

KENWOOD

TM-271E

144MHz FM TRANSCEIVER

The pioneering spirit lives on. Kenwood's new TM-271E FM transceiver (144MHz) is blazing a trail for the future of mobile communications.



All-Terrain Performance

Frontiers are not for the meek. It takes a rugged 4WD vehicle to meet the challenges of the wilderness. And Kenwood's new TM-271E is built just as tough. This compact, MIL-STD-compliant transceiver delivers powerful mobile performance and such advanced features as multiple scan functions, memory names, and external TNC connectivity for packet communications. But on or off the road, you can always enjoy the sophistication of high-quality audio, illuminated keys and a large LCD with adjustable cool-green backlighting for simple operation, day and night. The TM-271E is the ideal companion for all your travels.

HIGH RF POWER OUTPUT (60W)

Despite its size, the TM-271E can provide an impressive 60 watts of RF power, with a choice of High/Low output.

US MIL-STD 810 C/D/E/F & EUROPE'S E-MARK

Built tough to take rough treatment in its stride, the TM-271E meets the strict U.S. Department of Defense MIL-STD 810 C, D, E & F environmental standards in categories such as Vibration and Shock. It is also certified compliant with EU Directive 95/54/EC (Automotive-EMC).



ALPHANUMERIC LCD AND ILLUMINATED KEYPAD

Capable of displaying up to 6 large alphanumeric characters, the positive-type green LCD display comes with a 32-step brightness control to suit all driving conditions. Also, the front panel and microphone keypads are both illuminated for ease of use. Note that keys for only the 5 most frequently used functions are arranged on the front panel for simplicity (other functions can be quickly accessed via menu).



Memory Name



Menu Mode



Power-on Message

DTMF MICROPHONE

The TM-271E is supplied with a DTMF microphone as standard.

HIGH-QUALITY FRONT SPEAKER

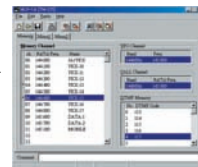
The large oval (58mm x 35mm) speaker mounted in the front panel provides excellent clarity.

MULTIPLE SCAN FUNCTIONS

For maximum versatility, the TM-271E offers several scan functions, including VFO (band) scan, all memory scan, program scan, memory group scan (group scan), call scan, tone/CTCSS scan, DCS scan and priority scan, which checks a priority channel every 3 seconds. TO (Time-operated), CO (carrier-operated) and seek scan resume modes are also provided.

200 MEMORY CHANNELS PLUS 1 CALL-CHANNEL

Each of the 200 memory channels can be used to store, transmit, and receive frequencies independently. Additionally, memory data can be edited and stored on a PC using the optional KPG-46 PC interface cable and MCP-1A Memory Control Software.



MEMORY NAME FUNCTION

At-a-glance identification of 100 memory channels is possible with up to 6 alphanumeric characters per channel. Up to 200 channels are available if the memory name function is not used.

CTCSS & DCS ENCODER/DECODER

The built-in CTCSS and DCS encoder/decoder enables operation of the 42 CTCSS subtone frequencies and 104 DCS subtone frequencies.

HIGH FREQUENCY STABILITY

Thanks to the built-in TCXO, frequency stability is ± 2.5 ppm, while frequency drift is less than ± 365 Hz at $-20^{\circ}\text{C} \sim +60^{\circ}\text{C}$.

1200/9600BPS HIGH-SPEED DATA COMMUNICATIONS

When hooked up to a TNC, you can make use of either standard 1200bps or high-speed 9600bps packet communications.



- Power-on Message
- Wide/Narrow Deviation Selection (per channel)
- 1750Hz Tone Burst
- Automatic Simplex Checker
- Auto Repeater Offset
- Reverse Repeater Checker
- Beep On/Off
- Auto Power Off
- Time Out Timer
- Channel Display Mode
- Busy Channel Lock-out
- Memory Channel Lock-out
- MR-shift
- Direct Frequency Enter
- Key Lock



◆ Optional Accessories



KMC-30
Hand Microphone



KMC-32
16-Key Hand Microphone*
*Can be used for remote control of the TM-271 although functions are not indicated on the keypad.



MC-60A
Desktop Microphone
(Requires MJ-88)



PG-2N
DC-Power Cable



PG-3B
DC Line Noise Filter



PG-5A
Data Cable



SP-50B
External Speaker



KPG-46A
PC Interface Cable



MJ-88
Microphone Plug Adapter



MCP-1A
Memory Control Software
(version 2.0 or later)*
*Free download from Kenwood Japan website:
www.kenwood.com/v/products/info/amateur.html

Not all accessories are available in all markets. For availability, contact your nearest dealer.

◆ Specifications

	TM-271E
General	
Frequency Range	TX: 144-146 MHz RX: 144-146 MHz
Mode	F3E (FM), F2D
Power Requirement	13.8V DC $\pm 15\%$, negative ground
Current Drain	
Transmit	Less than 13.0 A (HI), less than 8.0 A (Low)
Receive	Less than 1.0 A
Operation Temperature Range	-20° C ~ +60° C
Antenna Impedance	50 ohms
Microphone Impedance	600 ohms
Frequency Tolerance	± 2.5 ppm (-20° C ~ +60° C)
Dimensions (W x H x D)	160 x 43 x 137 mm (Projections included)
Weight	1.2 kgs (approx.)
Transmitter	
RF Output Power (approx.)	
High	60 W
Low	25 W
Modulation	Reactance modulation
Maximum Frequency Deviation	± 5 kHz
Modulation Distortion	Less than 3% (300 MHz ~ 3 kHz)
Receiver	
Circuitry	Double Conversion Superheterodyne
Intermediate Frequency	
1st IF	49.95 MHz
2nd IF	450 kHz
Sensitivity (12dB SINAD)	Less than 0.18 μ V (Narrow: less than 0.22 μ V)
Squelch Sensitivity	Less than 0.1 μ V
Selectivity	
-6 dB	More than 12 kHz (Narrow: more than 10 kHz)
-60 dB	Less than 30 kHz (Narrow: less than 24 kHz)
Audio Output Power	More than 2 W (5% distortion)

Kenwood follows a policy of continuous advancement in development.
For this reason specifications may be changed without notice.

◆ Applicable MIL-STD

	TM-271E			
MIL-STD	810C	810D	810E	810F
Vibration	514.2/III, X	514.3/I	514.4/I	514.5/I
Shock	516.1/I, II, V	516.3/I, IV	516.4/I, IV	516.5/I, IV

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ISO9001 Registered
Communications Equipment Division
Kenwood Corporation
ISO9001 certification