

TH-D75E

144 / 430 MHz Dual Bander

Following on from the TH-D74, the TH-D75E adds many useful features such as simultaneous reception of 2 D-STAR signals, Reflector Terminal mode for accessing D-STAR reflectors, enhanced voice guidance, and an APRS standalone digipeater function. Usability has also been improved with the adoption of USB Type-C, Bluetooth headset PTT support, and a fully ergonomic design. These much-anticipated additions mean that this premium model is sure to satisfy the needs of a wide range of amateur radio operators.



TH-D75E Key Features *10 Key Features (HE/CE/COM)*

1. Compatible with the APRS communication protocol, which allows real-time two-way data transmission by using packet communications. The NEW added stand-alone digipeater function enables the TH-D75E to operate as a temporary digipeater station in the fields, allowing APRS cocoverage to be expanded even in mountainous locations.
2. Compatible with D-STAR amateur radio communications network, developed by the Japan Radio League (JARL).
New is the simultaneous reception of 2 D-STAR signals (one on BAND A, one on Band B).
3. NEW - Reflector Terminal mode for more convenient communications via D-STAR reflectors.
4. Wideband and multimode reception.
5. IF filters for reduced reception interference.
6. IF output mode.
7. Enhanced voice guidance.
8. KENWOOD sound quality.
9. NEW - USB Type-C port.

TH-D75E Supplied With *20 COM_Supplied_With*

1. Antenna: Yes , Ferrite Bar Antenna suitable for receiving mid- and low-HF bands
2. Battery: Yes , KNB-75L - Li-ion battery (1800 mAh)
3. Belt Clip: Yes
4. Charger: Yes Supplied with both UK (3-pin) and EU (2-pin) mains cables
5. Instruction Manual: Yes , Printed "Basic operations" manual in English, German, French, Italian, Spanish & Dutch
6. Screw Set: Yes , for belt clip
7. USB Cable: ~~Yes~~ → changed into "No"

TH-D75E Amateur Radio General Features *30 COM_AMA_General_Features*

1. 1750 Hz Tone Burst Function.: Yes
2. 8.33KHz spacing on Air Band: Yes
3. Alphanumeric LCD Display: Yes
4. Antenna Socket: SMA

5. APRS Function (via built-in TNC): Yes
6. Auto Power Off: Yes
7. Automatic Repeater Offset (VHF): Yes
8. Built-in Packet TNC 1200/9600 bps: Yes , KISS TNC
9. Built-in GPS: Yes
10. Built-in microSD/SDHC: Yes
11. Built-in micro-USB: Yes , USB Serial, USB Audio Output, Mass Storage
12. Built-in Bluetooth: Yes , HSP, SPP
13. Channel Display Mode: No
14. Clock: Yes , Time/Date Function
15. CTCSS Encoder/Decoder: Yes , Choice of 50 tones
16. CW Band Width: Yes
17. CW Pitch Frequency: Yes
18. CW Reverse: Yes
19. D-STAR: Yes
20. DCS Encoder/Decoder: Yes , Choice of 104 digital tones
21. Detect Signal Output: Yes
22. Direct Frequency Entry: Yes
23. DTMF Memory: Yes , 10 channels, 16 digits
24. Dual Receive: Yes , VHFxUHF, VHFxVHF or UHFxUHF
25. Duplex Operation: No
26. DX Cluster Monitoring (via built-in TNC): No
27. DX Cluster Tune Function: No
28. ECHOLINK Memory Dialer Channels: Yes
29. Firmware Upgradeable via USB Port: Yes
30. FM Radio: Yes
31. Front Panel KeyPad: Yes
32. GPS Port (NMEA 0183): No
33. High-Quality Front Speaker: Yes
34. IF 12 kHz Output: Yes , to USB Audio, 2-pin Jack
35. Key Beep On/Off: Yes
36. Key Lock: Yes
37. LCD Background Color: Yes , B/W
38. Memory Channel Lock-out: Yes
39. Memory Channels with Alpha-tagging: 1000 Memory Channels
40. Memory Shift Function: Yes
41. Menu System for individual set-up: Yes
42. Meter Type: Yes , 3 types
43. Monitor Function: Yes
44. Multiple Scan Functions: Yes
45. Multi-scroll Key: Yes
46. Packet Operation - AX25 and KISS Mode: Yes , KISS mode only
47. PC Programmable Memories: Yes
48. PC Radio Control Program (Option): Yes
49. Power-On Message: Yes
50. Power-On Password Protection: No
51. Programmable Function Keys: Yes , 2 keys (PF1, PF2)
52. QSO Log: Yes
53. Reverse Repeater Checker: No

