



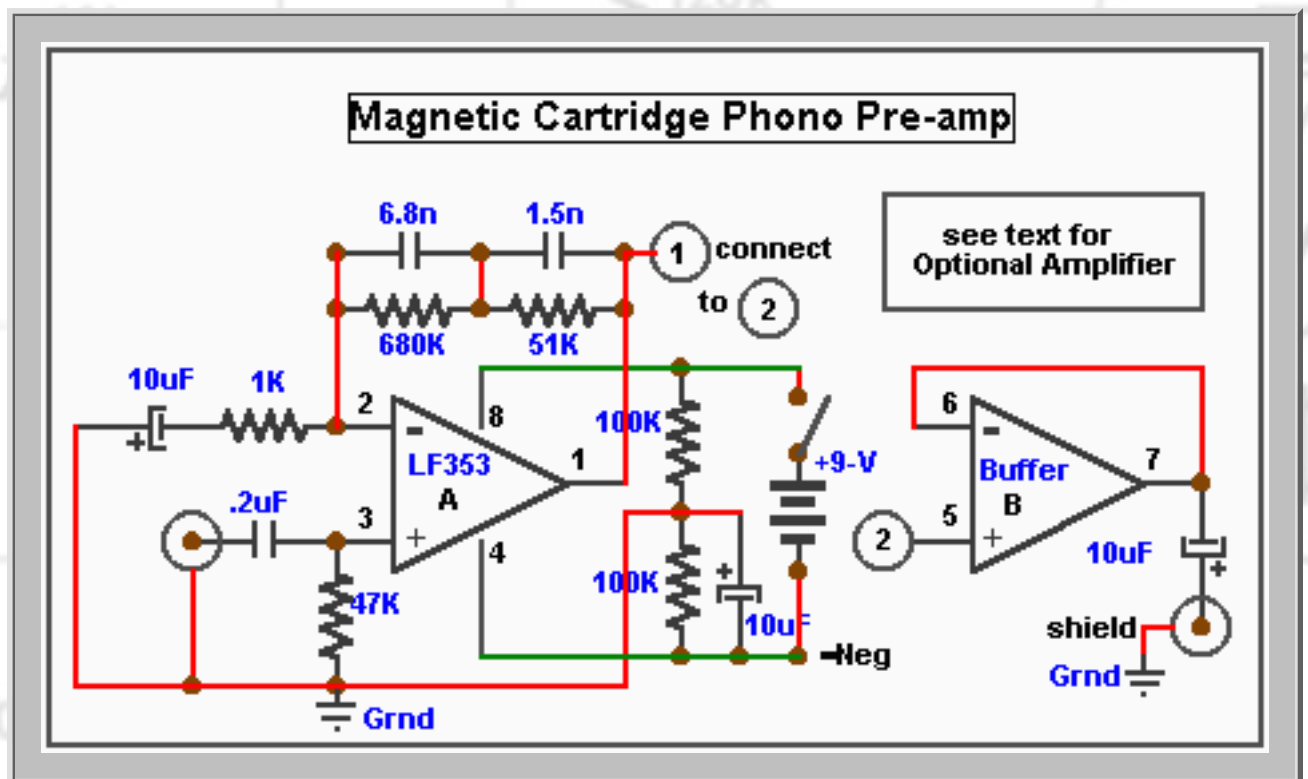
Handy Dandy #12 Little Circuits

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• Gotta stack of 'old' vinyl LPs sitting around that you'd like to play through your computer sound card or record to your new CDR-W but don't have a stereo pre-amp to do it? Then build this magnetic pre-amp with RIAA curve play back (equalization) .

