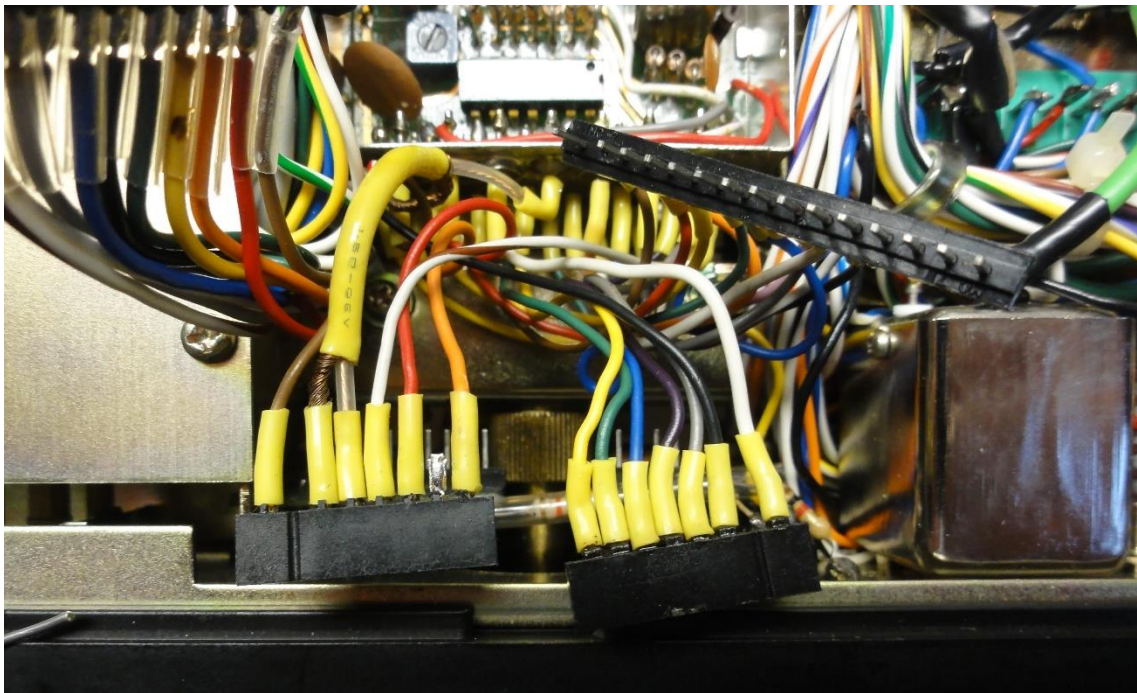


# Modification for FT-301D CBM

Display Logic Unit, Yaesu FT-301D



Modification instructions

April 10, 2019

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Important! Advices or tips for the correct function.



Caution! The instructions must be observed carefully.

## 1 Introduction

The transceiver Yaesu FT-301D was produced in different versions. Special was the Sommerkamp FT-301D CBM series. CBM specifies that the transceiver was modified for the CB band (27 - 27.5 MHz) and the lower marine band (160m, 1.7 - 2.2 MHz).

The frequency display board for the 160m band is the PB-1731 board instead of the normally used PB-1542B.

So the pin assignment of the frequency display of the CBM types is slightly different and it is not possible to use the replacement display EL-31 without small wiring changes.

The following modification shows how the modification is done.

It is important that the EL-31 frequency display module uses firmware version 2.1.b or higher. If you still have an older firmware on your module, then the latest firmware can be loaded via USB connection (see chapter 4 in the operating instructions).

## 2 Modifying for the FT301D CBM

Addition in chapter 2.4.2 of the conversion instructions only for the FT-301D CBM

- Unsolder on the left connector (J2201) the wire from pin 5 (brown, see Figure 1).



The wire must not be cut, because it is needed again!

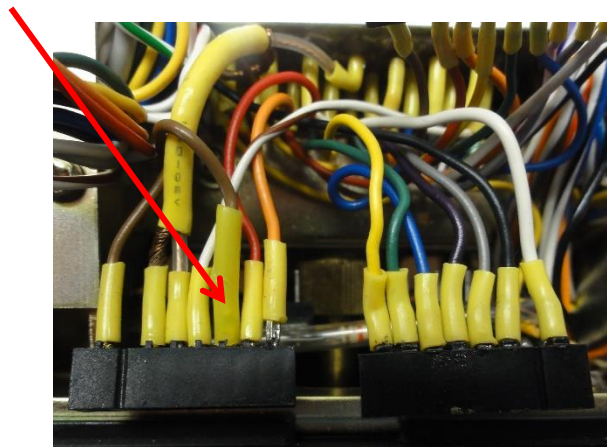


Figure 1

- Unsolder the wire from pin 6 (red, see figure 1) on the left connector (J2201) and solder the wire to pin 5 (see Figure 2). Pin 6 remains free.

