# Operator's Manual **KX 99**

## Handheld
## Aviation Transceiver

# Table of Contents

# Introduction

This manual contains information relative to the operation and programming of the KX 99 Transceiver. It is best to review the entire manual before attempting use of the KX 99. However, persons who require immediate communications capability but do not have time to study the entire manual can begin on page 1, Basic Communications Operation. Information on available accessory items is contained in the last section of this manual.

**Warning:** Use only soap and water to clean the KX 99. Although the KX 99 case is made of a very rugged polycarbonate plastic, use of solvents may cause damage or discoloration of the case.

**Notice on Battery Disposal:** Many states have written prohibitions on the disposal of nickel-cadmium batteries in municipal landfills. Please contact your state or local government agencies for proper disposal of nickel-cadmium batteries. You may return used batteries to:

Bendix/King
400 N. Rogers Road
Olathe, Kansas 66062 USA
Attention: Pollution Control Dept.
Phone: (913) 768-2790

# General Information

This section contains a basic description of the KX 99 Transceiver as well as suggestions and factors to consider before using the KX 99.

Close adherence to these suggestions will assure a more satisfactory performance from the equipment.

## Equipment Description

The KX 99 is a 760 channel, hand-held VHF aircraft communications transceiver with a 1.5 watt transmitter output. In addition, the KX 99 is capable of receiving 200 Nav channels and all 7 NOAA Weather Radio Broadcast channels. While audio is received on all 200 Nav channels, localizer information is not processed on the 40 localizer frequencies. VOR information is processed and displayed on the liquid crystal display (LCD) in either a radial, bearing, or Course Deviation Indicator (CDI) left-right information format. The KX 99 contains a single receiver. *Therefore, it cannot perform the COMM function and the NAV function simultaneously.*

The unit is powered by a self-contained battery pack. Frequencies and features are entered via the keypad on the front of the unit. The keypad and display may be illuminated for night use. Power On/Off, volume, squelch sensitivity, keyboard lockout, and transmitter lockout controls are located on the top of the unit. Jacks for headphone and microphone are also located on the top of the unit. The flexible antenna may also be removed so the unit may be used with an external antenna.

## License Requirements

If the KX 99 Transceiver is to be utilized in an aircraft an Aircraft Radio Station License is required. If the transceiver is to be used as a ground station, then a Ground Station Authorization is required. Included with the KX 99 are a FCC Form 404, Application for Aircraft Radio Station License and a FCC Form 406, Application for Ground Station Authorization in the Aviation Services. Additional copies may be obtain from your nearest FCC Field Office.

This equipment has been accepted by the FCC and entered on their list of Type Accepted Equipment as King Radio Corporation Model KX 99, (ASY7BL KX 99).

*Caution: The VHF transmitter in this equipment is guaranteed to meet FCC acceptance over the operating temperature range only when a King crystal is used in the stabilized master oscillator. Use of other than a King crystal is considered an unauthorized modification, and will void the warranty.*

3

## Antenna Requirements

The flexible antenna that is included with the KX 99 is very convenient and may be used for both communications and navigation purposes. However a more efficient antenna may be required for some applications. For maximum utilization of the KX 99 inside an aircraft, automobile or other metal enclosure, an external COMM antenna should be used for communications and an external NAV antenna should be used for navigation. An external communications antenna will noticeably improve the reception and transmission of communication radio signals; however, it is not recommended for receiving navigation signals. The use of a horizontal type navigation antenna will improve the reception and the directional characteristics of the navigation signal but it is not recommended for communications transmissions from the KX 99. The BNC type connector, located on the top of the unit, is standard for use on aircraft radios and antennas so little difficulty should be encountered when connecting to an existing aircraft communications or navigation antenna.

VOR navigation signals are received best by a horizontal antenna while communications signals are received best by a vertical antenna. This is a good point to keep in mind when trying to receive weak signals. When using the flexible antenna in the cockpit or an automobile, try to place the antenna in the center of a window which is facing the station you are trying to receive. Remember, if the received station is weak and noisy, that station is not likely to hear your transmission. Obtain the best received signal before attempting to call the station.

When the KX 99 is to be used as an emergency backup Comm or Nav radio in an aircraft, one or two antenna adapters (P/N 071-01443-0001) may be installed to easily connect the KX 99 to the existing aircraft antennas. *See diagram below.*
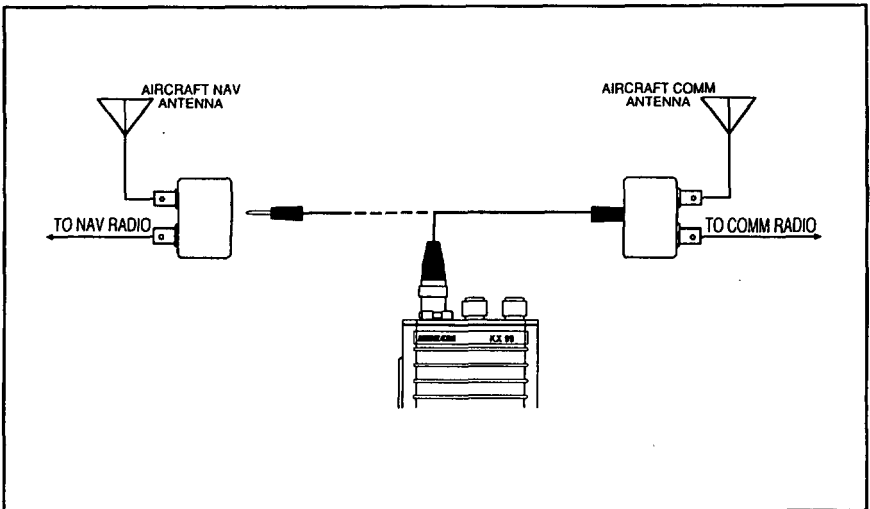
## Nickel Cadmium (NiCad) Battery Pack

The standard power source supplied with the KX 99 is a 9.6 volt, 720 mA hour, rechargeable nickel-cadmium battery pack. The battery that is shipped with the KX 99 will not be fully charged and should be charged prior to use.

If possible, the battery should be fully discharged before recharging. This will maintain the maximum useful charge in the battery and avoid "memory" problems associated with this type battery. A characteristic of NiCad batteries is that they do not hold their charge for long periods of time such as an alkaline battery does.

### Caution:

- *Do not store a discharged battery pack. Battery cell polarity may reverse making it impossible for the battery to fully recharge.*
- *Do not store a battery pack where it might be accidentally shorted. The current capability is tremendous.*
- *Do not crush or disassemble a NiCad battery pack. There are toxic chemicals inside.*
- *Do not dispose of the battery pack in a fire. It may explode.*
- *Do not exceed the recommended quick charge current. Use only the approved chargers.*

The KX 99 comes standard with a trickle charger capable of operating on either 115V or 230V. To charge the battery; plug the charger module into an appropriate wall outlet and plug the other end into the connector marked "CHRG" which is located on top of the KX 99. It takes approximately 12 hours to fully charge the NiCad battery pack.

*Caution: To avoid possible damage to the KX 99 make absolutely certain that the 115V/230V select switch located on the trickle charger is in the correct position for the voltage to be used.*

The amount of time that the NiCad battery pack will power the KX 99 on one charge depends on a number of factors:

- The duty cycle (amount of time the unit is transmitting versus time receiving a signal versus squelched standby operation). Transmitting discharges the battery fastest.
- The volume level of the received signal.
- The temperature. A colder battery will not last as long.

The following table shows the approximate life of a fully charged NiCad battery at several different duty cycles with midlevel volume and the battery at room temperature.

| LIFE (Hrs) | STBY % | REC % | TX % |
|---|---|---|---|
| 7.0 | 95 | 3 | 2 |
| 5.3 | 90 | 5 | 5 |
| 4.1 | 25 | 70 | 5 |
| 3.8 | 80 | 10 | 10 |
| 2.4 | 60 | 20 | 20 |

### Alkaline Battery Pack

An optional replaceable cell alkaline battery pack is available for the KX 99. Alkaline batteries are used for radios that are maintained for emergency purposes because they have extremely long shelf life and no maintenance is required. *ALKALINE BATTERY PACKS ARE NOT TO BE RECHARGED!*

The alkaline battery pack holds 8 "AA" size cells. To gain access to the 8 cells, first remove the battery pack from the KX 99 (see below). Next, with one hand holding the outside of the battery pack case, use the other hand to press down firmly on the center hub on the top of the case. The battery cell holder will slide out the bottom of the case.

