



State of West Virginia  
 Department of Administration  
 Purchasing Division  
 2019 Washington Street East  
 Post Office Box 50130  
 Charleston, WV 25305-0130

# Request for Quotation

RFQ NUMBER  
 7012C007

PAGE  
 1

ADDRESS CORRESPONDENCE TO ATTENTION OF:  
 PAUL REYNOLDS  
 304-558-0468

VENDOR

\*709042444      304-776-4091  
 ELECTRONIC COMMUNICATIONS WV  
 408 OLD GOFF MOUNTAIN ROAD  
 CROSS LANES WV 25313

SHIP TO

DIVISION OF HIGHWAYS  
 EQUIPMENT DIVISION  
 ROUTE 33  
 BRUSHY FORK ROAD  
 BUCKHANNON, WV  
 26201      304-472-1750

DATE PRINTED 09/09/2011	TERMS OF SALE <i>NET 30 Day</i>	SHIP VIA <i>BEST WAY</i>	F.O.B. <i>Dest</i>	FREIGHT TERMS <i>Paid Shipper</i>
BID OPENING DATE: 09/28/2011		BID OPENING TIME 01:30PM		

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
0001		EA		725-12	\$ 470.48	\$ 470.48
<p>REQUEST FOR QUOTATION</p> <p>THE WEST VIRGINIA STATE DIVISION OF PURCHASING FOR THE AGENCY, THE WEST VIRGINIA DIVISION OF HIGHWAYS IS SOLICITING BIDS FOR LOW BAND DASH MOUNTED RADIOS PER THE ATTACHED SPECIFICATIONS.</p> <p>TECHNICAL QUESTIONS CONCERNING THIS SOLICITATION MUST BE SUBMITTED IN WRITING TO PAUL REYNOLDS IN THE WEST VIRGINIA STATE PURCHASING DIVISION VIA MAIL AT THE ADDRESS SHOWN IN THE BODY OF THIS RFQ, VIA FAX AT 804-558-4115, OR VIA EMAIL AT PAUL.REYNOLDS@WV.GOV. ATTACHED FIND A WORD DOCUMENT FOR SUBMITTING TECHNICAL QUESTIONS. DEADLINE FOR ALL TECHNICAL QUESTIONS IS 09/23/2011 AT THE CLOSE OF BUSINESS. ANY TECHNICAL QUESTIONS RECEIVED WILL BE ANSWERED BY FORMAL ADDENDUM TO BE ISSUED BY THE PURCHASING DIVISION AFTER THE DEADLINE HAS LAPSED.</p> <p>PURCHASING CARD ACCEPTANCE: THE STATE OF WEST VIRGINIA CURRENTLY UTILIZES A VISA PURCHASING CARD PROGRAM WHICH IS ISSUED THROUGH A BANK. THE SUCCESSFUL VENDOR MUST ACCEPT THE STATE OF WEST VIRGINIA VISA PURCHASING CARD FOR PAYMENT OF ALL ORDERS PLACED BY ANY STATE AGENCY AS A CONDITION OF AWARD.</p> <p>NOTICE</p>						



SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE: *[Signature]* TELEPHONE: 304-776-4091 DATE: Sept 27 2011

TITLE: PRESIDENT FEIN: 550520004 ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'



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PAUL REYNOLDS 304-558-0468

VENDOR	*709042444      304-776-4091
	ELECTRONIC COMMUNICATIONS WV 408 OLD GOFF MOUNTAIN ROAD
	CROSS LANES WV 25313

SHIP TO	DIVISION OF HIGHWAYS EQUIPMENT DIVISION ROUTE 33 BRUSHY FORK ROAD BUCKHANNON, WV 26201      304-472-1750
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DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
09/09/2011				

BID OPENING DATE: 09/28/2011      BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
<p>A SIGNED BID MUST BE SUBMITTED TO:</p> <p>DEPARTMENT OF ADMINISTRATION            PURCHASING DIVISION            BUILDING 15            2019 WASHINGTON STREET, EAST            CHARLESTON, WV 25305-0130</p> <p>THE BID SHOULD CONTAIN THIS INFORMATION ON THE FACE OF THE ENVELOPE OR THE BID MAY NOT BE CONSIDERED:</p> <p>SEALED BID</p> <p>BUYER:      PAUL REYNOLDS      FILE 33</p> <p>RFQ. NO.:      7012C007</p> <p>BID OPENING DATE:      09/28/2011</p> <p>BID OPENING TIME:      1:30 P.M.</p> <p>PLEASE PROVIDE A FAX NUMBER IN CASE IT IS NECESSARY TO CONTACT YOU REGARDING YOUR BID:</p> <p>----- 304 776 7092 -----</p> <p>CONTACT PERSON (PLEASE PRINT CLEARLY):</p> <p>----- Tim Ford -----</p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS			
SIGNATURE		TELEPHONE	DATE
TITLE	FEIN	ADDRESS CHANGES TO BE NOTED ABOVE	