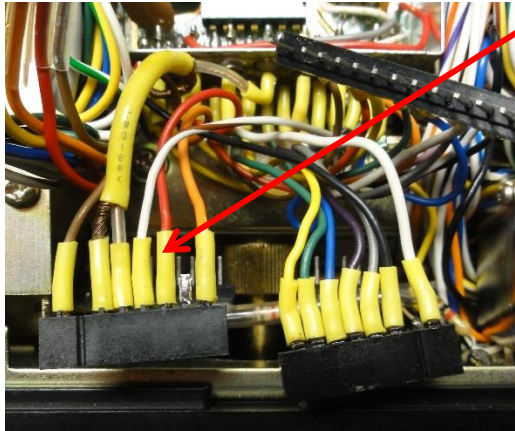


Figure 2

- Solder the brown wire to the empty pin 1 of the connector (J14). (see Figure 3).

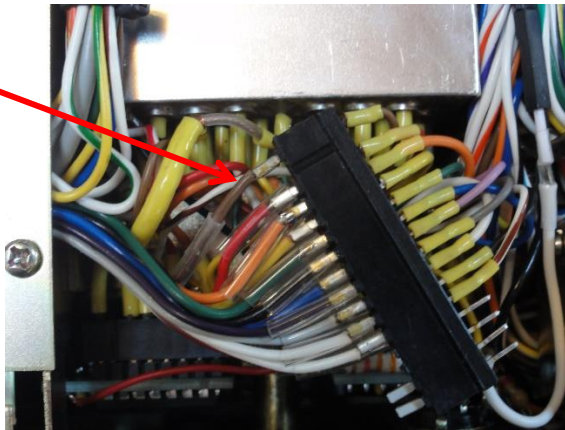


Figure 3

- Carefully plug the two pin headers connections (J2201 und J2202) back to the new display board (see Figure 4).

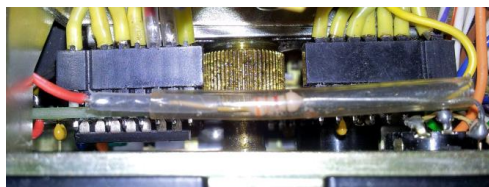


Figure 4

## 2.1 Pin assignment PB-1541

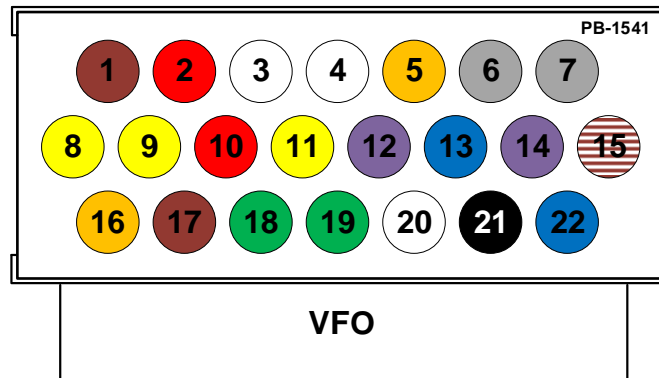


Figure 5

PB-1541		J2101 to EL-31		PB-1541		J2102 to EL-31	
1	brown	1	+5V	11	yellow	1	E-MHz-2
chassis	black	2	Gnd	18	green	2	E-MHz-1
4	coaxial cable	3	RF-Input	13	blue	3	E-MHz-4
15	white-brown	4	5MHz	14	violet	4	E-MHz-8
2	red	5	H-kHz-8	7	grey	5	Z-MHz-1
16	orange	6	5Hz (Gate)	chassis	black	6	Gnd
--	NC	7	NC	3	white	7	Z-MHz-2

Figure 6

Attention: Yaesu has changed the 11m / AUX position at the BAND switch from serial number 6.N.xxxxxx. Position 6 (11m band) is now on position 10 (AUX band).

PB-1541		P2201		J14 on 1976 Type		J14 from 1977 Types	
17	brown	1	160m	brown	brown		
10	red	2	80m	red	red		
5	orange	3	40m	orange	orange		
9	yellow	4	20m	yellow	yellow		
19	green	5	15m	green	green		
22	blue	6	11m / AUX	blue	black		
12	violet	7	10A	violet	blue		
6	grey	8	10B	grey	violet		
20	white	9	10C	white	grey		
21	black	10	10D	black	white		
15	white-brown	11	WWV	white-brown	white-brown		



to Ser.#6.M.xxxxxx



from Ser.#6.N.xxxxxx

Figure 7

### **3 Disclaimer of liability**

Any actions based on the information contained in this document are taken at the user's own responsibility. Any liability is excluded, both for direct and indirect damages and consequential damages that may arise in connection with the use of the information contained in this document.