



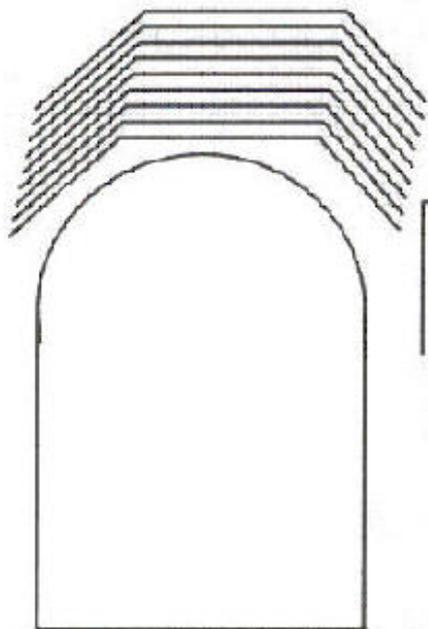
Mods for IC-821H

TX/RX

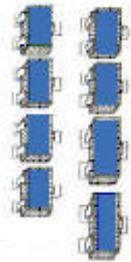
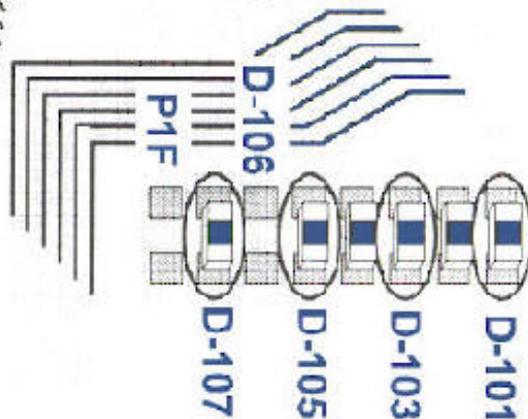
136 - 174 Mhz 420 - 460 Mhz

1. Remove power and antenna.
2. Remove screws open case.
3. Locate display board
4. Locate and **cut resistor D101 (144 RX Mod)**
5. Locate and **cut resistor D103 (440 RX Mod)**
6. Locate and **cut resistor D105 (144 TX Mod)**
7. Locate and **cut resistor D107 (440 TX Mod)**
8. Locate and **install Diode P1F (1SS355 - X-Band repeater mod)**
9. Reset the microprocessor.
10. Reassemble the radio
11. **Reset the microprocessor.** (Hold [M-CLEAR] and turn power on)

IC-821H



Display Board



Cross Band Repeater

TURN ON X-BAND

Turn power on

Set frequency in both bands

Set [LOCK] function (see user manual)

Turn the radio off

Press and hold [M/S] key and turn the radio on.

TURN OFF X-BAND - Press [LOCK]

On this page is the x-band (cross band) repeater mod described for the ICOM IC-821h alamode dual band transceiver with photo's

I have not done this mod myself (yet) the schematics come from ICOM Europe and the mod has been tested by Wolfgang DJ9JY.

