revision, the bass pedal connector and pitch trimmer were located on the underside. This is the 16-pin type connector, but one socket is blanked. The DIN-5-180 connector has only three connections; a DIN-3-180 plug is normally used.

◀ This pin 16 connects to all the shields at this end of K2-14 and part of K2-110. It is grounded in the M175 when its connector is in.

Audio signal directions are marked at terminals with solid pointers: ◀ ▶

Decay control signal directions are marked with empty pointers: < >

Board viewed from underside.

- The numbers here are original but key notes are added for reference.
- strings treble (F3-F6) busbar (+20)
- PHB Off busbar (-26)
- PHB On busbar (GND)

The PSU as drawn here is specific to the K2r3 as seen; earlier revisions had different wiring connectors and layouts. Terminal numbers given here are my additions.

The extra (pink) wire to ground from the sustain pedal socket may not have been used in earlier revisions.

Ground tag strip: Without desoldering or cutting the lacing the exact location of ground wires on tag terminals cannot be determined, but they're commoned.

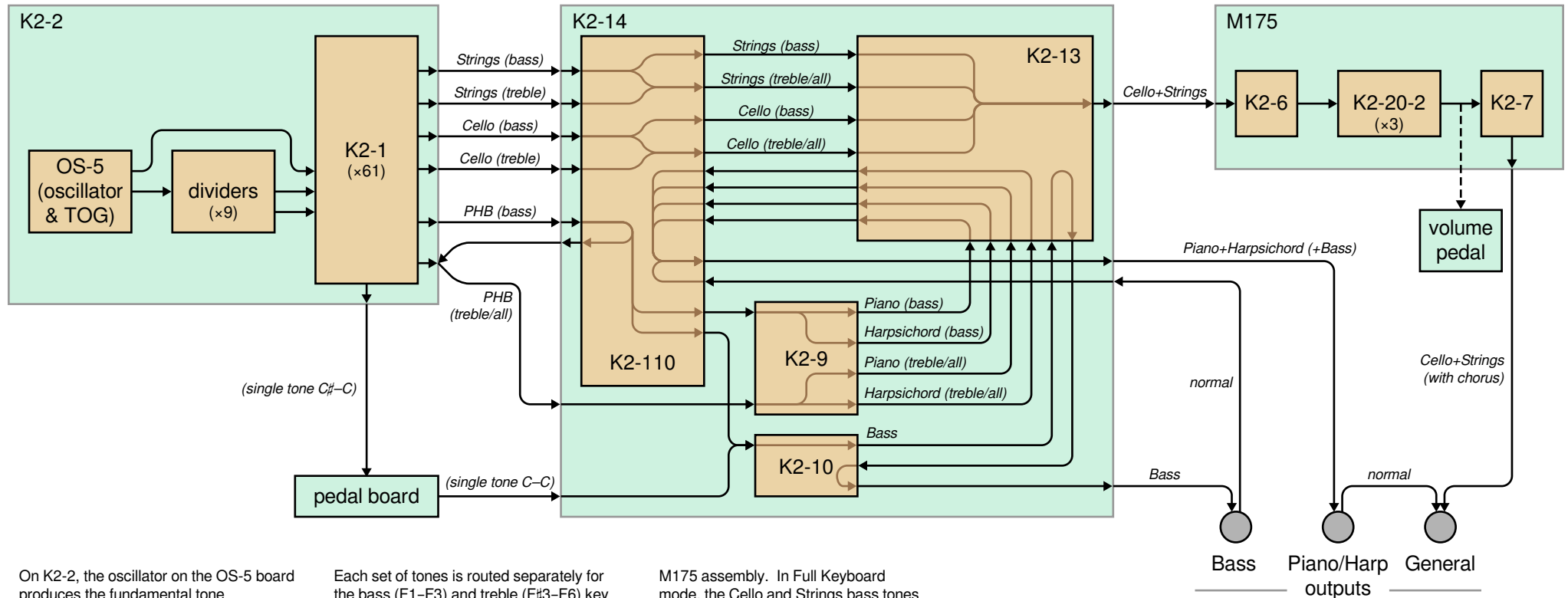
Terminal numbers for the M175 connector are my additions. Earlier revisions did not use the red and blue wires to pins 4 & 5.

◀ the pedal input is labelled "Gen. Vol." but it only affects the strings voices.

Some K2r3s (ELEX/Excelsior branded?) and all earlier revisions have a single-pole power switch and may have only one pair of wires running to it. (This may depend on original national market.)

Earlier revisions had a different "Matrix" board in place of the M175, and mostly different daughterboards. The K2-20-2 and M174 boards are new in r3.

ELEX K2 (Hohner Stringvox) (r3): Tone Signal Route



On K2-2, the oscillator on the OS-5 board produces the fundamental tone (c.667,040Hz) which is divided by the TOG chip to produce the top octave of notes. These are passed directly to some K2-1 boards but are also passed through the divider chain to produce successively lower octaves.

In each K2-1, when a note is triggered by a keypress, a tone and its one-half division are passed on separately as Strings and Cello tones, and the two are combined to produce the basic Piano/Harpsichord/Bass tone (PHB). The tones have their amplitude varied by internal amplifiers controlled by the velocity circuits and sustain pedal (pianos), and decay controls (strings).

Each set of tones is routed separately for the bass (F1–F3) and treble (F#3–F6) key groups. A single tone signal for C#–C is also sent through the pedal board if used.*

The strings tones and PHB bass are sent to the K2-110 board, where, according to switch selection:

- The Cello and Strings tones are grounded or passed to the K2-13 board, where they are mixed, then sent to the

* Only twelve pitches are taken from the K2-2 board and they are a single waveform, IPN C#2–C3. I do not yet know how this is turned into the pedals' thirteen notes; does this pedal board have its own divider circuit?

M175 assembly. In Full Keyboard mode, the Cello and Strings bass tones are combined with the treble tones in the K2-110.

- Normally the PHB bass signal is grounded or passed to the K2-9 board. In Bass mode it is diverted to the K2-10 board, and the Bass voice replaces both pianos and strings voices in the bass range.

The PHB treble signal is sent direct from the K2-1s to the K2-9. In Full Keyboard mode PHB bass is combined with it at the K2-2 output.

In the K2-9 board the signals are filtered producing the Piano and Harpsichord voices, then sent through the bass and

treble Piano and Harpsichord attenuators on the K2-13 board, and back to the K2-110 board for final amplification, then to the Piano/Harp output.

In the K2-10 board the signal is filtered (together with any signal from the bass pedals) producing the Bass voice. It is then sent through its own attenuator on K2-13, returned to K2-10 for final amplification, then to the Bass output.

With no plug in the Bass socket, the signal is returned to the K2-110 and combined with the other pianos voices. With no plug in the Piano/Harp socket,

the pianos signal is combined with the strings voices at the General output.

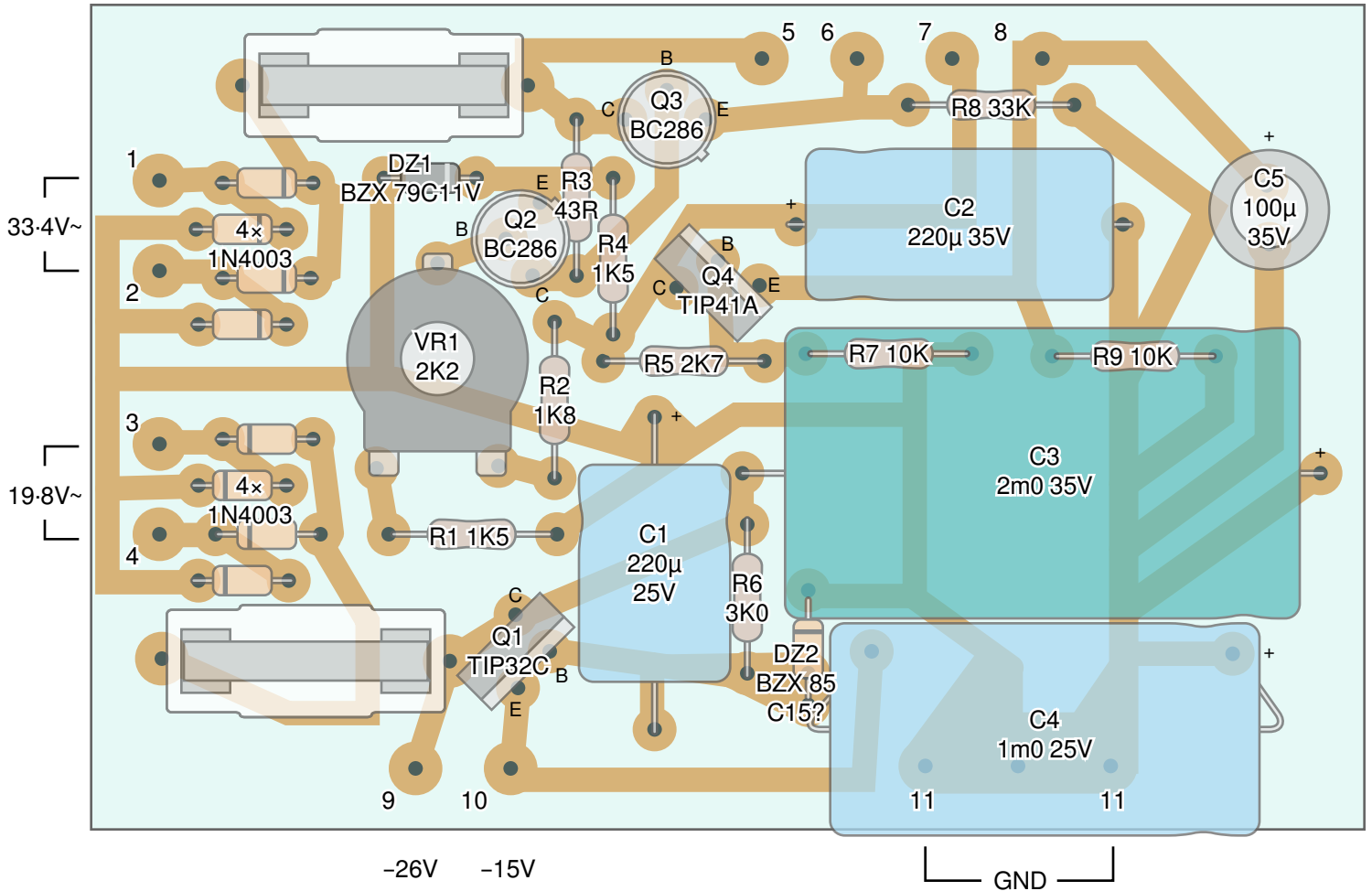
On the M175, the combined strings signal is amplified in the K2-6 and duplicated through the three K2-20-2 boards which each delay the signal by varying amounts. Their combined outputs are attenuated by the volume pedal if used, and the final signal is amplified in the K2-7 board and passed to the General output.

(Earlier revisions used different boards in place of the K2-110, M175, and K2-20-2 but with the same general routing.)