Alkaline battery life will be approximately the same as that of a NiCad for a 90% STBY, 5% REC and 5% TX duty cycle. However, alkaline batttery life will be considerably less than a NiCad at higher duty cycles and considerably greater than a NiCad at lower duty cycles.

**Battery Pack Installation and Removal**

To install the battery pack (either NiCad or alkaline), locate the center hub on the top of the battery pack into the recess on the bottom of the unit. Position the battery pack at a 30° offset so that the two metal studs on the battery pack go into their respective recesses on the bottom of the unit. Apply upward pressure to the pack while twisting the pack so that it's sides are flush with the sides of

the unit. The metal tab on the side of the unit will lock the pack into position.

To remove the battery, turn the radio off. Press up on the metal tab on the side of the unit while twisting the battery pack 30° and remove it from the radio. *See figure below.*

**Low Battery Indicator**

The KX 99 has a low battery indicator "beep" tone that will signal the user when the battery is almost unusable.

**Headphone/Microphone Adapter**

External headphone and microphone jacks are located on top of the KX 99. The supplied head-phone/microphone adapter allows standard aircraft headphones and microphones to be used with the KX 99. The clip on the adapter should be connected to the protruding attach point on the right side of the unit to provide strain relief. If a headset with a boom mike is used, the transmit key button on the side of the KX 99 may be used to key the transmitter. A separate push-to-talk switch may also be used with the headphone/micro-phone adapter.
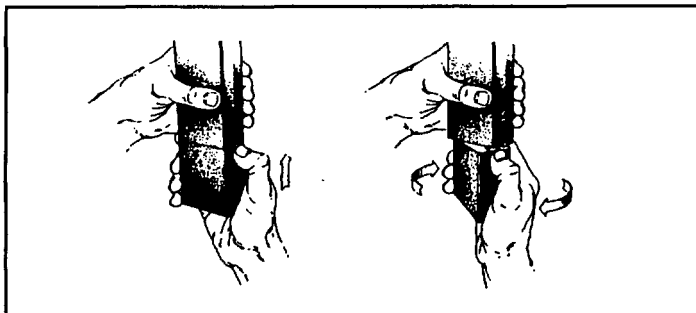
# KX 99 Controls
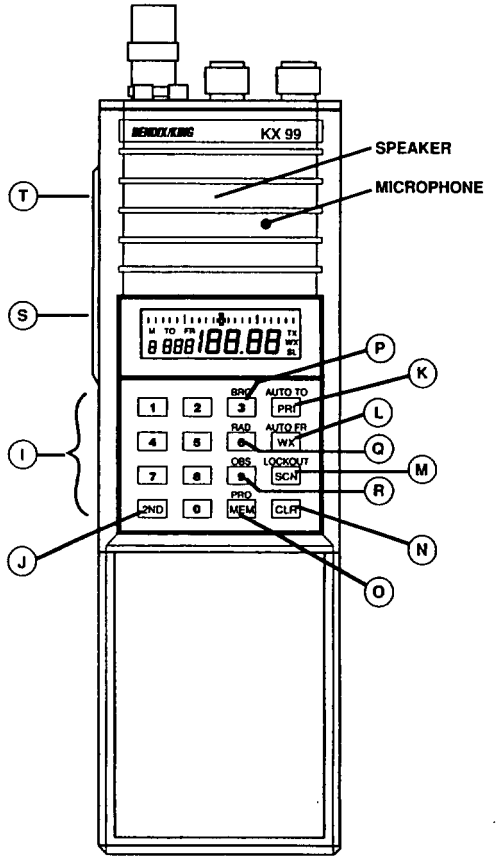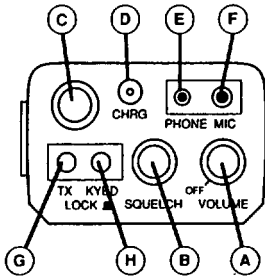
## Top Controls

### A. On/Off/Volume Knob

Turning the knob clockwise from the OFF position turns the unit on and increases the speaker volume as clockwise rotation is continued.

### B. Squelch Sensitivity Adjustment

When the squelch control is turned counterclockwise to the stop the squelch is completely open and receiver noise can be heard over the speaker. Turning the squelch control clockwise until the receiver noise is just eliminated from the speaker will cause only received transmissions to be heard over the speaker. The squelch control must be set to tune out the receiver noise for the scanning function to be operational. The squelch control should be fully counterclockwise for WX channel operation.

### C. Antenna BNC Connector

The flexible rubber antenna or an external antenna is connected to this connector.

### D. Wall Charger Input Jack

The external wall charger plugs into this jack to recharge the NiCad battery pack provided with the unit. *Do not attempt to use this jack to recharge the optional replaceable alkaline battery pack since damage to the unit could occur.*

### E. Headphone Jack

When a headphone is used, the headphone connector of the headphone/microphone adapter is plugged into this jack. Also, an earphone or an external speaker having a 2.5 millimeter, 2 conductor plug may be plugged directly into this jack. The internal speaker is disabled when this jack is being used.

### F. Microphone

When a headset having a boom mike is used or an external microphone is used, the microphone connector of the headphone/ microphone adaptor is plugged into this jack. Also, an external microphone having a 3.5 millimeter, 3 conductor plug with the tip of the connector connected to the mike key line and the ring connected to the microphone audio may be plugged directly into this jack.

### G. Transmit Lockout Button

The transmitter is disabled when the Transmit Lockout button is pressed in. To reenable transmitter operation, depress the button again so it is in the "out" or "up" position.

### H. Keyboard Lockout Button

When the Keyboard lockout button is in to the "in" position, no inputs from the keyboard will be accepted. To reenable the keyboard depress the keyboard lockout button again so it is in the "up" or

8

# Front Controls

## I. Numeric Keys

The numeric keys on the keyboard are used to enter frequencies into the KX 99. For example, entering the numbers 1 + 2 + 6 + 5 + 2 in sequential order would enable the unit to receive and transmit on 126.525MHz. Numeric buttons 3, 6 and 9 are also used in conjunction with the 2ND (2nd function) button to control the navigation display. *Their use is explained below.*

## J. 2ND (Second Function Key)

Depressing the Second Function key and then any of the seven keys on the keyboard with dual functions will enable the second function of the key pressed.

## K. PRI (Priority Key)

Pressing the PRI key causes the unit to monitor the Priority Frequency for any activity once every second. Depressing the PRI key again while in Priority mode will cause the unit to exit Priority mode.

## AUTO TO

Pressing the 2ND key followed by the AUTO TO key (2nd function of the PRI key) when a valid VOR signal is being received, automatically selects the OBS setting that centers the CDI with a TO indicaiton.

## L. WX (Weather Key)

Pressing the WX key and any of the numeric keys 1 through 7 will enable the unit to receive NOAA National Weather Service Broadcasts on any of the 7 weather channels.

## AUTO FR (Auto From)

Pressing the 2ND key followed by the AUTO FR key (2nd function of the WX key) when a valid VOR signal is being received, automatically selects the OBS setting that centers the CDI with a FROM indication.

## M. SCN (Scan Key)

Depressing the SCN key enables the frequency scan mode. Depressing the key again while in the frequency scan mode will cause the unit to exit the scan mode. This key is also used in conjunction with the memory scan mode.

## LOCKOUT

Pressing the 2ND key followed by the LOCKOUT key (2nd function of the SCN Key) causes the displayed memory channel to be skipped in the memory scan mode.

## N. CLR (Clear Key)

Depressing the CLR key clears the display of any partial or erroneous entries and will cause the unit to display the last valid entry.

9

### O. MEM (Memory Key)

Depressing the MEM key and then any numeric key 0 through 9 tunes the KX 99 to the frequency stored in that memory location.

### PRO (Program Key)

Pressing the 2ND key followed by the PRO key (2nd function of the MEM key) puts the KX 99 in the program mode. The displayed frequency is then programmed into the desired memory channel by pressing the appropriate numeric key.

### P. BRG (Bearing Key)

Pressing the 2ND key followed by the BRG key (2nd function of 3 key) causes the bearing to the tuned VOR to be displayed.

### Q. RAD (Radial Key)

Pressing the 2ND key followed by the RAD key (2nd function of the 6 key) causes the radial from the tuned VOR to be displayed.

### R. OBS (Omnibearing Selector Key)

Pressing the 2ND key followed by the OBS key (2nd function of the 9 key) causes the existing OBS setting for the tuned VOR to dash. The new OBS setting is now selected by entering the desired three number setting. For example, entering the numbers 0 + 2 + 5 in sequential order would cause the 25° OBS setting to be selected.