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

WEST VIRGINIA DIVISION OF HIGHWAYS  
EQUIPMENT DIVISION

PROCUREMENT SPECIFICATIONS FOR MOBILE RADIOS

NO. S. E. 650-002

LOW BAND DASH MOUNT MOBILE RADIOS

1.0 Purpose

It is the purpose of these specifications to describe Low Band dash mount mobile radio's (hereinafter referred to as "units) to be purchased for use by the West Virginia Division of Highways; to define the provisions to be contained in proposals for the sale of said units to the division; establish a schedule for delivery and the criteria for gauging the compliance of the bidder, his proposal and his unit to these specifications.

2.0 Bidders Compliance Report

Each proposal submitted should be accompanied by a Bidders Compliance report completed in detail and signed by bidder. Failure to submit this report, completed entirely, may subject the bidder to automatic disqualification.

3.0 Representative unit for test

3.1 The successful bidder shall furnish the West Virginia Department of Transportation, Division of Highways one (1) representative unit, to be tested and evaluated by the Department. Unit must be set up on 47.28 MHZ. as the test frequency with a subtone of 71.9 Hz. The radio must be pre-tested and operational on delivery. Time period for testing and evaluation to be seven (7) calendar days following delivery of the unit. The Department shall incur no obligation for deterioration of surface, finishes, seals and mechanical or electrical parts on the unit resulting from operation and testing within the limits of these specifications; nor shall it incur obligation for damage to the unit resulting from failure to meet specifications when due care and attention are given by the Department and testing is done within the limits of the these specifications.

3.2 After testing of the representative unit, the Department may place an order for the units bid or may decline to order any units if determination has been made by the Department that the representative unit does not meet the functional, operational or any other needs of the Department.

- 4.0 Specifications and guidelines - General -The bidder shall identify the units by manufacturer model, series, and year of manufacture in his proposal so as to enable identification by the West Virginia Department of Highways in the manufacture's sales literature on the proposed units. The bidder should submit complete descriptive literature fully describing the proposed unit to establish that he is bidding on the manufacture's most current model.

All specifications including the word "shall" are considered mandatory and any bid failing to include the mandatory item will be cause for rejection.

- 5.0 Unspecified Accessories and Features

All parts and service manuals, equipment, accessories, material, design and performance characteristics not specified herein, but which are necessary to provide a complete unit, shall be furnished with each unit and shall conform in strength, quality of material, and quality of workmanship to those which are advertised and provided to the market in general by the unit industry.

All parts and accessories advertised and regularly supplied as standard are to be included, except those which would represent duplication of these specified, and except those which, by specification are not to be furnished. All standard safety features required by federal and state law shall be included.

- 6.0 Manufacturer's Warranty and Service Policy

The manufacture's standard warranty or service policy is to apply to the unit. Such warranty or service policy is to be recognized at any authorized unit dealer representing manufacturer of proposed unit throughout the State of West Virginia. It shall be the responsibility of the bidder to provide labor to repair or replace any defective replacement parts, components and materials found to be defective and to have available those replacement parts, components, and/or materials found to be defective during the terms of the warranty period. The Units shall be accompanied upon delivery by the manufacture's properly execute warranty or service policy.

- 7.0 Delivery

- 7.1 Delivery point of the completely assembled units shall be the West Virginia Division of Highways, Equipment Division, at Buckhannon, WV located on U.S. Route # 33 at Brushy Fork Road.

- 7.2 Delivery 90 days after order.

## 8.0 General Specifications

All units shall conform to the following minimum specifications.

8.1 Number of Channels : 32 Minimum

8.2 Frequency Spread: 36.0 to 50.0 MHz

8.3 Main body must not weigh more than 3.75 pounds.

8.4 Controls: Shall have front microphone/program jack.

Shall have a minimum of 8 character alphanumeric display. Must have front mounted internal speaker. Must have controls for scan, monitor, channel delete/add and channel select. Shall have capability for user addition of a talk-around button with programmable offset. Unit shall provide a means of memory backup to allow operation on the ignition switch without loss of selected channel.

8.5 Programming:

Shall be programmable by PC, under Windows NT, 2000, XP, software must be provided. Twelve (12) interface cables for PC shall be supplied.

Successful bidder shall deliver units programmed to channels, frequencies and other programmable options as designated upon order or award of purchase order.

