

TK-280/380

VHF / UHF Trunking / Conventional Portable Radios

Model	Description	List
VHF		
<i>Spring Action Belt Clip included; Antenna, Battery & Charger not included</i>		
TK-280K	146-174 MHz 5W, LTR-32 Systems, CONV-250 CH.	\$517.00
TK-280K3	146-174 MHz 5W, LTR-32 Systems, CONV-250 CH., w/DTMF	550.00
TK-280K2	136-162 MHz 5W, LTR-32 Systems, CONV-250 CH.	517.00
TK-280K4	136-162 MHz 5W, LTR-32 Systems, CONV-250 CH., w/DTMF	550.00
UHF		
<i>Spring Action Belt Clip included; Antenna, Battery & Charger not included</i>		
TK-380K	450-490 MHz 4W, LTR-32 Systems, CONV-250 CH.	517.00
TK-380K4	450-490 MHz 4W, LTR-32 Systems, CONV-250 CH., w/DTMF	567.00
TK-380K2	470-512 MHz 4W, LTR-32 Systems, CONV-250 CH.	517.00
TK-380K5	470-512 MHz 4W, LTR-32 Systems, CONV-250 CH., w/DTMF	567.00
TK-380K3	400-430 MHz 4W, LTR-32 Systems, CONV-250 CH.	517.00
TK-380K6	400-430 MHz 4W, LTR-32 Systems, CONV-250 CH., w/DTMF	567.00

TK-280/380 FEATURES:

GENERAL FEATURES

5W VHF / 4W UHF Transmit Power
Wide Band Frequency Ranges
12.5 / 25 kHz Channel Spacing
Programmable Power Per Channel
Companded Audio Per Channel (wide & narrow*)
500 mW Audio Power
Lighted Front Panel Dot Matrix LCD
10 Character Alphanumeric Display
3 Numeric Character Sub-Display
Dot Matrix Lighted LCD
LCD Operational Icons
Two Color Tri-State LED
5 Programmable Function Keys (lighted)
DTMF Keypad Models
Shift Key Function (keypad models)
Optional Speaker Mic (w/ 2 PF Keys)
Recessed Orange Emergency/AUX Key
Encryption/Scrambler Board Control
ANI Board Control
PTT ID Side-Tone (ANI Boards)*
PTT ID TA Inhibit*
Emergency Type (FS, DTMF, ANI Brd.)*
Emergency Calling Feature
Key Lock Feature
DTMF Decode Selective Call
DTMF Deadbeat Disable
DTMF PTT ID & DTMF Emergency ID*
Alert with Transpond (2-Tone, DTMF)*
Call Alert Tone: Mom or Continuous (2-Tone, DTMF & FleetSync)*
Auto-Dial Memory (32 numbers)
Key Lock Feature
Low Battery Alert
Weather-Sealed Accessory Connector
PTT Release Tone

Minimum Volume
Control Tones On/Off
Embedded Message (64 Char.)
Data Password ("Anti-piracy")
Radio Password (Radio Lock)
Clone Capability (enable/disable)
Front Panel Self Programming & Tuning
PC Programming & Tuning (DOS)
Flash ROM Firmware
MIL810 C, D & E (11 categories)
CONVENTIONAL MODE
250 CH (aggregate max.)
Single Priority Scan
Single/Multi-Group Scan
Scan Revert Channel Display
Scan Delete/Add
Nuisance Delete
QT/DQT Encode & Decode
Operator Selectable Tone (16 OST)
2-Tone Decode (A, B, C, A-B, A-C, C-B; 2 decode pairs)*
BCL, BCL Override, TOT & TA

TRUNKED MODE

32 Systems (max.)
Trunked LTR & Conventional Systems
250 Group IDs (aggregate max.)
Single Priority Scan (within any Conv. System only)
LTR Talk Around / Scan Revert Group Display
System Scan & Group Scan / Auto System Search

FLEETSYNC

PTT ID (Digital ANI; 100 ID List capacity*)
- Caller ID Display (per CH; BOT only)*
- Caller ID Stack (last 3 calls)*
Status Messaging (50 Msg. List capacity*)
- 70 Custom Dispatch Messages
- 9 Reserved Special Use Messages

FLEETSYNC CONT.....