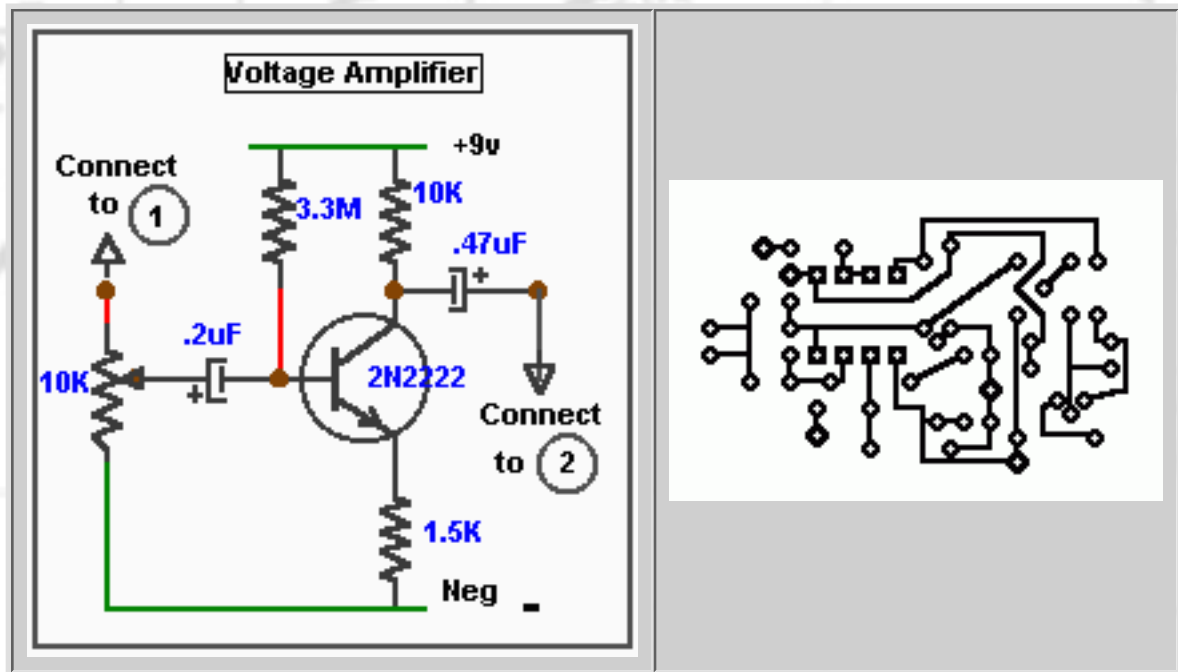
Make sure to use shielded wire for all your connections as well as a 9 volts battery to eliminate any AC(Hum) noise. This is a very sensitive amplifier and will output up to 350mv at 1khz for 5mv input from a magnetic cartridge. Make sure to ground the turntable frame to the **Circuits Ground** . For low noise and good frequency response use an LF353 dual FET . An LM358 may be used as a substitute .The two 100k resistances are connected to the Positive (+) and Negative (-) supply to form a voltage divider filtered by the 10uf capacitor to provide the ground (0- volt) .

Op-amp "B" is used as a (Buffer) voltage follower to provide a low impedance output (600 ohms) . The output is well suited for the input of most " Auxiliary " input of an amplifier .

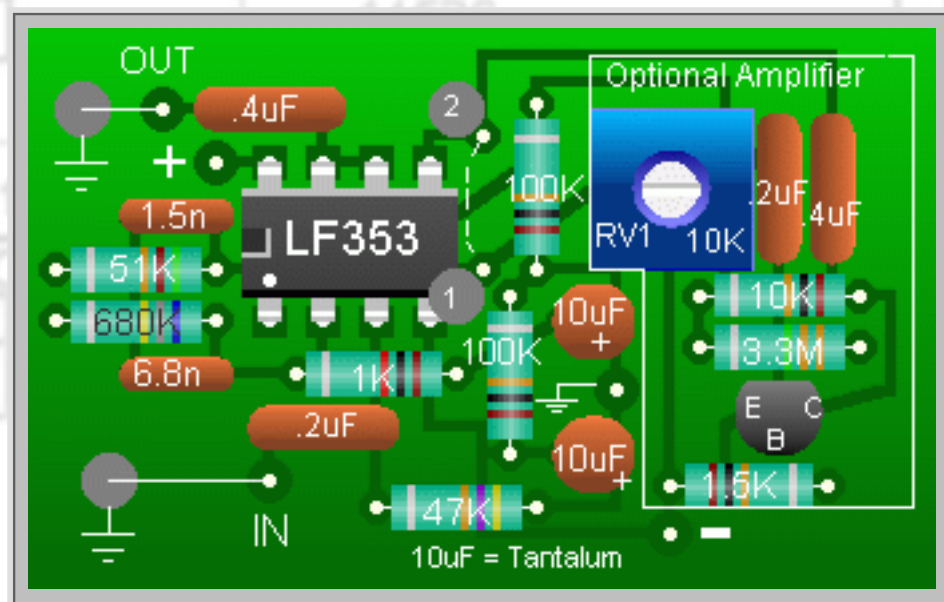


Sound Card

- I had a couple of readers who reported that the output of the basic pre-amp was not high enough for their sound card . As an option I designed a small voltage amplifier that can be inserted between the pre-amp (A) and the buffer (B) .



- This option has been incorporated into the PCB and layout as an option as shown and if not used then only a jumper is required between output " 1 " and input of the buffer " 2 " . The output of the modified pre-amp has been boosted to as much as 2.5 volts at 1Kz .



- The layout is for a single channel pre-amp . Duplicate the circuit layout or PCB for Stereo , connect positive , negative and ground points together .

Use stereo input and output plugs and shielded wire . Ensure that all grounds and wire shields (mesh) are connected to Ground of the circuit . It is also recommended that a metal enclosure be used to minimize noise and Hum .

● To set up into a computer sound card , great care must be taken not to overload the sound card input . First , set RV1 to it minimum point then set up your computer volume control to half point . Power up your pre-amp and with a record sound into to your pre-amp increase RV1 slowly until the computer sound output is at the normal level that you are used to and no distortion is heard . This will be a permanent setting for RV1 . To prevent any change to that setting you can use a drop a silicon or nail polish to lock RV1 setting .

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Questions? Email me at roma60@home.com

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