

1. NMP-612T FM TRANSMITTER CONCEPTION & Functions

1-1 SUMMARY

This apparatus transmits modulated contents(MP3, WMA file, etc) with FM radio Frequency(88.0~95MHz) at the same time playing them.

1-2 Main Functions of FM Transmitter

Not set the channel (output frequency) which has some level carrier power (To prevent channel interference between apparatus)

It check carrier power level with FM tuner within this apparatus before set frequency.

Search Channels automatically(Auto preset function)which has no carrier power.

2. Type of radio station

This weak power radio station is available for Car Audio, Home Audio, FM Radio in order that may accomplish education, entertainment purpose .

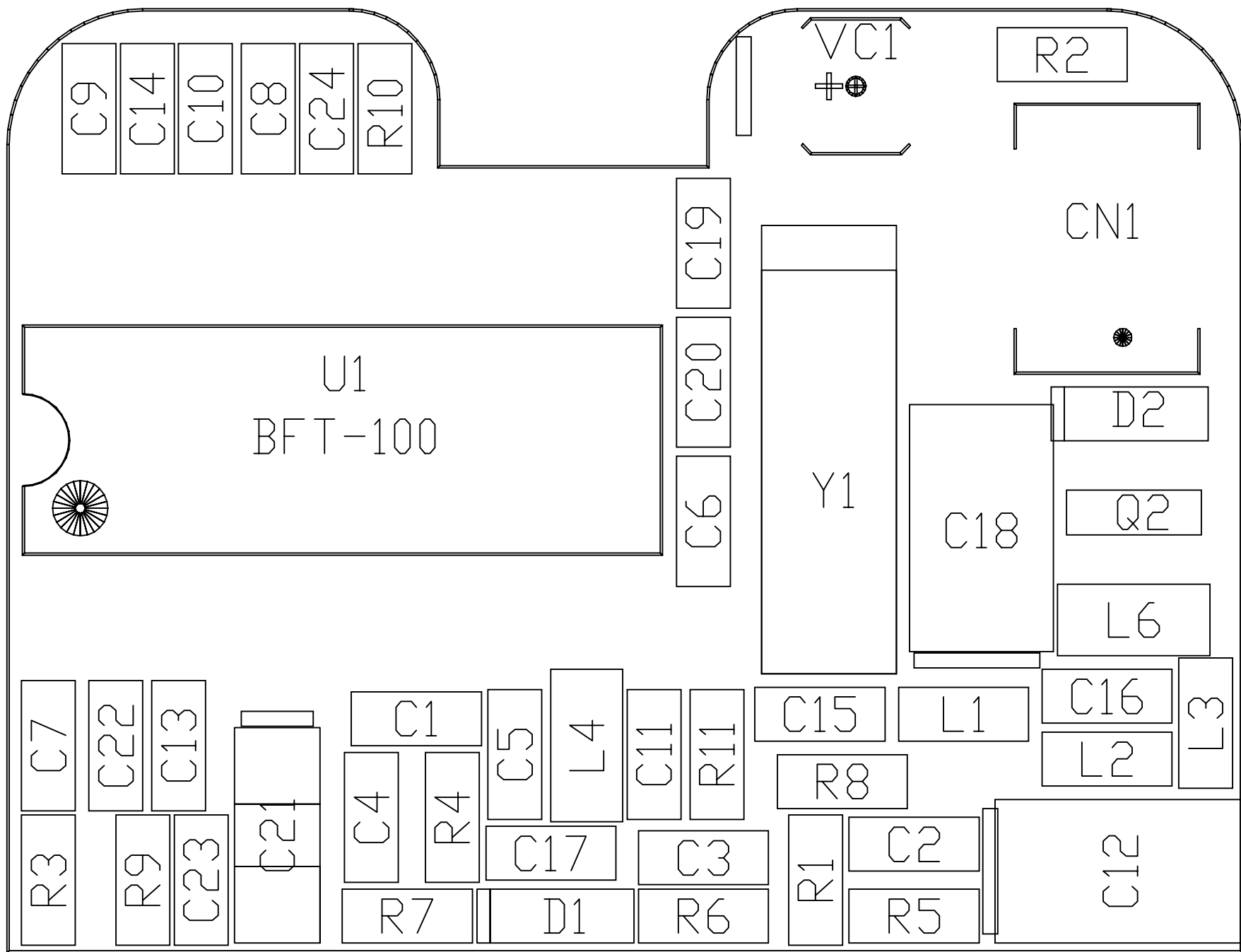
3. Specification of FM Transmitting Block