ST# 98 - Man Down Emergency (portables)*
ST# 99- Emergency Status
ST# 88- Emergency Mode Off*
ST# 89- Horn Alert Request* (mobiles)
ST# 90- Stun radio (No TX)
ST# 91- Stun radio (No TX / No RX audio)
ST# 92- Turn off Stun
ST# 93- ACK stun is ON
ST# 94- ACK stun is OFF
ST# 80-87, 95-97 (Reserved for future use)

Selective Call
Short Text Messages** (stored/display)

* Features added in Ver. 2 radios
** FleetSync Enhanced Option required (included as of 10/1/02)

INCLUDED ITEMS

Spring Action Belt Clip, Instruction Manual



Accessories for the TK-280/380 Series Radios

<i>Model</i>	<i>Description</i>	<i>List</i>
<u>ANTENNAS</u>		
KRA-14M	VHF helical antenna 148-162 MHz	\$17.00
KRA-14M2	VHF helical antenna 162-174 MHz	17.00
KRA-14M3	VHF helical antenna 136-150 MHz	17.00
KRA-15AM	UHF whip antenna 450-490 MHz	17.00
KRA-15AM2	UHF whip antenna 470-512 MHz	17.00
KRA-15AM3	UHF whip antenna 403-430 MHz	17.00
KRA-16M	VHF stubby antenna 148-162 MHz	13.00
KRA-16M2	VHF stubby antenna 162-174 MHz	13.00
KRA-16M3	VHF stubby antenna 136-150 MHz	13.00
KRA-17M	UHF stubby antenna 450-490 MHz	13.00
KRA-17M2	UHF stubby antenna 470-512 MHz	13.00
KRA-17M3	UHF stubby antenna 403-430 MHz	13.00
KRA-25	High Gain VHF Helically Loaded ¼ Wave Whip Antenna 148-162 MHz (9.75 inches; for TK-2160/280/290 portables only; SMA-F connector) Note: The KRA-25 is 9.75 inches long. This is 3.75 inches longer than a normal VHF helical antenna! Stocked in limited quantities. Allow up to 8 weeks for delivery.	32.50
<u>BATTERIES AND CHARGERS</u>		
KBP-4 ³	AA Alkaline Refillable Battery Pack for TK-290/390/280/380 (12 AA Alkaline 9V) Batteries Not Incl.	41.00
KNB-16A	1100 mAh/8 Hour, 7.2 VDC Ni-Cd battery	57.00
KNB-17A	1500 mAh/10 Hour, 7.2 VDC Ni-Cd battery	67.00
KNB-17BK ^{1, 2}	Intrinsically Safe Battery 1500 mAh, 7.2 VDC (4/5W), NiCd battery [I.S. Certified]	100.00
KNB-21N ⁷	1600 mAh NiMH (more than 10 hours life @ 5-5-90) - requires KSC-24 charger Note: Not compatible with Kenwood NiCd chargers or earlier model leather cases. Intrinsically Safe version NOT available.	60.00
KNB-22N ⁷	2100 mAh NiMH (more than 13 hours life @ 5-5-90) - requires KSC-24 charger Note: Not compatible with Kenwood NiCd chargers or earlier model leather cases. Intrinsically Safe version NOT available.	70.00
KMB-14	Six Unit Charger Adapter for the KSC-15/16/17/18/19 (chargers not included)	165.00
KMB-16	Six Unit Charger Adapter for the KSC-20/24/25 rapid rate (chargers not included)	165.00
KSC-19	Regular rate single unit desk charger for NiCd batteries only: KNB-16/17A/17B	35.00
KSC-19M	220 volt regular rate single unit desk charger for NiCd batteries only: KNB-16/17A/17B	35.00
KSC-24	110 volt Rapid rate single unit dual-chemistry charger for KNB-14/15/16/17A/17B/20N/21N/22N	59.00
KSC-24E	220 volt Rapid rate single unit dual-chemistry charger for KNB-14/15/16/17A/17B/20N/21N/22N	59.00
KVC-3	Regular rate DC vehicular charger adapter for the KSC-15,17,19 (chargers not included; includes KSC-mobile bracket & cigarette lighter cable DC adapter) Note: NOT compatible with NiMH batteries (KNB-20N/21N/22N); Compatible w/NiCd batteries	60.00
KVC-4	Rapid rate DC vehicular charger adapter for the KSC-16,18,20,24,25 (chargers not included; includes KSC-mobile bracket & cigarette lighter cable DC adapter) Note: Compatible with NiMH batteries (KNB-20N/21N/22N) & NiCd batteries when used with the KSC-24.	80.00
KVC-5A ⁴	Drop-in Vehicular D.C. Charger for 80/90 Series Portables Note: Compatible with KNB-16/17A/17B/21N/22N (Replacement for KVC-5)	340.00
<u>CARRYING ACCESSORIES</u>		
KBH-8 ⁵	Spring action belt clip - Same as Supplied (See Important Note 5 below)	8.00
KBH-8DS ⁵	Swivel belt loop with D-Ring	25.00
KLH-58BC	Bungi-cord for KLH-58/60/71/75/76	3.50
KLH-6SW	Swivel belt loop / detachable swivel back for KLH-58/60/70/71/75/76/78/79/83/112	21.00
KLH-75B	Heavy duty leather carrying case for TK-280/380/480/481 - compatible w/NiCd & NiMH batteries	42.00
KLH-76B	Heavy duty leather carrying case for TK-280/285/380/480/481 DTMF keypad models - compatible w/NiCd & NiMH batteries	42.00
KLH-85	Cordura Nylon carrying case for TK-280/380/480/481 DTMF keypad models (Black)	25.00
KLH-86	Cordura Nylon carrying case for TK-280/285/380/480/481 (Black)	25.00
KLH-92	Heavy duty leather carrying case for TK-280/380/480/481 DTMF keypad models w/ KBP-4	42.00
KWR-1	Water resistant bag	29.00