ELEX K2-0 Power Regulator Board: Drawing

components side, shown transparent to circuit side

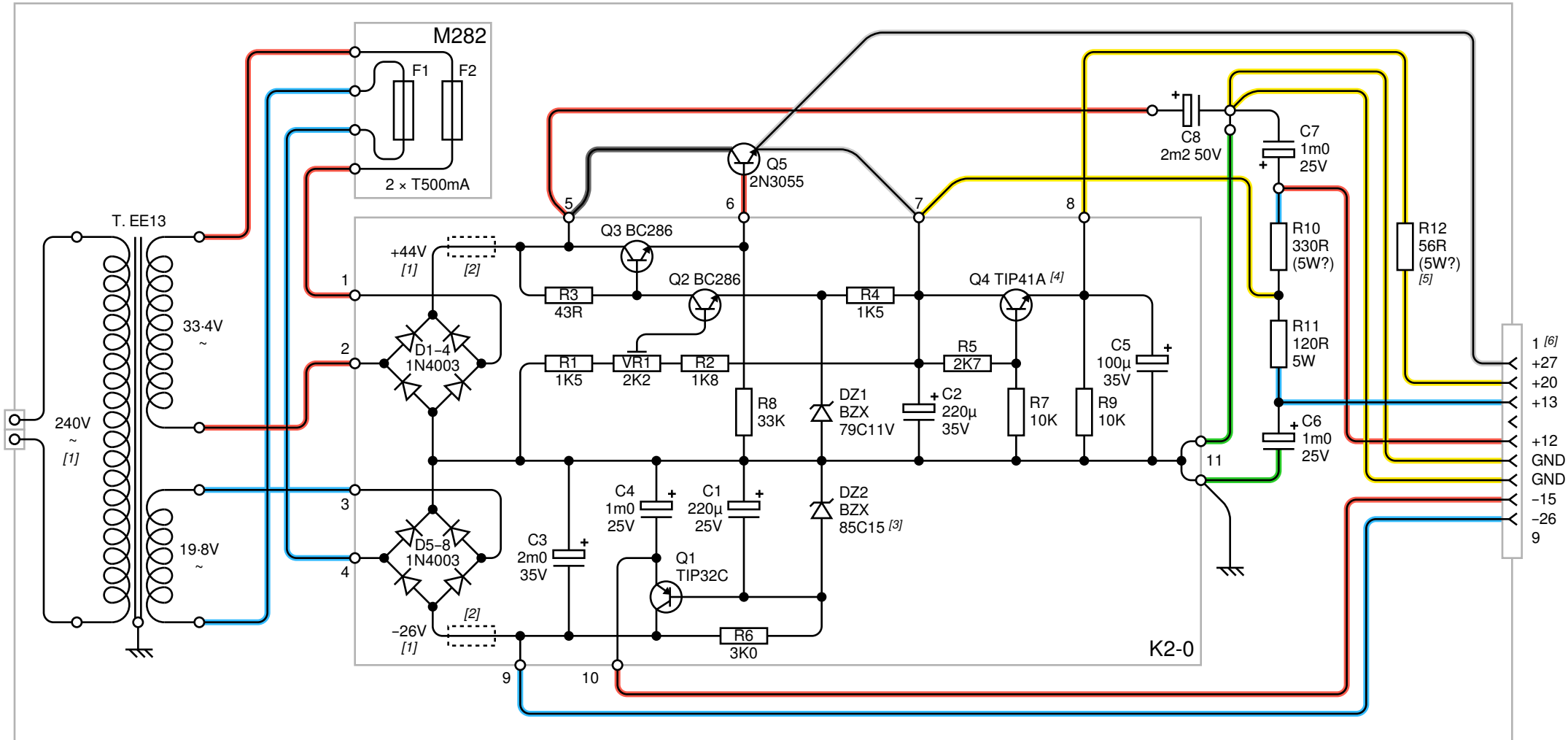
designed ELEX S.p.A. (Excelsior) c.1975–79 | drawn 2024 Electropict



ELEX K2 (Hohner Stringvox) (r3) Power Supply: Schematic

designed ELEX S.p.A. (Excelsior) c.1975–79

drawn 2024 Electropict



Component numbers are assigned arbitrarily in the absence of original schematics, except K2-0 terminal numbers which are as on the board, and the Zener diodes where codes have been copied from the K4 schematic. (Most components on that schematic are not individually numbered.)

Wiring sheath colours are shown as found. (Earlier revisions used different colours.)

It is not certain what the original specification for capacitors was. The installed components vary. Rev.2 information received gives C1 as 35V, C3 as 50V, C6 & 7 as 16V and C8 as 2mF.

[1] The + and - bridge outputs should be proportionately lower with 220V AC in; some K2s were built for 117V and had different transformer connections; the outputs would also be different there.

[2] Earlier revisions had fuses on the K2-0 board after the bridges and did not have the M282 board, but in r3 the fuses have been moved to the outside of the enclosure.

[3] The DZ2 Zener voltage seems to be 15.4, which should make it a BZX 85C15, but the end of the code is not quite legible.

[4] Q4 seems to have been replaced and may not be the original specified part. (The K4 schematic had another BC286, which seems

to have been used in a K2r1; it also had BC160b for Q1.)

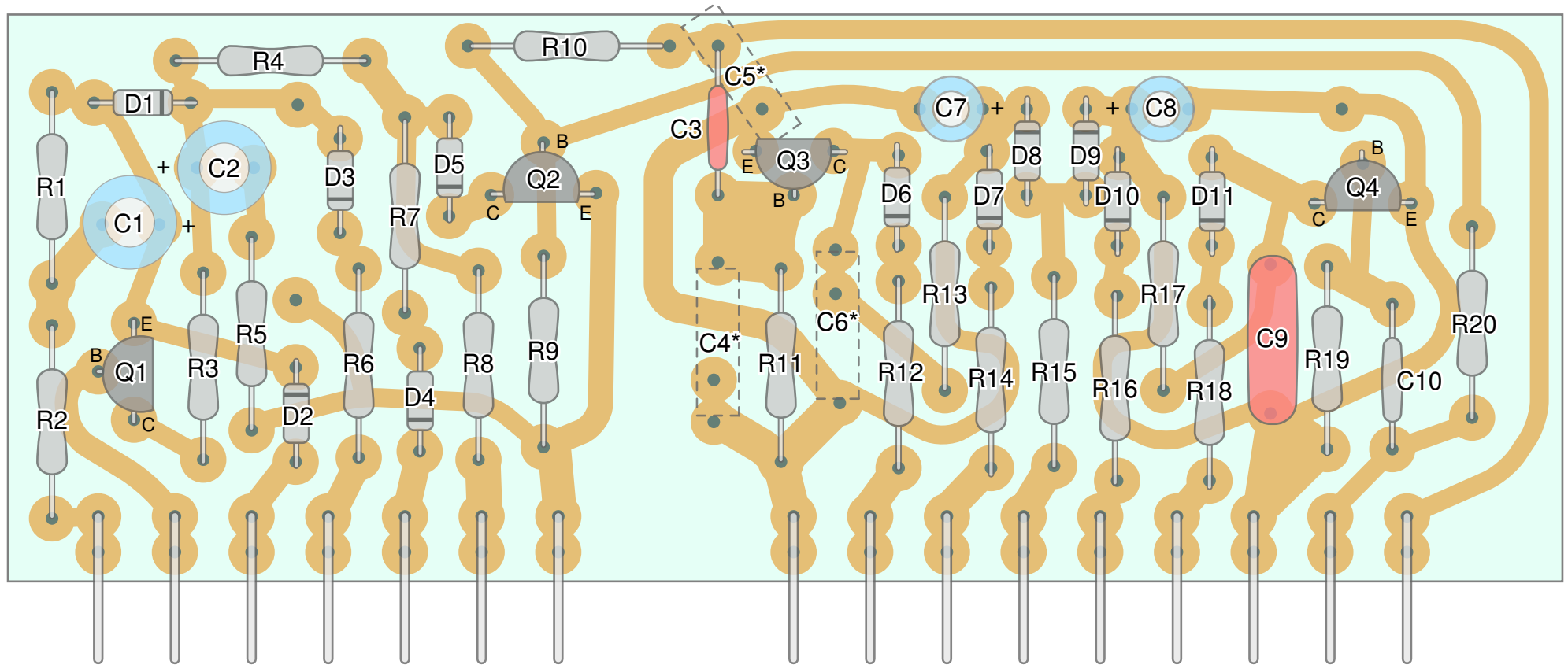
[5] Earlier revisions had no R12.

[6] Earlier versions had different power connectors with a different arrangement of terminals.

ELEX K2 (Hohner Stringvox) (r3) K2-1 Voicing Board: Drawing

designed c.1975 ELEX S.p.A. (Excelsior)

drawn 2024 electropict



The board is drawn from components side, semi-transparent to show the circuit side.

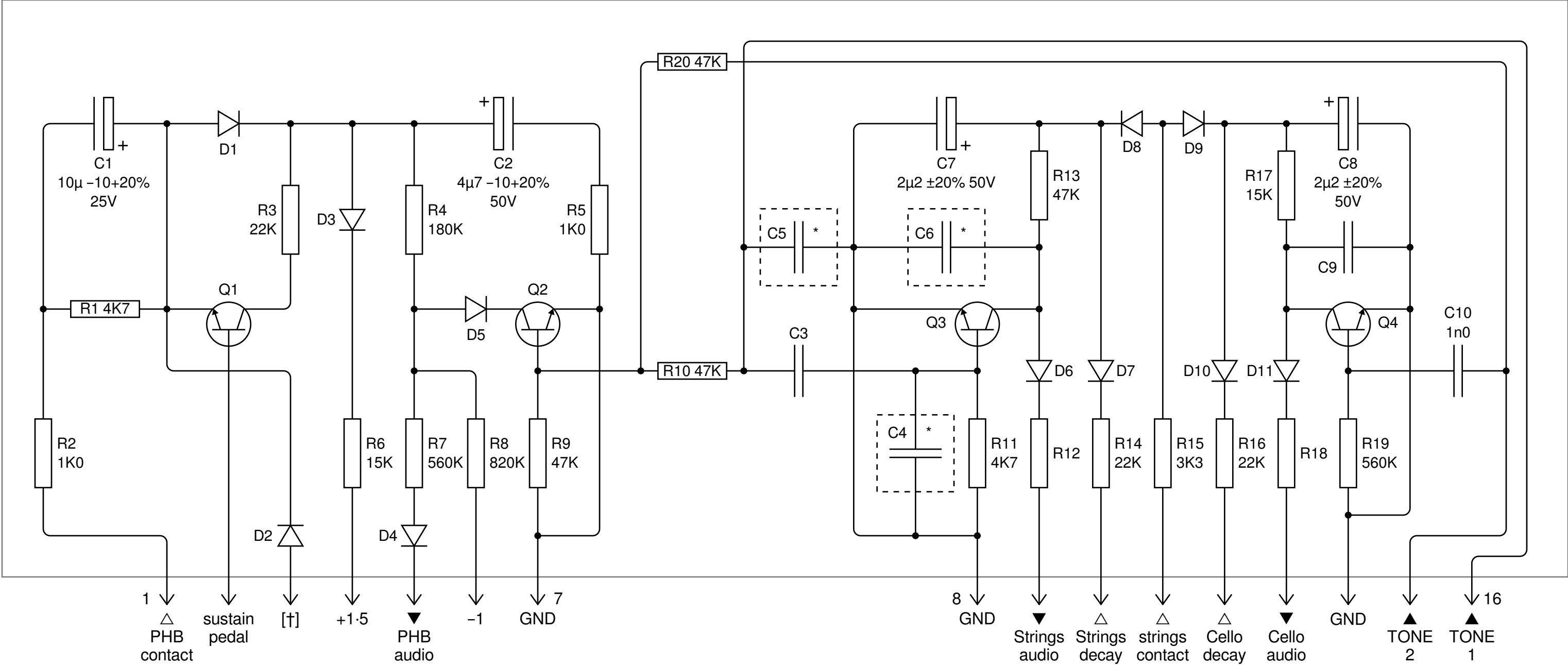
Component codes given here are assigned arbitrarily in the absence of original documents.

