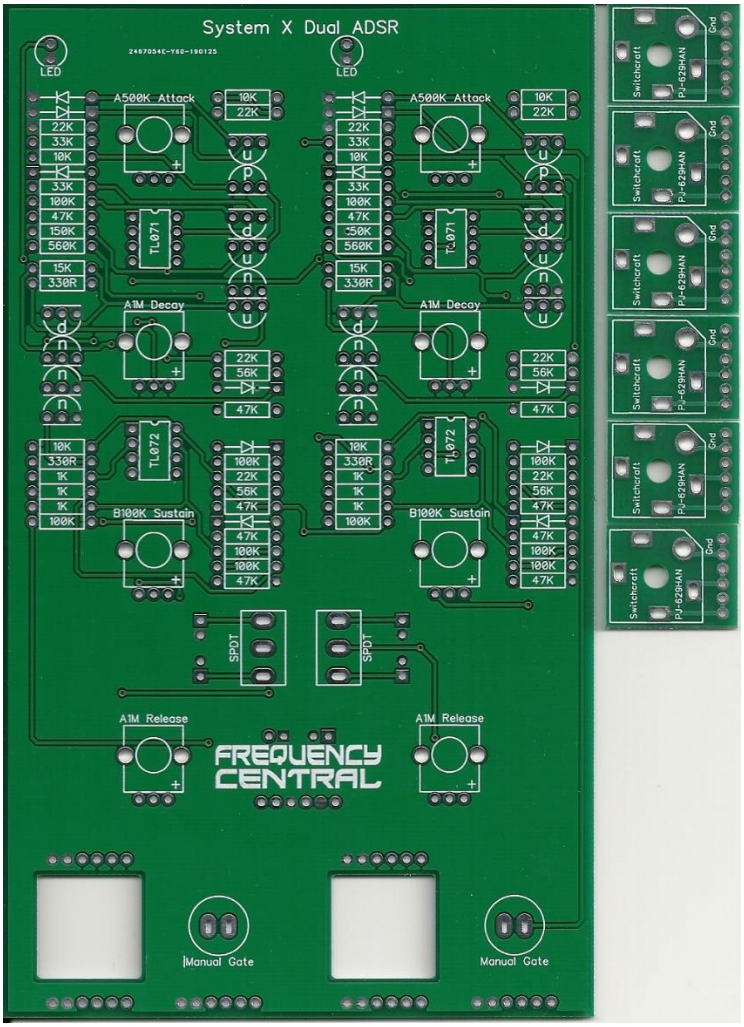
FREQUENCY CENTRAL

Build documentation for:

MU SYSTEM X
DUAL ADSR

Based on the Roland System 100M ADSR.

MU System X Dual ADSR features: Main PCB**,** Sockets PCB x 6.



<u>Key to PCB screen print:</u>

n: This signifies NPN BC547 transistors. Note the correct pinout as shown by the half circles.

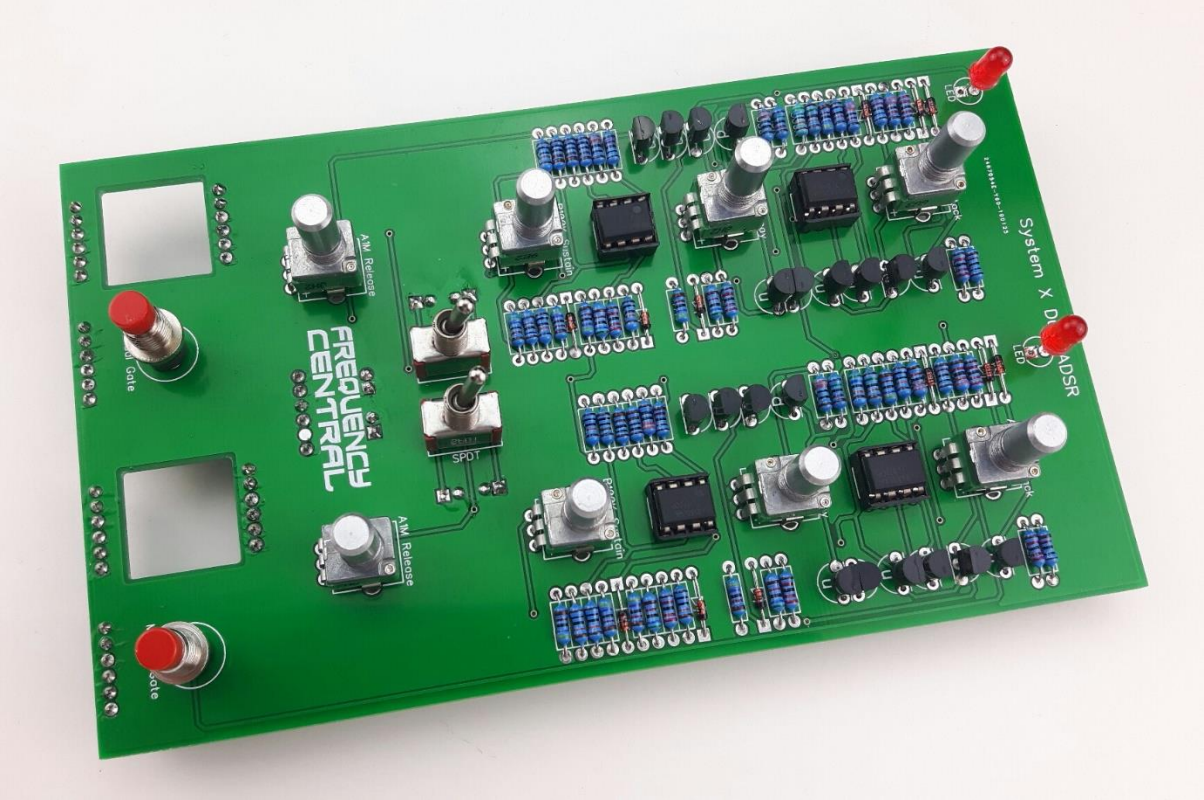
p: This signifies PNP BC557 transistors. Note the correct pinout as shown by the half circles.