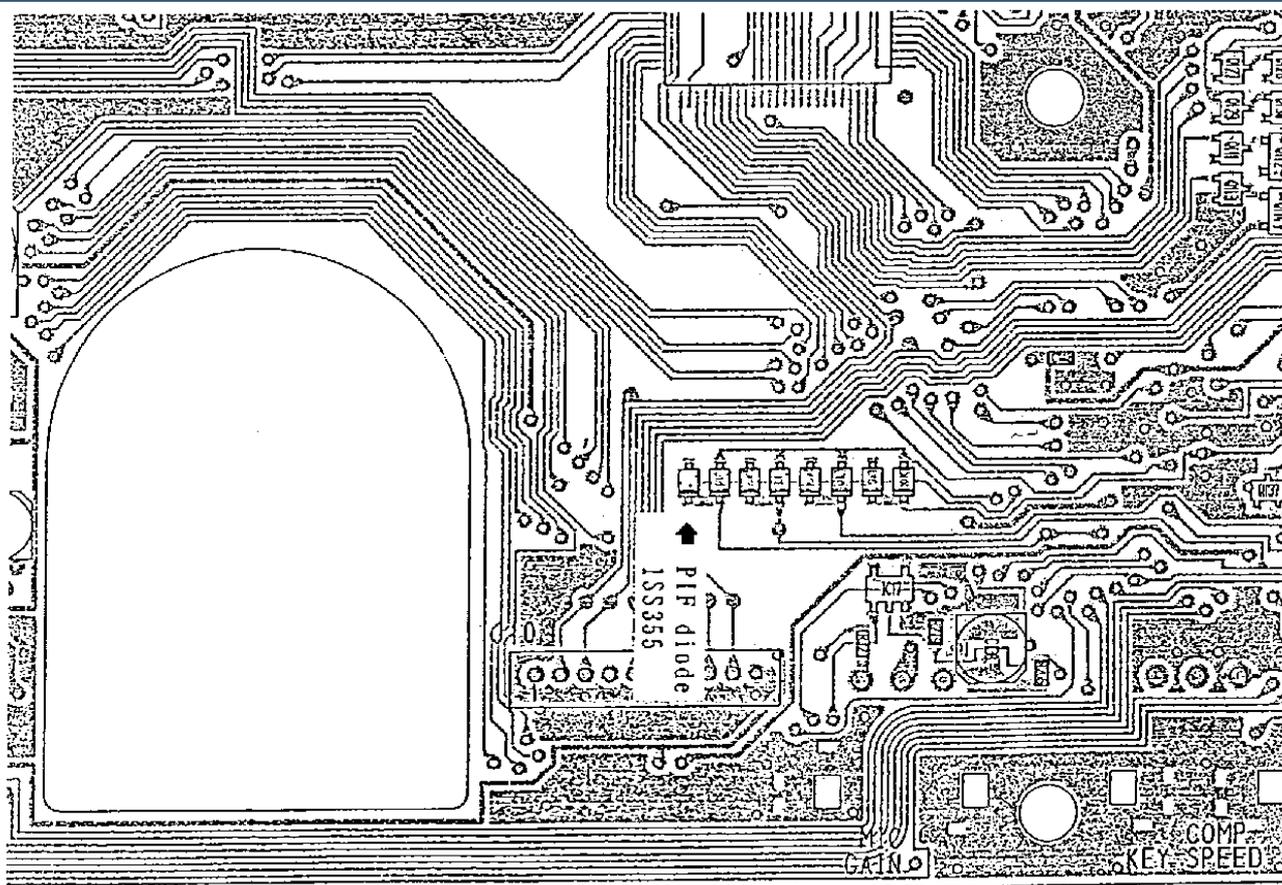
You need to locate the row of diodes on the display board, for that You need to remove top and bottom covers of the 821 (described in Your owners manual on page 50 and remove two screws witch hold the front of the 821 and turn the 2 other screws 1/4 loose so You can pull the front towards You (about 5cm)

Now You have to solder a diode in to the space reserved for D108.(1ss355) You can use one of the diodes you have removed (d101-d107)

