



NX-3220/3320

VHF/UHF Digital & FM Analog Portable Radios

STANDARD



Basic Standard Key Full Key

All NX-3000 series portables include:

- Belt Clip (KBH-11)
- 2-PIN Accessory Cover
- Channel Stopper
- User Guide

Purchase Battery, Charger & Antenna separately or order a Value Package

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

Because of spurious signal (birdie), the following frequencies (and ± 7.5 kHz ranges) are not allowed ;

- | | | |
|------------|------------|------------|
| • 139.2000 | • 403.2000 | • 460.8000 |
| • 144.0000 | • 408.0000 | • 465.6000 |
| • 148.8000 | • 412.8000 | • 470.4000 |
| • 153.6000 | • 417.6000 | • 475.2000 |
| • 158.4000 | • 422.4000 | • 480.0000 |
| • 160.0000 | • 427.2000 | • 484.8000 |
| • 163.2000 | • 432.0000 | • 489.6000 |
| • 168.0000 | • 436.8000 | • 494.4000 |
| • 172.8000 | • 441.6000 | • 499.2000 |
| | • 446.4000 | • 504.0000 |
| | • 451.2000 | • 508.8000 |
| | • 456.0000 | • 513.6000 |

■ GENERAL FEATURES

- 5 W (136-174 MHz) Models
- 5 W (400-520 MHz) Models
- 260 CH-GID / 128 Zones
- 64 CH-GID / 4 Zones (For Basic Models)
- Basic Models (w/o LCD and keypad)
- Standard Keypad Models (w/ LCD and D-pad/4key)
- Full Keypad Models (w/ LCD and D-pad/12 key)
- 4-Line Basic Frame (2-Line Main/Sub-LCD, icon & key guide)
- 5-Line Text Message Frame (3 Lines of Text, icon & key guide)
- Multi-Language Display
- Date & 12/24 Hour Time Clock
- 7-color Light Bar Indicator
- Transmit/Busy/Call Alert/Warn LED
- Remote Stun/Kill/Check
- On/Off Volume Knob
- 16-Position Mechanical Selector
- 4-way Directional-pad (For Standard/Full Keypad)
- Emergency Key
- 2 Side PF Keys
- 1W Speaker Audio
- Multi Digital Protocol¹
- Emergency Call Features
- Built-in GPS Receiver / Antenna
- Built-in Bluetooth® Module
- Built-in Motion Sensor
- Active Noise Reduction (ANR)
- KPG-D3N Windows® FPU
- Flash Firmware Upgrading
- Software DES and AES Encryptions (Digital Only)
- MIL-STD-810 C/D/E/F/G
- IP54/55° Water & Dust Intrusion

*1. Designed to operate under an NXDN OR DMR digital, and FM analog protocols.
2. Must equip 2-PIN Accessory Cover included with the Radio. Speaker Microphone does not cover IPs.*

■ DIGITAL – NXDN® MODE

- NXDN® Conventional Standard
- NXDN® TYPE-C (Gen1/Gen2) Trunking Optional
- AMBE+2™ 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 Messaging
- Remote Stun/Kill/Check
- Short & Long Data Messages
- GPS Location
- NXDN® Scrambler

■ DIGITAL – DMR MODE

- DMR Tier II Conventional Standard
- AMBE+2™ VOCODER
- 12.5 kHz Channels
- Site Roaming
- Call Interrupt (Direct & Repeater Mode)
- Paging Call
- Emergency Call
- All Group Call
- Late Entry
- Status Messaging
- Remote Control by Subscriber Units
- ARC4 Encryption

■ 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 / DQT
- Two-Tone (Conventional Zones Only)
- DTMF

OPTIONAL FEATURES

- 1000 Channel (**KWD-3000CH** License Key Activation required)
- Front Panel Programming (**KWD-3001FP** License Key Activation required)
- Built-in Bluetooth® Module for Data (**KWD-3002BT** License Key Activation required)
- Digital Trunking (**KWD-3501TR** License Key Activation required)
- DMR ARC4 Enhanced Encryption (**KWD-3502EE** License Key Activation required)
- AES/DES Encryption (**KWD-3503AE** License Key Activation required)
- Remote Control by Subscriber Units (**KWD-3504RC** Software License Key required)

RADIO

NX-3220K	VHF (136-174MHz), 5.0 Watts, 64 CH, Basic Model
NX-3220K2	VHF (136-174MHz), 5.0 Watts, 260CH, Standard Model
NX-3220K3	VHF (136-174MHz), 5.0 Watts, 260CH, Full Key Model
NX-3320K	UHF (400-520MHz), 5.0 Watts, 64 CH, Basic Model
NX-3320K2	UHF (400-520MHz), 5.0 Watts, 260CH, Standard Model
NX-3320K3	UHF (400-520MHz), 5.0 Watts, 260CH, Full Key Model



