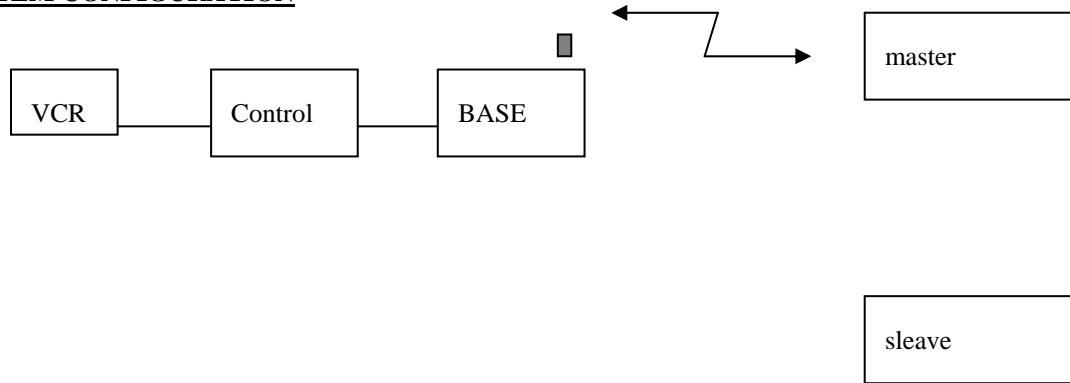


General Description

KT-24N
2.4GHz Frequency Hoping Digital TRANSMITTER AND Base
INSTRUCTION MANUAL

KT-24N consists of a Base and transmitter. Read these instructions carefully for correct use and retain it for reference in future.

SYSTEM CONFIGURATION



- 95 channels are possible in the 2400~2483 MHz bandwidth.
- Transmission range reaches up to 350 meters in free area.
- KT-24N conforms to RF regulations of FCC part 15.
- Power: 12 VDC,
Adaptor: For Charging 9VDC 400 mA Class 2 transformer wall adaptor provided.
- Interconnection: RJ jack & cord provided
- Dimension: Transmitter 66(L) × 46 (W) × 24 (H) mm
BASE 80 (L) × 70(W) × 74 (H) mm
- Color: black & black
- Do not use this product near water, *i.e.*, near a bathtub, wash bowl, kitchen sink or laundry Hub, in a wet basement, or near a swimming pool.
- Do not use this product to report a gas leak in the vicinity of the leakage area.

FEATURES

- Longer range
- Better voice quality
- 95 channels operation
- Auto on
- Auto stand-by
- 2 transmitters
- Beep sound on/off switch
- LED indicator for out of range warning
- High performance chipset
- Low battery LED indicator

- Li-ion battery (3.7 VDC, 1200 mAh)
- VCR on-work display
- Internal & external microphone

PIN DESCRIPTION OF THE BASE OUTPUT PORT

Connector wire

- Pin #1 : MIC trigger (blue)
- Pin #2 : Panic Trigger (black)
- Pin #3 : Inside car mic trigger(yellow)
- Pin #4 : GND(orange)
- Pin #5 : 12V VDC_IN (red)
- Pin #6 : VIDEO_ON (brown)

Audio jack

- Pin #1 AUDIO_GND
- Pin #2 AUDIO_OUT (output from the port)
- Pin #3 car mic out

CHARGING THE BATTERY (FULL CHARGE)

1. Once the BASE has power connection, place the transmitter in its cradle on the BASE.
2. Leave the transmitter on the cradle for at least 4 hours for a full charge.
3. Charge LED stays red during charging and turns green after full charge.

PREPARING FOR INITIAL USE

1. Ensure that the fully charged before initial use.
2. Check line and power connections to the BASE.
3. Select the ON position of power switch
4. Push the TALK button of the transmitter to check the operation.

OPERATION

1. Supply 12 VDC power into the BASE using the Car Battery.
2. 1) Separate the transmitter from the BASE and turn on the transmitter.
2) When In-Use LED blinks for a few seconds and stops blinking, communication channel between Base and Transmitter has been set up. When In-Use LED keeps blinking, the communication channel between Base and Transmitter does not match.

3) How to set up communication channel between Base and Master Transmitter

Put Transmitter on the Base for charging. Press and hold the Talk button on the Transmitter for over 5 seconds. Release the Talk button and Green LED's(In-Use LED)on both the Base and Transmitter blink and a confirm tone is heard. Now communication channel has been set up and Transmitter is ready to operate normally.

In case of setting up communication channel by Slave Transmitter, on the other hand, The In-Use LED on Base does not blink and stays on.

4) Basically KT-24N allows the simultaneous usage of two transmitters.

Though one master Transmitter is used with one Base, optionally another Transmitter (Slave) can be used. In short, one master Transmitter can be used with one Base, instead of using two master Transmitters or two slave Transmitters with one Base.

Each of master Transmitter and slave Transmitter is marked on the label on each of the Transmitter.

3. When the In-Use LED on the top of Transmitter turns on by pressing the toggle Talk button, the Transmitter transmits the audio signal and the Base outputs the active-high(12V) digital signal on the Talk mode output pin.

Active-high or active-low on the bottom of the Base is selectable.