- 54. RX Audio Equalizer: Yes , 5 bands
- 55. Selectable Repeater Offsets: Yes
- 56. Separate Squelch for A and B Bands: Yes
- 57. SSB/CW/AM Reception: Yes
- 58. SSB Hi-cut Filter: Yes
- 59. AM Hi-cut Filter: Yes
- 60. Simultaneous 2 frequency RX: Yes
- 61. Sky Command 2: No
- 62. Time-Out Timer: Yes
- 63. TX Audio Equalizer: Yes , 4 bands
- 64. TX/RX Audio Recording: Yes , microSD/SDHC
- 65. USB Port: Yes , built-in Micro-USB Port
- 66. VOX: Yes
- 67. Voice Message Memory: Yes
- 68. Voice Guidance: Yes
- 69. Wide/Narrow Deviation Selection: Yes
- 70. Wide Band Reception: Yes

TH-D75E Amateur Portable Specification *70 COM_AMA_Portable_Specs*

- 1. **RF Output Power - 13.8 V: Yes**
- 2. RF Output Power (approx.) - High: 5 W
- 3. RF Output Power (approx.) - Mid: 2 W
- 4. RF Output Power (approx.) - Low: 0.5 W
- 5. RF Output Power (approx.) - E. Low: 0.05 W
- 6. Frequency Range - TX - VHF: 144 - 146 MHz
- 7. Frequency Range - TX - UHF: 430 - 440 MHz
- 8. Frequency Range - TX: 144 - 146 MHz, 430 - 440 MHz
- 9. Frequency Range - Band A: 136 - 174 MHz, 216 - 260 MHz, 410 - 470 MHz
- 10. Frequency Range - Band B: 0.1 - 76 MHz / 108 - 524 MHz
- 11. Frequency Range - Band B - FM - W: 76 - 108 MHz
- 12. Number of Channels: Total 1000 Channels
- 13. Mode: TX: F3E, F2D, F1D, F7W
RX: F3E, F2D, F1D, F7W, J3E, A3E, A1A
- 14. Mode - Band A: F3E, F1D, F2D, F7W
- 15. Mode - Band B: F3E, F2D, F1D, F7W, A1A, A3E, J3E, F7W
- 16. Frequency Stability: +/- 2.0 ppm
- 17. 13.8 V DC-In Facility: Yes (use PG-2W or PG-3J)
- 18. Antenna Impedance - 50 Ohm: Yes
- 19. Microphone Impedance: 2 kOhm
- 20. Operating Temperature Range: -10 °C to +50 °C with standard battery
- 21. Operating Voltage: DC-IN: DC 11.0 - 15.9 V (STD: DC 13.8 V)
BATT: DC 6.0 - 9.6 V (STD: DC 7.4 V)
- 22. Receiver Circuitry: F3E, F2D, F1D, F7W: Double Super Heterodyne
J3E, A3E, A1A: Triple Super Heterodyne
- 23. Receiver Intermediate Frequency - Band-A - 1st IF: 57.15 MHz
- 24. Receiver Intermediate Frequency - Band-A - 2nd IF: 450 kHz
- 25. Receiver Intermediate Frequency - Band-B - 1st IF: 58.05 MHz
- 26. Receiver Intermediate Frequency - Band-B - 2nd IF: 450 kHz