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Li-ion VALUE PACKAGES (Preferred for Trunked Mode usage)

NX-3220K2-XLKVP	VHF Extra-Cap Li-Ion Value Pack (NX-3220K2+KNB-78LM(2,860mAh)+KSC-25LSK+KRA-26M)
NX-3220K2LAKVP	VHF Hi-Cap Li-Ion Value Pack (NX-3220K2+KNB-57LAM(2,000mAh)+KSC-25LSK+KRA-26M)
NX-3320K2-XLKVP	UHF Extra-Cap Li-Ion Value Pack (NX-3320K2+KNB-78LM(2,860mAh)+KSC-25LSK+KRA-27M)
NX-3320K2LAKVP	UHF Hi-Cap Li-Ion Value Pack (NX-3320K2+KNB-57LAM(2,000mAh)+KSC-25LSK+KRA-27M)

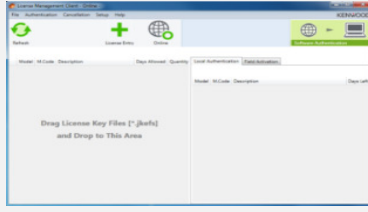
Li-ion VALUE PACKAGES (Preferred for Conventional Mode Usage)

NX-3220K2-SLKVP	VHF Li-Ion Value Pack (NX-3220K2+KNB-55L(1,480mAh)+KSC-25LSK+KRA-26M)
NX-3320K2-SLKVP	UHF Li-Ion Value Pack (NX-3320K2+KNB-55L(1,480mAh)+KSC-25LSK+KRA-27M)


CSA US APPROVED MODELS

NX-3220-ISCK	VHF (136-174MHz), 5.0 Watts, 64 CH, Basic Model
NX-3220-ISCK2	VHF (136-174MHz), 5.0 Watts, 260CH, Standard Model
NX-3220-ISCK3	VHF (136-174MHz), 5.0 Watts, 260CH, Full Key Model
NX-3320-ISCK	UHF (400-520MHz), 5.0 Watts, 64 CH, Basic Model
NX-3320-ISCK2	UHF (400-520MHz), 5.0 Watts, 260CH, Standard Model
NX-3320-ISCK3	UHF (400-520MHz), 5.0 Watts, 260CH, Full Key Model

Note: KNB-68LC for NX-x20 series radios cannot be used with NX-3000 series as an Intrinsically Safe battery.



Note: KPT-300LMC is compatible with Windows Vista/7/8/8.1/10 Only. Windows



KPT-300LMC License Management Client

KPT-300LMC is a required software package that is used to authenticate **software (FPU)** and **radio feature license** keys.

KPT-300LMC is available as a free download from our website and is also supplied with applicable software, such as KPG-D3K.

NOTE: A license key is required for the KPT-300LMC to authenticate the software / Radio Feature prior to use. To receive a license key, complete the enclosed "[Account Request](#)"

KPT-300LMC	License Management Client	NC	NC
L-5000	Account Registration Key Note: specify the number of PC's used for Radio Feature License Activation.	NC	NC

SOFTWARE LICENSING OPTIONS

TO PLACE AN ORDER FOR SOFTWARE:

1. Complete a **Software License Keys 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.

Field Programming Unit (FPU)

KPG-D3K	License Key for KPG-D3K Programming Software for NX-3000 Portable/Mobile Note: Requires KPT-300LMC for authentication
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Over The Air Programming (OTAP)

KPG-180AP	<p>Licence Key for KPG-180AP OTAP Manager Software</p> <ul style="list-style-type: none"> • License includes Fifty (50) radios / One(1) NXDN Conventional and Type-C Air Communication Profile and One(1) NXDN Conventional and Type-C IP Communication Profile <p>Note:</p> <ul style="list-style-type: none"> - Requires KPT-300LMC for authentication - NEXEDGE Type-D Trunking and DMR System not supported.
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Over The Air Programming (OTAP) - Continued

SOFTWARE UPGRADE LICENSES FOR KPG-180AP

Note: Includes package license for additional subscriber unit or license for additional profile attached to one computer running KPG-180AP software. All additional licenses require KPT-300LMC for authentication.