Accessories for the TK-280/380 Series Radios Cont'd...

<i>Model</i>	<i>Description</i>	<i>List</i>
<u>MICROPHONES AND SPEAKERS</u>		
KEP-1 ¹	3.5mm earphone kit for KMC-25/26, KMC-10/11 Speaker mics (black only) [I.S. Certified]	50.00
KCT-30 ¹	2.5mm Audio Accessory Adapter for KEP-3/4 [I.S. Certified]	61.00
KEP-3 ¹	Earphone kit w/ 2.5mm plug for KCT-30, 30" Cable (black) [I.S. Certified]	49.00
KEP-4 ¹	Earphone kit w/ 2.5mm plug for KCT-30, 48" Cable (black) [I.S. Certified]	52.00
KMC-25 ¹	MIL-SPEC, Noise canceling Speaker mic [I.S. Certified]	92.00
KHS-11BE ¹	2-wire palm mic w/earphone, universal connector. ("Beige-colored" 2-wire & 3-wire mic models; Allow min. 4 weeks delivery time). [I.S. Certified]	149.00
KHS-11BL ¹	2-wire palm mic w/earphone, universal connector (Black) [I.S. Certified]	149.00
KHS-12BE ¹	3-wire mini lapel mic w/earphone, universal connector. ("Beige-colored" 2-wire & 3-wire mic models; Allow min. 4 weeks delivery time). [I.S. Certified]	175.00
KHS-12BL ¹	3-wire mini lapel mic w/earphone, universal connector (Black) [I.S. Certified]	175.00
KHS-14 ¹	Lt. Wt. Single muff headset w/boom mic & In-line PTT, universal connector (Blk) [I.S. Certified]	120.00
KHS-15-BH ¹	Hvy-duty noise reduction behind-the-headset w/noise cancelling boom mic & in-line PTT (black); NRR24 db; (Heavy-duty headsets; Allow min. 4 weeks delivery time). [I.S. Certified]	400.00
KHS-15-OH ¹	Hvy-duty noise reduction over-the-headset w/noise cancelling boom mic & in-line PTT (black); NRR24 db. (Heavy-duty headsets; Allow min. 4 weeks delivery time). [I.S. Certified]	350.00

QE-2 G-Star®/ MDC1200 DIGITAL ANI MODULES by Cimarron Technologies

How to Order: Please see QE-2 Information and Order Sheet available from LMR Order Desk

1. Select the proper model/ quantity of radios, desired G-Star (L-901) or MDC-1200 (L-902) ANI format labor code.
 2. Refer to the "QE-2 MDC-1200 Information/Order Sheet" available from the LMR Order Desk; select the ID format, ID codes and other feature options
 3. Fax the Order Sheet with your radio order to your authorized Kenwood Rep or LMR Order Desk
- All order sheet items must be filled out even if the feature option is "disabled" (incomplete Order Sheets will not be processed).
- a. Orders are only accepted on new radio purchases. No retrofits, module-only or "tune & ship loose" orders are accepted.
 - b. Allow a min. 1 week delivery ARO for 1- 25 units (allow min. 3 weeks for 25 units and up).

Notes:

Emergency "Man-down" features require an installed CAE-3 internal man-down tilt switch option (portables only).