8.6 Receiver Specifications :

Sensitivity @ 12db EIA SINAD : .25uv or better

Selectivity : -75db or better

Intermodulation : -70db or better

Spurious Rejection : -70db or better

Frequency Spread : 12.0 MHz or better

Audio Output : 10 watts at 5% distortion

8.7 Transmitter Specification :

Output power : 65 watts or greater

Frequency Stability : . +/- 0.0005%

Spurious & Harmonics -62db or better

FM Noise : -45db or better

Audio Distortion : less than 3%

Frequency Separation : 12.0MHZ or better

DIVISION OF HIGHWAYS  
WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
EQUIPMENT DIVISION

BIDDERS COMPLIANCE REPORT

PROCUREMENT SPECIFICATIONS FOR MOBILE RADIOS

NO. S. E. 650-002

LOW BAND DASH MOUNT MOBILE RADIOS

NOTE TO BIDDER: Procurement Specifications No. S.E.650-002, Paragraph 2.0 recommends the completion and submittal of this report with your proposal. Purpose of this report is to enable the West Virginia Division of Highways Equipment Division Communications Review to make full and fair evaluation of the bid proposal. FAILURE TO SUBMIT THIS REPORT, COMPLETE IN ITS ENTIRETY, MAY SUBJECT THE BIDDER TO DISQUALIFICATION.

SPECIFICATIONS - GENERAL

Reference Requisition No. On request for proposal:

7012C007

Bidder's Name: Electronic Communications of WV Inc

Address: 408 Old Goff Mtn Road Cross Lanes WV 26313

Telephone Number: 304 776-4091

Years Company has been registered to do business with the State of West Virginia: 40 YEARS

Manufacturer, model, series, and date of manufacture of proposed unit:

KENWOOD TK-6110 K2

Is descriptive literature, fully describing proposed unit, attached to your proposal? Yes

If not, why? \_\_\_\_\_

Bid price per unit:

\$ 470.48 x 1 = 470.48 TOTAL BID

5.1 Will required number of operating and service manuals and complete parts lists be delivered with the selected unit?  YES  NO

6.0 WARRANTY

Define the terms of manufacturer's standard warranty. If not offered, so state. Attach copy if available.

See Attached Warranty Sheet  
\_\_\_\_\_  
\_\_\_\_\_

6.1 Define warranty service to be performed at manufacturer's representative facility. List names and locations of manufacturer's representative.

All Warranty Services Can be provided by Elec. Comm. of WV in our  
Service location from Component Replacement to Case Parts, As well  
As out bound Depot Services  
\_\_\_\_\_

6.2 List locations for parts inventories that are within the State of West Virginia. Also list availability of levels if known.

Electronic Communications of WV Inc  
408 Old Goff Mtn Road  
Cross Lanes WV  
\_\_\_\_\_  
\_\_\_\_\_

7.2 Will deliver of ordered units be completed within 90 days of order?  YES  NO

- 8.0 SPECIFICATIONS OF THE QUOTED UNIT: the bidder should complete the following schedule in order for the Division to compare the actual bid unit to the specifications. Should the bidder take exception to any of the specifications, then such exception may be only on the basis that such feature is not offered by the manufacturer. The Division will have the sole discretion as to whether the bidder's substitution meets the requirements of the specifications..

Manufacturer: KENWOOD

Model: TK-6110

Year model: 2011 +

- 8.1 Does unit have a minimum of 32 channels ?  YES  NO
- 8.2 Does unit have 42.0 to 50.0 Mhz frequency spread and include 47 MHZ. range ?  YES  NO
- 8.3 Does unit have Front Microphone/Program Jack?  YES  NO
- 8.3.1 Minimum of 8 character alpha numeric display?  YES  NO
- 8.3.2 Scan, monitor, channel add/delete and select?  YES  NO
- 8.3.3 Does unit have capability for user addition of talk around button with programmable transmit offset?  YES  NO
- 8.3.4 Does unit have long term memory backup to allow operation on the ignition switch without loss of selected channel ?  YES  NO
- 8.3.5 Does unit include accessories or kit to enable it to be turned on and/or off with the vehicle ignition switch?  YES  NO
- 8.4 Is the unit programmable by PC for Windows NT, 2000, and XP and is the necessary 12 copies of programmable software provided ?  YES  NO



- 8.5.1 Is Sensitivity @ 12db EIA SINAD : .3uv or better ?  YES  NO
- 8.5.2 Is Selectivity : -75db or better ?  YES  NO
- 8.5.3 Is Intermodulation : -70db or better ?  YES  NO
- 8.5.4 Is Spurious Rejection : -70db or better ?  YES  NO
- 8.5.6 Is Audio Output : 10 watts external at 5% distortion?  YES  NO
- 8.6.1 Is output power: 65 watts or greater ?  YES  NO
- 8.6.2 Is Frequency Stability : +/- 0.0005%?  YES  NO
- 8.6.3 Is Spurious & Harmonics -62db or better ?  YES  NO
- 8.6.4 Is FM Noise : -45db or better ?  YES  NO
- 8.6.5 Is audio Distortion : less than 3% ?  YES  NO



## WARRANTY ON LAND MOBILE RADIOS AND ACCESSORIES

Kenwood U.S.A. Corporation ("KENWOOD") warrants its Land Mobile Radios and accessories purchased from an authorized KENWOOD dealer in the United States (the "Products") as follows:

### WHAT IS COVERED AND WHAT IS EXCLUDED

Except as specified below, Products will be free from defects in material and workmanship under normal use and service for the time specified below. The following are not covered by this Warranty:

1. Damage, defects, deterioration or failure resulting from:
  - A. Accident, misuse, negligence, abuse, neglect, improper handling, product modification or failure to follow instructions contained in your Owners Manual.
  - B. Improper or unauthorized testing, operation, alteration, disassembly, modification, adjustment or repairs.
  - C. Exposure to fire, water, excessive moisture, dampness, extreme changes in climate or temperature or other acts which are not the fault of KENWOOD and which the Product is not specified to tolerate.
  - D. Repair or attempted repair by anyone not authorized by KENWOOD.
  - E. Installation of parts or accessories that do not conform to the quality or specifications of the original parts or accessories.
  - F. Installation of the Product in, or removal of the Product from, the vehicle or other site of its use.
  - G. Use of a Product in conjunction with hardware or software electrically or mechanically incompatible with such Product.
  - H. Use of a Product in conjunction with accessories or ancillary equipment not supplied by KENWOOD.
  - I. Normal and customary wear and tear.
2. Damage, defects, deterioration, failure or loss occurring during shipment (claims must be presented to the carrier).
3. Any unit which is not new when sold to the first end user or upon which the serial number has been defaced, modified or removed.
4. Damage, defects, deterioration or failure of antennas unless caused directly by defects in material and workmanship.
5. Damage, defects, deterioration or failure of rechargeable batteries if any of the seals on the battery enclosure of cells are broken or show evidence of tampering or if caused by use of the batteries in equipment or service other than in conjunction with the Product for which it is specified.

USE OF THE PRODUCT WITH ACCESSORIES OR OTHER EQUIPMENT NOT SUPPLIED BY KENWOOD OR OTHERWISE NOT EXPRESSLY AUTHORIZED BY KENWOOD MAY BE DANGEROUS AND WILL VOID THE PRODUCT WARRANTY. ALL SUCH ACCESSORIES AND ANCILLARY EQUIPMENT ARE EXPRESSLY EXCLUDED FROM THIS WARRANTY. BECAUSE EACH SYSTEM THAT MAY INCORPORATE A PRODUCT IS UNIQUE, KENWOOD DISCLAIMS ANY LIABILITY OR WARRANTY COVERAGE FOR OR WITH RESPECT TO RANGE, COVERAGE OR OPERATION OF THE SYSTEM AS A WHOLE.

### HOW LONG IS THE WARRANTY

This Warranty will remain in effect for two (2) years for portables, mobiles and repeaters. One (1) year for accessories including rechargeable batteries. TK-X140, TK-5X20 & NX-210 models have a three (3) year warranty. The TK-5X10, TK-X180 and NX-X00 models purchased prior to 3/1/09 have a two (2) year warranty. The TK-5X10, TK-X180 and NX-X00 models purchased on 3/1/09 or after have a three (3) year warranty. Warranty is measured from the date of purchase by the first end user.

### WHO IS PROTECTED

This Warranty is enforceable only by the first end user. Transfer or resale of a Product will automatically terminate warranty coverage with respect to that Product. This Warranty is not transferable to any third party, including but not limited to any subsequent purchaser or owner of the Product.

### WHAT WE WILL DO AND HOW TO OBTAIN WARRANTY SERVICE

KENWOOD will, at its sole absolute discretion, either repair or replace a Product with a new or a rebuilt unit (which unit may include new and/or reconditioned parts) if found by KENWOOD to be defective in material and workmanship. If KENWOOD determines that it is unable to repair or replace such Product, KENWOOD shall refund the purchase price for such Product. The foregoing is subject to your returning the defective Product to an authorized KENWOOD Land Mobile dealer or authorized service center within the Warranty period, accompanied by a sales receipt or other evidence of the date of purchase. If it is necessary to ship the Product for Warranty service, you are responsible for the initial shipping charges, but KENWOOD will pay the return shipping charges if the Product is repaired or replaced under Warranty. You are responsible for any charges incurred in removing the Product from the vehicle or other site of use and for reinstallation of the repaired or replaced Product. All replaced Products or parts and Products or parts for which a refund has been given will become the property of KENWOOD.