KWD-AP5100	<p>Additional 100 Radio Package License for 1 PC</p> <p>Note: License includes 100 subscriber radios OTAP License.</p>
KWD-AP5250	<p>Additional 250 Radio Package License for 1 PC</p> <p>Note: License includes 250 subscriber radios OTAP License.</p>
KWD-AP5500	<p>Additional 500 Radio Package License for 1 PC</p> <p>Note: License includes 500 subscriber radios OTAP License.</p>
KWD-AP1-CA	<p>Additional NXDN Conventional Type-C Air Communication Profile for 1 PC.</p> <p>Note: Price is per license on quantities of less than 16 licenses. Used as NEXEDGE Base Station Serial Interface for both Conventional and Trunking (Type-C Gen1/Gen2).</p>
KWD-AP2-CP	<p>Additional NXDN Conventional Type-C IP Communication Profile for 1 PC.</p> <p>Note: Price is per license on quantities of less than 16 licenses. Used NEXEDGE Repeater IP Interface for both Conventional and Trunking (Type-C Gen1/Gen2) .</p>

-- IMPORTANT NOTES--

Base radios are connected to a computer using the KPG-22UM USB adapter for portables, or a KPG-46XM for mobiles. Requires firmware version 2.5 or higher for the NXR-x00/NXR-x10 repeaters.

Encryption Software Keyloaders

KPG-AE1K	<p>Licence Key for AES/DES Encryption Software Key Loader for KWD-3503AE</p> <p>Note:</p> <ul style="list-style-type: none"> - Requires KPT-300LMC for authentication - KPG-AE1 is a U.S. DOC/BIS Export Controlled Item (ECCN 5D002A).
KPG-DE1K	<p>Licence Key for DES Encryption Software Key Loader for KWD-3503AE</p> <p>Note:</p> <ul style="list-style-type: none"> - Requires KPT-300LMC for authentication - KPG-DE1 is not an export controlled item; therefore, it does not require an export license.

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:

1. Complete a Radio Feature License Keys 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.

Offline Authentication Option

KWD-OFL-USB	<p>USB License Storage Hardware key for Radio Feature License</p> <p>Note:</p> <ul style="list-style-type: none"> - Must purchase Radio Feature Licenses separately. - Can be used with only one (1) Account Registration Key. - Requires KPT-300LMC V1.10 or higher. - Cancellation rule is difference with standard Online/Offline Authentication. Please refer to a leaflet bundled with KWD-OFL-USB.
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Radio Features

KWD-3000CH	License Key for 1000 Channel Expansion
KWD-3001FP	License Key for Front Panel Programming
KWD-3002BT	License Key for Bluetooth Serial Port Profile (Required for Data Communication) Note: Voice Communication for Bluetooth Head Set does NOT require KWD-3002BT. You can pair with any Bluetooth audio device without this option.
KWD-3302TR	License Key for DMR Tier 3 Trunking
KWD-3501TR	License Key for Digital Trunking (Includes NXDN Type-C and Type-C Gen2)
KWD-3502EE	License Key for DMR ARC4 Enhanced Encryption

Radio Features (Continued)

	License Key for AES/DES Encryption Note:
KWD-3503AE	1. Factory Installation only. Must order L-5054. 2. Requires KPG-AE1/DE1 software key loader to encrypt. 3. KWD-3503AE is a U.S. DOC/BIS Export Controlled Item (ECCN 5A002A.1) Please see descriptions at the bottom.
	License Key for Remote Control by Subscriber Unit Note:
KWD-3504RC	- This license may be used by Administrator due to Stun/Revive/Kill. - The license is only required for transmission of Remote Control commands. - PC command for Remote Control does NOT require the license.
	License Key for DES Encryption Note:
KWD-3505DE	- Requires either the KPG-AE1 or KPG-DE1 software key loader to load encryption keys. - KPG-AE1 is a U.S. DOC/BIS Export Controlled Item (ECCN 5D002A). - KPG-DE1 is not an export controlled item; therefore, it does not require an export license.

ANTENNAS

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-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-25	High gain VHF helically loaded whip antenna 148-162 MHz
KRA-28	Broad-band VHF helically loaded whip antenna 140-170 MHz

BATTERIES AND CHARGERS

KBP-5	AA Alkaline Refillable Battery Pack (6 AA; 9V) cells not included
KNB-55L	1480 mAh, Li-ion battery, IP67, battery only, best for conventional mode operation
KNB-56N	1400 mAh, Ni-MH battery, IP67, battery only
KNB-57LAM	2000 mAh, Li-ion battery, IP67, battery only, best for trunked mode operation
KNB-78LM	2860 mAh, Li-ion battery, IP67, battery only, best for trunked mode operation
KNB-79LCM	CSA US Intrinsically Safe battery, 2860 mAh, Li-ion battery, IP67, battery only [Intrinsically Safe Option]
KSC-25LSK	100~240 volt rapid rate single unit charger for KNB-40LC(V)/55L/57L/57LAM/68LC/78LM/79LCM Li-ion Battery
KSC-25SK	110 volt Rapid rate single unit charger for KNB-26N/40LC(V)/55L/56N/57L/57LAM/68LC/78LM/79LCM
KSC-256AK	Rapid rate 6-Unit charger for KNB-26N/55L/56N/57L/57LAM/68LC/78LM/79LCM