Dealers can purchase a QE-2 programmer , Model QPF-2, direct from Cimarron Technologies Call 800-487-7184
www.cimtechcorp.com

QE-2	G-Star® or MDC1200 ANI Board : PTT ANI, emergency & man-down Important Factory Install Only –Order L-901 or L-902	76.80	128.00
CAE-3	Emergency Man-Down Internal Tilt Switch (mercury switch) [Factory Install Only – Must order L-845]. The CAE-3 is only sold for use w/Cimarron ANI Option modules for man-down emergency. [I.S. Certified]	12.60	21.00

Transcrypt Secure Technologies Encryption

The following Transcrypt Secure Technologies encryption accessories (available from Transcrypt) and TK-280/380/480/481 combination when installed according to Transcrypt instructions meet Intrinsically Safe Classes I, II & III, Div.1, Groups C, D,E, F & G hazardous locations and Non-Incendive Class I, Div. 2, Groups C, D hazardous locations:

- SC20-400 · SC20-430-12
- SC20-416-12 · SC20-460-12

For more information on Transcrypt encryption please visit their website at www.transcryptsecure.com or contact them at:

Transcrypt Secure Technologies

4800 NW 1st Street, Suite 100
Lincoln, NE 68521
Phone: 402-474-4800
Fax: 402-479-8472

SERVICE RELATED ACCESSORIES

KPG-36	Programming interface Cable		N/A
KPG-49D	P.C. Programming Software for TK-280/380/480/481/780/880/980/981		N/A

Installation/Tuning Charges for the TK-280/380 Series Radios

<i>Model</i>	<i>Description</i>	<i>List</i>
L-822	Assemble KMB-14 with six KSC-19's (Regular Rate, 120 volt version only)	15.00
L-836	Assemble KMB-16 with six KSC-24's (Rapid Rate, 120 Volt version only)	15.00
L-845	Install CAE-3 (portable only)	9.00
L-855	Tune TK-280/380	25.00
L-856	Configure TK-280/380 for Intrinsically Safe (Must Order KNB-17BK)	70.00
L-901	Program and install QE-2 MDC1200 Encoder	75.00
L-902	Program and install QE-2 G-Star® Encoder	75.00

PassPort Options (Kenwood-installed)

FOR NEW RADIO ORDERS ONLY

Ordering Instructions

For VHF/UHF models TK-280/780/380/880 new radio orders, the Kenwood-installed PassPort ESN / firmware option is no charge: Order the PassPort ESN/Firmware option L-938 for each PassPort radio.

Other required items:

- a. KPG-63D Radio Programming Software: the KPG-63D is required to program all PassPort parameters for all PassPort™ enabled radios, the KPG-63D will not program LTR or conventional parameters.
- b. KPG-49D is required only if LTR or conventional systems are to also be programmed in the PassPort radio.

Model	Description	List
L-938	Install PassPort™ ESN options and firmware; NO CHARGE for new TK-280/380/780/880 orders Note: Only current 80-Series Version 2.0 production radios ("Ver. 2.0" appears on FCC ID label) are compatible with the PassPort ESN/firmware option. Verison 1.0 radios are not compatible.	0.00

PassPort™ Radio Programming Software

KPG-63D	PassPort™ Radio Programming Software V2.00 or higher	65.00
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PassPort Options (Field-installation kits)

FOR DEALER / OPERATOR FIELD CONVERSIONS

Ordering Instructions

1. Order the ESN key/firmware Labor Code options: L-892, L-893 or L-894; specify model radio(s). Pre-loaded ESN hardware key(s) with the ordered quantities of ESN's and a PassPort™ radio firmware diskette will be shipped (100 ESN's maximum per hardware key). **Important: Any depleted key previously registered to a technicians computer must be retained to register any new purchased key to the computer; please retain the old key until the new one is received.**
2. Other required items:
 - a. KPG-64D: PassPort™ ESN Install Program: the KPG-64D only needs to be ordered one time. It is re-usable for subsequent ESN orders (unless an upgrade is recommended).
 - b. KPG-63D Radio Programming Software: required to program all PassPort parameters for all PassPort™ enabled radios, the KPG-63D will not program LTR or conventional parameters.
 - c. KPG-49D Radio Programming Software: required only if LTR or conventional systems are also the programmed in the PassPort radio.

