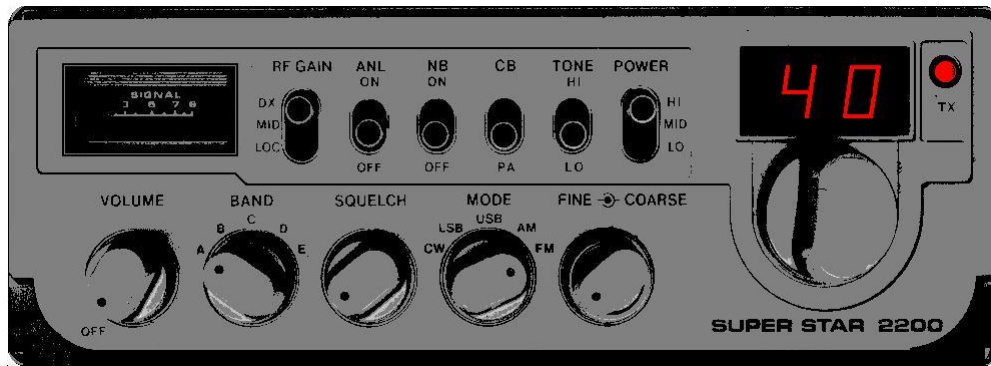




CHASSIS PCMA001S

CHASSIS PTBM125A4X

CHASSIS PTBM131A4X

RECEIVER

Ant. → Q18 RF Amp. → Q19 Mixer → XF1 (10.695MHz) → SSB IF → SSB IF → SSB Det. → AN7140 IC6 AF Power → Speaker

CEPT 37.660MHz - 38.100MHz → Q19 Mixer

PLL Circuit → 10.240MHz → Q19 Mixer

10.695MHz → Q34 Q35 OSC → TP4

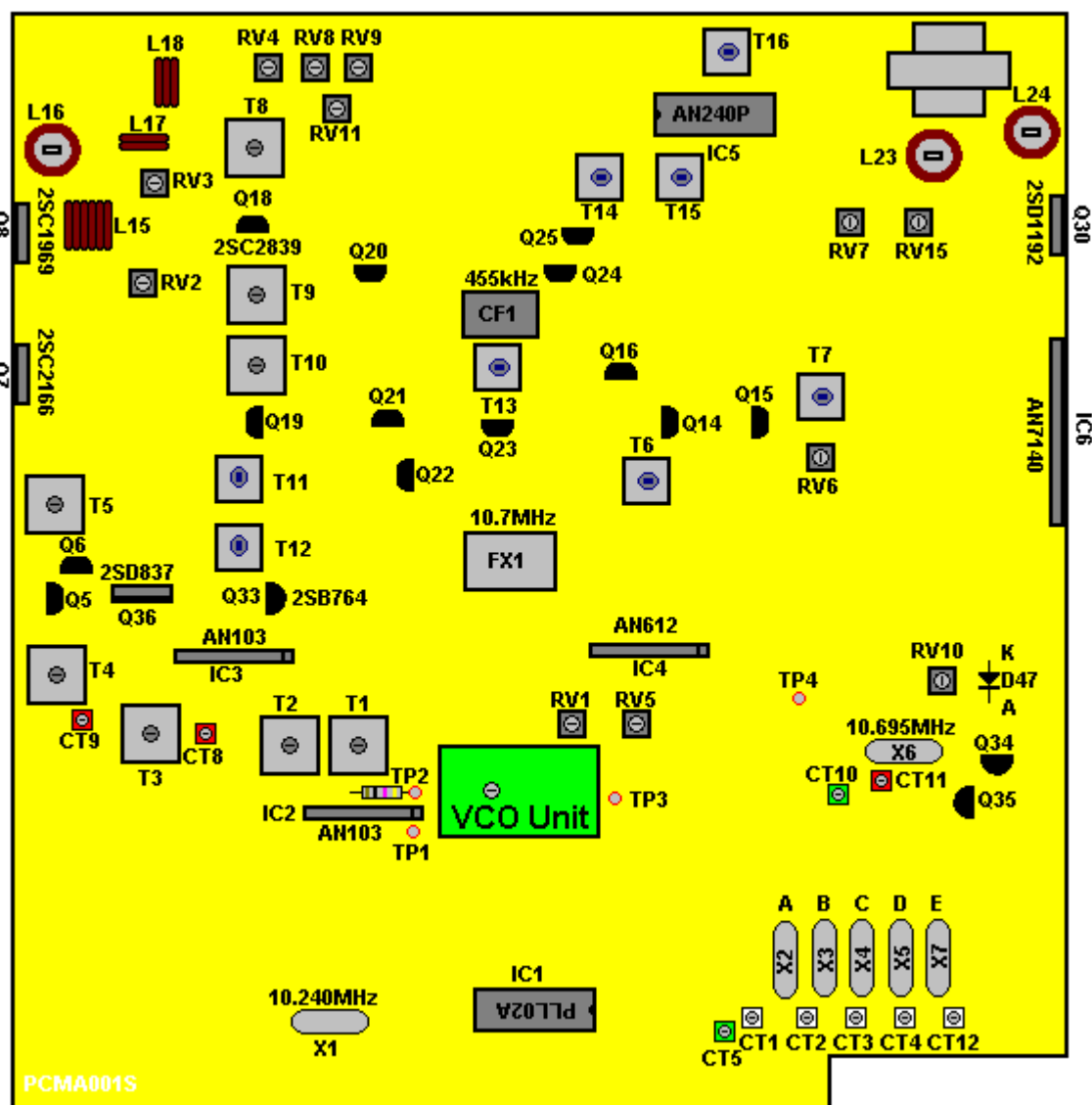
Q19 Mixer → AM Mixer → CF1 (455kHz) → AM IF → AM Det. → AN240P IC5 FM Det.

