

| [Created August 2008](#) | [version 0.1.a](#) | [Current Version 0.1.b](#) |



[Uniden PC-122XL
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Courtesy Of CBTricks.com

Recommended Part Additions
Components marked with Yellow Dot
Modification Section

For Educational Purposes only!

To begin, I'm assuming you've taken the covers off and have the main board exposed...

Locate Final and Driver, did you ever wonder why holes are still in the board - with no parts?

This is what differentiates this Radio from the other predecessors in this line of radios based on this chassis. To get varying levels of performance, some parts are omitted to allow this chassis to be used in the USA and exported to other countries that follow FCC guidelines.

And some parts can be replaced or put in, when the country is following ITU regs, or has no limits on power capacity or other restrictions.

This radio, is not a Galaxy by any means. It's a unique radio.

The pictures, Graphics, Circuit Board Design and Nonclenemature are © COPYRIGHTED by individual manufacturers. Schematics were Re-drawn by hand to help the newer users as an aid during discussion and to enlighten you.

To provide you with a guide, [VIEW SOURCE](#) this page. Then [SAVE](#) the text under an .htm or .html extension in a directory created on your hard drive. And create a Sub-Directory using "**graphics**" as the name. Then right-click on the individual graphics and select [SAVE TARGET AS](#) to this graphics directory. This will make it easier for you to refer to the pages - since they will be saved onto your hard-drive and can be viewed later when you need to be off-line.

I appreciate you taking the time to spend with this effort. Please take a moment or two to thank this site for having this data stored to help people like you.

I strongly recommend that you get all the graphics and text on these pages and study them before you begin work. There is a lot of information here and it's hard to place all of it into a 2-dimensional screen.

Thank You

- H.A.

DISCLAIMER:

I am NOT RESPONSIBLE if procedures are not followed or if errors are made.

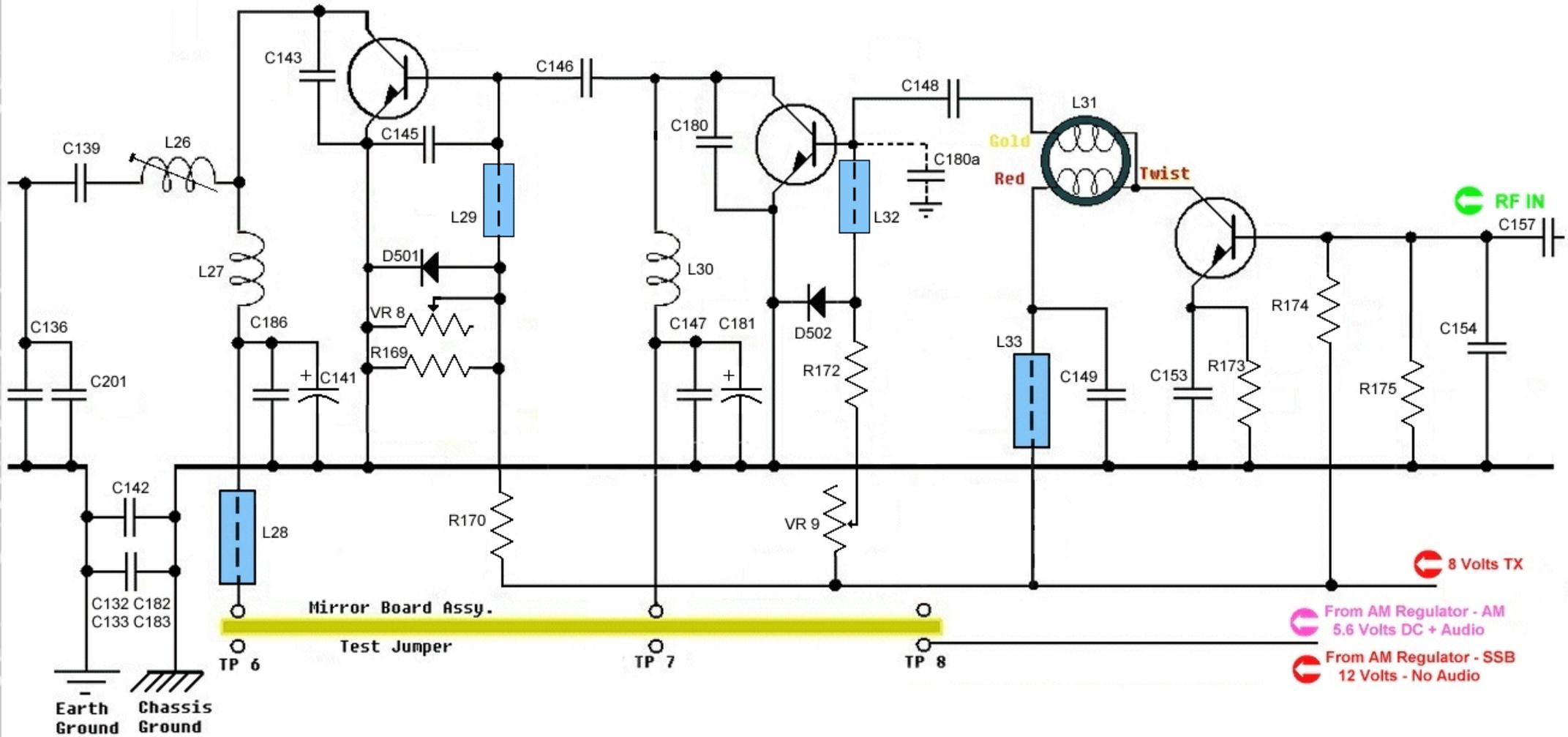
Every effort has been made to provide this information as complete as possible.