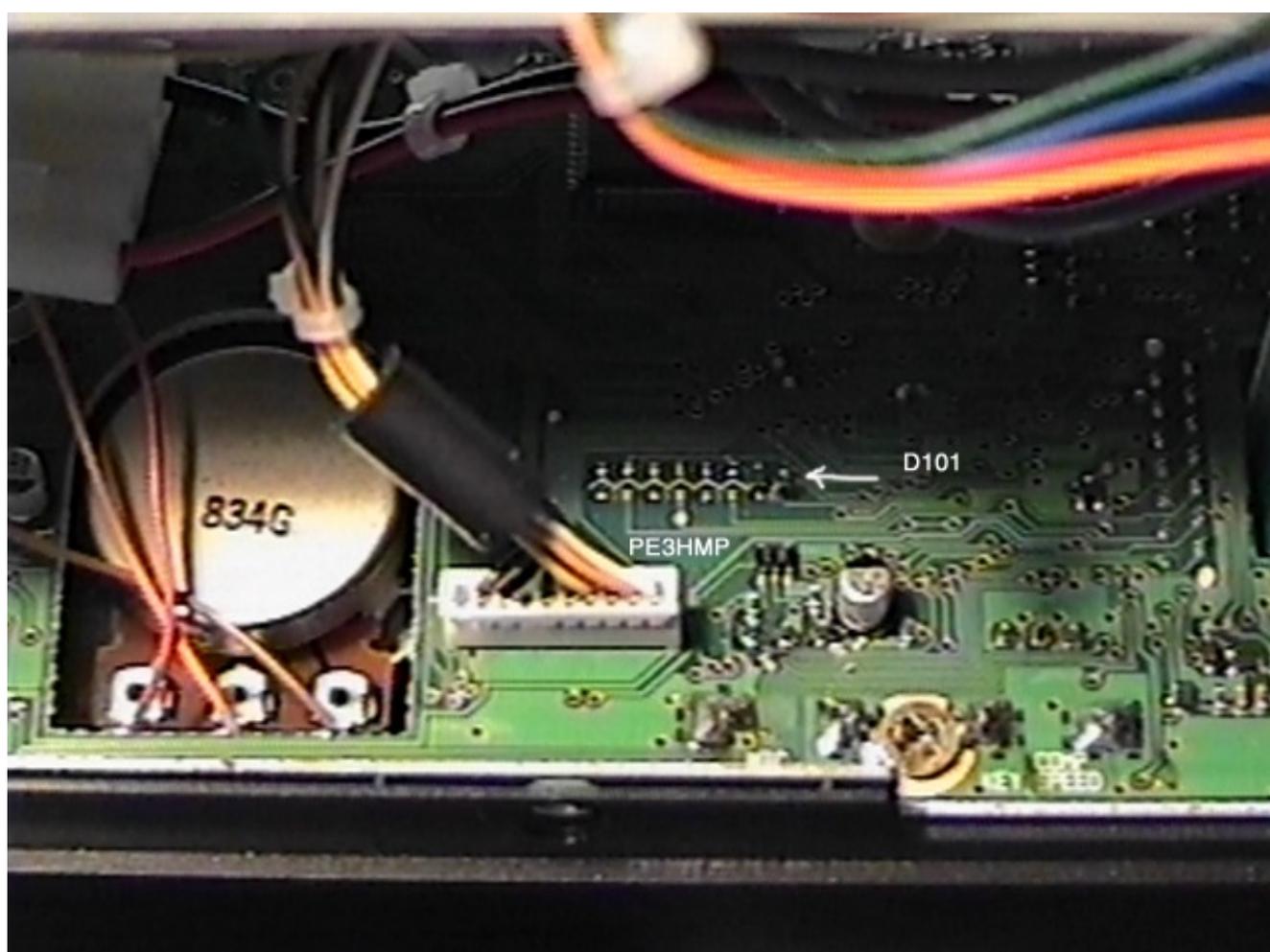
As far as I know D108 is never in place as it leaves the factory.

If this is Your first attempt to solder anything I would suggest to leave it until You have a lot of practice

In this drawing You see were D108 should be placed



This is a color photo were the diodes can be found , D108 is on the left, D101 is on the right



After soldering D108 into place you will have to do the following to get the x-band repeater to work:

Turn ON the power switch.

Set the both band desire frequency at dial

Set [LOCK] function (see instruction manual)

Turn OFF the the power switch

Push [M/S] key and turn on power switch.