The PCB shows the correct orientation for BC547/BC557. Other transistor types can be used (eg 2N3904/2N3906), but please observe the correct pinout. Please observe the correct polarity of the electrolytic capacitors.

Bill of Materials			
330R x 4 1K x 6 10K x 6 15K x 2 22K x 8 33K x 4 47K x 10 56K x 4 100K x 10 150K x 2 560K x 2 All resistors ¼ watt metal film	1uF x 2 10uF x 2 47uF electrolytic x 2	TL071 x 2 TL072 x 2 BC547 x 14 BC557 x 6 1N4148 x 12 8 pin socket x 4 5mm red LED x 2	A500K x 2 A1M x 4 B100K x 2 SPDT toggle x 2 Momentary switch x 2 6.3mm socket x 6 Male 40 pin header x 1 6 pin female header x 6 DOTCOM 6 pin header

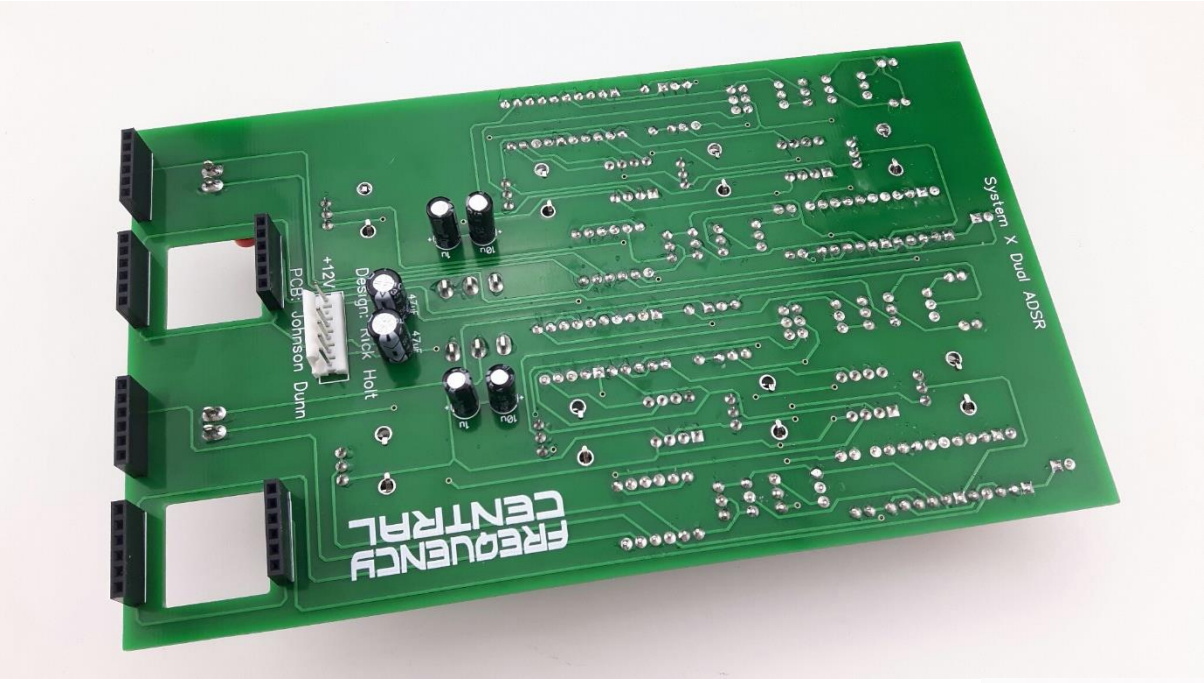
Main PCB assembly - FRONT

1. Solder all diodes
2. Solder all resistors.
3. Solder all IC sockets
4. Solder all transistors
5. Solder the 8 x Alpha pots, toggle and momentary switches. Make sure they fit snug to the PCB.



Main assembly – REAR

1. Solder all of the 6 pin female headers. These will later accept the Socket PCBs
2. Solder the DOTCOM power header. Don't forget to make it 'keyed' by removing the second pin in (the PCB won't accept it otherwise – it's keyed too!)
3. Solder the electrolytic capacitors



Socket PCB

1. Solder the 6 sockets to the 6 Socket pcbs, socket sits on it's silkscreen footprint

Final Assembly

1. Present the pcb to the panel, and bolt the two together using the washers and nuts for the pots and switch
2. Cut 6 pieces of male header to be 6 pins wide. Place the long end of each into the 6 female headers.
3. Present each socket pcb assembly to the main pcb, bolt into place, making sure that the male headers line up with their places on the socket pcbs. Solder the male headers to the sockets pcbs.

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