- 27. Receiver Intermediate Frequency - Band-B - 3rd IF: J3E, A3E, A1A: 10.8 kHz
- 28. Receiver Sensitivity - Main & Sub Bands: Amateur Band
FM 12 dB SINAD
FM / NFM 144 MHz Band-A: 0.18 / 0.22 uV
FM / NFM 144 MHz Band-B: 0.19 / 0.24 uV
FM / NFM 430 MHz Band-A: 0.18 / 0.22 uV
FM / NFM 430 MHz Band-B: 0.20 / 0.25 uV
DV PN9 / GMSK 4.8 kbps, BER 1% 144 MHz Band-A: 0.20 uV / 0.22 uV
DV PN9 / GMSK 4.8 kbps, BER 1% 430 MHz Band-B: 0.22 uV / 0.24 uV
SSB 10 dB S/N Band-A: 0.16 uV
AM 10 dB S/N Band-B: 0.50 uV
- 29. Receiver Squelch: Band-A: 0.18 uV
Band-B: 0.25uV
- 30. Receiver Spurious Rejection: 144 MHz - Band-A: 50 dB or more
430 MHz - Band-A: 50 dB or more
144 MHz - Band-B: 45 dB or more
430 MHz - Band-B: 40 dB or more
- 31. Receiver IF Rejection: Band-A: 60 dB or more
Band-B: 55 dB or more
- 32. Receiver Channel Selectivity: -6 dB: 12 kHz or more
-50 dB: 30 kHz or less
- 33. Receiver Audio Output: 7.4 V, 10% Dist.
400 mW or more / 8 Ohm
- 34. Transmitter Maximum Frequency Deviation: FM: +/- 5.0 kHz
- 35. Transmitter Modulation: FM: Reactance Modulation
DV: GMSK Reactance Modulation
- 36. Transmitter Modulation Deviation: FM: +/- 5.0 kHz
NFM: +/- 2.5 kHz
- 37. Transmitter Spurious Emissions: HI / MID: -60 dBc or less
L: -50 dBc or less
EL: -40 dBc or less
- 38. Dimensions: W x H x D
with KNB-75L: 56.0 x 121.95 x 32.5 mm
- Projections not included -
- 39. Weight (with battery): with KNB-75L: 340 g (net)

TH-D75E APRS Features *90 COM_AMA_APRS Features*

- 1. Alert on Special Call: Yes
- 2. APRS Data Output: Yes , to a PC via the USB Port or Bluetooth
- 3. Auto Message Reply: Yes
- 4. Decay Algorithm: Yes
- 5. Digipeat Function: ~~No~~ → changed into "Yes"
- 6. Message Memory: Yes , 100 Messages
- 7. New-N Paradigm: Yes
- 8. Packet Data Output: Yes Yes, to a PC via the USB Port or Bluetooth
- 9. Proportional Pathing: Yes
- 10. QSY Function: Yes
- 11. Received Packet Data Pop-ups: Yes

- 12. Relay Path Display: Yes
- 13. SmartBeaconing TM: Yes
- 14. State/Section /Region Pathing: Yes
- 15. Station List Memory: Yes , lists up to 100 Stations, with filtering and sorting options
- 16. TX Object, Item Packet: Yes
- 17. User Phrases: Yes
- 18. Visible Message Notifications: Yes
- 19. Weather Station Function: No

TH-D75E D-STAR Features *110 COM_AMA_DSTAR_Features*

- 1. DV Mode: Yes
- 2. DV Fast Mode: Yes , USB Interface or Bluetooth
- 3. DR Mode: Yes
- 4. Communication Mode: Yes
- 5. Communication Mode - Direct: Yes
- 6. Communication Mode - Single Repeater: Yes
- 7. Communication Mode - Zone: Yes
- 8. Communication Mode - Gateway: Yes
- 9. Communication Mode - Reflector: Yes
- 10. Repeater List, Import/Export: Yes
- 11. Repeater Information: Yes
- 12. Callsign List, Import/Export: Yes
- 13. Near Repeater Station Select/Scan: Yes
- 14. Access Repeater Select: Yes
- 15. Gateway Route Select: Yes
- 16. Select TO Station: Yes
- 17. TX Message: Yes
- 18. GPS TX Mode: Yes
- 19. GPS Sentense TX Select: Yes
- 20. GPS Auto TX for Target Station: Yes
- 21. Detect FM on DV Mode: Yes
- 22. RX Popup Message: Yes
- 23. Direct Reply: Yes
- 24. Standby Beep: Yes
- 25. Code SQ: Yes
- 26. Auto Reply: Yes
- 27. Auto Reply Voice Select: Yes
- 28. EMR: Yes
- 29. RX History: Yes
- 30. TX History: Yes
- 31. Late Entry Receive: Yes
- 32. Packet Loss Display: Yes
- 33. D-STAR RX AFC: Yes
- 34. Digital Monitor (MONI Key): Yes
- 35. Car Chank Display: Yes

TH-D75E Applicable Standards *130 COM_Applicable_Standards*

1. IP54: Yes
2. IP55: Yes