You can stop pushing the [M/S] key now (LOL)

This enables the x-band repeater

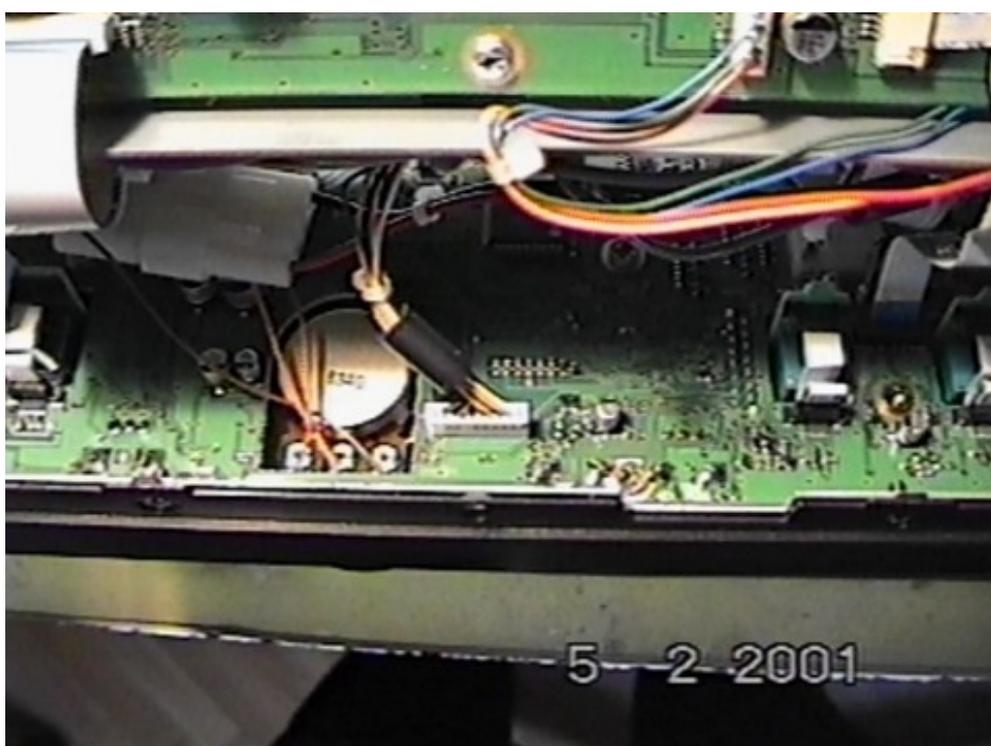
To disable the x-band repeater just push [LOCK] to release lock function.

Icom IC-821H mods

I have done this mod myself but If You do anything wrong I'm not responsible !!

You need to locate the row of diodes on the display board, for that You need to remove top and bottom covers of the 821 (described in Your owners manual on page 50 and remove two screws witch hold the front of the 821 and turn the 2 other screws 1/4 loose so You can pull the front towards You (about 5cm)

Now You have enough space to carefully remove the diodes.



can You find them ? (they are SMD diodes)

Removing D101 gives You 136 - 174 Mhz (RX)

Removing D103 gives You 420 - 460 Mhz (RX)

