KENWOOD



NX-5200/5300

VHF/UHF Digital & FM Analog Portable Radios



<Standard Key Model >

<Full Key Model >

All NX-5000 series portables include:

- Belt Clip (KBH-11)
- Universal Connector Cap
- User Guide

Purchase Battery, Charger, Antenna separately

**Note: To maintain immersion specs (IP67/68), all warranty service must be done by one of the three National Kenwood Authorized Service Centers. No recertification is available

Because of spurious signal (birdie), following frequencies (and ±10kHz ranges) are not allowed;

- 144.0000 • 384.0000 • 460.8000
- 480.0000 • 499.2000
- 147.4560 153.6000 172.0325 432.0000
- 518.4000
- 172.8000 • 441.6000

STANDARD

■ GENERAL FEATURES

- 6 W (136-174 MHz) Models
- 5 W (380-470, 450-520 MHz) Models
- 1024 CH-GID / 128 Zones
- Standard Key Models (w/o numeric keypad)
- Full Key Models (w/ numeric keypad)
 Full Color 1.74" (240 x 180 pixels)
- Transflective TFT Display
- Multi-line Text Display
- Function/Status Icons
- Multi-Language DisplayDate & 12/24 Hour Time Clock
- Transmit/Busy/Call Alert/Warn LED
- On/Off Volume Knob
- 16-Position Mechanical Selector (w/ a stopper)
 4-way Directional-pad (D-pad)
- 2 Position Lever Switch
- Emergency/AUX Key
 3 Side PF Keys
 1W Speaker Audio

- Emergency Call Features
 Built-in GPS Receiver / Antenna
- Built-in Bluetooth® Module
 Built-in Motion Sensor
- Built-in 56-bit DES Encryption
- (4 keys programmable by KPG-D1K)
- Active Noise Reduction (ANR)
 KPG-D1K Windows® FPU
 Flash Firmware Upgrading
- MIL-STD-810 C/D/E/F/G
- IP67/68 Immersion

■ DIGITAL - NXDN® MODE

- NXDN® Conventional / TYPE-C Trunking
 AMBE+ 2^{TM} VOCODER
- 6.25 & 12.5 kHz Channels
- Over-the-Air Alias
- Over-the-Air Programming (requires KPG-180AP OTAP Manager Software)
- Paging Call
- Emergency Call
- All Group Call
- Status MessagingRemote Stun/Kill/Check
- Short & Long Data Messages GPS Location
- NXDN® Scrambler

■ ANALOG MODE

- Conventional Zones
- LTR® Zones
- FleetSync®/II: PTT ID ANI, Caller ID Display, Selective/Group Call, Emergency Status,
- Text Messages

 MDC-1200: PTT ID ANI, Caller ID Display, Emergency, Radio Check & Inhibit
- QT / ĎQT
- Two-Tone (Conventional Zones Only)
- DTMF
- · Built-in Voice Inversion Scrambler

OPTIONAL

■ GENERAL FEATURES

- 4000 Channel (KWD-5000CH License Key Activation required)
 Front Panel Programming (KWD-5001FP License Key Activation required)
 microSD/microSDHC Memory Card Slot (KWD-5002SD License Key Activation required)
- Built-in Bluetooth® Module for Data (<u>KWD-5003BT</u> License Key Activation required)
- 256-bit AES Encryption (<u>KWD-AE30K/31K</u> Encryption Module required)
 Battery Management Solution (<u>KSC-Y32K</u> Charger & <u>KAS-12K</u> Software License Key required)

■ DIGITAL - P25 MODE

- Conventional Features (KWD-5100CV License Key Activation required)
- Phase 1 Trunking Features (KWD-5100CV & 5101TR License Keys Activation required)
- Phase 2 Trunking Features (KWD-5100CV & 5101TR & 5102TR License Keys Activation required)
- Conventional OTAR (KWD-5103RK License Key Activation required)
 Trunking OTAR (KWD-5103RK & 5106DT License Keys Activation required)
 Conventional Voting Scan (KWD-5105VT License Key Activation required)
- Packet Data required for Trunked OTAR/GPS (KWD-5106DT License Keys Activation required)