## Side Controls

### S. Microphone Key (Push-to-Talk)

Enables the unit to transmit on the selected frequency if it is a valid communications channel.

### T. Display Lamp Switch

When the display lamp switch is depressed the keyboard and the display are illuminated for easy night viewing. The lamp will remain on as long as the switch is depressed.

*Note: The microphone is located to the right side of the speaker (see diagram on Page 7). For maximum transmit clarity hold mouth approximately 1/4 inch from microphone and speak in a normal tone of voice.*

# KX 99 Operation

## Basic Communications Operation

With a charged battery pack attached and an antenna installed on the unit, turn the On/Off/Volume knob to the ON position. The unit will display the last frequency entered when the unit was turned off. This frequency is set at 118.00MHz at the factory. With the squelch adjusted completely open (counterclockwise) adjust the volume to a comfortable level. To eliminate the receiver noise in the speaker adjust the squelch control clockwise just enough until the speaker becomes quiet. Frequencies may now be entered via the keyboard.

*NOTE: Be sure the keyboard lockout button is in the "up" or "out" position or the unit will not accept entries from the keyboard.*

Enter a frequency by pressing the five desired keys starting with 1 for the100's MHz. After the 1 has been entered, dashes will appear for the remaining four digits. The dashes remain until each of the remaining digits is entered. Each digit is checked for validity when entered and invalid digits will not be allowed. Pressing the CLR key will clear any digits that have been entered and restore the last valid frequency that was entered.

For example, to select the frequency 126.525MHz enter the first five numbers of the frequency. Depress the keys on the keyboard in the following order:

$$\boxed{1} + \boxed{2} + \boxed{6} + \boxed{5} + \boxed{2}$$

The unit will now transmit and receive on 126.525MHz.

*126.52*

*NOTE: The unit will not transmit if the transmitter lockout button is pushed in. To transmit, the transmitter lockout button must be in the "out" or "up" position.*

To change frequencies, simply enter the first five numbers of the new frequency.

## VOR Navigation Modes

The KX 99 navigation modes are valid only for VOR frequencies between 108.00MHz and 117.95MHz. If a localizer frequency is selected, the letters "LOC" are displayed but no navigation information is displayed. However, audio is still available on the localizer frequencies.

*Loc 109.50*

## Basic NAV CDI Mode

To enter a VOR frequency (115.90MHz for example) press the keys on the keyboard in the following order:

[ 1 ] + [ 1 ] + [ 5 ] + [ 9 ] + [ 0 ]

```
|I I I I I|I I I I I|I I I I I|I I I I I|
  085I I5.90
```

When a VOR frequency is selected the display shows the frequency, the last selected course (085) and a Course Deviation Indicator (CDI). When the selected VOR station is not being received, a flagged condition is indicated by the CDI bars extending across the entire length of the top of the display and the absence of a TO or FR annunciation above the selected course.

```
         ·|·I I I
  TO
  085I I5.90
```

This display indicates that a VOR signal is being received. The "TO-FR" annunciator is indicating "TO", the selected course is 85 degrees and the CDI indicates that the course is to the right of the aircraft three degrees. Full scale CDI deviation is 10 degrees (10 tick marks left or right of the center).

---

### Course Selection (Changing the OBS Setting)

Enter a valid navigation frequency as previously described. The display will show the frequency, the last selected course, and the CDI. Depress the keys in the following order:

                OBS
[ 2ND ] + [ 9 ]

```
|I I I I I|I I I I I·|·I I I I I|I I I I I|
  ---I08.00
```

The OBS window will now display three dashes and will accept any valid OBS setting between 0° and 360°. To enter a valid course three digits must be entered. For example: to enter a course of 0°, 000 would have to be entered. To enter a course of 5°, 005 would have to be entered.

To enter a course of 90° depress the keys in the keyboard in the following order:

[ 0 ] + [ 9 ] + [ 0 ]

The OBS window will display the selected course of 090°. If a valid navigation signal is being received the course deviation indicator will display deviation from the selected course of 90° and the appropriate TO or FR (From) indication will be displayed above the OBS window. The figure on page 13 shows the aircraft to be right of the 90° selected course. With the selected course of 90° the deviation from the selected course is 5°. The 5° deviation will be indicated by the KX 99 CDI as shown in the display below.

```
      |I I I I I·|·
  TO
  090I08.00
```
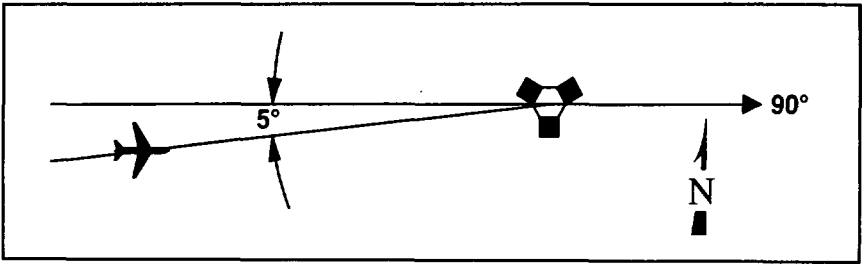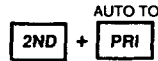
## Centering the CDI with a TO Indication

While a VOR signal is being received, pressing the 2ND key followed by the AUTO TO key will activate the Auto Course Mode and automatically center the CDI (Course Deviation Indicator) with the "TO" annunciator displayed. The OBS setting is then latched and the CDI operates in the basic NAV CDI mode.

*Note: Wait approximately 10 seconds after selecting a new NAV frequency before using the AUTO TO feature in order to allow the NAV filters to settle.*

For example, to center the CDI below with a "TO" indication press the following keys:

AUTO TO

[ 2ND ] + [ PRI ]

**(Before pressing)**



I I I I I∙I∙

TO 090 108.00

**(After pressing)**



∙I∙

TO 085 108.00

---

## Centering the CDI with a FR (From) Indication

While a VOR signal is being received, pressing the 2ND key followed by the AUTO FROM key will activate the Auto Course Mode and automatically center the CDI (Course Deviation Indicator) with the "FR" (From) annunciator displayed. The OBS setting is then latched and the CDI operates in the basic NAV CDI mode.

*Note: Wait approximately 10 seconds after selecting a new NAV frequency before using the AUTO FR feature in order to allow the NAV filters to settle.*
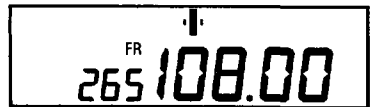
For example, to center the CDI below with "FR" indication press the following keys:

AUTO FR

[ 2ND ] + [ WX ]

**(Before pressing)**



I I I I I∙I∙

TO 090 108.00

**(After pressing)**



∙I∙

FR 265 108.00

13
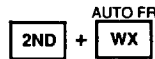
## Displaying Radial from the VOR Station

The radial tracking mode is activated by first selecting a VOR frequency and then pressing the 2ND key followed by the RAD key. The CDI will no longer be displayed. A "FR" (From) annunciation is displayed above the OBS window. The radial from the VOR station is displayed in the OBS window. The radial displayed in the OBS window will change as the aircraft changes position with respect to the VOR station.

For example, to enter the radial tracking mode press the following keys:

$$\boxed{2ND} + \boxed{6}^{\text{RAD}}$$

(Before pressing)

```
 |||||||||||||•
  ᵀᴼ
125 108.00
```

(After pressing)

```
  ᶠᴿ
275 108.00
```

If a valid VOR signal is not being received, a flagged condition is indicated by dashes being displayed in the OBS window and no "FR" annunciation being displayed.

## Displaying Bearing to the VOR Station

The bearing tracking mode is activated by first selecting a VOR frequency and then pressing the 2ND key followed by the BRG key. The CDI will no longer be displayed. A "TO" annunciation is displayed above the OBS window. The bearing displayed in the OBS window will change as the aircraft changes position with respect to the VOR station.

For example, to enter the bearing tracking mode press the following keys:

$$\boxed{2ND} + \boxed{3}^{\text{BRG}}$$

(Before pressing)

```
 |||||||||||||•
  ᵀᴼ
125 108.00
```

(After pressing)

```
  ᵀᴼ
095 108.00
```

If a valid VOR signal is not being received, a flagged condition is indicated by dashes being displayed in the OBS window and no "TO" annunciation being displayed.

14

## Programming Memory Locations 1-9

Ten memory locations exist so that frequently used frequencies can be quickly called up and so that these same frequencies may be scanned in the memory scan mode.