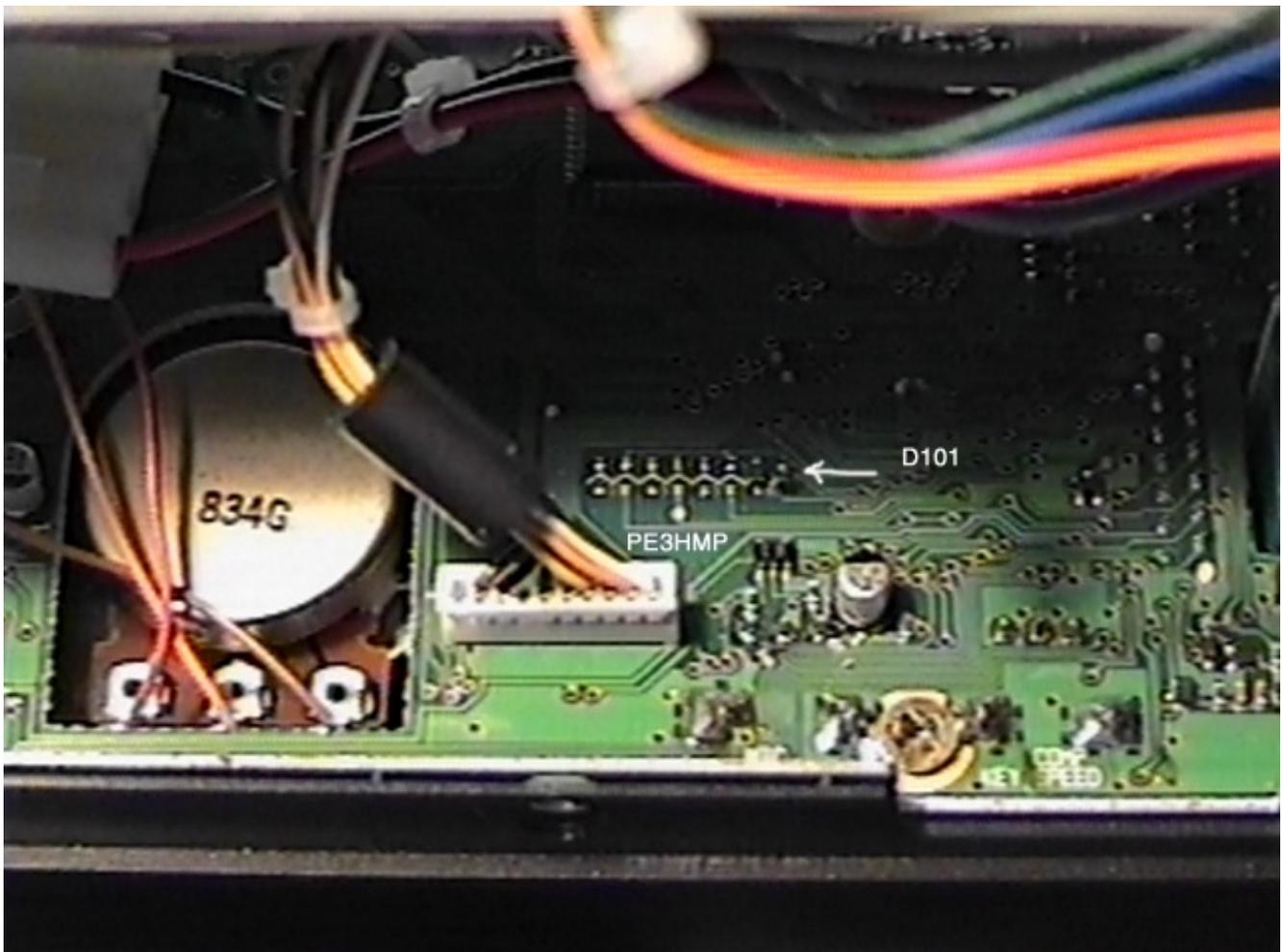
Removing D105 gives You 136 - 174 Mhz (TX)

Removing D107 gives You 420 - 460 Mhz (TX)

And then You will have to make a choice: leaving the D102 diode in place for 1750Hz tone when You press the tone button on the front, or if You remove D102 You can use the sub audio tones (like the ones used at some European repeaters) but no 1750Hz tone.

If this is Your first attempt to solder anything I would suggest to leave it until You have a lot of practice, make sure You have a small soldering tip and some pliers then gently heat one side of the diode and lift that side up, I would suggest leaving the diode hanging there (only connected to one side) in case You want to restore the 821h to its original state.