RADIO Standard Key Models	's	
NX-5200K2	VHF (136-174MHz), 6.0 Watts NXDN Conventional / TYPE-C Trunking	
NX-5300K2	UHF (450-520MHz), 5.0 Watts NXDN Conventional / TYPE-C Trunking	
NX-5300K5	UHF (380-470MHz), 5.0 Watts NXDN Conventional / TYPE-C Trunking	
Full Key Models		
NX-5200K3	VHF (136-174MHz), 6.0 Watts NXDN Conventional / TYPE-C Trunking	
NX-5300K3	UHF (450-520MHz), 5.0 Watts NXDN Conventional / TYPE-C Trunking	
NX-5300K6	UHF (380-470MHz), 5.0 Watts NXDN Conventional / TYPE-C Trunking	







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CSA US APPROVED MODELS			
	Must Order L-5039 & KNB-LS5M Intrinsically Safe Battery per radio		
	*Note: microSD card is not allowed to use as Intrinsically Safe Option.		
NX-5200-ISCK2	VHF (136-174MHz), 6.0 Watts NXDN Conventional / TYPE-C Trunking		
NX-5200-ISCK3	VHF (136-174MHz), 6.0 Watts NXDN Conventional / TYPE-C Trunking		
NX-5300-ISCK2	UHF (450-520MHz), 5.0 Watts NXDN Conventional / TYPE-C Trunking		
NX-5300-ISCK3	UHF (450-520MHz), 5.0 Watts NXDN Conventional / TYPE-C Trunking		
NX-5300-ISCK5	UHF (380-470MHz), 5.0 Watts NXDN Conventional / TYPE-C Trunking		
NX-5300-ISCK6	LIHE (380-470MHz) 5.0 Watts, NXDN Conventional / TXPE-C Trunking		

LICENSING SYSTEM



Note: KPT-300LMC is compatible with Windows Vista/7/8/8.1/10 Only. Windows XP is not supported.

KPT-300LMC License Management Client

KPT-300LMC is a <u>required</u> software package that is used to authenticate **software** (FPU) and **radio feature license** keys for the NX-5000 Series radios.

KPT-300LMC is available as a free download from https://int.kenwoodusa.com and is also supplied with applicable software, such as KPG-D1K, KAS-12, and KPG-AE1/DE1.

<u>NOTE</u>: A license key is required for the KPT-300LMC to authenticate the software prior to use. To receive a license key, complete an "<u>Account Request Form"</u> and return to the Land Mobile Order Desk.

License Keys will be E-Mailed to the address provided on the Account Request Form.

KPT-300LMC	License Management Client	NC	NC
L-5000	KPT-300LMC License Key	NC	NC

SOFTWARE LICENSING OPTIONS

TO PLACE AN ORDER FOR SOFTWARE:

- 1. Complete a Software License Key Request Form.
- 2. Submit along with your PO to the Land Mobile Order Desk via:
 - a) E-Mail: coca@us.jvckenwood.com
- 3. License Keys will be E-mailed to the address provided on the order form. A hard copy will follow by mail for your records.

Note: A unique license key is required for each PC with software installed. A single license key will not authorize multiple PCs.





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FIELD PROGRAMMING UNIT (FPU)

KPG-D1K License Key for KPG-D1K

Programming Software for NX-5000 Portable/Mobile (Windows® Vista/7/8/8.1)

Note: Requires KPT-300LMC for authentication

P25 Trunked Programming Capability (licensed by either 1 or 2 below):

- 1. USB Key Type: Advanced System Key (ASK)- See KWD-ASK-MK and AK
- For NX-5000 series radios.
- KWD-ASK-MK (Master Key): For trunked system operator (SYSOP). Required for activating KWD-ASK-AK Access keys. Securely embeds/encrypts the HSID.
- KWD-ASK-AK (Access Key): For Dealers/contractors. Activated by KWD-ASK-MK
 Master Key
- KPG-D1K supports up to 16 KWD-ASK-AK Access Keys (16 trunked networks).