There are twenty versions of the board each with varying resistor and capacitor values. The shape and size of the varying capacitors (C3, C4, C5, C6, C9) is also highly variable.

* C4, C5, or C6 are not always present.

ELEX K2 (Hohner Stringvox) (r3) K2-1 Voicing Board: Schematic

designed c.1975 ELEX S.p.A. (Excelsior) | drawn 2024 electropict



Component codes given here are assigned arbitrarily in the absence of original documents.

Transistors are FBC 237B. Diodes are BA130. Resistors are ±5%. All nonpolarised capacitors are rated 50V or above.

PHB: Piano Harpsichord Bass

† Pin 3 function is uncertain; it is connected to ground through a power resistor. Speculatively, it may limit negative voltage from the contacts and voltage spikes resulting from their movements?

Positive and negative voltage inputs here are as measured.

There are twenty versions of the board each with varying resistor (R12, R18) and capacitor (C3, C4, C5, C6, C9) values. The consistent values are given on the diagram.

* Different versions use either C6, C4 & C5, or C5 & C6, but not all three.

TONE 1 and 2 are the lower and upper octave divider outputs for each note.

ELEX K2 (r3) K2-1 Voicing Board: Component Variations

The 61 boards are divided into 20 groups. Those components which vary between the different groups are as follows.

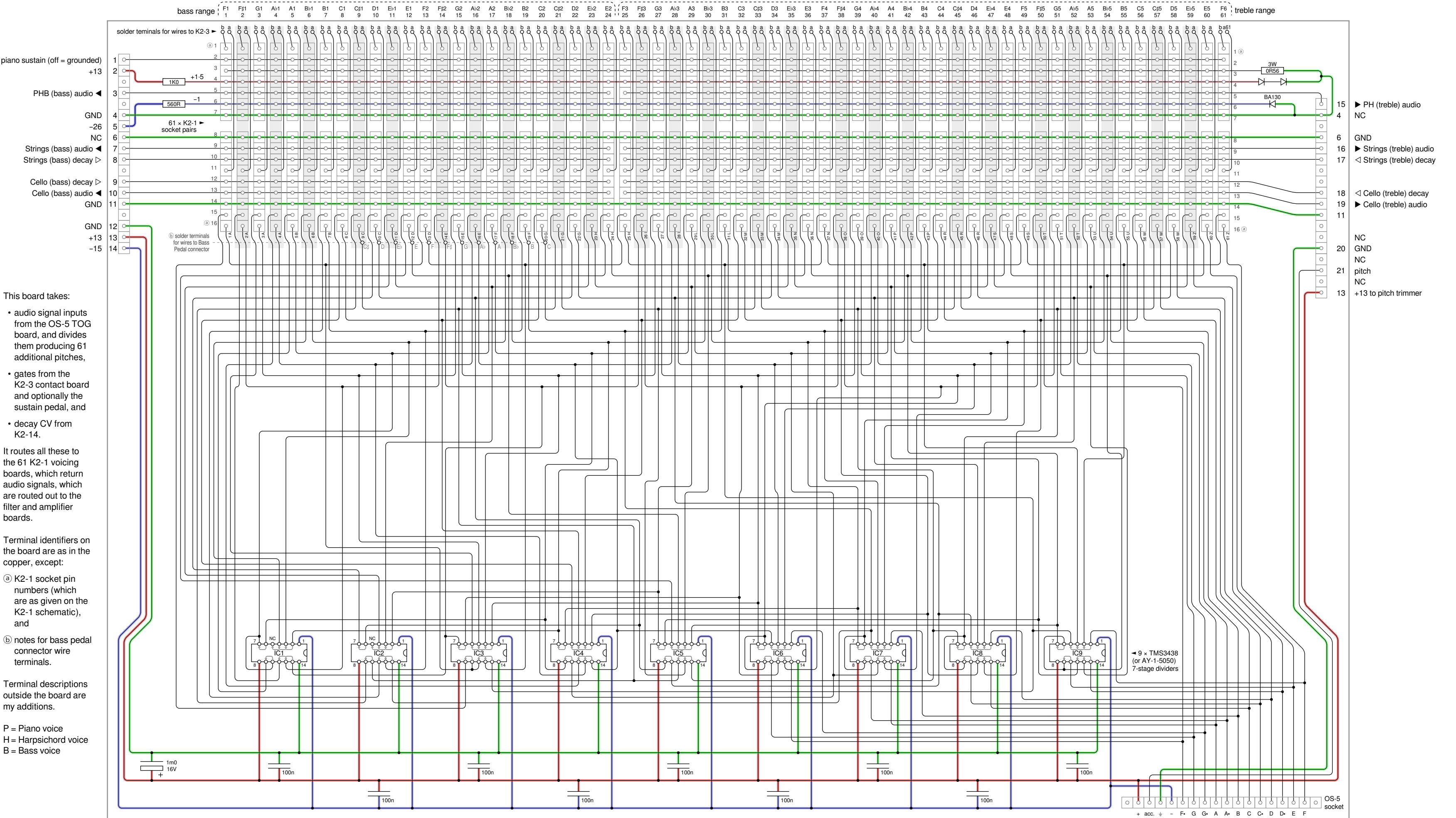
Non-varying components are not listed. Capacitors C4, C5, and C6 are not always present.

Group	Keys	Capacitors					Resistors	
		C3	C4	C5	C6	C9	R12	R18
A	1-4	4n7	-	-	8n2	56n	560K	560K
B	5-7	4n7	-	-	6n8	47n	560K	560K
C	8-10	4n7	-	-	5n2	39n	560K	560K
D	11-13	4n7	-	-	4n7	33n	560K	560K
E	14-16	4n7	-	-	3n9	27n	560K	560K
F	17-19	4n7	-	-	3n3	22n	560K	560K
G	20-22	4n7	-	-	2n7	18n	560K	560K
H	23-25	4n7	-	-	2n2	15n	560K	560K
I	26-28	4n7	-	-	1n8	12n	560K	560K
L	29-31	4n7	-	-	1n2	10n	560K	560K
M	32-34	4n7	-	-	820p	8n2	470K	470K
N	35-37	4n7	-	-	470p	6n8	470K	470K
O	38-40	6n8	-	-	220p	5n6	330K	390K
P	41-43	6n8	-	-	100p	4n7	270K	390K
R	44-46	8n2	6n8	8n2	-	4n7	390K	330K
S	47-49	6n8	6n8	6n8	-	3n3	330K	330K
T	50-52	1n0	-	4n7	1n0	2n2	330K	270K
U	53-55	1n0	-	2n2	1n0	2n2	330K	270K
W	56-58	1n0	-	2n2	1n0	1n8	390K	220K
Z	59-61	1n0	-	22n	1n0	1n5	270K	220K

ELEX K2 (Hohner Stringvox) (r3) K2-2 'Matrix' Board: Schematic

designed c.1975 ELEX S.p.A. (Excelsior)

drawn 2024 electropict



This board takes:

- audio signal inputs from the OS-5 TOG board, and divides them producing 61 additional pitches,
- gates from the K2-3 contact board and optionally the sustain pedal, and
- decay CV from K2-14.

It routes all these to the 61 K2-1 voicing boards, which return audio signals, which are routed out to the filter and amplifier boards.

Terminal identifiers on the board are as in the copper, except:

- Ⓐ K2-1 socket pin numbers (which are as given on the K2-1 schematic), and
- Ⓑ notes for bass pedal connector wire terminals.

Terminal descriptions outside the board are my additions.

P = Piano voice
H = Harpsichord voice
B = Bass voice

- 15 ► PH (treble) audio
- 4 NC
- 6 GND
- 16 ► Strings (treble) audio
- 17 ◀ Strings (treble) decay
- 18 ◀ Cello (treble) decay
- 19 ► Cello (treble) audio
- 11
- NC
- 20 GND
- NC
- 21 pitch
- NC
- 13 +13 to pitch trimmer

9 x TMS3438 (or AY-1-5050) 7-stage dividers

OS-5 socket
+ acc. ± - F- G- A- B- C- D- E- F

K2 Divider Pitch Outputs

		Dividers								
		1	2	3	4	5	6	7	8	9
Pins	3	Bb2	Eb3	G3	C4	E4	Ab5	B5	D6	F6
	4	Bb1	Eb2	G2	C3	E3	Ab4	B4	D5	F5
	5	<i>Bb0</i>	<i>Eb1</i>	G1	C2	E2	Ab3	B3	D4	F4
	7	A2	D2	F#3	Bb3	Eb4	G4	Bb4	C#5	E5
	9	A1	C#2	F1	A3	D3	G5	Bb5	C#6	E6
	11	F#1	B1	F2	Ab1	C#3	F#4	A4	C5	Eb5
	12	F#2	B2	F3	Ab2	C#4	F#5	A5	C6	Eb6

Dividers are numbered left to right. Only output pins are shown.

Outputs are shown as IPN pitches.

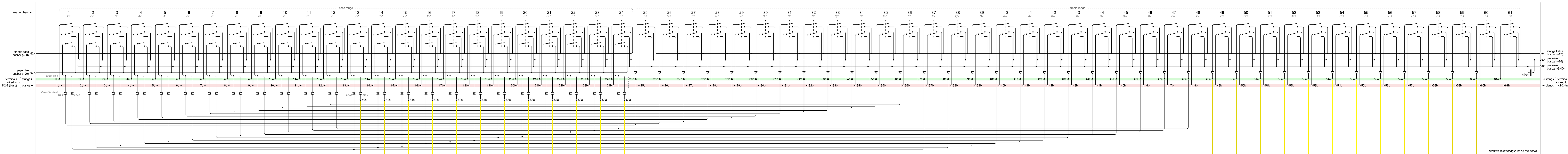
Bb0 and Eb1 are not used.

This table does not include the top octave F#6–F7 which is produced by the TOG chip on OS-5.

Each K2-1 voicing card uses two pitches an octave apart.

ELEX K2 (Hohner Stringvox) (r3) K2-3 Contacts Board: Schematic

designed c.1975 ELEX S.p.A. (Excelsior)
drawn 2024 electropict



The K2 is a 61-key keyboard with a 24/37 split. Each key operates two or three contact strings and has an individual K2-1 voicing card on the K2-2 board, to which the contacts are individually wired through their Ⓢ and Ⓞ solder terminals.