If you find something amiss - PLEASE INFORM US AS SOON AS POSSIBLE!

PLEASE VERIFY YOUR WORK AND COMPONENT VALUES!

If you purchased a USED radio, you may find many parts have been changed - schematics on these pages are here to help aid you in re-aligning and rebuilding.

PB-122 [xx] Original Uniden Design



Brief Cicuit Description:

This radio uses a 3-stage amplifier section for Transmit;

The Pre-driver, 2SC1973SSB, is biased as a Class A amp using R174 for pull up and R175 for impedance and return bias. The Emitter uses C153 to provide an RF-shunt to board ground and R173 provides current limiting and DC voltage stability. Power taken from TORRIOD COIL L31, mixes with RF generated at the output of the Collector and is sent through via this Trifilar winding to C148.

The Driver, 2SC2166 is biased in Class-AB [VR9, R172-150 ohm, L32 - 2.2ohm with Ferrite Bead and C150-0.047uF] using a Forward Biased diodes' [D502 MV-1Y] voltage drop

being applied to the Base at the same time RF is being applied from C148. Amplification occurs when Audio and Voltage provided by AM REGULATOR section is applied to the Collector through TP 7 and a filter network consisting of C147 [0.01uF], C148 [1uF] and the RF Choke L30. The Emitter is sent to common - board ground - for maximum gain. The output of this stage is developed at the junction of C180 and C146.

The Final, 2SC2312, is also biased as Class-AB. Accepts RF from C146, using C145 and C211 as shunts to present to the base the proper drive level for the region of bias the transistor uses; being determined by D501 [MV-1Y], R169, and VR8 - with C144 being used to keep RF out of the Bias circuit in conjunction with L29 - a 1.0 ohm resistor with Ferrite Bead. The Collector accepts voltage and audio together through TP 6 and filtered by C141 [0.47uF] and C186 [0.01uF] into L27 - an RF Choke - that passes the mixed Audio and Voltage provided by the AM Regulator section. RF Chokes L27 and L30 keeps RF from finding a feedback path and generating instability. The Finals' Emitter is also sent to common - board ground - for maximum gain. The RF output is developed at the junction of C143, L27 and L26.

L26 is a tuning slug that acts as the admittance impedance transfer to C139 and Pi-output filter network and onto the Antenna connector.

I need to caution you that playing with these values to achieve "SWING" can destroy the Final!

• Yellow Dot Parts List:

[View the Schematic with the parts being affected here!](#)

• Red Dot Parts List:

[You Can view the components affected by clicking here!](#)

I have a reference page, it is a compilation of notes and mods that I've done to this radio. I just couldn't place it in a true format except to throw all the information onto one page with the graphics involved. I hope this information yet to be seen could be of assistance to you.

You can view the page [By Clicking Here!](#)

PC-122XL - in HD

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Have fun...and remember...

For Educational Purposes only!

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Disclaimer: Although the greatest care has been taken while compiling these documents, we cannot guarantee that the instructions will work on every radio presented.

Uniden PC-122 Upgrade/Troubleshooting Service Section How-To Manual
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