2. Software Key Type: System Key File (SKF)- See L-5005

- For NX-5000 series radios.
- 3-digit HEX System ID (HSID) with verifiable written authorization required from SYSOP.
- Utilized by both SYSOPs and Dealers/Contractors. But Dealers/Contractors must be permitted from SYSOP to order and use SKF.
- Kenwood ships an encrypted *.SKF file via E-Mail to the address provided on the P25
- Trunking System Keys Request Form.
- The *.SKF securely embeds/encrypts the HSID.

OVER THE AIR PROGRAMMING (OTAP)

KPG-180AP

OTAP Manager Software

• License includes 50 radios / 1 NXDN Conventional and Type-C Air Communication Profile

Note:

- Requires KPT-300LMC for authentication.
- Radio to Radio OTAP for P25 Conventional system requires KWD-AP3-P25 license.
- To add more radios/communication profiles, you must contact Kenwood.

BATTERY READER

KAS-12K

License Key for KAS-12

Battery Reader Software for KNB-L1/2/3/N4/LS5 & KSC-Y32 (Windows® Vista/7/8/8.1)

Note: Requires KPT-300LMC for authentication

SOFTWARE UPGRADE LICENSES FOR KAS-12

Note: Upgrade License attaches to one computer running KAS-12 software. All additional licenses require KPT-300LMC for authentication.

Add Battery Management with Database

KAS-12PRO Note: A Windows® PC may be required as a Database Server which KAS-12DU (Free) software is

installed.

RADIO FEATURE LICENSE OPTIONS

PCs registered under the same KPT-300LMC Account Registration Key (License Key) will be able to authentic Radio Features that can then be viewed / shared / managed by all registered users for the account.

* TO PLACE AN ORDER FOR RADIO FEATURE LICENSES:

- Complete a Radio Feature Request Form.
- 2. Submit the completed form along with your PO to the Land Mobile Order Desk via:
 - a) E-Mail: coca@us.jvckenwood.com
- 3. License Keys will be E-mailed to the address provided on the request form. A hard copy will follow by mail for your records.

Note: Radio Feature License Keys can be transferable from a radio to radio within 72 hours count started from being authenticated to a Radio. Once license transferred radio is authenticated by KPT-300LMC, 72 hours is reset and count started from first.



NEXEDGE®

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General Radio Features		
KWD-5000CH	License Key for 4000 Channel Expansion	
KWD-5001FP	License Key for Front Panel Programming	
KWD-5002SD	License Key for microSD Memory Card Slot Activation	
KWD-5003BT	License Key for Bluetooth Serial Port Profile (Required for Date Communication) Note: Voice Communication for Bluetooth Head Set does NOT need KWD-5003BT. You can pair with any Bluetooth audio device without this option.	

P25 Radio Features	
KWD-5100CV	License Key for P25 Conventional
KWD-5101TR	License Key for P25 Phase 1 Trunking (requires KWD-5100CV)
KWD-5102TR	License Key for P25 Phase 2 Trunking (requires KWD-5100CV & KWD-5101TR)
KWD-5103RK	License Key for P25 OTAR (requires KWD-5106DT for a Trunking Operation)
KWD-5105VT	License Key for P25 Conventional Voting Scan
KWD-5106DT	License Key for P25 Trunking OTAR/GPS Data
	Note: Conventional (OTAR/GPS) does NOT require KWD-5106DT.