The pianos contacts move from the negatively charged *off* busbar to the grounded *on* busbar. connect the busbars' positive voltage to the K2-1 ensemble busbar. The additional circuitry on K2-3 (including the extra wires between Ⓢ terminals) transmits gate signals for keys 1-24 (F1-E2) to the K2-1 boards two and three octaves above the key pressed (F3-E5), so the

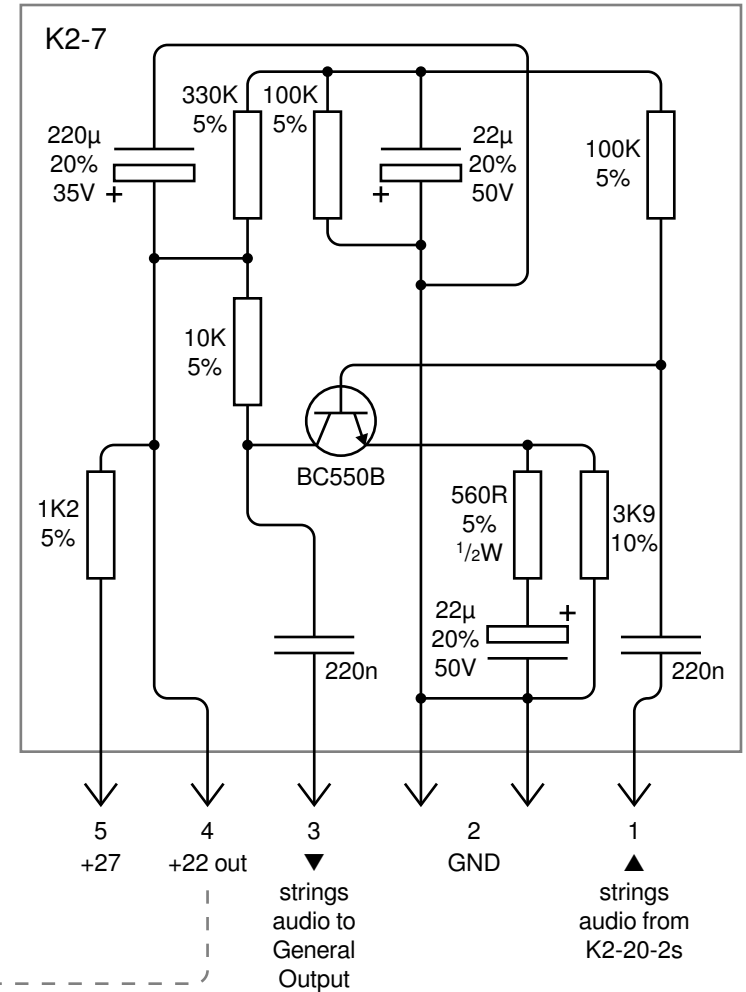
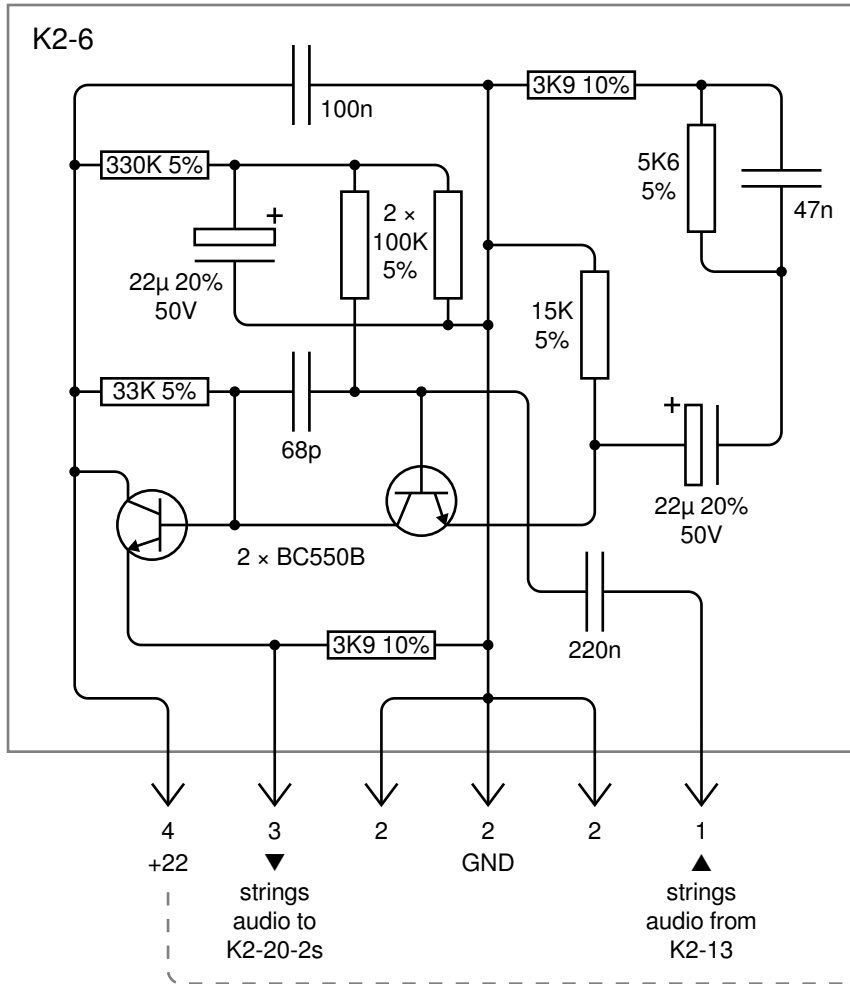
Normally each key controls only one K2-1 card. However, in *Ensemble mode*, power is switched from the strings treble busbar to the strings circuit.

The strings audio signals even though they have not been triggered directly.

Terminal numbering is as on the board.

ELEX K2 (Hohner Stringvox) (r3) K2-6 & K2-7 Preamp Boards: Schematics

designed c.1975 ELEX S.p.A. (Excelsior) | drawn 2024 electropict



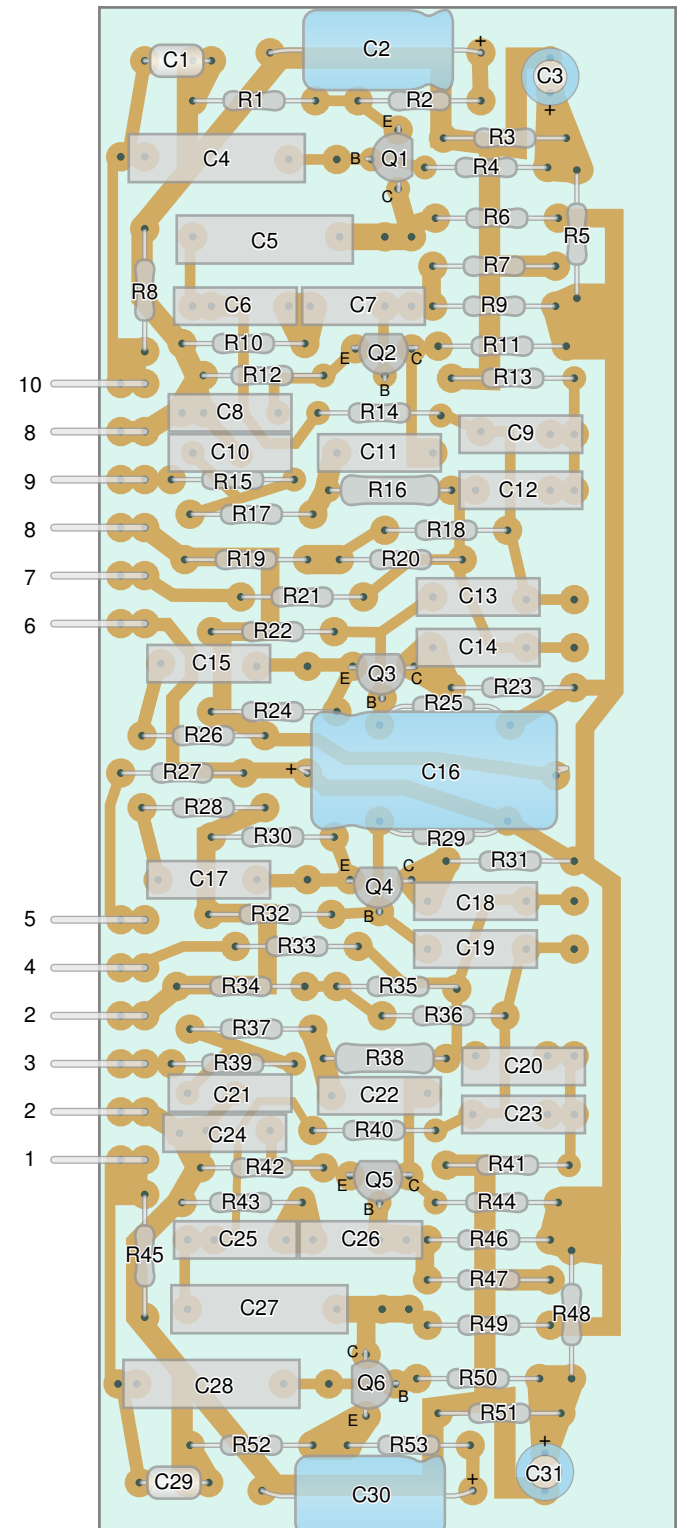
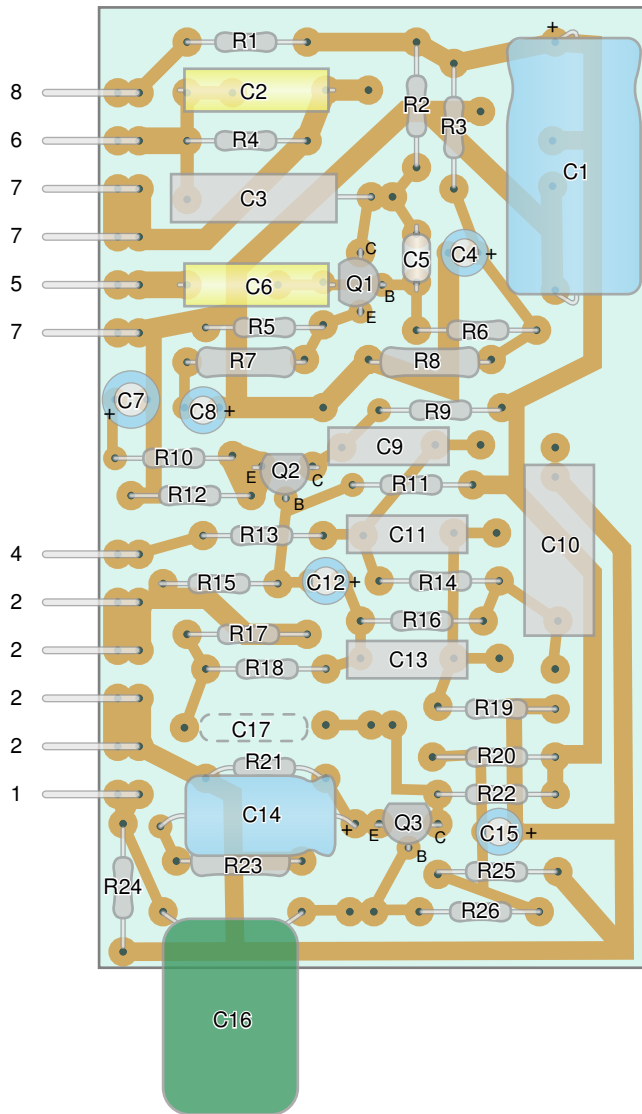
Pin numbers for the K2-6 are approximately based on the K4 schematic but it's too faint to read all of them; those for the K2-7 are as on the schematic.

In the K4 schematics, K2-6 is also called P.A.I and K2-7 is P.A.II. (Preamp?) Other than that the images I've seen are too faint to make much out.