Any frequency from 108.00 to 136.975 (135.975 on P/N 069-1026-00 version units) may be entered into any of the ten Memory Locations, numbered 0 through 9. Memory Location 0 is reserved for duplex operation. Duplex operation is transmitting on one frequency and receiving on another frequency. If duplex operation is not desired, memory location 0 may also be programmed with a single frequency. Refer to the section entitled Duplex Operation. To enter a frequency into Memory Location 1 through 9 the frequency must first be entered and then stored into the desired Memory Location. For example, to enter the frequency 118.90MHz into Memory Location 1:

First the desired frequency must be entered. Press the keys on the keyboard in the following order:

$$\boxed{1} + \boxed{1} + \boxed{8} + \boxed{9} + \boxed{0}$$

$$\boxed{1\ 18.90}$$

Now that the desired frequency has been entered, it now must be stored in Memory Location number 1 as desired. Press the keys on the keyboard in the following order:

$$\boxed{2ND} + \boxed{MEM}^{PRO}$$

$$\boxed{Pro\ 1\ 18.90}$$

The frequency entered will now be displayed in the frequency window and the Program mode will be annunciated by "Pro" being displayed in the OBS window. To store the frequency 118.90MHz into any Memory Location 1 through 9 press the corresponding number for that Memory Location. Example:

To store in Memory Location 1 press the 1 key on the keyboard, to store in Memory Location 2 press the 2 key on the keyboard, and so on. In this case press the number 1 key on the keyboard. An M along with the Memory Location number will be displayed on the left side of the display indicating the frequency window is displaying the frequency stored in that Memory Location. The frequency, 118.90MHz, is now permanently stored in Memory Location 1 until it is reprogrammed.

$$\boxed{^M_1\ \ 1\ 18.90}$$

15

## Recalling Memory Locations

Any of the frequencies from the ten memory locations can be recalled by simply pressing the MEM key on the keyboard followed by the corresponding Memory Location. For example, pressing MEM and then the 1 key will recall the frequency stored in Memory Location 1.

To recall the frequency previously stored in Memory Location 1 press the keys on the keyboard in the following order:

[ | MEM | + | 1 | ]

The display will now show M and 1 on the left side of the display indicating the frequency in Memory Location 1 is being displayed. The frequency window will display 118.90 as stored in the previous section.

**(Before pressing)**

```
 125.60
```

**(After pressing)**

```
M
1       118.90
```

---

## Duplex Operation

Duplex operation allows the unit to receive on one frequency and transmit on another. An example of when duplex operation may be used is when transmitting to a Flight Service Station (FSS) on 122.10MHz and receiving the FSS over a navigation frequency such as 111.00MHz. Memory Location 0 has been reserved for this feature. In duplex operation the receive frequency is entered and stored first, then the transmit frequency is entered and then stored. For example:

To enter a receive frequency of 111.00MHz and a transmit frequency of 122.10MHz press the keys on the keyboard in the following order:

[ 1 ] + [ 1 ] + [ 1 ] + [ 0 ] + [ 0 ]

```
| | | | | | | | | | | • | | | | | | | | | | |
 090 111.00
```

The frequency 111.00MHz will now be displayed in the frequency window along with the appropriate CDI indication. Press the keys on the keyboard in the following order:

```
            PRO
[ 2ND ] + [ MEM ] + [ 0 ]
```

```
M
0   Pro    -- --
            .
```

The CDI display will be removed and M and 0 will be displayed on the left side to the display. The program annunciation "Pro" will still be displayed in the OBS window and the frequency window will display dashes.

16

The transmit frequency of 122.10MHz may now be entered. Depress the keys on the keyboard in the following order:

| 1 | + | 2 | + | 2 | + | 1 | + | 0 |

```
||||||||||||||·||||||||||||
 M
 0  090 1 1 1.00
```

Two seconds after a valid frequency has been entered the display will revert back to the receive frequency and any appropriate CDI indication. The transmit frequency may be checked by momentarily depressing the Mike Key button on the side of the unit. The frequency window will display the transmit frequency any time the unit is transmitting.

```
 M
 0     122.10 ᵀˣ
```
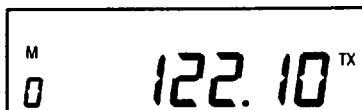
For memory location 0 to receive and transmit on the same frequency, the frequency must be entered first as the receive frequency and then again as the transmit frequency.
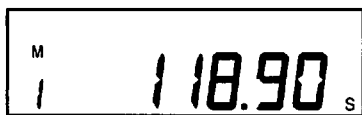
## Scan Modes

The scan modes allow the user to sequentially step through a group of frequencies to find an active frequency. When a transmission is received, the radio will stop scanning and remain on that frequency until the activity stops. After the frequency has been inactive for 2 seconds, the scan process will resume. There are 2 scan modes, memory scan and frequency

scan. Before initiating either scan mode it is important to have the squelch knob properly adjusted such that the background noise in the speaker is just eliminated. That is, any further counterclockwise rotation would cause the background noise to return. If the unit is keyed during scan operation the scan will be disabled and the unit stay tuned to the frequency it was tuned to when the unit was keyed.

## Memory Scan

To enable the scanning of Memory Locations 0 through 9 depress the keys on the keyboard in the following order:

| MEM | + | SCN |

```
 M
 1     118.90 ₛ
```

The unit will now begin scanning the frequencies stored in Memory Locations 0 through 9 that have not been locked out. An "S" will be displayed in the lower right side of the display to indicate a scan mode has been activated.

The Memory Scan mode can be cancelled by again pressing the MEM key followed by the SCN key.

## Memory Lockout

Memory Lockout applies only to the Memory Scan mode and not the Frequency Scan mode. Any of the 10 Memory Locations can be omitted from the scanning sequence. The memory location is first displayed in the frequency window and then locked out. For example, to lockout the frequency stored in Memory Location 2 depress the keys on the keyboard in the following order:

[MEM] + [2]

```
 M
 2    123.50
```

The frequency window will now display the frequency stored in Memory Location 2. An M and a 2 will be displayed on the left hand side of the display indicating that the frequency stored in Memory Location 2 is being displayed. Continue to depress the keys on the keyboard in the following order:

LOCKOUT
[2ND] + [SCN]

```
 M
 2    123.50  L
```

An L will now appear in the lower right corner of the display to indicate that the frequency stored in Memory Location 2 has been locked out of the scan sequence. To restore a locked out Memory Location to the Memory Scan sequence, perform the same sequence as above and the memory location will be returned to the scan sequence and the "L" will be removed from the display.

## Frequency Scan Mode

The Frequency Scan mode scans the frequency range in 25 KHz steps between the frequency stored in Memory Location 1 and the frequency stored in Memory Location 9. Only COMM frequencies (118.00MHz-136.975MHz) may be scanned in the Frequency Scan mode. For example to scan the frequency range of 120.00 MHz to 124.50MHz, 120.00 must first be stored in Memory Location 1 and 124.50 must be stored in Memory Location 9. Refer to the section entitled "Programming Memory Locations 1-9" for storing 120.00 and 124.50 in the appropriate memory locations. After the frequencies have been stored, depress the following key on the keyboard:

[SCN]

```
      120.00  S
```

An S will appear in the bottom right corner of the display indicating the Scan mode has been initiated. The unit will start scanning through the frequency range in 25KHz steps to 124.50MHz. When the frequency window gets to 124.50 it will reset and start counting at 120.00 again.

To exit the Frequency Scan mode at any time, simply depress the SCN button on the keyboard again. If the unit is keyed during scan operation the scan option will be disabled and the unit will remain tuned to the frequency it was tuned to when the unit was keyed.

If either Memory Location 1 or Memory Location 9 contains a navigation frequency (108.00 MHz to 117.95MHz) the scan limit will be the appropriate end of the communications band. For example, if Memory Location 1 has a navigation frequency stored in it the scan will begin at 118.00MHz and if Memory Location 9 has a navigation frequency stored in it the scan will reset when it reaches 136.975MHz (135.975MHz on KPN 069-1026-00 version units).

---

### Priority Mode

When the Priority mode of the KX 99 is enabled the unit will check the Priority frequency once a second for any activity. If any activity is present on the Priority frequency the receiver will stay tuned to the Priority frequency until there is no activity for 2 seconds. Keying the transmitter within two seconds after the last transmission on the Priority frequency will disable the Priority mode. The Priority mode cannot be enabled if a navigation frequency is currently displayed. (108.00 MHz to 117.95MHz). A navigation frequency cannot be programmed as the Priority frequency.