Model	Description	List
L-892	PassPort™ ESN Options & PassPort™ firmware disk (SPECIFY RADIO MODEL) · 1-24 qty. lot price; Price is per ESN	\$68.00
L-893	PassPort™ ESN Options & PassPort™ firmware disk (SPECIFY RADIO MODEL) · 25-99 qty. lot price; Price is per ESN	68.00
L-894	PassPort™ ESN Options & PassPort™ firmware disk (SPECIFY RADIO MODEL) · 100 qty lot price; Price is per ESN · Maximum 100 ESN options per hardware key	68.00

Note: Sales of L-892, 893, 894 are NOT refundable. Purchaser has a 72 hour limit after receipt to report suspected hardware key defects or ESN shortages to Kenwood engineering, Suwannee office 678-474-4700

SRB08698	Hardware Key (Sentinel Super Pro)	83.33
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NOTES:

- Requires purchase of L-892, 893 or 894
- Sales of L-892, 893, 894 are NOT refundable
- Maximum 100 ESNs per hardware key
- Requires KPG-64D to download PassPort™ ESN options into an 80-Series radio.
- Important: The hardware key is registered to the computer that it is first used on; it cannot be used on other computers.
- Empty hardware keys can be returned for 50% credit; call the LMR order desk for RMA #.
- Important: Retain depleted keys until a new one is received. It will be required to register the new key to the same computer.

KPG-64D	PassPort™ ESN Field Installation Software V1.12 · V1.12: supercedes V1.11; upgrade to V1.12 recommended for improved ESN file database features	10.00
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KPG-63D	PassPort™ Radio Programming Software V2.00 or higher	\$65.00
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IMPORTANT NOTES:

¹ For intrinsically safe models TK-190/280/380/290/390/480/481: Meets Intrinsically Safe Classes I, II & III, Div. 1, Groups C, D, E, F, G hazardous locations and Non-Incendive Class I, Div. 2, Groups C, D hazardous locations.

² **Important Note Regarding Intrinsically Safe Certification:** Using an Intrinsically Safe battery on a radio does not constitute an Intrinsically Safe (I.S.) radio. All Kenwood I.S. radios must be certified at Kenwood by inspection, logging & proper labeling. The appropriate I.S. labor code must be specified on all I.S. radio orders and the proper model I.S. battery must be used with the radio. Kenwood I.S. batteries can be purchased separately for existing Kenwood certified I.S. radios. Intentionally or inadvertently representing a Kenwood radio as I.S. without proper Kenwood certification can result in serious safety and/or legal liability issues for your company.

³ AA refillable packs DO NOT meet any of the MIL-STD environmental standards, nor are they water-resistant or Intrinsically Safe approved. Actual battery life is dependent on battery condition, type, quality, temperature, and use habits. Alkalines exhibit non-linear voltage vs. current drain characteristics, therefore radio transmit power will lower and decrease during transmit and as the battery is drained. Nominal Life (hrs.) 5-5-90 duty cycle, battery save off, scan off. See chart below:

Transmit Power	1W	2W	4/5W
Nominal Battery Life (hrs.)	18	11.5	4

⁴ **KVC-5 & KVC-6 has the following features:** Accommodates Speaker/Microphones of KMC-25/26 (for KVC-5), and KMC-17/21 (for KVC-6), with retainer brackets; Rapid Charge LED (red) -- "on" when portable radio is properly seated and battery is in rapid charge mode, Trickle Charge LED (green) -- "on" when the battery is fully charged and the charger is in the trickle charge mode, repeat enable LED (yellow) -- "on" when the Automatic Enable switch is on and the portable is removed (it goes "off" when portable is inserted), and Automatic Repeat Enable Switch (activates the vehicular repeater units, e.g. Pyramid Communications brand SVR units). Note: These units are ONLY charger units. They are NOT vehicular adapters with RF, P.A., AF P.A., antenna connector, speaker & mobile hand mic. (a.k.a.; "console", "vehicular console", "convert-a-com", "jerk & run").

⁵ Retain the screws included with the metal belt clip (included with radio). These are required to attach the KBH-8 or KBH-8DS. Screws also available from Parts Dept.: Part # N99-2004-05.

⁶ Required to program both normal radio parameters and all FleetSync™ feature parameters.

⁷ **Important Note regarding KNB-21N/22N:**

- NiMH batteries will exhibit reduced capacity while exposed to temperatures below 14°F(-10°C) and become virtually unusable below -4°F or (-20°C). NiMH batteries are commonly used in extreme low temperature environments (ex: northern latitudes, refrigerated warehousing, etc.) by keeping the portable next to the body under the users coats. Prolonged exposure to extreme cold should be avoided for proper radio operation.
- NiMH batteries capacity life is slightly lower than NiCd: **NiCd : 70% at 500 cycles vs. NiMH (1600 mAh): 60% at 500 cycles**