ELEX K2 (Hohner Stringvox) (r3) K2-10 Piano & K2-9 Bass Boards: Drawings

Shown from components side transparent to solder side.

designed c.1976–79 ELEX S.p.A. (Excelsior) | drawn 2024 electropict



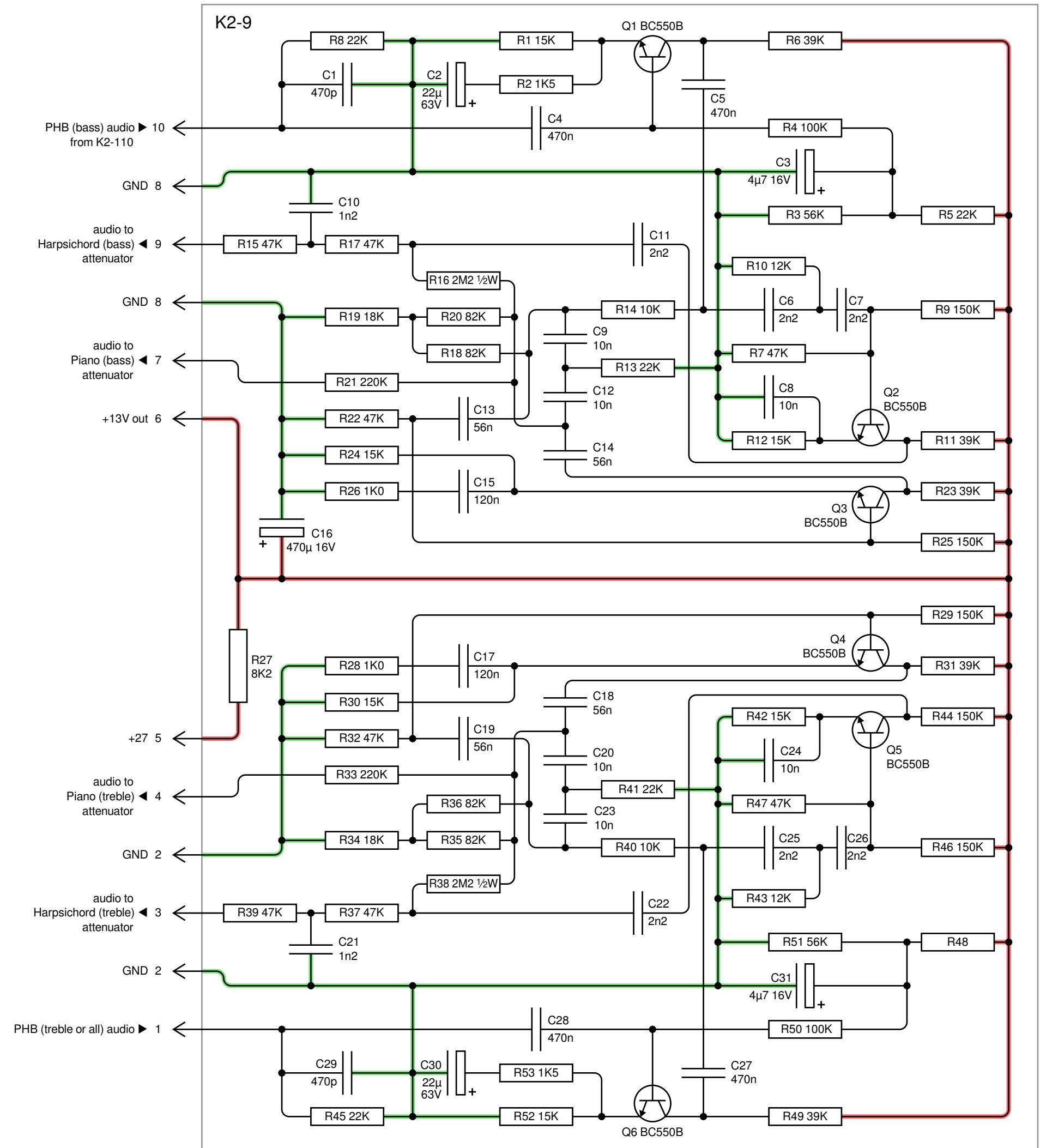
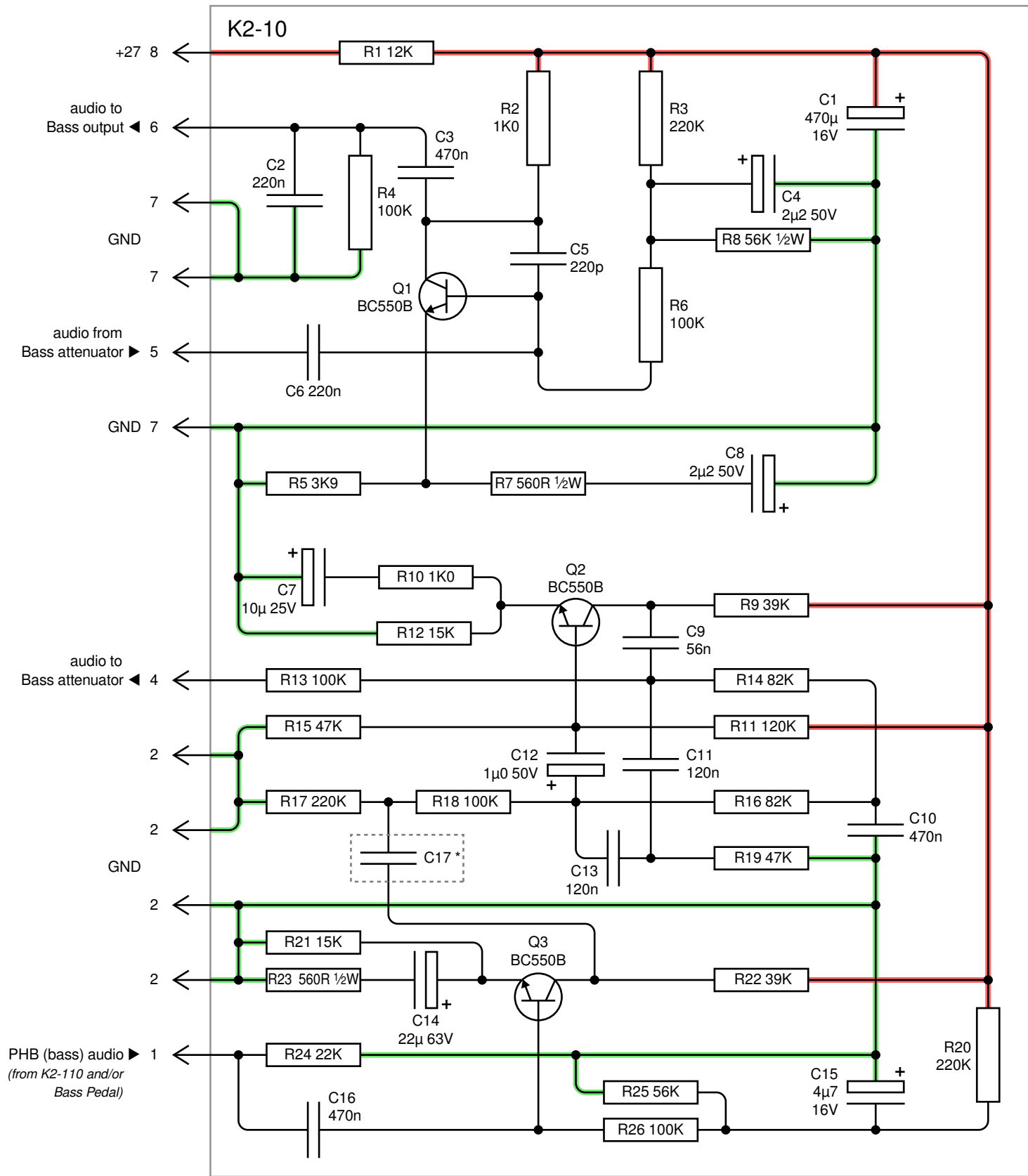
Component numbers are assigned arbitrarily in the absence of original documentation.

Non-polarised capacitors' type and shape varied between revisions.

ELEX K2 (Hohner Stringvox) (r3) K2-10 Piano & K2-9 Bass Boards: Schematics

designed c.1976-79 ELEX S.p.A. (Excelsior)

drawn 2024 electropict



Component numbers are assigned arbitrarily in the absence of original documentation. Terminal numbers are as on the K2-14 board.

Electrolytic capacitors are $\pm 20\%$. Resistors are $\pm 5\%$, and $\frac{1}{4}$ Watt except where stated.

PHB = Piano, Harpsichord, Bass

On an r1 String Orchestra, K2-9 capacitors found for C2 & C30 are 25V, and C16 is 35V.

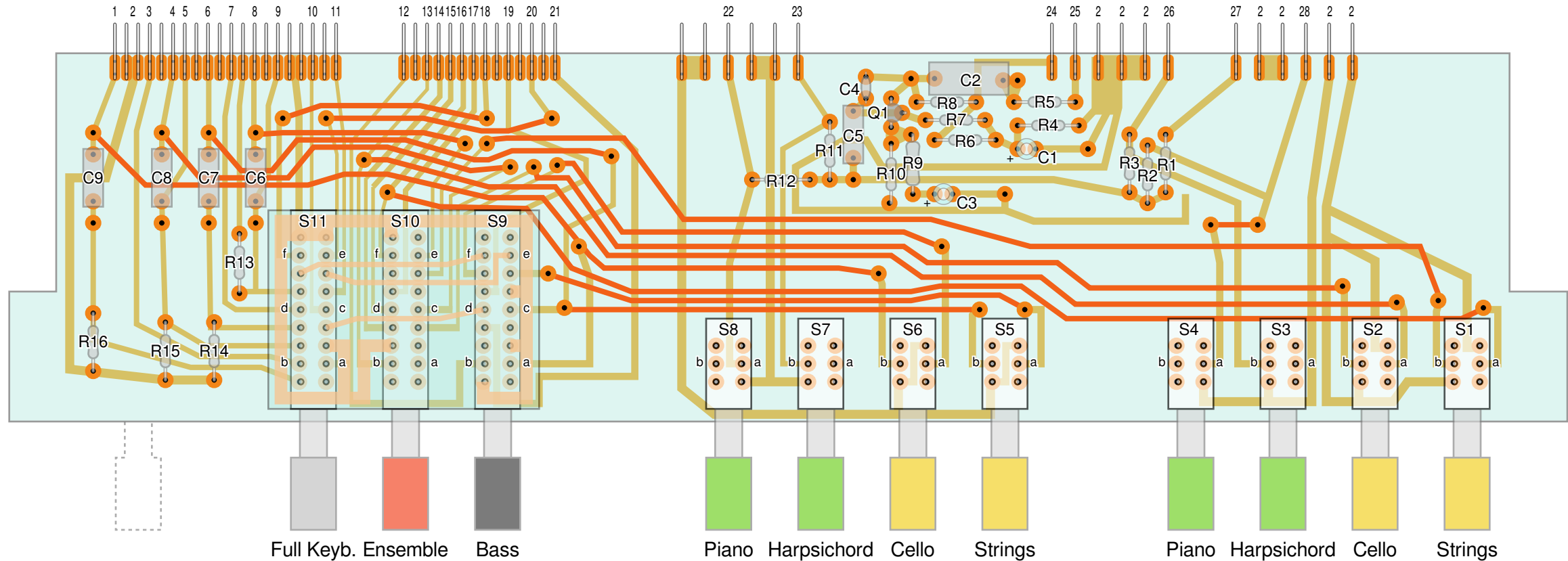
* C17 was used in earlier revisions and probably in the r3, but may have been removed from this example. Its value is uncertain, but 470n has been successfully tried as a replacement.

ELEX K2 (Hohner Stringvox) (r3) K2-110 & K2-12 Switching Board: Drawing

designed c.1975–79 ELEX S.p.A. (Excelsior)

Drawn from B (components) side, transparent to show both sides' traces.

drawn 2024 electropict



The K2-12 is permanently mounted above switches S9–S11. Its traces are shown separately.