SSB Det. → AN240P IC5 FM Det.

AN240P IC5 FM Det. → AM IF

AM IF → AM Det.

AM Det. → AN7140 IC6 AF Power



Reading Point	Adjustment	Description	Value
TP1	CT1	Band A -80 Ch.	19.655MHz
TP1	CT2	Band B -40 Ch.	19.880MHz
TP1	CT3	Band C CEPT	20.105MHz
TP1	CT4	Band D + 40 Ch.	20.330MHz
TP1	CT12	Band E + 80 Ch.	20.555MHz
TP1	CT5	Band C CEPT	20.1035MHz
TP2	T1	Output to RF local oscillator	37.660-38.100MHz for CEPT
TP3	VCO-Coil	VCO DC Voltage	2,5 Volt @ 27.175MHz
TP4	CT11	AM	10.695MHz
TP4	CT10	LSB	10.692MHz
Adjustment	Description		Value

RECEIVER		
T8	RF Input	
T9	RF Input	
T10	RF Input	
T11	1. IF	10,7MHz
T12	1. IF	10,7MHz
T13	AM IF	455kHz
T14	AM Detector	455kHz
T6	SSB IF	455kHz
T7	SSB Detector	
T16	FM Discriminator	
TRANSMITTER		
T1	PLL Output to Converter	37.660 - 38.100MHz for CEPT
T2	PLL Output to Converter	37.660 - 38.100MHz for CEPT
T3	Transmitter Output	26.965 - 27.405MHz for CEPT
T4	Transmitter Output	26.965 - 27.405MHz for CEPT
T5	Transmitter Output	26.965 - 27.405MHz for CEPT
L16	Transmitter Output	26.965 - 27.405MHz for CEPT
CT8	Transmitter Output USB/LSB	26.965 - 27.405MHz for CEPT
CT9	Transmitter Output USB/LSB	26.965 - 27.405MHz for CEPT
RV2	Bias Q8	
RV11	AM/FM Output Power	10 Watt
METER		
RV4	RF Power Meter	
RV8	RF S-Meter	SSB (USB/LSB)
RV9	RF S-Meter	AM/FM
.		
RV1	FM Modulation	+/- 2kHz
RV6	SSB Modulation	18 Watt p-p
RV11	AM Modulation	90%
RV5	Carrier at SSB	Adjust for NO Carrier

Modification for SuperStar 2200

To get 10-meter, cut trace from + 5 Volt to Pin 8 and 9.

To get 12-meter, cut trace from GND to Pin 7 and connect Pin 7 to + 5 Volt.

Make a new [VCO Block](#).

Re-tune both Transmitter and Receiver-part.

VCO operates between 17.115MHz (Ch.1 Band A) and 18.445MHz (Ch.40 Band E),
output on Pin 6 is 36.780MHz (Ch.1 Band A) to 39.000MHz (Ch.40 Band E),
and output on Pin 9 is 2.550MHz to 2.110MHz in all band.
The VCO-voltage (TP1) operates between 4,5 Volt (Ch.1 Band A) and 0,5 Volt (Ch.40 Band E).

[Frequency List for SuperStar 2200](#)

COMPONENTS

[PCMA001S Schematic Diagram](#)

[VCO Block](#)

[2SC1969 Final Transistor](#)

[2SC2166 Driver Transistor](#)

[2SC2839 RF Transistor](#)

[2SB764 DC Switch Transistor](#)

[2SD837 DC Switch Transistor](#)

[2SD1192 AM Modulation Transistor](#)

[AN7140 Power Amplifier](#)

[AN240P FM IF-Amplifier and Discriminator](#)

[AN612 Balanced Modulator](#)

[AN103 Oscillator, Mixer and Amplifier](#)

[PLL02A PLL Frequency Synthesizer](#)