### EXCLUSION OF OTHER WARRANTIES AND DAMAGES

Unless considered unlawful or unenforceable under applicable law:

- A. THIS IS THE COMPLETE WARRANTY GIVEN BY KENWOOD AND IT IS GIVEN IN LIEU OF ALL OTHER EXPRESS WARRANTIES. KENWOOD ASSUMES NO OBLIGATIONS OR LIABILITY FOR ADDITIONS OR MODIFICATIONS TO THIS WARRANTY. ALL IMPLIED WARRANTIES WITH RESPECT TO PRODUCTS, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE EXCLUDED.
- B. KENWOOD'S LIABILITY UNDER THIS WARRANTY IS LIMITED TO THE REPAIR OR REPLACEMENT, AT KENWOOD'S OPTION, OF ANY DEFECTIVE PRODUCT, AND SHALL NOT INCLUDE DAMAGES OF ANY KIND, WHETHER DIRECT, INDIRECT, SPECIAL, GENERAL, INCIDENTAL, CONSEQUENTIAL OR OTHERWISE, INCLUDING BUT NOT LIMITED TO LOSS OF USE, LOSS OF TIME, INCONVENIENCE, COMMERCIAL LOSS, OR LOSS OF PROFITS OR SAVINGS OR ANTICIPATED PROFITS OR SAVINGS.

This Warranty is enforceable only in the United States of America and governed by the laws of the State of California.

If a problem develops during or after the Warranty Period, or if you have any questions regarding the operation of the product, you should contact your KENWOOD Authorized Dealer or Authorized Service Center. If the problem or your question is not handled to your satisfaction, please contact our Customer Relations Department at (310) 761-8275

KENWOOD USA CORPORATION  
PO BOX 22745  
2201 East Dominguez Street  
Long Beach, CA 90801-5745 U.S.A.



**KENWOOD U.S.A. CORPORATION**

**LIMITED WARRANTY ON SYSTEMS, SYSTEM COMPONENTS AND SERVICES**

Kenwood U.S.A. Corporation ("KENWOOD") warrants its Systems and System Components, including but not limited to, repeaters, controllers, power amplifiers, power supplies, power distribution panels, combiners, receiver multi-couplers, antenna systems, reinforced antenna systems, control stations, consoles as follows:

**HOW LONG IS THE WARRANTY**

The Limited Warranty will remain in effect based on the following table, measured from the date of system acceptance on KENWOOD system contracts or date of invoice for standard systems and components.

<u>PRODUCT CATEGORY</u>	<u>WARRANTY PERIOD</u>
Kenwood Labeled System Components and Kenwood Integrated Complete Systems.....	2 Years
Non-Kenwood System Components.....	2 Years
Portable Handheld Radios, Mobile Radios and Land Mobile Accessories.....	See KENWOOD Land Mobile Radio Warranty
Systems Services (Including Engineering, Installation, & Programming).....	90 Days

**WHO IS PROTECTED**

This Warranty is enforceable only by the first end user ("Buyer").

**PRODUCT WARRANTY**

Except as specified below, this Warranty covers all defects in materials and workmanship in KENWOOD Systems and System Components. The following are not covered by the Warranty:

1. Damage, deterioration or failure resulting from:
  - A. Accident, misuse, abuse, neglect, product modification or failure to follow instructions contained in the Owner's and Operations Manuals.
  - B. Repair or attempted repair by anyone not authorized by KENWOOD.
  - C. Installation of parts or accessories that do not conform to the quality or specifications of the original parts or accessories.
  - D. Improper installation of the product in, or improper removal of the product from any location.
  - E. Environmental conditions which adversely affect systems/product performance, including but not limited to temperature, water, excessive moisture, power surges, lightning, electro-static discharge, acts of God or other casualties which are not the fault of KENWOOD and which the Product is not specified to tolerate.
  - F. Battery leakage, water, or other elements.
  - G. Failure due to the use of a Product in conjunction with hardware or software electrically or mechanically incompatible with such Product.
  - H. Failure due to the use of a Product in conjunction with accessories or ancillary equipment not supplied by KENWOOD.
  - I. Normal and customary wear and tear.
2. Damage or loss occurring during shipment (claims must be presented to the carrier).
3. Any product, which is not new when sold to the first end user unless otherwise specified at time of sale.
4. Any product upon which the serial number has been defaced, modified or removed.

**USE OF PRODUCT WITH NON-KENWOOD SUPPLIED EQUIPMENT AND ACCESSORIES**

USE OF THE PRODUCT WITH ACCESSORIES OR OTHER EQUIPMENT NOT SUPPLIED BY KENWOOD OR OTHERWISE NOT EXPRESSLY AUTHORIZED BY KENWOOD MAY BE DANGEROUS AND WILL VOID THE PRODUCT WARRANTY. ALL SUCH ACCESSORIES AND ANCILLARY EQUIPMENT ARE EXPRESSLY EXCLUDED FROM THIS WARRANTY. BECAUSE EACH SYSTEM THAT MAY INCORPORATE A PRODUCT IS UNIQUE, KENWOOD DISCLAIMS ANY LIABILITY OR WARRANTY COVERAGE FOR OR WITH RESPECT TO RANGE, COVERAGE OR OPERATION OF THE SYSTEM AS A WHOLE.