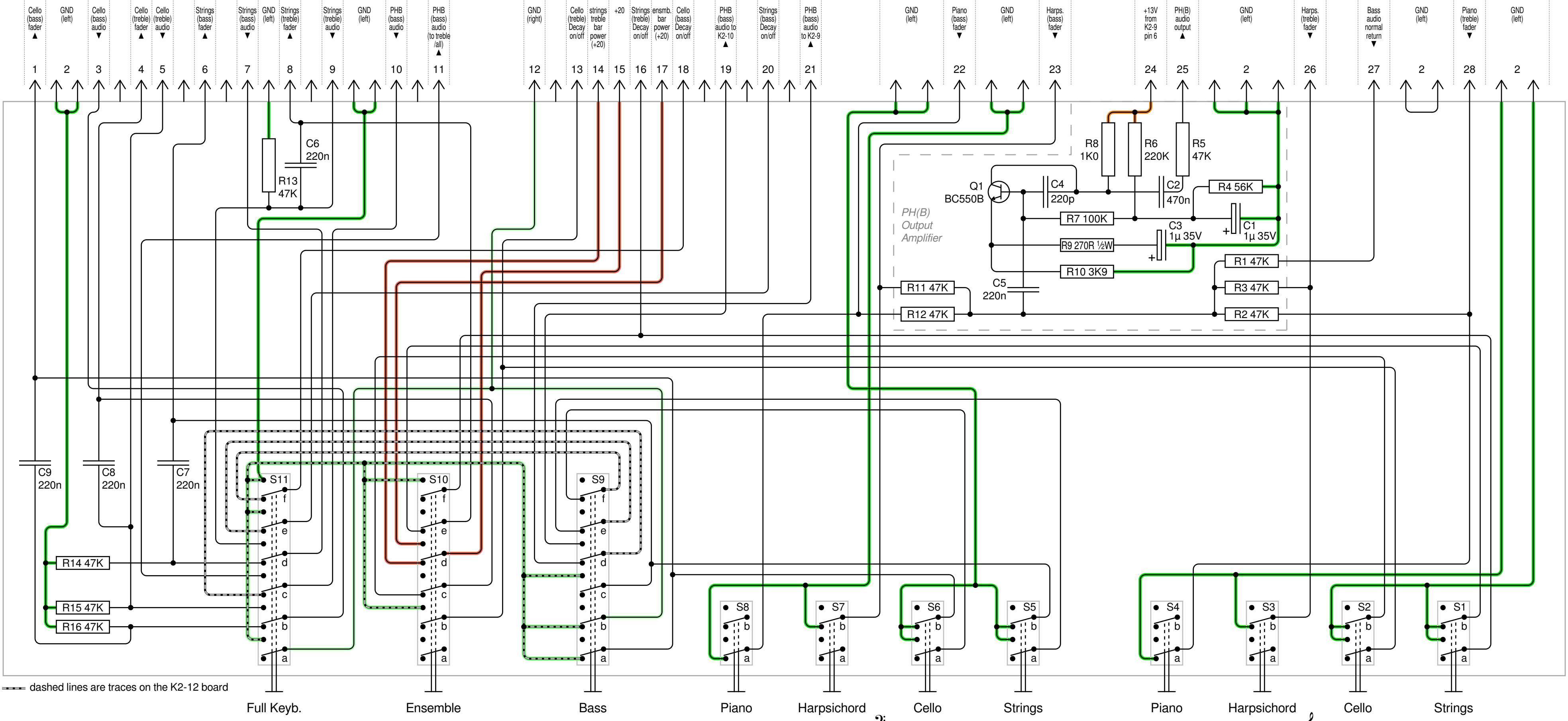
Component codes are assigned arbitrarily in the absence of documentation, except contact pins which are numbered as on the board.

- B side traces
- A side traces
- K2-12 traces

ELEX K2 (Hohner Stringvox) (r3) K2-110 & K2-12 Switching Board: Schematic

designed c.1975-79 ELEX S.p.A. (Excelsior)

drawn 2024 electropict



--- dashed lines are traces on the K2-12 board

Component codes are assigned arbitrarily in the absence of documentation, except terminal pins which are numbered as on the board.
 PH – Piano Harpsichord, PHB – Piano Harpsichord Bass

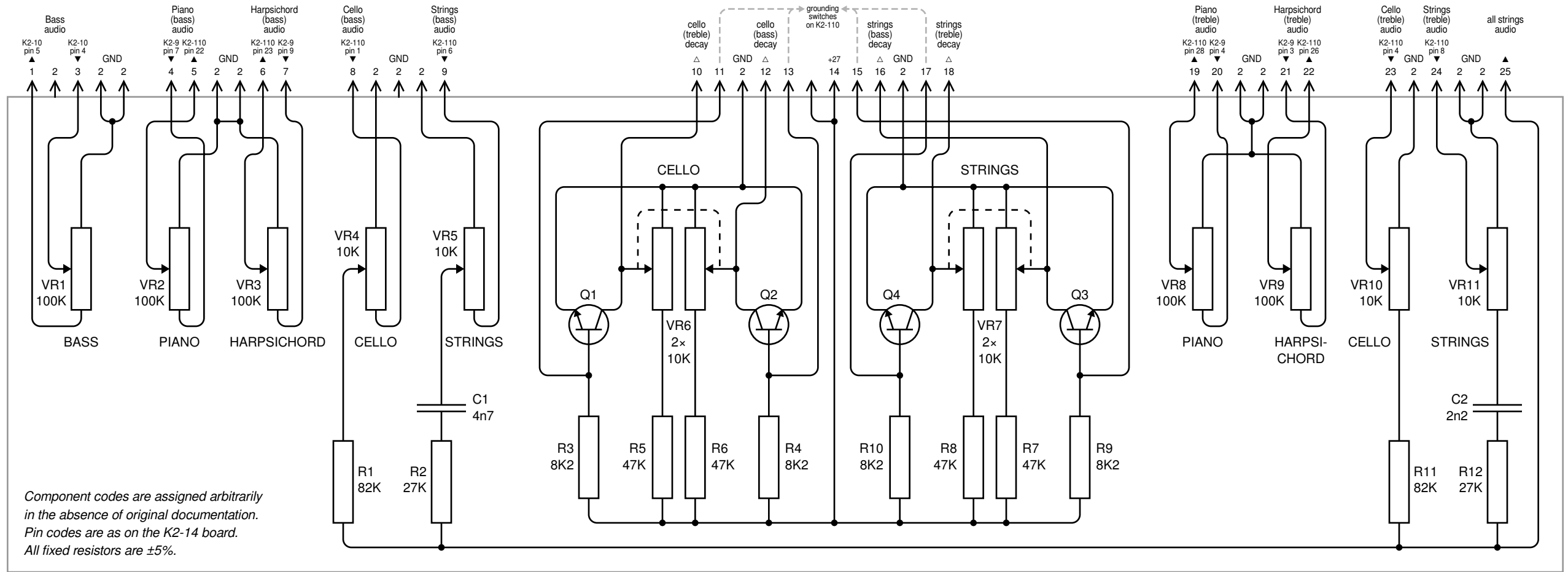
There are two separate ground connections here, connected from the K2-14 left and right end connectors. They are joined (in r3) in the M175 board, but also through the ground trace on K2-12 when either the Full Keyboard switch is on or the Bass switch is off.

Resistors are ±5%, and 1/4W except where stated.

ELEX K2 (Hohner Stringvox) (r3) K2-13 Controls Board: Schematic

designed c.1976 ELEX S.p.A. (Excelsior)

drawn 2024 electropict



VOLUME

DECAY

VOLUME

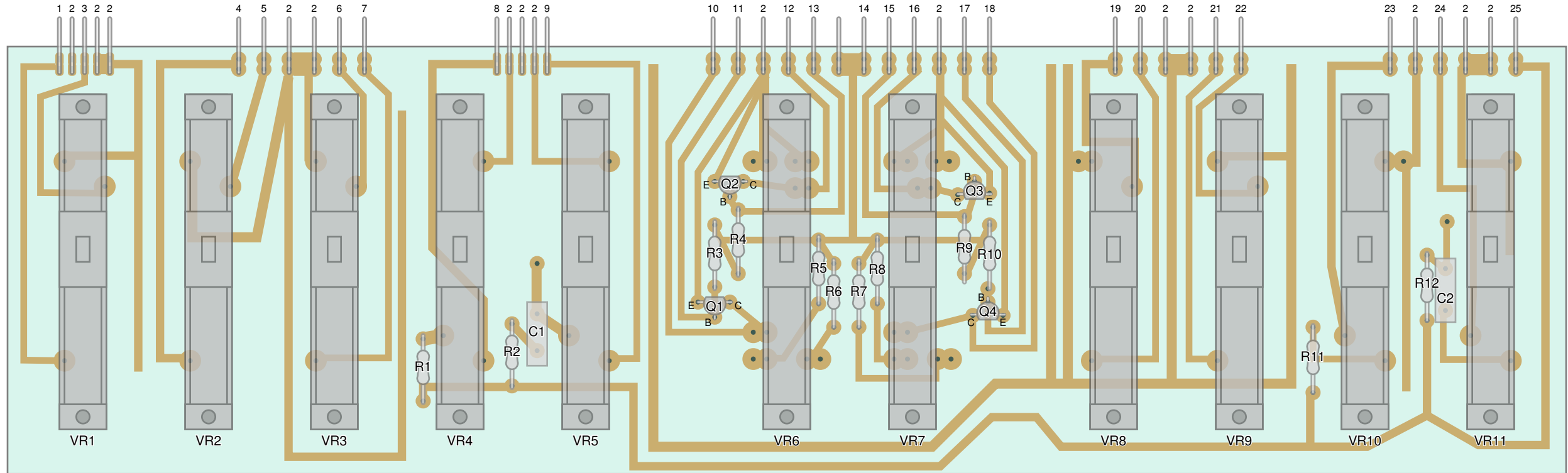
(Treble volumes apply to all keys in 'Full' mode.)

ELEX K2 (Hohner Stringvox) (r3) K2-13 Controls Board: Drawing

designed c.1976 ELEX S.p.A. (Excelsior)

Shown from components side transparent to solder side.

drawn 2024 electropict

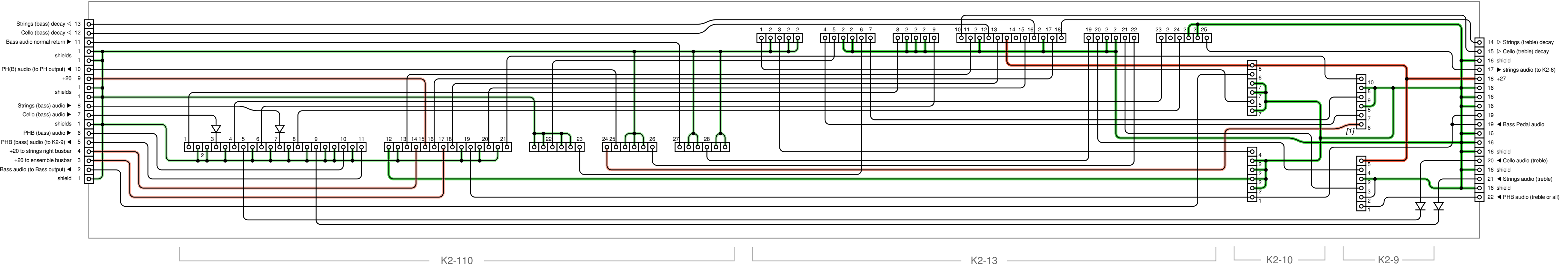


Component codes are assigned arbitrarily in the absence of original documentation.
Pin codes are as on the K2-14 board.