To enable the priority mode press the following key on the keyboard:
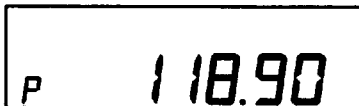
The frequency window will now display the frequency that was selected and will display the Priority Frequency once a second. The Priority annunciation P will also be displayed on the left side of the display. To exit the Priority mode at any time, simply depress the PRI key on the keyboard again. If there is any activity on the Priority channel the unit will remain tuned to the Priority frequency for two seconds after all transmission activity on the Priority frequency has stopped. If the transmitter is keyed within two seconds after receiving a transmission on the Priority frequen-cy the unit will remain tuned to the Priority frequency and the Priority mode will be disabled. It may be reenabled at any time by depressing the PRI button again.

```
┌─────┐
│ PRI │
└─────┘
```

```
┌──────────────────────┐
│                      │
│ P      1 18.90       │
│                      │
└──────────────────────┘
```

19

## Priority Programming

To program a priority frequency into memory it must first be entered on the display. For example, to enter the frequency 123.50MHz as the Priority frequency press the keys on the keyboard in the following order:

| 1 | + | 2 | + | 3 | + | 5 | + | 0 |

The frequency 123.50MHz is now displayed on the frequency window. Continue to press the keys on the keyboard in the following order:

| 2ND | + | MEM (PRO) | + | 0 |

```
 123.50
```

A "P" will appear in the lower left corner of the display. The frequency window will display the Priority frequency. When another frequency is entered the Priority annunciation ("P") and Priority frequency will no longer be displayed.

```
P  123.50
```

## NOAA Weather Radio Channels

The National Oceanic and Atmospheric Administration (NOAA) of the U.S. Department of Commerce is responsible for the NOAA Weather Radio Service. The radio service provides continuous broadcasts of the latest weather information from the National Weather Service. The weather messages are repeated every four to six minutes and are revised every one to three hours, or as weather conditions dictate. During severe weather conditions the normal taped forecasts are interrupted to provide special warnings and advisories. The majority of the stations operate on a 24 hour basis.

*NOTE: These weather broadcasts are not tailored specifically for pilots but can serve to give a general idea of the local weather picture. These broadcasts do not delete the requirement to get current aviation weather from a Flight Service Station or other professional aviation weather service.*

Since reception is limited to line of sight of the antenna, range of the signal is usually less than 40 miles from the antenna site if the receiver is on the ground. Although the effective range of the receiver will be increased in flight due to increased height of the KX 99 antenna, it is quite likely that multiple stations may be received simultaneously.

## Monitoring the NOAA Weather Radio Broadcasts

Broadcast frequencies ranging from 162.40 to 162.55MHz are used for the 7 different weather channels. These frequencies are available on the KX 99 and are listed below:

| Channel | Frequency |
|---------|-----------|
| 1 | 162.550MHZ |
| 2 | 162.400MHz |
| 3 | 162.475MHz |
| 4 | 162.425MHz |
| 5 | 162.450MHz |
| 6 | 162.500MHz |
| 7 | 162.525MHz |

To receive any of the 7 NOAA National Weather Service channels press the WX key followed by the weather channel number you wish to receive. For example to receive weather channel 1 depress the keys in the following order:

| WX | + | 1 |

| _1_ WX |

Over 350 stations are operated by NOAA nationwide. The stations and their locations are listed on the following pages.
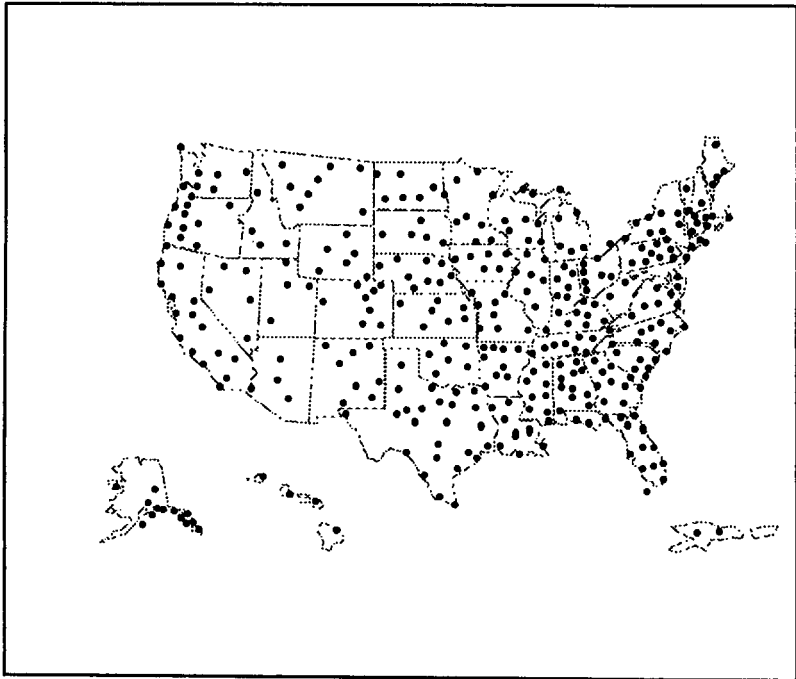
# NOAA WEATHER RADIO NETWORK

Over 350 stations are operated by NOAA nation wide.

The stations and their locations are listed below:

| LOCATION | CHANNEL | | LOCATION | CHANNEL |
|---|---|---|---|---|
| **ALABAMA** | | | **CALIFORNIA** | |
| Anniston | 3 | | Bakersfield (DT) | 1 |
| Birmingham | 1 | | Coachella (DT) | 2 |
| *Columbia | 4 | | Eureka | 2 |
| Demopolis | 3 | | Fresno | 2 |
| Dozier | 1 | | Los Angeles | 1 |
| Florence | 3 | | Lindsay | 6 |
| Huntsville | 2 | | Merced | 1 |
| Louisville | 3 | | Monterey | 2 |
| Mobile | 1 | | Point Arena | 2 |
| Montgomery | 2 | | Redding (DT) | 1 |
| Tuscaloosa | 2 | | Sacramento | 2 |
| | | | San Diego | 2 |
| **ALASKA** | | | San Francisco | 1 |
| Anchorage | 1 | | San Luis Obispo | 1 |
| Cordova | 1 | | Santa Barbara | 2 |
| Fairbanks | 1 | | | |
| Homer | 2 | | **COLORADO** | |
| Juneau | 1 | | Alamosa (DT) | 3 |
| Ketchikan | 1 | | Colorado Springs | 3 |
| Kodiak | 1 | | Denver | 1 |
| Nome | 1 | | Grand Junction | 1 |
| Petersburg | 1 | | Greeley | 2 |
| Seward | 1 | | Longmont | 1 |
| Sitka | 1 | | Pueblo | 2 |
| Valdez | 1 | | Sterling | 2 |
| Wrangell | 2 | | | |
| Yakutat | 2 | | **CONNECTICUT** | |
| | | | Hartford | 3 |
| **ARIZONA** | | | Meriden | 2 |
| Flagstaff | 2 | | New London | 1 |
| Phoenix | 1 | | | |
| Tucson | 2 | | **DELAWARE** | |
| Yuma | 1 | | Lewes | 1 |
| | | | | |
| **ARKANSAS** | | | **DISTRICT OF COLUMBIA** | |
| Fayetteville | 3 | | Washington, D.C. | 1 |
| Fort Smith | 2 | | | |
| Gurdon | 3 | | | |
| Jonesboro | 1 | | | |
| Little Rock | 1 | | | |
| Mountain View | 2 | | | |
| Star-City | 2 | | | |
| Texarkana | 1 | | | |