ANTENNAS	
KRA-26M	VHF helical antenna 146-162 MHz
KRA-26M2	VHF helical antenna 162-174 MHz
KRA-26M3	VHF helical antenna 136-150 MHz
KRA-27M	UHF whip antenna 440-490 MHz
KRA-27M2	UHF whip antenna 470-520 MHz
KRA-27M3	UHF whip antenna 400-450 MHz
KRA-22M	VHF low-profile helical antenna 148-162 MHz
KRA-22M2	VHF low-profile helical antenna 162-174 MHz
KRA-22M3	VHF low-profile helical antenna 136-150 MHz
KRA-23M	UHF low-profile helical antenna 450-490 MHz
KRA-23M2	UHF low-profile helical antenna 470-512 MHz
KRA-23M3	UHF low-profile helical antenna 403-430 MHz
KRA-25	High gain VHF helically loaded whip antenna 148-162 MHz

BATTERIES AND CHARGERS		
KNB-L1M	Li-ion 2000mAh (Compact Slim)	
KNB-L2M	Li-ion 2600mAh (Standard)	
KNB-L3M	Li-ion 3400mAh (High Capacity)	
KNB-N4M	Ni-MH 2500mAh	
KNB-LS5M	CSA US Intrinsically Safe Battery Li-ion 2000mAh	
	Note:	
	Due to the I.S. circuitry on the KNB-LS5M, the cells may lose charge during storage. To	
	prevent loss of capacity during storage, charge the battery	
	for 10 minutes at least every 4 months with the KSC-32, KSC-Y32K or KSC-326K.	
	[Intrinsically Safe Option]	
KBP-8M	AA Alkaline Refillable Battery Pack (12 AA: 9V). Cells not included.	
	Note: The color of the case is International Orange.	
KSC-Y32K	Rapid rate single unit charger (Long-Life Charge Mode capable with KAS-12 Software)	
KSC-32	Rapid rate single unit charger	
KSC-326K	Rapid rate 6-unit charger	
KMB-30M	Wall Mount Bracket for KSC-326K/256K	
KVC-15	Rapid rate DC vehicular charger adapter for the KSC-32 (chargers not included; includes	
	KSC-mobile bracket & cigarette lighter cable DC adapter)	
KVC-23	Rapid rate DC vehicular charger for TK-5x10/5x20, NX-5x00/x00/x10/x20, TK-x180, TK-	
	x170, & TK-x360 portables with Lithium Ion /Lithium Polymer/NiMH packs only	







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CARRYING ACC	ESSORIES
KBH-11	Spring action belt clip (2.5")
KBH-8DS	Leather swivel belt loop with portable D-Ring attachment
KLH-6SW	Leather swivel belt loop / detachable swivel D-Ring back
KLH-137ST	Firemen's Heavy-Duty Leather Shoulder Strap for a Heavy-Duty Leather Case
KLH-200K3	Heavy duty leather carrying case for NX-5000-series (for both keypad models)
KLH-201K3	Nylon carrying case for NX-5000-series (for both keypad models)
SPECIAL COLOR	R HOUSING
KWD-YH-5000	Yellow Housing Kit for NX-5000 series Portables (Standard Key Model Only)
11112	Order <u>L-5024</u> for Factory Install. (Intrinsically Safe Option must be installed by Kenwood.)
KWD-OH-5000	Orange Housing Kit for NX-5000 series Portables (Standard Key Model Only)
	Order L-5025 for Factory Install, (Intrinsically Safe Option must be installed by Kenwood.)

