

## HOW TO CONNECT DISPLAYS TO Trxavrb WHEN USED WITH 'COMBO'

These drawings are currently DRAFT only versions. They refer ONLY to the Trxavrb PCB which is supplied with the Combo BB or integrated on later panels eg C versions, P1, P2 etc.

Note there are some variations to the connector pinout over that used on the individual Trxavrb panel supplied in 2009. I had to rationalise the pinout.

PLEASE verify pinout of the display you are using with these drawings before connecting them up.

Displays are expensive and you might destroy a display or even the Trxavrb PCB with incorrect interconnect.

Refer also to Ian, G3VPX's pages. Ian has found some displays have the 5v and gnd pins reversed, for example !

VK3PE

28th March, 2010

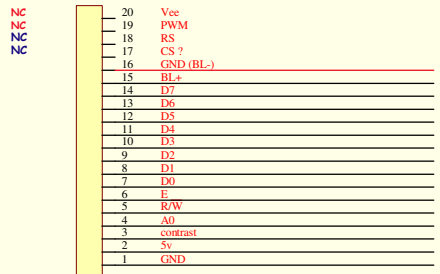
Jan 4th, 2014, minor updates for later Combo versions.

# DISPLAY INTERCONNECTION DETAILS FOR Trxavrb on COMBO panel only

## SIMPLE Trxavrb (COMBO) TO 4X20 lcd DISPLAY

J6 on 'simple' Trxavrb on Combo Panel

*'JT6' on Combo versions.*

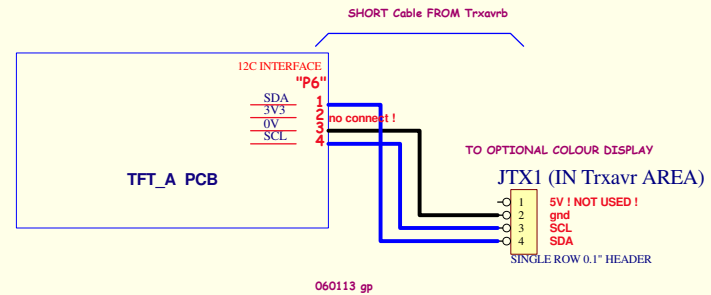


20pin dual row IDC socket

LCD THIS IS A GENERIC CONNECTION PINOUT

RUN BL-ve FROM DISPLAY TO j16 IF DIMMABLE BL REQUIRED

## Trxavrb (COMBO) TO COLOUR (TFT) DISPLAY



060113 gp

NB: Sheet #3 refers to the commercial TFT displays ONLY

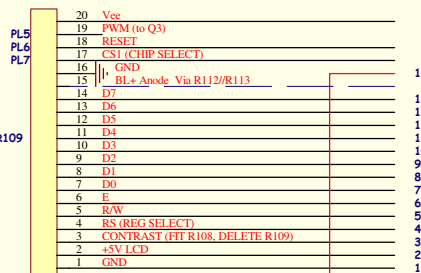
**!! DISPLAYS ARE EXPENSIVE !!! VERIFY THIS INFORMATION WITH THE DISPLAY YOU ARE USING BEFORE CONNECTING TO Trxavrb**

## SIMPLE Trxavrb (COMBO) TO 128x64 GRAPHICS DISPLAY

J6 on 'simple' Trxavrb on Combo Panel

*'JT6' on Combo versions.*

THIS IS Lumex 'LCM-X128646XX' PINOUT, CHECK YOURS!



20pin dual row IDC socket

RUN BL-ve FROM DISPLAY TO J16 IF DIMMABLE BL REQUIRED

1. SEE NOTE BELOW Ref J16

On Trxavrb PCB, fit R108, delete R109

RUN WIRE TO POINT 'G' ON Trxavrb PCB. This is pin 39 of 'IC1'  
Could use: JT13 pin 5. (might need to lower value of RT122)

TO MAKE DISPLAY 'PLUG-ABLE':-

Some builders have cut the track on Trxavrb PCB that connects to J6-15, and then connected the line above (CS2) to J6-15

You then need to run a wire under Trxavrb PCB from point "G" to J6-15 ie. see below

'G' wire under pcb 15 16

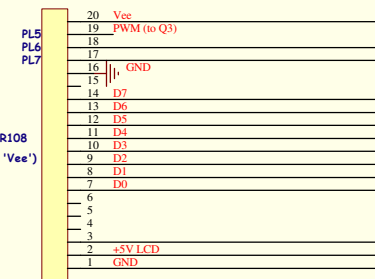
cut existing track to J6, pin 15 (JT6 on Combo)

1. YOU WILL THEN NEED TO SUPPLY BACKLIGHT +VE TO THE DISPLAY FROM PIN 19 OR USE J16 Details to right>>>

## SIMPLE Trxavrb (COMBO) TO 320 x 240 GRAPHICS DISPLAY

J6 on 'simple' Trxavrb on Combo Panel

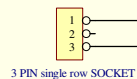
*'JT6' on Combo versions.*



20pin dual row IDC socket

On Trxavrb PCB, fit R109, delete R108  
(Contrast uses Neg voltage from displays 'Vee')

J16 ON Trxavrb  
*JT16 on Combo versions*



BACKLIGHT

DISPLAY BACKLIGHTING

CONNECTIONS NOT YET COMPLETED

DRAFT ONLY 26th March, 2010

CONNECTORS SHOWN HERE ARE NOT IN THE BOM

Jan 4th, 2014, minor updates, re Combo versions ref numbers

Sheet:	SCHEMATICS BY VK3PE & C.S.	
1 of 1	TITLE:-	C:\Documents and Settings\User\My Documents\KEN G3LVP QUERIES\LCD
	"VK3PE"	Vers update Jan 2014

## THIS WIRING IS FOR THE 'ELECTRONICS ASSEMBLY' TFT DISPLAY ONLY

This display has two 20 pin single in-line connectors.

The Connector numbered 1-20 is used for connecting to TrxAVRB

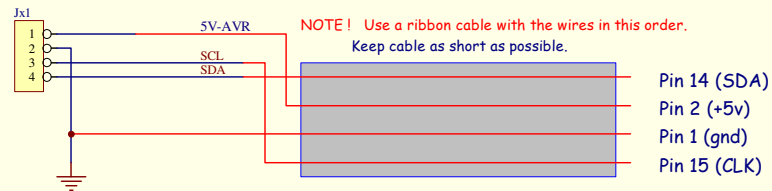
PLEASE VERIFY CONNECTIONS WITH THE DATA SHEET FOR THE DISPLAY YOU HAVE.

**IF IN DOUBT, PLEASE ASK !**

**A 4 WAY RIBBON CABLE CONNECTS FROM Jx1 ON TrxAVRB  
TO THE 'ELECTRONICS ASSEMBLY' COLOUR TFT DISPLAY. )**

PLUGS INTO 'Jx1' ON TrxAVRB PCB

FEMALE 4 PIN SOCKET



20 PIN SOCKET PLUGS INTO DISPLAY

Also:-

Pin 5 (reset) tie to +5v with 6k8 resistor.

Pin 12 (I2C mode), tie to GND

Option: Pin 16 can drive a buzzer, via a transistor for touchpad audio indication.

THE CONNECTORS SHOWN HERE ARE NOT ON THE BOM.

Title		
Trxavr COLOUR CONNECTIONS		
Size	Number	Revision
B		DRAFT
Date:	26-Aug-2009	Sheet of
File:	F:\TrxAVR PCB\Trxavr COLOUR TFT CONNECTIONS 1.Sch	