22

| LOCATION | CHANNEL | | LOCATION | CHANNEL |
|---|---|---|---|---|
| **FLORIDA** | | | **INDIANA** | |
| *Clewiston | 2 | | *Bloomington | 5 |
| Daytona Beach | 2 | | Evansville | 1 |
| Fort Myers | 3 | | Fort Wayne | 1 |
| Gainesville | 3 | | Indianapolis | 1 |
| Jacksonville | 1 | | Lafayette | 3 |
| Key West | 2 | | South Bend | 2 |
| Melbourne | 1 | | Terre Haute | 2 |
| Miami | 1 | | | |
| Orlando | 3 | | **IOWA** | |
| Panama City | 1 | | Cedar Rapids | 3 |
| Pensacola | 2 | | Des Moines | 1 |
| Tallahassee | 2 | | Dubuque (DT) | 2 |
| Tampa | 1 | | Sioux City | 3 |
| West Palm Beach | 3 | | Waterloo | 1 |
| | | | | |
| **GEORGIA** | | | **KANSAS** | |
| Athens | 2 | | Chanute | 2 |
| Atlanta | 1 | | Colby | 3 |
| Augusta | 1 | | Concordia | 1 |
| *Baxley | 7 | | Dodge City | 3 |
| Chatsworth | 2 | | Ellsworth | 2 |
| Columbus | 2 | | Topeka | 3 |
| Macon | 3 | | Wichita | 1 |
| Pelham | 1 | | | |
| Savannah | 2 | | **KENTUCKY** | |
| *Valdosta | 6 | | Ashland | 1 |
| Waycross | 3 | | Bowling Green | 2 |
| | | | Covington | 1 |
| **HAWAII** | | | Elizabethtown (LP) | 2 |
| Hilo | 1 | | Hazard | 3 |
| Honolulu | 1 | | Lexington | 2 |
| Kokee | 2 | | Louisville | 3 |
| Mt. Haleakala | 2 | | Mayfield | 3 |
| Waimanato (DT) | 2 | | Pikeville (LP) | 2 |
| | | | Somerset | 1 |
| **IDAHO** | | | | |
| Boise | 1 | | **LOUISIANA** | |
| Lewiston (DT) | 1 | | Alexandria | 3 |
| Pocatello | 1 | | *Baton Rouge | 2 |
| Twin Falls | 2 | | Buras | 3 |
| | | | Lafayette | 1 |
| **ILLINOIS** | | | Lake Charles | 2 |
| Champaign | 1 | | Monroe | 1 |
| Chicago | 1 | | Morgan City | 3 |
| Marion | 4 | | New Orleans | 1 |
| Moline | 1 | | Shreveport | 2 |
| Peoria | 3 | | | |
| Rockford | 3 | | **MAINE** | |
| Springfield | 2 | | *Caribou | 7 |
| | | | *Dresden | 3 |
| | | | Ellsworth | 2 |
| | | | Portland | 1 |

23

| LOCATION | CHANNEL | | LOCATION | CHANNEL |
|---|---|---|---|---|
| **MARYLAND** | | | **MISSOURI (CONT'D)** | |
| Baltimore | 2 | | Kansas City | 1 |
| Hagerstown | 3 | | St. Joseph | 2 |
| Salisbury | 3 | | St. Louis | 1 |
| | | | Sikeston | 2 |
| **MASSACHUETTS** | | | Springfield | 2 |
| Boston | 3 | | | |
| Hyannis | 1 | | **MONTANA** | |
| Worcester | 1 | | Billings | 1 |
| | | | Butte | 1 |
| **MICHIGAN** | | | Glasgow | 1 |
| Alpena | 1 | | Great Falls | 1 |
| Detroit | 1 | | Havre (DT) | 2 |
| Flint | 2 | | Helena | 2 |
| Grand Rapids | 1 | | Kalispell | 1 |
| Houghton | 2 | | Miles City | 2 |
| Marquette | 1 | | Missoula | 2 |
| *Onondaga | 2 | | | |
| Sault Sainte Marie | 1 | | **NEBRASKA** | |
| Traverse City | 2 | | Bassett | 3 |
| | | | Grand Island | 2 |
| **MINNESOTA** | | | Holdrege | 3 |
| Detroit Lakes | 3 | | Lincoln | 3 |
| Duluth | 1 | | Merriman | 2 |
| International Falls | 1 | | Norfolk | 1 |
| Mankato | 2 | | North Platte | 1 |
| Minneapolis | 1 | | Omaha | 2 |
| Rochester | 3 | | Scottsbluff | 1 |
| Saint Cloud (DT) | 3 | | | |
| Thief River Falls | 1 | | **NEVADA** | |
| Willmar (DT) | 2 | | Elko | 1 |
| | | | Ely | 2 |
| **MISSISSIPPI** | | | Las Vegas | 1 |
| Ackerman | 3 | | Reno | 1 |
| Booneville | 1 | | Winnemucca | 2 |
| Bude | 1 | | | |
| *Columbia | 2 | | **NEW HAMPSHIRE** | |
| Gulfport | 2 | | Concord | 2 |
| Hattiesburg | 3 | | | |
| Inverness | 1 | | **NEW JERSEY** | |
| Jackson | 2 | | Atlantic City | 2 |
| Meridian | 1 | | | |
| Oxford | 2 | | **NEW MEXICO** | |
| | | | Albuquerque | 2 |
| **MISSOURI** | | | Clovis | 3 |
| Columbia | 2 | | Des Moines | 1 |
| Camdenton | 1 | | Farmington | 3 |
| Hannibal | 3 | | Hobbs | 2 |
| Hermitage | 5 | | Las Cruces | 2 |
| Joplin/Carthage | 1 | | Ruidoso | 1 |
| | | | Santa Fe | 1 |

24

| LOCATION | CHANNEL | LOCATION | CHANNEL |
|---|---|---|---|
| **NEW YORK** | | **OREGON** | |
| Albany | 1 | Astoria | 2 |
| Binghamton | 3 | Brookings | 1 |
| Buffalo | 1 | Coos Bay | 2 |
| Elmira | 1 | Eugene | 2 |
| Kingston | 3 | Klamath Falls | 2 |
| New York City | 1 | Medford | 2 |
| *Riverhead | 3 | Newport | 1 |
| Rochester | 2 | Pendleton | 2 |
| Syracuse | 1 | Portland | 1 |
| | | Roseburg | 3 |
| **NORTH CAROLINA** | | Salem | 3 |
| Asheville | 2 | | |
| Cape Hatteras | 3 | **PENNSYLVANIA** | |
| Charlotte | 3 | Allentown | 2 |
| Fayetteville | 3 | Clearfield | 1 |
| New Bern | 2 | Erie | 2 |
| Raleigh/Durham | 1 | Harrisburg | 1 |
| Rocky Mount | 3 | Johnstown | 2 |
| Wilmington | 1 | Philadelphia | 3 |
| Winston-Salem | 2 | Pittsburgh | 1 |
| | | State College | 3 |
| **NORTH DAKOTA** | | Wilkes-Barre | 1 |
| Bismarck | 2 | Williamsport | 2 |
| Dickinson | 2 | | |
| Fargo | 2 | **PUERTO RICO** | |
| Jamestown | 2 | Maricao | 1 |
| Minot | 2 | San Juan | 2 |
| Petersburg | 2 | | |
| Williston | 2 | **RHODE ISLAND** | |
| | | Providence | 2 |
| **OHIO** | | | |
| Akron | 2 | **SOUTH CAROLINA** | |
| Cambridge | 3 | Beaufort | 3 |
| Cleveland | 1 | Charleston | 1 |
| Columbus | 1 | Columbia | 2 |
| Dayton | 3 | Florence | 1 |
| Lima | 2 | Greenville | 1 |
| Sandusky | 2 | Myrtle Beach | 2 |
| Toledo | 1 | Sumter (LP) | 3 |
| | | | |
| **OKLAHOMA** | | **SOUTH DAKOTA** | |
| Clinton | 3 | Aberdeen | 3 |
| Enid | 3 | Huron | 1 |
| Lawton | 1 | Pierre | 2 |
| McAlester | 3 | Rapid City | 1 |
| Oklahoma City | 2 | Sioux City | 2 |
| Tulsa | 1 | | |

25

| LOCATION | CHANNEL | | LOCATION | CHANNEL |
|---|---|---|---|---|
| **TENNESSEE** | | | **VERMONT** | |
| Bristol | 1 | | Burlington | 3 |
| Chattanooga | 1 | | *Marlboro | 4 |
| Cookeville | 2 | | Windsor | 3 |
| Jackson | 1 | | | |
| Knoxville | 3 | | **VIRGINIA** | |
| Memphis | 3 | | Heathsville | 2 |
| Nashville | 1 | | *Lynchburg | 1 |
| Shelbyville | 3 | | Norfolk | 1 |
| Waverly | 2 | | Richmond | 3 |
| | | | Roanoke | 3 |
| **TEXAS** | | | | |
| Abilene | 2 | | **WASHINGTON** | |
| Amarillo | 1 | | Neah Bay | 1 |
| Austin | 2 | | Olympia | 3 |
| Beaumont | 3 | | Seattle | 1 |
| Big Spring | 3 | | Spokane | 2 |
| Brownsville | 1 | | Wenatchee | 3 |
| Bryan | 1 | | Yakima | 1 |
| Corpus Christi | 1 | | | |
| Dallas | 2 | | **WEST VIRGINIA** | |
| Del Rio (DT) | 2 | | Beckley | 6 |
| El Paso | 3 | | Charleston | 2 |
| Fort Worth | 1 | | Clarksburg | 1 |
| Galveston | 1 | | Gilbert | 7 |
| Houston | 2 | | Hinton | 4 |
| Laredo | 3 | | Romney | 7 |
| Lubbock | 2 | | Spencer | 6 |
| Lufkin | 1 | | Sutton | 5 |
| Midland | 2 | | | |
| Paris | 1 | | **WISCONSIN** | |
| Pharr | 2 | | La Crosse (DT) | 1 |
| San Angelo | 1 | | Green Bay | 1 |
| San Antonio | 1 | | Madison | 1 |
| Sherman | 3 | | Menomonie | 2 |
| Tyler | 3 | | Milwaukee | 2 |
| *Victoria | 2 | | Wausau | 3 |
| Waco | 3 | | | |
| Wichita Falls | 3 | | **WYOMING** | |
| | | | Casper | 1 |
| **UTAH** | | | Cheyenne | 3 |
| Logan | 2 | | Lander | 3 |
| Cedar City | 2 | | Sheridan (DT) | 3 |
| Vernal | 2 | | | |
| Salt Lake City | 1 | | | |