MICROPHONES	& AUDIO ACCESSORIES
KMC-54WDM	MIL-SPEC, IP67 (Immersion) Speaker Mic Compatible with ANR Feature
rano o mon	Note: only compatible with a NX-5000 series portable
	[Intrinsically Safe Option]
KMC-42WDM	MIL-SPEC, IP67 (Immersion) Noise-canceling Speaker Mic
	[Intrinsically Safe Option]
KMC-49	MIL-SPEC, Speaker Mic. with Antenna Connector
	Note: 5/16" Coax cable hex wrench included (antenna is not included).
	[Intrinsically Safe Option]
KEP-1	3.5mm earphone kit for KMC-41/42W/54W Speaker Mics
	[Intrinsically Safe Option]
KEP-2	2.5mm earphone kit for KMC-49 Speaker Mic
	[Intrinsically Safe Option]
KCT-51	Hirose 6-pin Adapter (adapts KVL/aftermarket audio acc. to portable connector)
	[Intrinsically Safe Option]
KHS-11BL	2-wire palm mic w/earphone, universal connector (Black)
	[Intrinsically Safe Option]
KHS-12BL	3-wire mini lapel mic w/earphone, universal connector (Black)
	Note: NOT compatible with TDMA operations
	[Intrinsically Safe Option]
KHS-14	Lt. Wt. Single muff headset w/boom mic & In-line PTT
	Note: NOT compatible with TDMA operations
	[Intrinsically Safe Option]
KHS-15-BH	Hvy-duty noise reduction behind-the-headset w/noise cancelling boom mic & PTT
	Note: NOT compatible with TDMA operations
	[Intrinsically Safe Option]
KHS-15-OH	Hvy-duty noise reduction over-the-headset w/noise cancelling boom mic & PTT
	Note: NOT compatible with TDMA operations
	[Intrinsically Safe Option]
ENCRYPTION M	ODULES
KWD-AE30K	AES FIPS140-2 & DES Encryption Module (Multi-Key)
TOTAL TIESURE	Order a Labor Code L-5003 if installation is required.
	KWD-AE30K requires: a Motorola KVL3000 Plus/4000 key loader device.

ENCRYPTION M	ODULES	
KWD-AE30K	AES FIPS140-2 & DES Encryption Module (Multi-Key)	
	Order a Labor Code L-5003 if installation is required.	
	KWD-AE30K requires: a Motorola KVL3000 Plus/4000 key loader device.	
	KWD-AE30K is an U.S. DOC/BIS Export Controlled Item (ECCN 5A002A.1).	
	Intrinsically Safe Option - Must be Kenwood installed for I.S.	
KWD-AE31K	AES & DES Encryption Module (Multi-Key)	
	Order a Labor Code <u>L-5004</u> if installation is required.	
	Note: Requires KPG-AE1/DE1 software key loader or Motorola KVL3000 Plus/4000 key loader device.	
	KWD-AE31K is an U.S. DOC/BIS Export Controlled Item (ECCN 5A002A.1)	
	Intrinsically Safe Option - Must be Kenwood installed for I.S.	





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ENCRYPTION MODULES CON'T

KPG-AE1K

AES/DES Encryption Software Key Loader for KWD-AE31K

Authentication by KPT-300LMC is required

Note: KPG-AE1 is a U.S. DOC/BIS Export Controlled Item (ECCN 5D002A).

KPG-DE1K DES Encryption Software Key Loader for KWD-AE31K

Authentication by KPT-300LMC is required Note: KPG-DE1 is a U.S. DOC/BIS Export Controlled Item (ECCN 5D992A.1).

SERVICE RELAT	TED ACCESSORIES
KPG-36XM	Full Speed USB Programming interface cable
KPG-93	KVL-3000/3000 Plus/4000 Interface Cable for P25 Portables
KPG-93AUT	KVL-4000 Radio Authentication Cable [Available in 2016 1Q]
KWD-ASK-AK	Access Key for KPG-D1K P25 trunked programming Notes: Enables P25 Trunked system programming privileges in a KPG-D1K. For NX-5000 series only. Must be activated by trunked system operator (SYSOP) with KWD-ASK-MK Master Key. Must have KPG-D1K. Configurable expiration period of KWD-ASK-AK set by KWD-ASK-MK is available for 3 years for built in battery. USB Key must be replaced since the expiration set up dose not work after 3 years.
KWD-ASK-MK	Master Key for activating KWD-ASK-AK Access Keys - Restricted Purchase Requirements - Notes: • For NX-5000 series only.

