

CIRCUIT BOARD COMPLEMENT OF TEN TEC TXRs FROM THE TRITON TO THE CORSAIR II (version as of 15/10/17)

Model Name	TRITON*	TRITON*	OMNI A** Series B	OMNI D** Series B	OMNI C****	CORSAIR	CORSAIR II	Comments	
Model Number	540	544	545	546	546C	560	561		
RF Attenuator			80445	80445		80445	see RF Mixer	see RF Mixer	
RX Trimmer	Unnumbered Board	Unnumbered Board	80446	80446		80710			Fine tuning of input circuit
RF Amplifier	80166	80166	80460	80460		80460	see RF Mixer	see RF Mixer	
PTO	^80277	^80277	^80277	^80277		^80277	81038	81038	
OSC - MIX	^80288	^80349	80455	80455		80711	^^^80975	^^^80975	
VFO Amplifier			80454	80454		80454			
RX Mixer			80452	80452		80452			
RF Mixer							^^^80987	^^^80987	
Noise Blanker	Accessory Model 249	Accessory Model 249	Accessory Model 248	Accessory Model 248		80717	^^^80977	^^^80977	
Pass Band Tuning							80979	80979	
Crystal Filter			80256	80256		80256	see Noise B'er	^^81252	
IF-AGC	80279	80279	80448	80448		80448			
IF-AF							^^^80984	^^^80984	
CW Filter	Accessory Model 245	Accessory Model 245	80436	80436		80436	see IF-AF	see IF-AF	Post Demodulation
Notch Filter			80527	80527		80527	see IF-AF	see IF-AF	Post Demodulation
Audio-Sidetone			80447	80447		80447			Audio Amplifier
Audio Amplifier	80274	80274							
SSB Generator	80282	80282	80449	80449		80449			
Double Sideband Generator							80980	80980	
TX-RX Mixer	80287	80287							
TX Mixer			80453	80453		80453	see RF Mixer	see RF Mixer	
Bandpass Filter	80291	80291	80459	80459		80712	80976	80976	
Low Level Driver	80285	80285	80444	80444		80743	81037	81037	
Final Amplifier	80276	80276	80491	80491		80491	80565	80565	RF Power Amp
Low Pass Filter	80307	80307	80466	80466		80709	80969	80969	
SWR-ALC	80284	80284							
SWR-TR			80450	80450		80450			
SWR Board							80970	80970	
OT-TR	80281	80281	80281	80281		80281			Offset Tuning
VOX			80451	80451		80451		81249	
VOX-Processor							80981		
Audio Processor								81255	
Bandswitch		80365							First two digits of freq display
(Counter) Logic Board		80348		80441		80441	80973	^^81246	
Time Base-Preamp		80346					80974		
Display		80347		80440		80440	80547	81248	
Display Driver								81247	
Preset-Amp				80465		80465			

Timebase				80442	80442		
Control Board	80280	80280	80464	80464	80708	^^80978	^^80978
LED Display						80983	80983
Switch Board						80971	
Meter Switch						80972	
Mode Switch						90982	81256
Crystal Calibrator	80308		80437				

The table shows the complement of the circuit boards in the various model TXRs. TT gave each board an identifying number. This enables the tracking of the changes to the TXRs through the various models - although this does not work so well with the Corsairs. (See ^^ ^^.)

Source of Information: Ten Tec Owner's Manuals - Model 540, Model 544, Omni A - Omni D Original Series***, Omni A - Omni D Series B, Omni C Model 546C, Omni (appears to be the same as the preceding manual), Corsair, Corsair II.

* The main difference between the 540 and the 544 is that the 540 had a mechanical frequency readout and the 544 a digital readout.

** The main difference between the Omni A and the Omni D is that the Omni A had a mechanical frequency readout and the Omni D had a digital frequency readout. The difference between the Original Series and the Series B is that the Original Series had a squelch control and a 4 position selectivity switch (post demodulation). In the Series B, the squelch was replaced by a notch control and the selectivity switch had 6 positions. In the Omni C, the notch control was placed underneath the drive control and the rotary selectivity switch was replaced by two toggle switches located underneath the ALC control. In summary (as best understood but may be subject to revision):

<u>Model #</u>	<u>Series</u>	<u>Insignia</u>	<u>Frequency Display</u>	<u>LH Control Position</u>	<u>RH Control Position</u>
545	original	OMNI A	analog	rotary squelch	4 position rotary selectivity
545	B	OMNI A	analog	rotary notch	6 position rotary selectivity
546	original	OMNI D	digital	rotary squelch	4 position rotary selectivity
546	B	OMNI D	digital	rotary notch	6 position rotary selectivity
546C	C	OMNI	digital	2 toggle switches selectivity	rotary notch

*** The frontpiece of the copy of the manual to hand manual says it is of the Original Series. However, the circuitry inside shows the inclusion of a notch filter. The notch filter first appeared in the Series B. This copy appears to be titled incorrectly. Hence the Omni A and D columns above show information for the Series B only.

**** I have two manuals which both seem to deal with the 546C but have different title pages (viz., Omni C Model 546C, Omni). I can't otherwise discern any difference between the manuals. (Again, more scrutiny may be required.)

^ There appears to be inconsistencies with the way the VFO system is named in the manuals. There are discrepancies between the index, the written description, the schematics and the inter board wiring diagramme. I have chosen to use the nominations in the schematics.

^^ The written description of the Control Board and the Digital Readout circuitry in the manual for the Corsair II has been taken from the Corsair manual - additionally, there appears to be circuit differences between the control board in each model even though they have the same identifying number - a complete schemozzle.

^^ Designated as 81253 in the manual index and title to description. The schematic numbers it as 81252.

^^^ Whilst these boards in the Corsair and Corsair II are numbered the same, they have moderately to completely different circuitry.