## NOTES:

1. Stations marked with an asterisk (*) are funded by private interest groups.

2. Stations marked (LP) are low powered experimental repeater stations serving a very limited local area.

3. Stations marked (DT) operate less than 24 hours/day; however, hours are extended when possible during severe weather.

# KX 99 Accessories

**Desktop Single Battery Charger**

Will charge one KX 99 NiCad
battery pack to 90% of the battery
capacity in one hour. Once the
charging function is complete, the unit
will automatically switch to a trickle
rate to maintain the charge without
damaging the battery pack.
Size: 7.0 x 3.75 x 3.5 inches.
Weight: 3 lbs. 2 oz.
Power Cord: Grounded, 3 Conductor
Cable, 78" length. 50/60 Hz.
120 VAC input - P/N 062-00103-0080
240 VAC input - P/N 062-00103-0081
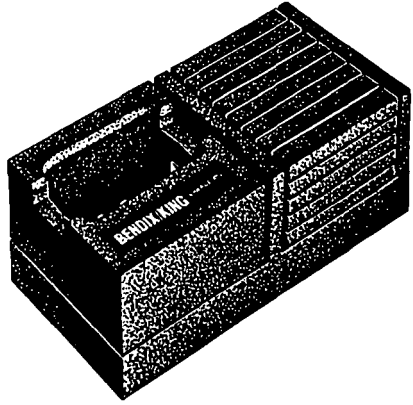
**Desktop Five Unit Battery Charger**

Will charge up to five KX 99
NiCad battery packs to 90% of the
battery capacity in one hour.
Size: 18.5 x 7.25 x 5.5 inches.
Weight: 15 lbs. 8 oz.
Power Cord: Grounded, 3 Conductor
Cable, 78" length. 50/60 Hz.
120 VAC input - P/N 062-00108-0080
240 VAC input - P/N 062-00108-0081

27
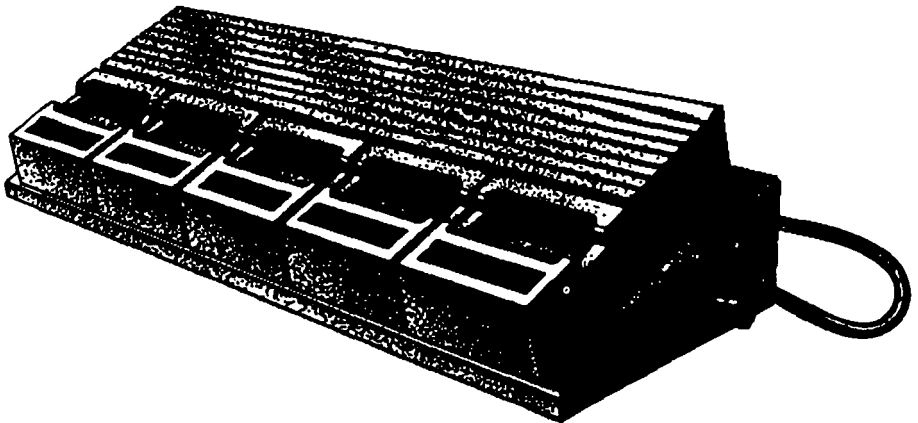
## 12V Vehicular Drop-In Trickle Charger

Charges KX 99 NiCad battery pack in 14 hours or less. KX 99 is secured in base with spring loaded rollers. A rugged adjustable mounting bracket attaches the base securely to dash or lamp mount. NOT FOR USE WITH 28V ELECTRICAL SYSTEMS. Input: 12-18 VDC.
Power Cord: 2 wire (red/black), red with in-line fuse, Length 10 ft.
P/N 062-00107-0080

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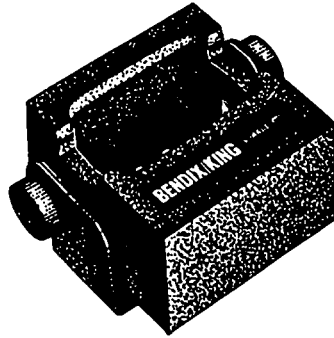
## Plug in 115V/230V Wall Trickle Charger (Included with KX 99)

Charges KX 99 NiCad battery pack in 14 hours or less. Standard 115 VAC wall receptacle style with plug-in to KX 99. Unit has 230V switch position also. 50/60 Hz.
P/N 015-00190-0000

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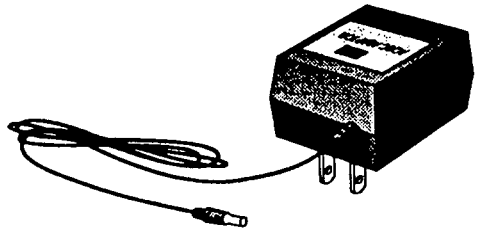
## Cigar Lighter Trickle Charger

Charges KX 99 NiCad battery pack in 14 hours or less. Standard cigar lighter plug and plug-in to KX 99. May be used on 12-28V electrical systems.
P/N 155-02481-0000

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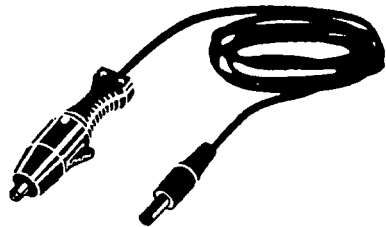
## Replaceable Alkaline Cell Battery Box

Holds 8 "AA" alkaline cells (not included). Alkaline cells have superior shelf-life characteristics making this an ideal option when the KX 99 is to be used for emergency backup. Battery box is 1/4 inch longer than NiCad battery pack. KX 99 with alkaline cell battery box will not fit in leather case P/N 071-00041-0081 but will fit in leather case P/N 071-00038-0081. Alkaline cells can not be recharged.
Size: 2.55 x 1.50 x 3.20 inches
P/N 071-00056-0000

28
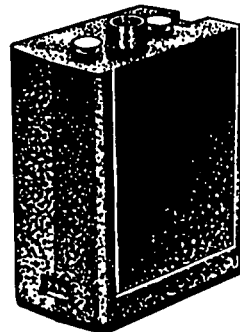
**Nicad Battery Pack**
Included with KX 99)

   May be recharged with any of
the battery chargers previously
described. 720mAH.
Size: 2.55 x 1.50 x 2.95 inches.
P/N 200-03224-0081

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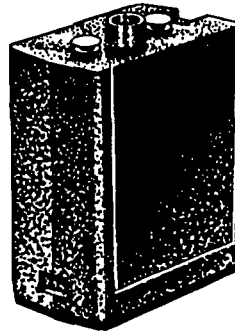
**Headphone/Microphone Adapter**
Included with KX 99)

   Allows standard size headphone
and microphone plugs to work with
KX 99. P/N 071-00049-0000

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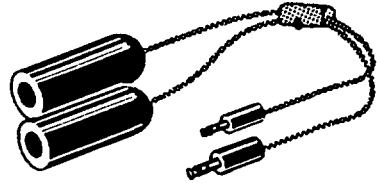
**Antenna Adapter with Cable**

   Allows KX 99 to use existing
external aircraft COMM or NAV
antennas. One adapter required for
COMM antenna and one for NAV
antenna. See page 4 of manual for
additional information.
P/N 071-01443-0001

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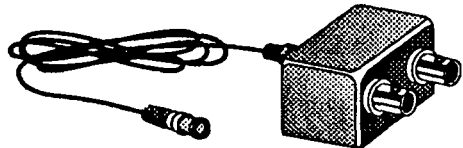
**Earphone**