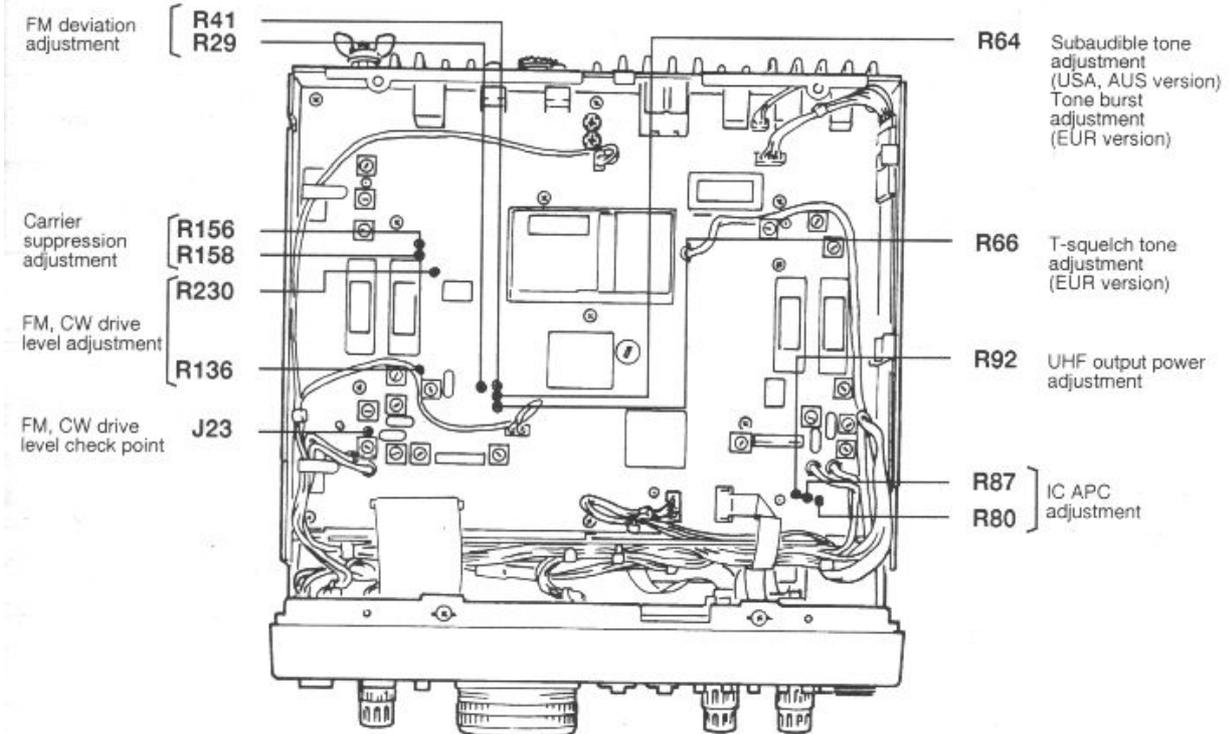
I removed ALL diodes so now I have RX/TX 136 - 174 Mhz and RX/TX 420 - 460 Mhz and sub audio tones.



On this photo You can see were the diodes used to be.

After I had done the mod there occurred a problem, the sub tone's deviation was too high because the same pot is used for the deviation of the 1750Hz burst tone in the European models, the deviation should be about 1/3 of that of the 1750Hz tone (about

• MAIN UNIT



T-SQUELCH TONE (EUR version)	1	<ul style="list-style-type: none"> • MAIN band freq. : Any • [TONE SQL] : ON • Tone frequency : 67 Hz • Applied no audio signals to the microphone connector. • Transmitting 	Rear panel	Connect an FM deviation meter to the transmitting band's antenna connector through an attenuator.	± 0.6 kHz	MAIN	R66
SUBAUDIBLE TONE (USA, AUS versions)	1	<ul style="list-style-type: none"> • MAIN band freq. : Any • [TONE] : ON • Tone frequency : 67 Hz • Applied no audio signals to the microphone connector. • Transmitting 					R64

Well this should make things very easy for You, If there are any suggestions pse e-mail me:

PE3HMP@hotmail.com