- Sold to trunked system operator (SYSOP) or SYSOP authorized entities only
- Must have KPG-D1K.
- SYSOP must provide 3-digit HEX HSID to Kenwood with P25 Trunking System Keys Request Form.
- Purchase KWD-ASK-AK Access Keys if needed.

INSTALLATIC	ON / TUNING CHARGES		
L-5000	Account Registration Key Note: specify the number of PC's used for Radio Feature License Activation.	NC	NC
L-5001	Factory Activation of Radio Feature Licenses (per Radio) Note: Must purchase Radio Feature Licenses separately. KPT-300LMC's History Menu will not display the Radio Features activated by Factory.		
L-5002	NX-5200/5300/5400 Programming (with basic TX/RX check)		
L-5003	Install KWD-AE30K in NX-5000 series Portable (Must purchase module separately)		
L-5004	Install KWD-AE31K in NX-5000 series Portable (Must purchase module separately)		
L-5005	KPG-D1K System Key File (SKF) Note: Enables P25 Trunked system programming privileges in a KPG-D1K. - Restricted Purchase Requirements - • Trunked system operator (SYSOP) must provide 3-digit HEX HSID to Kenwood with P25 Trunking System Keys Request Form. • Must have KPG-D1K. • Kenwood ships an encrypted *.SKF file via E-Mail to the address provided on the P25 Trunking System Keys Request Form. • Non-SYSOP entities ordering L-5005 must provide verifiable written authorization from SYSOP to receive an *.SKF file. • 3-digit HEX HSID are securely encrypted & embedded in the *.SKF file.		
L-5024	Assemble Yellow Housing KWD-YH-5000 with NX-5000 series Portable		
L-5025	Assemble Orange Housing KWD-OH-5000 with NX-5000 series Portable		
L-5039	Configure NX-5200/5300/5400 for CSA US Intrinsically Safe Must order KNB-LS5M I.S. battery		





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-- IMPORTANT NOTES regarding ENCRYPTION MODULES--

Encryption modules, key loaders and radios containing encryption are export controlled by the U.S. Department of Commerce Bureau of Industry & Security EAR regulations and may either require an Export License, are eligible for a License Exception (ENC) or are exportable with No License Required (NLR) depending on the country, the consignee and the intended use. High level encryption is a special commodity that may require an export license to most countries. See www.bis.gov for more information regarding export regulations. DO NOT SHIP encryption items outside the U.S. without proper DOC/BIS Export Licenses and/or compliances.

Kenwood may request the following information to be submitted at time of order (this information must meet Kenwood internal approvals prior to shipment even if being returned to Kenwood later:

a) Initial Destination: Initial delivery point if different from Ultimate Destination

(customer distribution center, headquarters, dealership, manufacturer's representative)

- * Business/Agency Name:
- * Address:
- * Contact Person Name:
- * Contact Phone:

b) Ultimate Destination: Final delivery point(s); deployment/distribution

- * Business/Agency Name:
- * Address:
- * Contact Person Name:
- * Contact Phone
- c) Intended Use of Radios: Law enforcement, security, operations, etc.

KWD-AE30 AES FIPS140-2 SCM , NIST Validation & Customer Shipping

A secure delivery method direct to the end user customer is required by the NIST AES FIPS 140-2 validation rules. For U.S. Federal Government entities the SCM must ship from Kenwood USA Corporation directly to the end user customer by a trusted carrier (FEDEX, UPS or a designated Kenwood USA Corporation employee); shipping/handling by a dealer or other entity is not acceptable. This may or may not be required by local/state government agencies or business/industrial users. Please check with the end use customer about their AES encryption handling requirements before ordering. Kenwood will not be responsible for shipments of KWD-AE30K modules to erroneous destinations specified on an order.