   Includes ear loop. 2 conductor,
60 inch cable. 2.5 mm connector.
Impedance: 2000 Ohms.
P/N 071-00039-0080

29
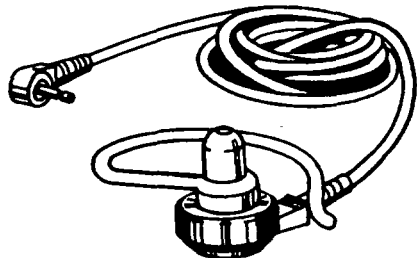
**Flexible Antenna**

(Included with KX 99)

BNC connector.
P/N 071-01441-0000

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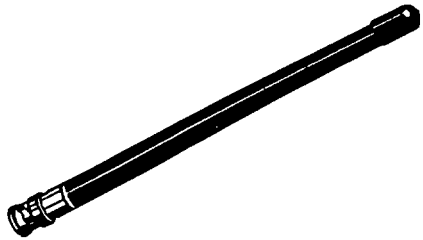
**Leather Case with Cutouts, Cover and Belt Loop**

Deluxe leather case. Has cutouts to allow viewing display and oeration of KX 99 when unit is in case. Unique holster clip traps the battery pack in the bottom of the case yielding maximum access to the radio top controls. Includes leather top cover and detachable swivel belt loop. The belt loop will accept up to 2 3/4 inch wide belts. Note: KX 99 with optional alkaline cell battery box will not fit in this leather case. Order system number KX 0099-51.

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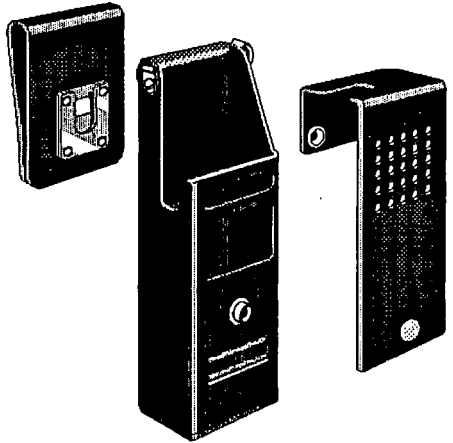
**Leather Case with Cutouts**

(Less cover and belt loop)

Has cutouts to allow viewing display and operation of KX 99 when unit is in case. Note: KX 99 with optional alkaline cell battery box will not fit in this leather case.
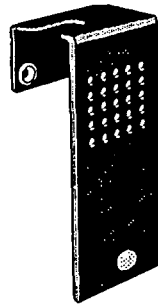
P/N 071-00041-0081

30
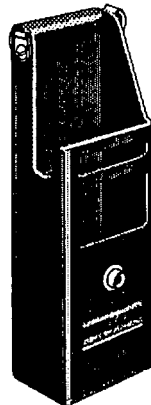
**Leather Cover Only for Leather Case**
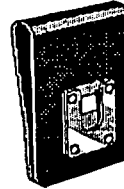
Fits both leather cases
(071-00041-0081 & 071-00038-0081)

P/N 071-00034-0080

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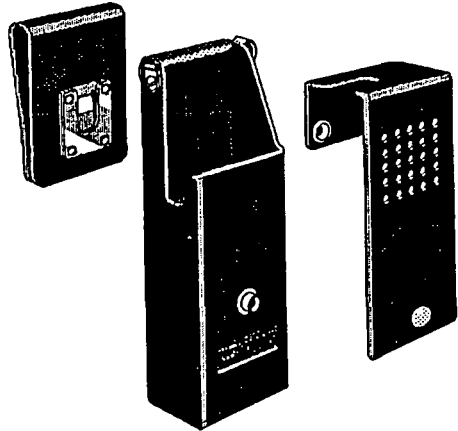**Belt Loop Only for Leather Case**

Fits both leather cases
(071-00041-0081 & 071-00038-0081)

P/N 071-00037-0080

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**Leather Case with Cover and Belt Loop**

Deluxe leather case. Unique holster clip traps the battery pack in the bottom of the case yielding maximum access to the radio top controls. Includes leather top cover and detachable swivel belt loop. The belt loop will accept up to 2 3/4 inch wide belts.
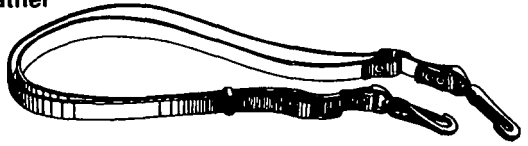Order system number KX 0099-50.

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**Leather Case**
(Less cover and belt loop)

P/N 071-00038-0081

31
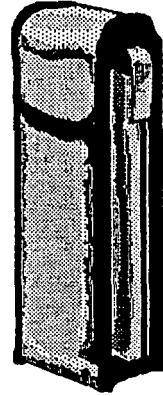
**Leather Shoulder Strap for Leather Case**

P/N 071-00036-0080

**Cloth Carrying Case**

Protective padded case for transporting/storing KX 99. Separate pouch on side for antenna storage. KX 99 controls not accessible when in carrying case.

P/N 071-06118-0000

**Wrist Strap**
(Included with KX 99)

P/N 063-09022-0000

**Belt Clip**
(Included with KX 99)

P/N 047-07525-0001

**Belt Clip Screws** (Not Shown)
(Included with KX 99)
2 Required.
P/N 089-06617-0004

**KX 99 Operators Manual** (Not shown)
(Included with KX 99)
P/N 006-08428-0000

**Operating Guide Decal** (Not shown)
(2 included with KX 99)
P/N 057-03435-0000

# In Case Service is Required

In case you have difficulties with the operation of the KX 99, first check these items:

- Make sure the battery is charged.
- Check that the squelch knob is properly adjusted.
- Verify that you have followed the correct operating procedures described in this manual.

If repairs are required, the unit may be taken to your nearest authorized Bendix/King Service facility or it may be sent directly to the factory service department.

**BENDIX/KING**
Customer Service Department
400 N. Rogers Road
Olathe, KS 66062

When shipping the unit to the factory service department make sure everything is securely packaged (ideally in the original shipping carton). Whenever sending any KX 99 back to the factory service department, fill out the foldout card attached to this page (KX 99 Repair Request) and return this card with the unit. If the card is not available please include the following information with the KX 99 or accessory:

Name, address, daytime phone number, KX 99 Serial Number, billing requested (Master Card, VISA, or COD), Card No., Expiration date, Warranty Certificate Number (if unit to be repaired under warranty). Also give a specific description of the problem.

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DETACH ALONG DASHED LINE

IMPORTANT: RETURN THIS CARD WITH UNIT TO

BENDIX/KING
400 N. Rogers Road
Olathe, KS 66062
Attn: Customer Service Receiving

## KX 99 REPAIR REQUEST

KX 99 SERIAL NUMBER

BILLING REQUESTED (NON-WARRANTY SERVICE):

MASTER CARD ☐  VISA ☐  COD ☐

CARD NO.

EXPIRATION DATE

WARRANTY CERTIFICATE NO.
(WARRANTY SERVICE)

NAME

ADDRESS

DAYTIME PHONE #

DESCRIPTION OF PROBLEM:

# Specifications

## KX 99 Technical Characteristics

| | |
|---|---|
| Compliance | FCC: Part 87 |
| Physical Characteristics | 8.0"H x 2.6"W x 1.6"D, Weight: 1.75 lbs. |
| Frequency Stability | .002% |
| Operating Temperature Range | -20 to +55 Degrees C. |
| Power Requirements | 9.6 VDC |
|     Receive: Squelched | 70 mA. |
|     Receive: Full volume | 200 mA. |
|     Transmit: | 1200 mA. |

## Receiver

| | |
|---|---|
| Frequency Range | 108 to 136.975 MHz (P/N 069-1026-01) |
| | 161.50 to 163.275 MHz Weather |
| Selectivity | -6 dB at ±15 KHz |
| Sensitivity | AM 6 dB $\frac{S+N}{N}$ at 1 µV soft |
| | Wx 12 dB SINAD at 1 µV·soft |
| Adjacent Channel Rejection | -40 dB Comm and -60 dB Nav |
| Channel Spacing | 25 KHz Comm and 50 KHz Nav |
| Audio Output Power and Distortion | 500 mW into 8 Ohms, 15% |

## Transmitter

| | |
|---|---|
| Transmitter Power | 1.5 Watts Minimum |
| Duty Cycle | No damage continuously keyed |
| Microphone | Internal Electret or External |

## BENDIX/KING

Our Name Has Changed
www.honeywell.com
Honeywell
...space