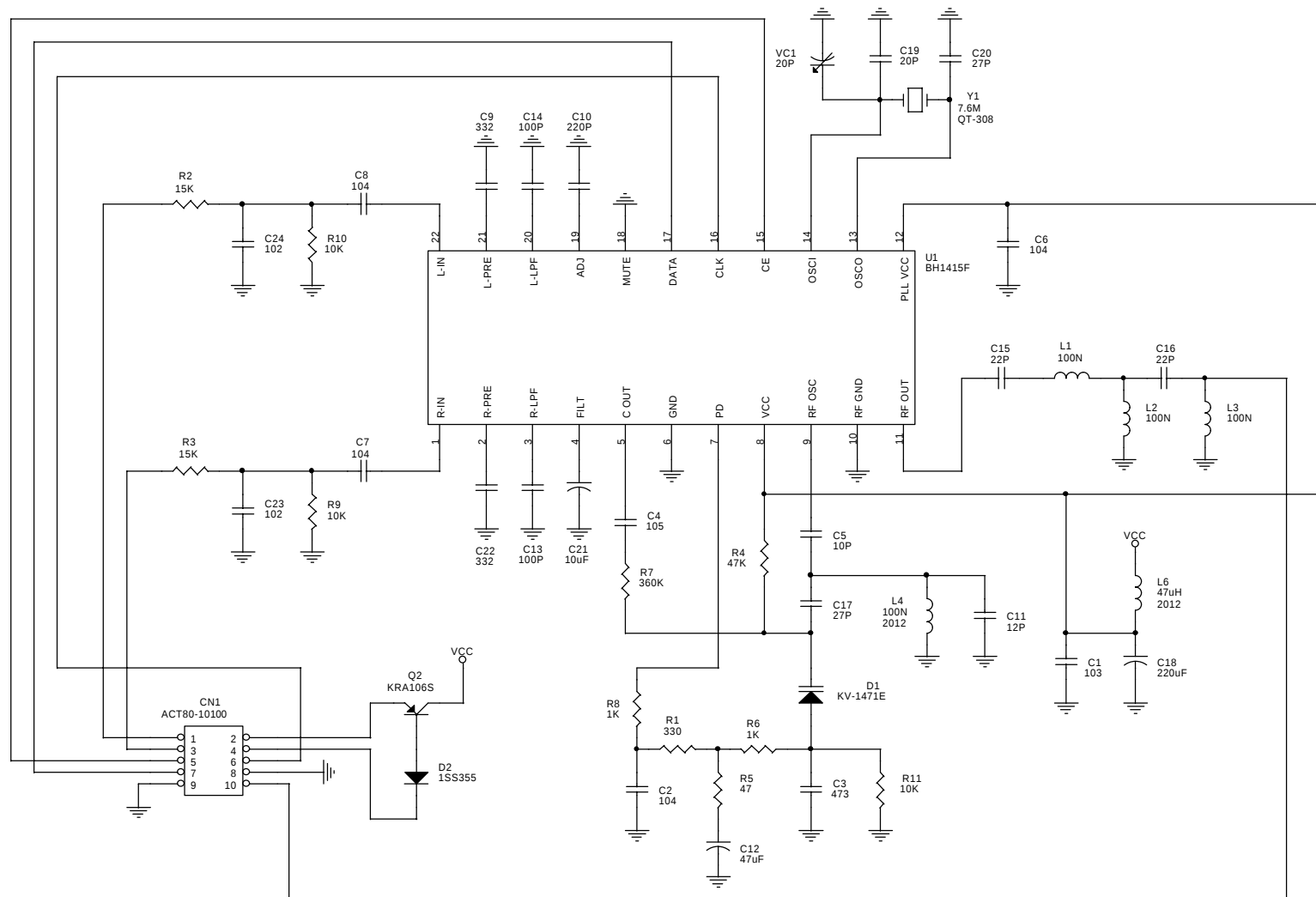
3-1 General specifications

- 1) Current Dissipation : 28mA Max
- 2) Supply Voltage : DC3.8V
- 3) Dimension : (H)4mm X (W)28mm X (D)21mm
- 4) Environment
 - Storage Temperature : -30℃ ~ +80℃
 - Operating Temperature : -10℃ ~ +60℃
- 5) Antenna
 - Gain : 1dB
 - Length : 45Cm
 - Output Impedance : 50Ω

3-2 Electrical Specification(Transmitter)

- 1) Carrier configuration : FM(F3E)
- 2) Duplex : Only transmit
- 3) RF output level : under 250uV/m at 3m
- 4) Frequency range : 88.0MHz to 95MHz
- 5) Frequency stability : ± 10 PPM
- 6) Number of Channel : 71channel
- 7) Channel space : 100kHz
- 8) Band width : 100kHz under
- 9) Oscillation type : PLL VCO
- 10) Modulation : Frequency modulation
- 11) Max shift keying : ± 75 kHz
- 12) Audio input frequency range : : 6dB/OCT 20Hz ~ 15kHz
- 13) APC(auto power control) : automatic control
- 14) Max shift keying control : auto control
- 15) Spurious : 40dB under
- 16) Total Harmonic Distortion : 0.5% under
- 17) Matching impedance : 50 Ω
- 18) Function : RF oscillator & audio frequency modulation





AMENDMENT							
	NO	PART'S NO	PART'S NAME	MATERIAL	SIZE	TREATMENT	REMARK
	MODEL NO:KSR - MX001			UNIT:mm	SCALE:	DATE: 2003. 09. 17	
	DRAWN	DESIGN	CHECKED	APPROVED	DRAW NO	KSD - MX001	
						NAME	
						SCHEMATIC DIAGRAM	

*NOTE. The Component Values of this schematic diagram are subject to change without notice for improvement

KWANG SUNG ELECTRONICS CO.,LTD.