ELEX K2 (Hohner Stringvox) (r3) K2-14 Controls 'Matrix' Board: Schematic

designed c.1975-79 ELEX S.p.A. (Excelsior)

drawn 2024 electropict



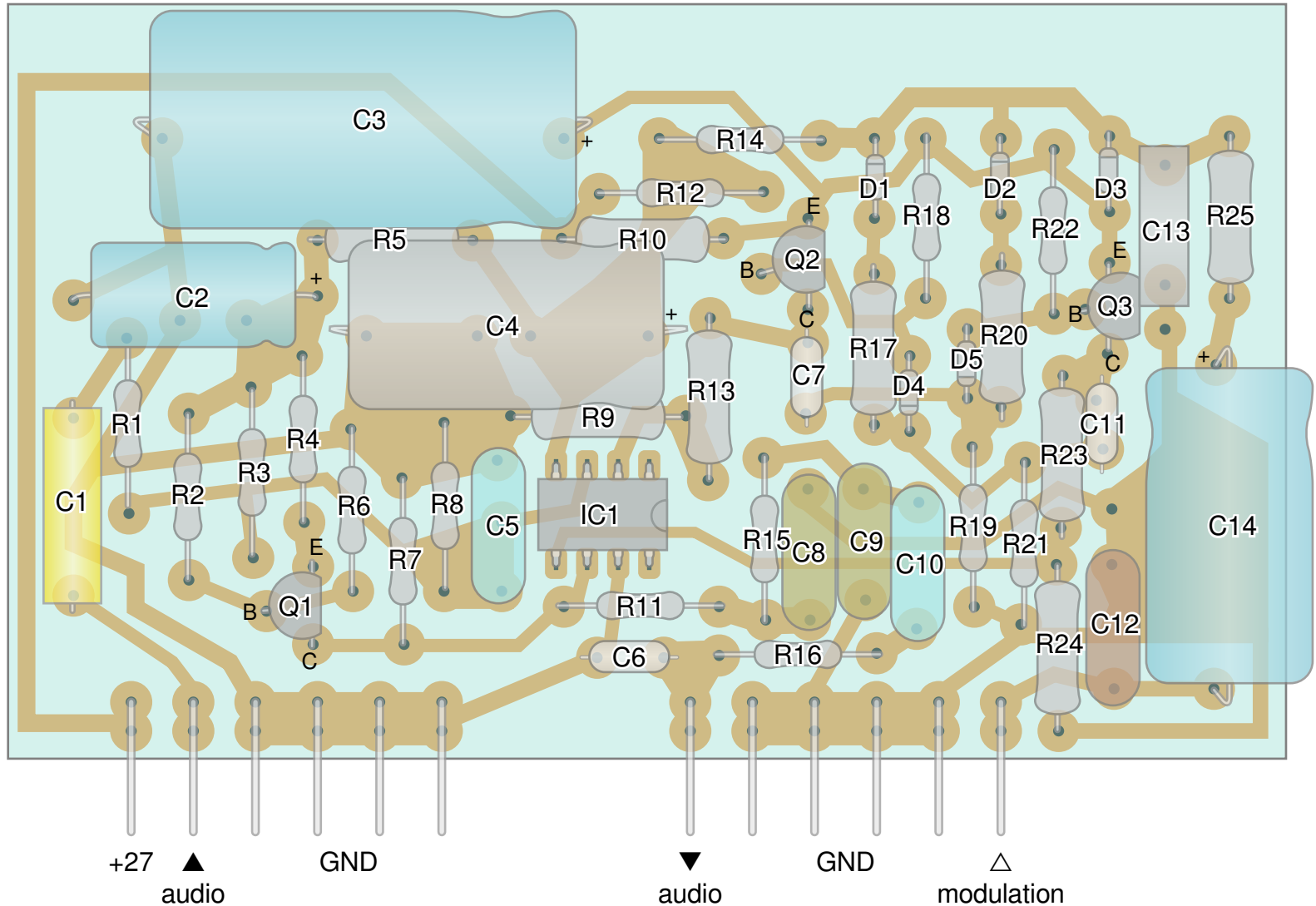
Terminal numbers are as on the board except for the K2-110 connectors, where the numbers are from the K2-110.

(An earlier revision may have had a different board, K2-11, in place of the K2-110; its terminal numbering is unknown.)
Descriptions are my interpretation.

[1] K2-9 produces a +13V supply at terminal 6 which powers the PHB amplifier on K2-110.

ELEX K2 (Hohner Stringvox) (r3) K2-20-2 Modulation Board: Drawing

design c.1975-79 ELEX S.p.A. (Excelsior) | drawn 2024 electropict

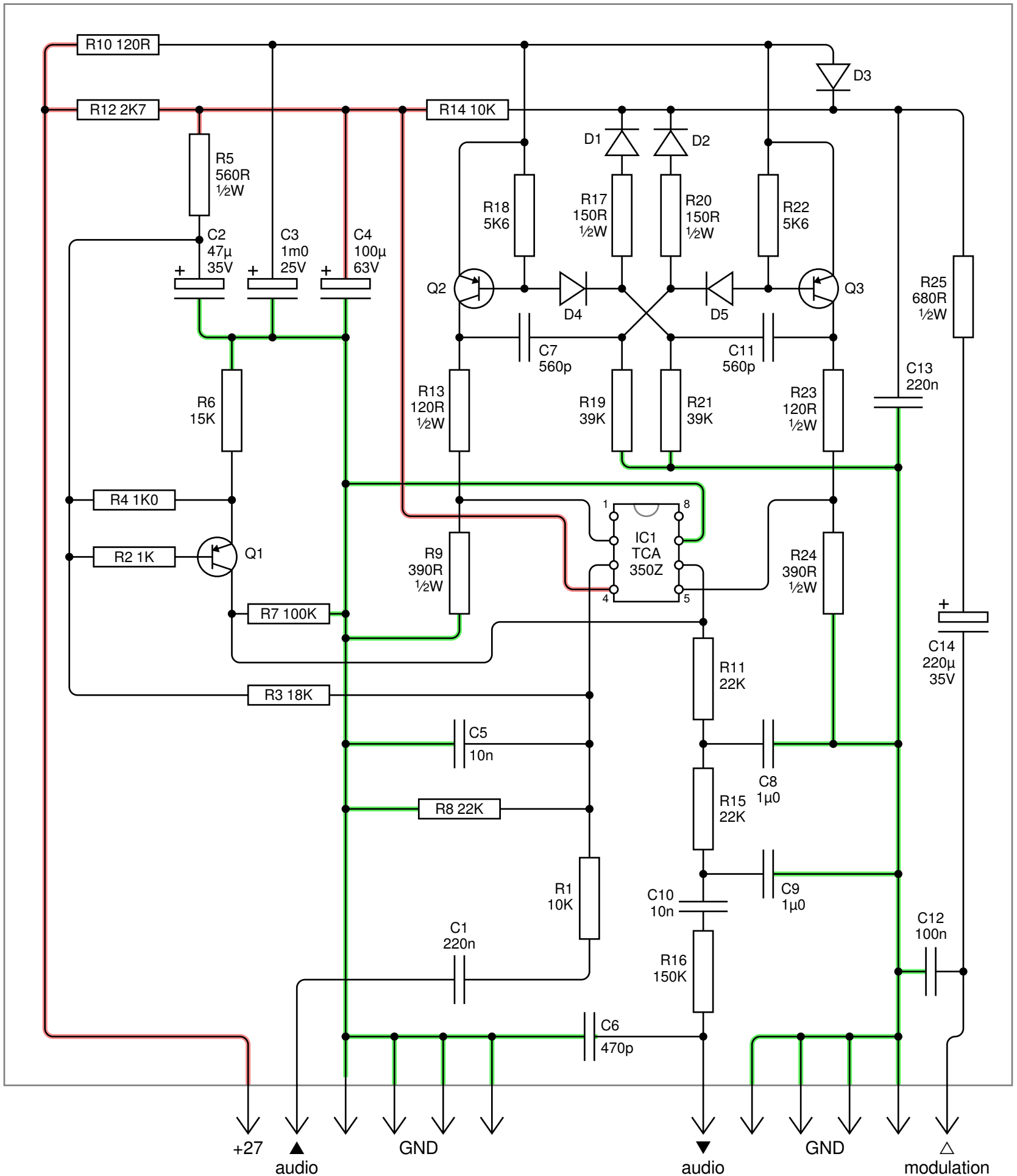


Shown from components side transparent to solder side.

The K2-20-2 takes an input audio signal and delays it using the TCA350Z BBD chip, by amounts controlled by the incoming modulation signal from the M174 Oscillator board. It replaced an earlier K2-4 modulation board.

ELEX K2 (Hohner Stringvox) (r3) K2-20-2 Modulation Board: Schematic

design c.1975-79 ELEX S.p.A. (Excelsior) | drawn 2024 electropict

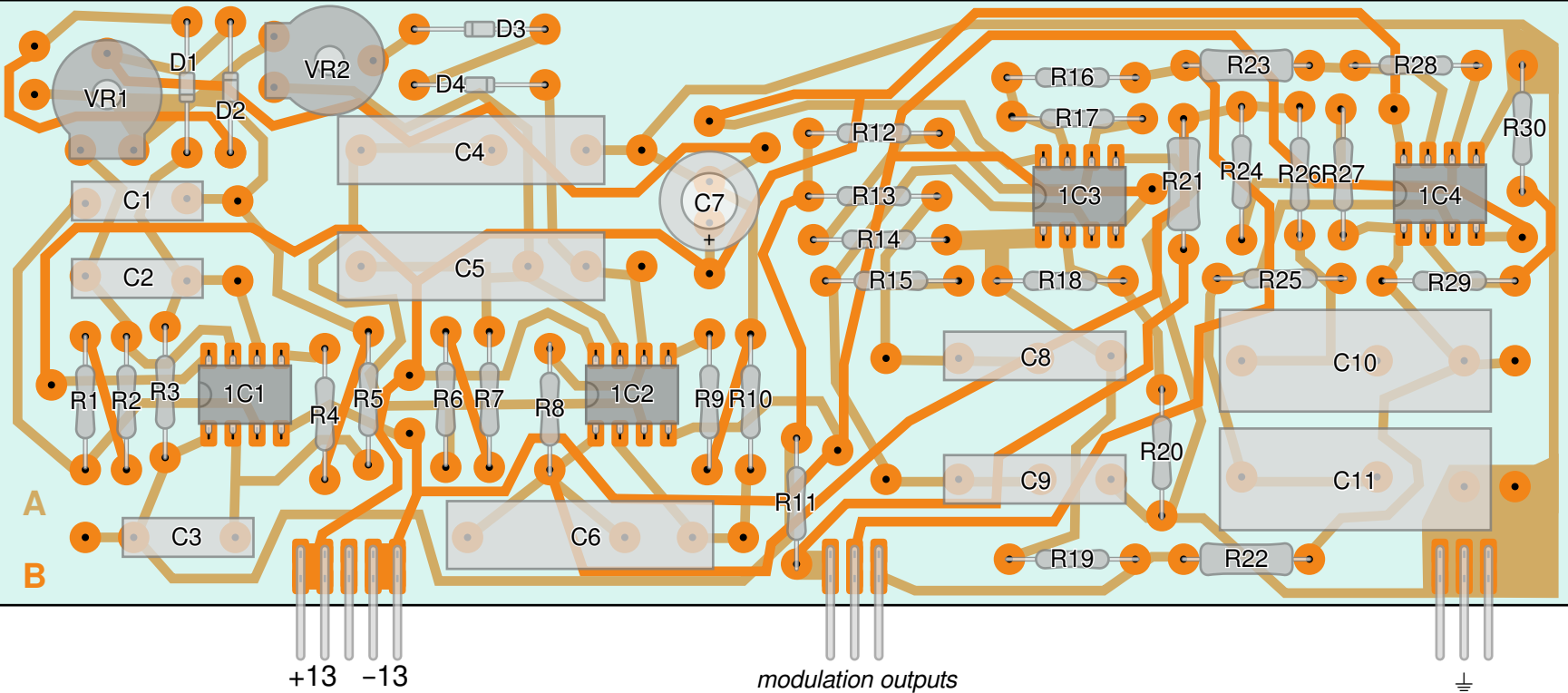


Component codes are added arbitrarily in the absence of original documentation.