**WORKMANSHIP WARRANTY**

KENWOOD warrants the Services performed by KENWOOD to be free from defects in workmanship for ninety (90) days from System Acceptance. KENWOOD's obligation and Buyer's remedy under this warranty for Services is limited to the correction of the defective Services. Such obligation and remedy are conditional upon the defect not being the result of mishandling, abuse, misuse, or improper maintenance by Buyer, or other causes not attributable to KENWOOD. The correction of defective Services shall be warranted for a period of thirty (30) days or the remainder of the original warranty period, whichever is longer.

**WHAT WE WILL PAY FOR AND WHAT YOU MUST PAY FOR**

KENWOOD will pay all labor and material expenses for items covered by this Warranty at KENWOOD's location in Suwanee, GA. or at one of the KENWOOD Authorized Service Centers. Contact the phone numbers below to determine where your product must be shipped (it depends on the product to be repaired as to where it is sent). If it is necessary to ship the product for Warranty service, you, the Buyer, are responsible for the initial shipping charges, but we will pay the return shipping charges at ground rates if the product is repaired or replaced under Warranty. The Buyer will pay any express return shipping costs. Unless KENWOOD has installed the system under contract, you are responsible for any charges incurred in diagnosing the problem, removing the product from the rack, cabinet, vehicle, or other site of use and for reinstallation of the repaired or replaced product.

**HOW TO OBTAIN WARRANTY SERVICE**

Before sending any units for warranty work please call one of the phone numbers below to find out where your unit must be sent. KENWOOD in Suwanee, GA. or an authorized service center (depending on the product) must service your KENWOOD System or System Component. KENWOOD Systems customer service staff is available between 8:30 a.m. and 5:00 p.m., Monday through Friday Eastern Time. If you have difficulty in obtaining service, please write or telephone KENWOOD Systems at the address and phone numbers below.

**EXCLUSION OF IMPLIED WARRANTIES AND DAMAGES**

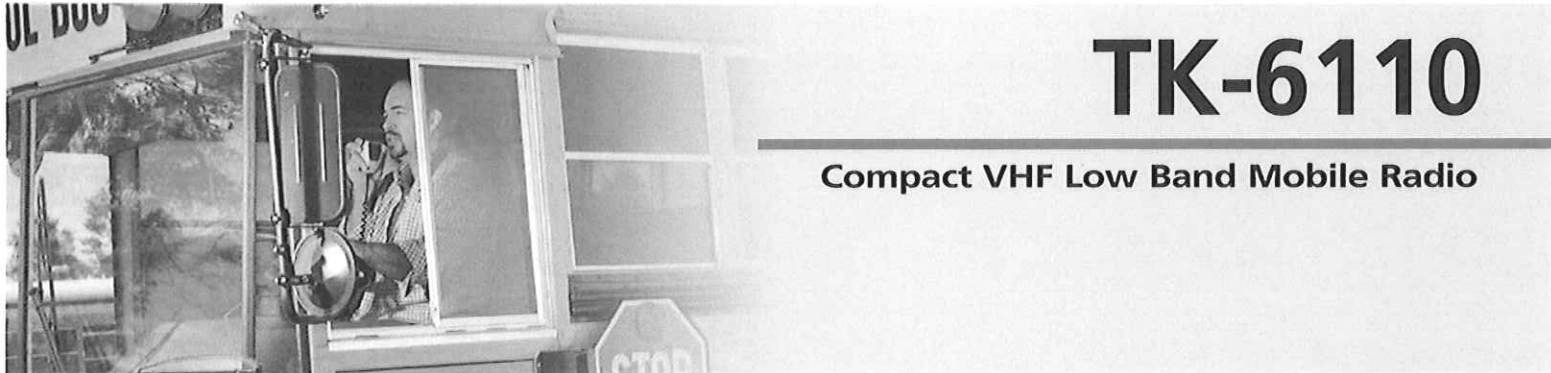
- Unless considered unlawful or unenforceable under applicable law:
- A. ALL EXPRESS OR IMPLIED WARRANTIES WITH RESPECT TO KENWOOD SYSTEMS AND SYSTEM COMPONENTS, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY EXCLUDED.
  - B. KCC'S LIABILITY UNDER THIS WARRANTY SHALL BE LIMITED TO THE REPAIR OR REPLACEMENT, AT KCCS OPTION, OF ANY DEFECTIVE PRODUCT, AND SHALL NOT INCLUDE DAMAGES OF ANY KIND, WHETHER INCIDENTAL, CONSEQUENTIAL, INDIRECT, EXEMPLARY OR OTHERWISE.

This Warranty is enforceable only in the United States of America.

