

INTERFACE FOR AN ICOM IC-705 TO AN ATU-100 (most smd)

This Schematic is to interface an ICOM IC-705 transceiver to an ATU-100 (by N7DDC) and uses the IC-705's TUNER function BUTTON to initiate "tune" or "reset" of the ATU.

** SOFTWARE IS "IC705_ATU100_6.ino **

Use EITHER an ATtiny85 or Arduino NANO board

See Sketch for details when compiling

correct the issue with D5 (weak) on the ATtiny

V1.1 PCB has wrong pinout to 3.5mm socket !

CORRECTED ON V1.2 nano/atTINY VERSION PCB

TO IC-705 (TUNER JACK)

Use a stereo jack here (Socket)

NOT USED IF NANO

SHEET TWO IN CASE I DO THRU HOLE PCB

ATU-100

NOTE:

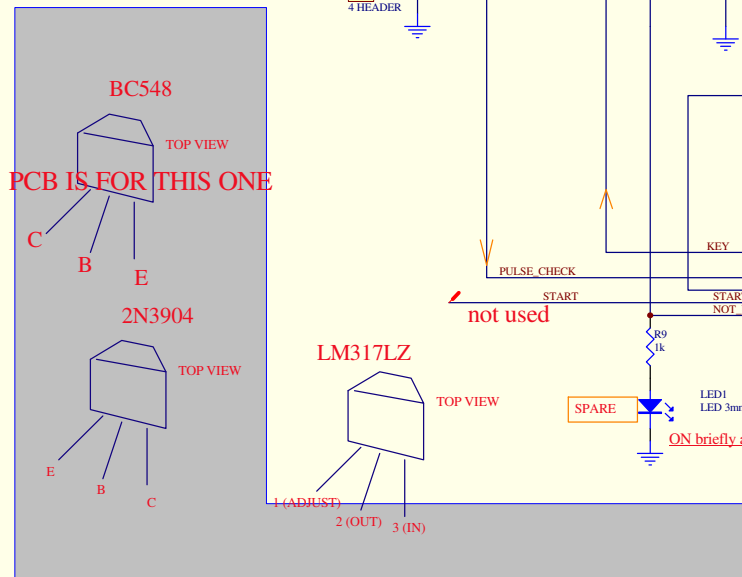
Pin 4 of J1 to the ATU-100, needs to be connected to point "A7" on the bottom of the ATU PCB.

This is a small solder pad so be careful. Put a small blob of solder on the pad, then solder a pre-tinned wire to this point, making sure of no solder bridges especially to adjacent point "A6".

"A7" shows activity by the ATU tuner.

*** BC548 WAS USED IN PROTO BUILDS.

2N3904 CAN BE USED BUT NEED TO BE INSERTED 180 Deg ROTATION CHECK BEFORE



CAUTION: there appears to be 2 versions of pinout for the 2N3904:

D:\PROJECTS 2021\ATU_100-ic705\NANO_ATtiny V1.1\IC-705_INTERFACE-TO-ATU-100_correction_U1_V1.1.1.2_NANO_ATtiny85.sch

12TH FEB 2021 UPDATED PCB TO V1.1 FOR SOFTWARE, SEE "IC705_ATU100_4.ino" or later

Schematic:- IC-705_INTERFACE-TO-ATU-100_2

FOR SOFTWARE, SEE "IC705_ATU100_4.ino" or later

JUNE 2024:- NOW v1.2 PCB

DRAFT v1.1 PCB

140221: correct the issue with D5 (weak) on the ATtiny shift pins

12-02-2021 v1.1 PCB_CORRECTED 2N3904 FOOTPRINT & LM317L & STEREO SKT

Q3 now used on both Micro versions & pull-up on that Pin

020221 ADDED ARDUINO NANO ALTERNATE

30th Jan add PNP to START line to IC-705

VK3PE Jun 20TH 2021 DRAFT

Title	IC-705_INTERFACE-TO-ATU-100_2	Rev	1
Size	A4	Number	1
File	IC-705_INTERFACE-TO-ATU-100_correction_U1_V1.1.1.2_NANO_ATtiny85.sch	Date	27-Jun-2024
		Time	12:23:41
		Sheet	0 of 0

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