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KMB-16	Six Unit Charger Adapter for the KSC-16/20/24/25/25L chargers (chargers not included)
KMB-23	Six Unit Charger Adapter for the KSC-16/20/24/25/25L/32 chargers (chargers not included)
KMB-30M	Wall Mount Bracket for KSC-326K/256K
KVC-4	Vehicular charger adapter for the KSC-16/18/20/24/25SK chargers (chargers not included) *KSC-25LSK is not compatible with KVC-4
KVC-23	Rapid rate DC vehicular charger for TK-5x10/5x20, NX-5x00/NX-3x00/x00/x10/x20, TK-x180, TK-x170, & TK-x360 portables with Lithium Ion /Lithium Polymer/NiMH packs only.

CARRYING ACCESSORIES

KBH-11	Spring action belt clip (2.5")
KBH-8DS	Leather swivel belt loop with portable D-Ring attachment
KLH-206K	Heavy-Duty Leather Case w/Swivel Belt Loop for Basic Model
KLH-206K2	Heavy-Duty Leather Case w/Swivel Belt Loop for Standard Keypad Model
KLH-206K3	Heavy-Duty Leather Case w/Swivel Belt Loop for Full Keypad Model
KLH-207K	Nylon carrying case for Basic Model
KLH-207K2	Nylon carrying case for Standard Keypad Model
KLH-207K3	Nylon carrying case for Full Keypad Model

SPECIAL COLOR HOUSING

KWD-YH-3000U	Yellow Housing Kit for NX-3x00 Series Portables (Standard Key Model Only) Must order L-5068 for Factory Install.
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MICROPHONES & AUDIO ACCESSORIES

KMC-21	Compact speaker microphone [Intrinsically Safe Option]
KMC-45D	MIL-SPEC, IP54/55 Speaker microphone (Built-in 2.5mm miniature earphone jack) Note: KMC-45 (Non D version) is not compatible with DMR (TDMA) operations [Intrinsically Safe Option]
KEP-2	2.5mm earphone kit for KMC-17/45 Speaker Mic [Intrinsically Safe Option]
KHS-7	Single muff headset w/boom mic [Intrinsically Safe Option]
KHS-7A	Lt. Wt Single muff headset w/boom mic & in-line PTT Note: Available for Analog and NXDN (FDMA) only. NOT compatible with DMR (TDMA) operations [Intrinsically Safe Option]
KHS-8BL	Two-Wire palm mic w/earphone (black) Note: Available for Analog and NXDN (FDMA) only. NOT compatible with DMR (TDMA) operations [Intrinsically Safe Option]
KHS-9BL	Three-Wire lapel mic w/earphone (black) Note: Available for Analog and NXDN (FDMA) only. NOT compatible with DMR (TDMA) operations
KHS-10D-BH	Hvy-duty noise reduction behind-the-headset w/noise cancelling boom mic & in-line PTT [Intrinsically Safe Option]
KHS-10D-OH	Hvy-duty noise reduction over-the-headset w/noise cancelling boom mic & in-line PTT [Intrinsically Safe Option]
KHS-22	Behind-the-Head Headset with flexible boom mic and in-line PTT single ear receiver (low profile wire head band) [Intrinsically Safe Option]
KHS-26	Clip Mic w/earphone
KHS-27A	D-Ring Ear Hanger w/PTT & Mic
KHS-31C	C-Ring Ear Hanger w/PTT & Mic

SERVICE RELATED ACCESSORIES

KPG-22UM	USB Programming interface cable
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INSTALLATION / TUNING CHARGES

L-836	Assemble KMB-16 with six KSC-25/25L
L-961	Assemble KMB-23 with six KSC-24/25/25L/32 (Rapid Rate, 120 Volt versions only)
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-5052	NX-3220/3320 Programming (with basic TX/RX check)
L-5054	Installation for NX-3000 Portable/Mobile AES/DES encryption
L-5062	Configure NX-3000 series for CSA US Intrinsicly Safe Note: NX-3000 series I.S. radios must be used with matching I.S. battery KNB-79LCM.
L-5068	Assemble Yellow Housing KWD-YH-3000U with NX-3000 Series Portable (Standard Key Model only)

-- IMPORTANT NOTES regarding ENCRYPTION SOFTWARE OPTION--

Encryption Software Option, 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.

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