**Kenwood USA Corporation 3970 Johns Creek Court Ste 100, Suwanee GA. 30024 (678) 474-4700**

# KENWOOD

Listen to the Future



## TK-6110

Compact VHF Low Band Mobile Radio

### GENERAL FEATURES

- 70 W (29.7-37.0, 35.0-50.0 MHz)
- 32 Channels
- Single Priority Scan
- 8 Character Alphanumeric LCD
- 3 Digit Sub-Display and Icons
- Transmit / Busy / Call Allert / Warn LED
- Up/Down Channel Selector
- Volume Knob
- Power On/Off Button
- 7 Programmable Radio Keys
- Front Panel Speaker
- Noise Blanker Function
- Encryption / ANI Board Control
- Emergency Call Features
- QT/DQT Encode & Decode
- Operator Selectable Tone
- Two Tone Decode
- DTMF Encode & Decode
- Time Out Timer
- Busy Channel Lockout
- 15 Pin Accessory Connector
- MIL-Spec / Noise-Cancel Microphone
- M-Type Antenna Connector
- Ignition Sense
- Timed Power Off
- Horn Alert
- Cloning
- PC Programming & Tuning
- MIL-STD-810 C/ D/ E



## Options

### ■ KMC-9C

Control Station  
Desktop Microphone



### ■ KMC-27A

Microphone  
(supplied microphone)



### ■ KMC-27B

Microphone  
(MIL-SPEC noise-canceling)



### ■ KMC-28A

Keypad Microphone  
(MIL-SPEC noise-canceling)



### ■ KCT-18

Ignition Sense Cable



### ■ KLF-2

Line Noise Filter



### ■ KES-5

External Speaker



All accessories and options may not be available in all markets. Contact an authorized Kenwood dealer for details and complete list of all accessories and options.

## Specifications

Model	TK-6110
<b>GENERAL</b>	
Frequency Range	
Type 1	29.7-37.0 MHz
Type 2	35.0-50.0 MHz
Number of Channels	32
Channel Spacing	20 kHz / 25 kHz
Channel Step	5 kHz
Operating Voltage	13.6 V DC ±15%
Current Drain	
Standby	< 0.6 A
Receive	< 2.4 A
Transmit	< 15 A
Duty Cycle	Transmit: 20%
Operating Temperature Range	-22°F ~ +140°F (-30°C ~ +60°C)
Frequency Stability	±0.0005%
(-22° F - +140° F)	
Antenna Impedance	50 Ω
Dimensions (W x H x D)	6-1/4 x 2 x 6-1/4 in.
Projections not included	(160 x 50 x 160 mm)
Weight (net)	3.5 lbs. (1.6kg)
FCC ID	
Type 1	ALH29351110
Type 2	ALH29351120
IC Certification	
Type 1	
Type 2	282195666A
<b>RECEIVER (Measurements made per EIA/TIA-603)</b>	
Sensitivity	0.25μV
(12dB SNAD)	
Selectivity	75 dB
Intermodulation Distortion	70 dB
Spurious Response	70 dB
Audio Output	10W at less than 5% distortion
Band Spread	
Type 1	7.3 MHz
Type 2	15.0 MHz
<b>TRANSMITTER (Measurements made per EIA/TIA-603)</b>	
RF Output Power	70 W
Type of Emission	16K0F3E
Spurious Response	62 dB
FM Hum & Noise	50 dB
Microphone Impedance	600 Ω
Audio Distortion	Less than 3%
Band Spread	
Type 1	7.3 MHz
Type 2	15.0 MHz

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

Unavailable Frequencies:  
TK-6110K (29.7 - 37.0 MHz model), 33.60 MHz  
TK-6110K2 (35.0 - 50.0 MHz model), 42.00 MHz

## Applicable MIL-STD

Standard	MIL 810C Methods/Procedures	MIL 810D Methods/Procedures	MIL 810E Methods/Procedures
Dust	510.1/Procedure I	510.2/Procedure I	510.3/Procedure I
Vibration	514.2/Procedure VII, X	514.3/Procedure I	514.4/Procedure I
Shock	516.2/Procedure I, II, V	516.3/Procedure I, IV	516.4/Procedure I, IV

# KENWOOD

Kenwood U.S.A. Corporation  
Communications Sector Headquarters

3970 Johns Creek Court, Suite 100, Suwanee, GA 30024-1265

Order Administration/Distribution

P.O. BOX 22745, 2201 East Dominguez St., Long Beach, CA 90801-5745

Kenwood Electronics Canada Inc.  
Canadian Headquarters and Distribution

6070 Kestrel Road, Mississauga, Ontario, Canada L5T 1S8



# State of West Virginia VENDOR PREFERENCE CERTIFICATE

Certification and application\* is hereby made for Preference in accordance with *West Virginia Code*, §5A-3-37. (Does not apply to construction contracts). *West Virginia Code*, §5A-3-37, provides an opportunity for qualifying vendors to request (at the time of bid) preference for their residency status. Such preference is an evaluation method only and will be applied only to the cost bid in accordance with the *West Virginia Code*. This certificate for application is to be used to request such preference. The Purchasing Division will make the determination of the Resident Vendor Preference, if applicable.