Resistors are $\pm 5\%$ and $\frac{1}{4}W$ except where stated. All diodes are BA130. All Transistors are BC558A.

ELEX K2 (Hohner Stringvox) (r3) M174 Modulation Oscillator Board: Drawing

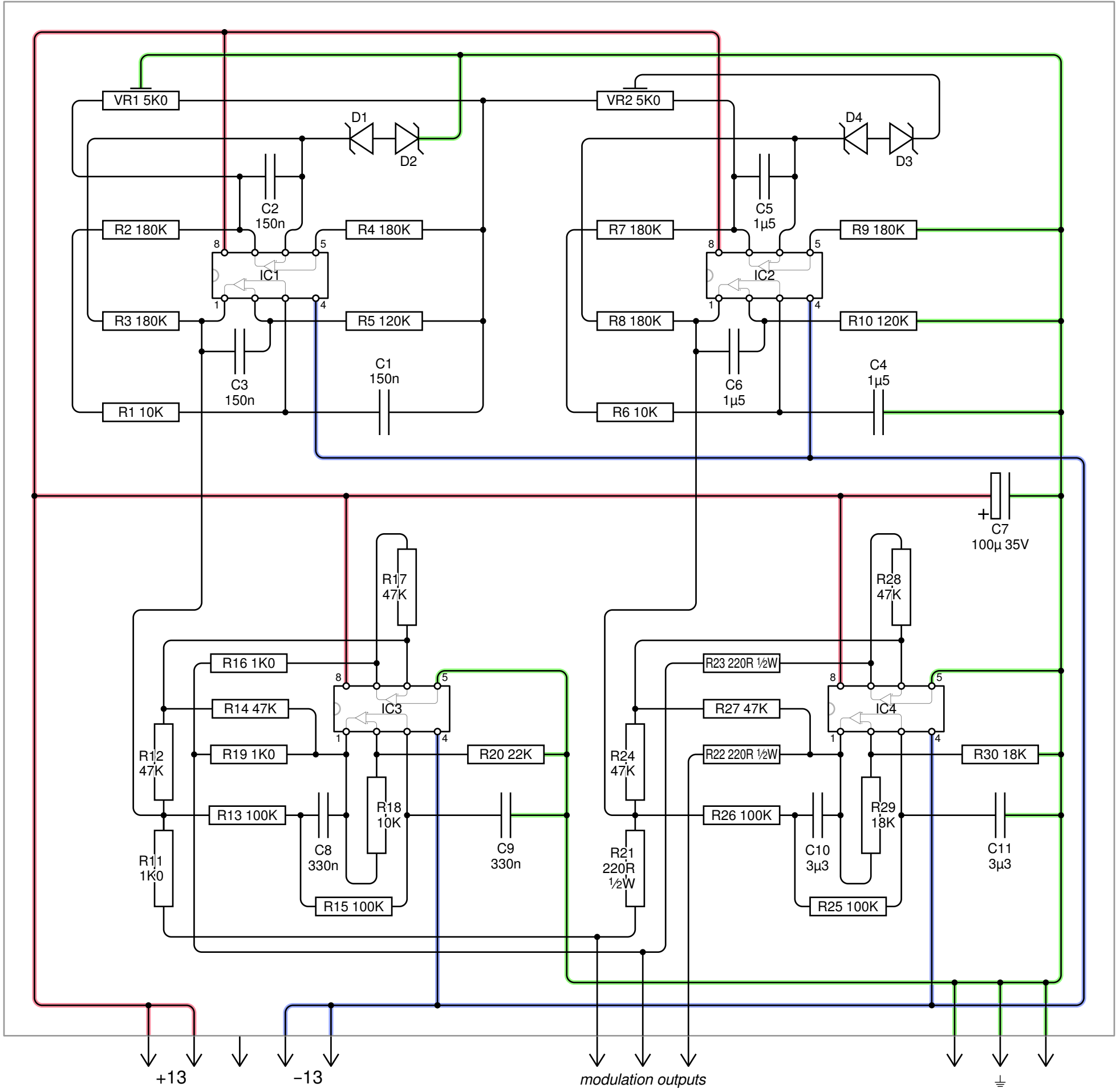
designed c.1979 ELEX S.p.A. (Excelsior) | drawing 2024 electropict



Components (B) side with traces, shown transparent to A side traces.
Component numbering is added arbitrarily in the absence of original documentation, except ICs which are as on the board.

ELEX K2 (Hohner Stringvox) (r3) M174 Modulation Oscillator Board: Schematic

designed c.1979 ELEX S.p.A. (Excelsior) | drawing 2024 electropict

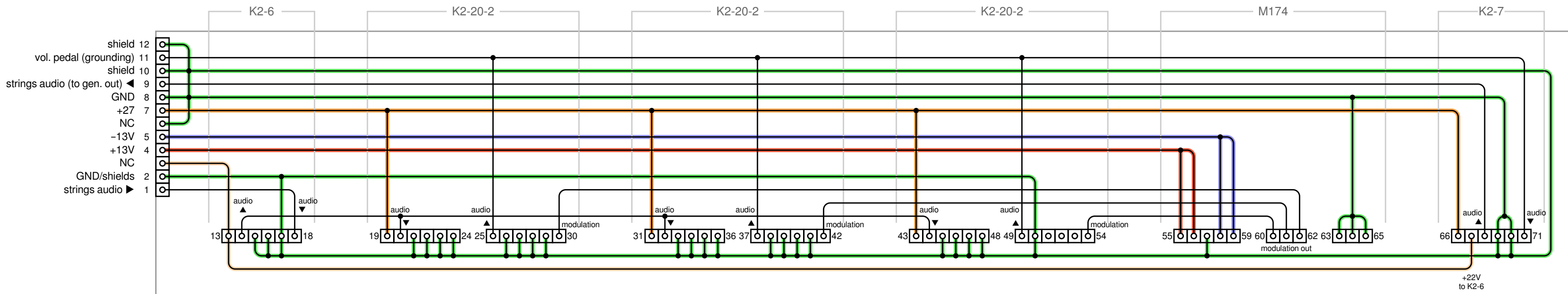


Component numbering is added arbitrarily in the absence of original documentation, except ICs which are as on the board.
All ICs are UA4558TC. All diodes are BZX85C5. All resistors are $\pm 5\%$, and $1/4W$ except where stated.

ELEX K2 (Hohner Stringvox) (r3) M175 Chorus 'Matrix' Board: Schematic

designed c.1979 ELEX S.p.A. (Excelsior)

drawn 2024 electropict



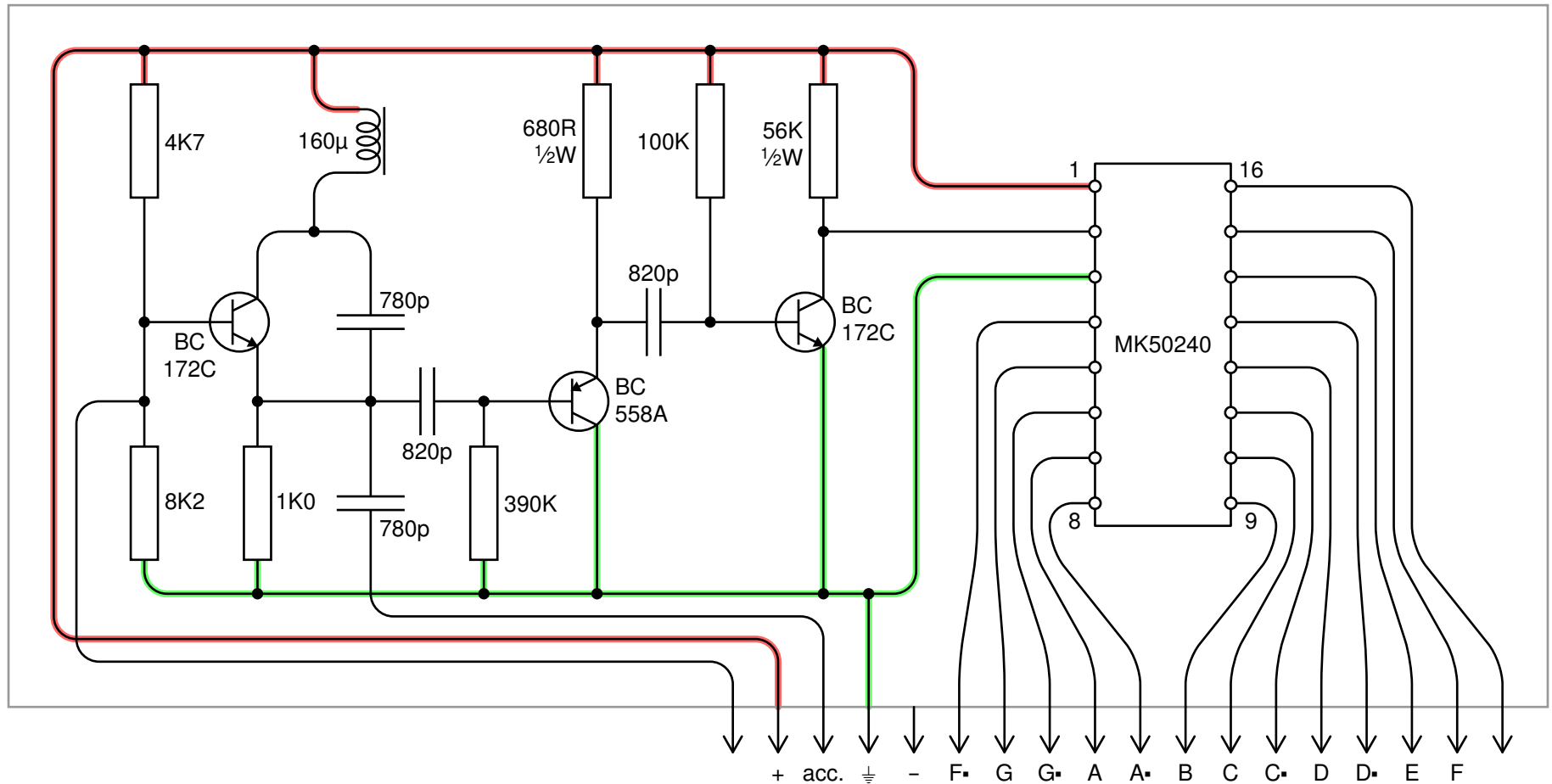
This board serves as a backplane routing power and signals to & from its daughterboards. Terminal numbers and descriptions are added in the absence of original documentation.

The board may be a redesign of an older board used in earlier K2 revisions, and perhaps in K4s. The new daughterboards are the K2-20-2s and M174.

n.b. while the 'strings' effect is usually described as an ensemble effect, in the K2 ELEX chose to use 'Ensemble' for what might normally be called Unison mode, so 'Chorus' is used here.

ELEX K2 (Hohner Stringvox) (r3) OS-5 Oscillator & TOG Board: Schematic

designed c.1975 ELEX S.p.A. (Excelsior) | drawn 2024 electropict



Terminal descriptions are as on the K2-2 board.
Notes are specific to the OS-5 as used on the K2's F-F keyboard. On some other ELEX instruments the oscillator is tuned for C-C. Component values may vary to allow this.

On the K2, the first terminal is not connected as there is no vibrato function, and the eighteenth is not connected as the K2 performs all F divisions on the K2-2 board.

The connector on the K2-2 board does supply negative power at the fifth position, and is marked for it, but the OS-5 does not use it.