- 1.  Application is made for 2.5% resident vendor preference for the reason checked:  
 Bidder is an individual resident vendor and has resided continuously in West Virginia for four (4) years immediately preceding the date of this certification; or,  
 Bidder is a partnership, association or corporation resident vendor and has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or 80% of the ownership interest of Bidder is held by another individual, partnership, association or corporation resident vendor who has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or,  
 Bidder is a nonresident vendor which has an affiliate or subsidiary which employs a minimum of one hundred state residents and which has maintained its headquarters or principal place of business within West Virginia continuously for the four (4) years immediately preceding the date of this certification; or,
- 2.  Application is made for 2.5% resident vendor preference for the reason checked:  
 Bidder is a resident vendor who certifies that, during the life of the contract, on average at least 75% of the employees working on the project being bid are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; or,
- 3.  Application is made for 2.5% resident vendor preference for the reason checked:  
 Bidder is a nonresident vendor employing a minimum of one hundred state residents or is a nonresident vendor with an affiliate or subsidiary which maintains its headquarters or principal place of business within West Virginia employing a minimum of one hundred state residents who certifies that, during the life of the contract, on average at least 75% of the employees or Bidder's affiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; or,
- 4.  Application is made for 5% resident vendor preference for the reason checked:  
 Bidder meets either the requirement of both subdivisions (1) and (2) or subdivision (1) and (3) as stated above; or,
- 5.  Application is made for 3.5% resident vendor preference who is a veteran for the reason checked:  
 Bidder is an individual resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard and has resided in West Virginia continuously for the four years immediately preceding the date on which the bid is submitted; or,
- 6.  Application is made for 3.5% resident vendor preference who is a veteran for the reason checked:  
 Bidder is a resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard, if, for purposes of producing or distributing the commodities or completing the project which is the subject of the vendor's bid and continuously over the entire term of the project, on average at least seventy-five percent of the vendor's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years.

Bidder understands if the Secretary of Revenue determines that a Bidder receiving preference has failed to continue to meet the requirements for such preference, the Secretary may order the Director of Purchasing to: (a) reject the bid; or (b) assess a penalty against such Bidder in an amount not to exceed 5% of the bid amount and that such penalty will be paid to the contracting agency or deducted from any unpaid balance on the contract or purchase order.

By submission of this certificate, Bidder agrees to disclose any reasonably requested information to the Purchasing Division and authorizes the Department of Revenue to disclose to the Director of Purchasing appropriate information verifying that Bidder has paid the required business taxes, provided that such information does not contain the amounts of taxes paid nor any other information deemed by the Tax Commissioner to be confidential.

Under penalty of law for false swearing (*West Virginia Code*, §61-5-3), Bidder hereby certifies that this certificate is true and accurate in all respects; and that if a contract is issued to Bidder and if anything contained within this certificate changes during the term of the contract, Bidder will notify the Purchasing Division in writing immediately.

Bidder: Electronic Communications of WV

Signed: 

Date: Sept 27 2011

Title: President

\*Check any combination of preference consideration(s) indicated above, which you are entitled to receive.

RFQ No. 7012CG07

STATE OF WEST VIRGINIA  
Purchasing Division

**PURCHASING AFFIDAVIT**

West Virginia Code §5A-3-10a states: No contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and the debt owned is an amount greater than one thousand dollars in the aggregate

**DEFINITIONS:**

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Debtor" means any individual, corporation, partnership, association, Limited Liability Company or any other form or business association owing a debt to the state or any of its political subdivisions. "Political subdivision" means any county commission; municipality; county board of education; any instrumentality established by a county or municipality; any separate corporation or instrumentality established by one or more counties or municipalities, as permitted by law; or any public body charged by law with the performance of a government function or whose jurisdiction is coextensive with one or more counties or municipalities. "Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

EXCEPTION: The prohibition of this section does not apply where a vendor has contested any tax administered pursuant to chapter eleven of this code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

Under penalty of law for false swearing (West Virginia Code §61-5-3), it is hereby certified that the vendor affirms and acknowledges the information in this affidavit and is in compliance with the requirements as stated.

**WITNESS THE FOLLOWING SIGNATURE**

Vendor's Name: Electronic Communications of WV Inc.

Authorized Signature: [Signature] Date: Sept 27, 2011

State of West Virginia

County of Kanawha, to-wit:

Taken, subscribed, and sworn to before me this 27 day of September 2011

My Commission expires May 10, 2020

AFFIX SEAL HERE

NOTARY PUBLIC [Signature]



Please use this document for technical questions, posing in question format.

Technical Questions for RFQ: 7012C007

Vendor Name: Electronic Communications of WSU Inc

Questions:

1. Specifications

NONE

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2 Delivery

NONE

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3 Invoicing

NONE

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4 Award

NONE

Other:

NONE