4. When the active-low digital signal is transmitted to the video-on input pin of the Base, Transmitter turns on automatically. When input signal switches from active-low to high, Transmitter goes to Standby mode automatically.
5. KT-24N has Emergency function. Whether Transmitter is either in Standby mode or In-Use mode, Emergency function is operable. Siren turns on/off by pressing toggle red(EMG) button.
In case toggle red(EMG) buttons on both transmitters are pressed, the siren turns on/off not independently. When the siren turns on with master Transmitter, for example, the siren turns off if pressing toggle red button of slave Transmitter once.
6. When the distance between the Base and Transmitter is within the coverage range, In-Use LED stays on, but if the distance is out of the area, In-Use LED blinks and out-of-range beep sound is heard. There is beep on/off switch on the left side of Transmitter to mute the beep tone.
7. There are two microphones on a Transmitter. One is Internal Mic and the other is External.
Basically Transmitter operates with Internal Mic, but when External Mic is plugged in the Jack on the top of Transmitter, Internal Mic switches off and External Mic switches on. When External Mic is removed or damaged, Internal Mic switches on automatically.

SPECIFICATIONS

1. Frequency Hoping / RF channel exclusion / Dual slot Antenna Diversity
2. Audible / LED display Out of Range warning.
3. Audible / LED display Low battery warning.
4. Earphone jack (transmitter Free)
5. Charging Status Indicator (Charging / Full charge)
6. Talk On/Off Key
7. Recording On/Off Indicator
8. AUTO Link, VCR On/Off (The base station is On /OFF control)
9. Recording Output signal
10. Transmitter Power switch control
11. Frequency Range: 2401.056MHz ~ 2482.272MHz
12. Up to longer Range
13. Data speed (via air interface) : 24kbit/sec
14. Modulation: GFSK
15. Channels: 95 (Channel spacing 0.864MHz)
16. Rx/Tx slots: 4/4
17. Fast Frequency hoping: Up to 800 hops/sec
18. Standard Compliance: FCC part 15.247/249
- 19.2 transmitters
20. Beep sound on/off switch

USER'S MANUAL

(IMPORTANT SAFETY INSTRUCTIONS & FCC NOTICE)

√ **IMPORTANT SAFETY INSTRUCTIONS**

When using your equipment, basis safety precautions should always be followed to reduce the risk of life electric shock, and injury to persons, including the following.

1. Read and understand all instructions.
2. Follow all warnings and instructions marked on the product.
3. Unplug this product from the outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
4. Do not use this product near water, for example, near a bathtub, washbowl, kitchen sink, or Laundry tub in a wet Basement or near a swimming pool.
5. Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.
6. Slots and openings in the cabinet and the back or bottom are provide for ventilation, to protect it from overheating.
These openings should never be blocked or covered. The opening should never should never be placed near or over a radiator or heat register. This product should not be placed in a built in installation unless proper ventilation is provided.
7. This product should be operated only from the type of power source indicated on the marking label.
If you are not sure of the type of power supply to your home, consult your dealer or local power company.
8. Do not allow anything to rest on the power cord. Do not locate this product where the cord will be abused by persons walking on it.
9. Do not overload wall outlets and extension cords as this can result in the risk of fire or electric shock.
10. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a of fire or electric shock. Never spill liquid of any kind on the product.
11. To reduce the risk of electric shock, do not disassemble this product, but take it to a qualified service contractor when some service or removing covers may expose you to dangerous voltages or other risks. Incorrect reassembly can cause electric shock when the appliance is subsequently used.
12. Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - A. When the power supply cord or plug is damaged or frayed.
 - B. If liquid has been spilled into the product.
 - C. If the product has been exposed to rain or water.
 - D. If the product does not operate normally by following the operating instruction. Adjust only those control that are covered by the operating instructions. Improper adjustments of other controls may result in damage and will often require extensive work by a qualified

- technician to restore the product to normal operation.
- E. If the product has been dropped or the cabinet has been damaged.
 - F. If the product exhibits a distinctive change in performance.
13. Avoid using a TRANSMITTER (other than a cordless type) during an electrical storm. There may be a remote risk of electric shock from lightning.
 14. Do not use the TRANSMITTER to report a gas leak in the vicinity of the leak.

✓ **SAFETY INFORMATION FOR KT-24N**

Your TRANSMITTER contains a low power transmitter.

When the Push-to Talk button is pushed it sends out radio frequency (RF) signals.

This device is authorized to operate at a duty factor not to exceed 50% in MARCH 2008 the Federal Communications Commission (FCC) adopted RF exposure guidelines with safety levels for hand-held wireless devices.

CAUTION: To maintain compliance with the FCC's RF exposure guidelines, hold the transmitter and antenna at least 1 inches (2.5 centimeters) from your face, with the antenna pointed up and away from the face, if you wear the handset on your body while using the headset accessory, use only the manufacturers supplied belt clip for this product and ensure that the antenna is at least 1 inch (2,5centimeters) from your body when transmitting.

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter. Use only the supplied antenna. Unauthorized antennas, modifications, or attachments could damage the transmitter and may violate FCC regulations.

This phone (device) has an output power of max 8.5mW, which no warning statements required. Now this phone (device) designed to be hold transmitter and antenna at least 1inchs(2.5cm) from your Face. Therefore this phone (device) satisfies RF exposure compliance.

✓ **IMPORTANT**

Read this manual before attempting to setup or use this instrument. It contains important information regarding safe installation and use. Keep this manual for future reference. Also save the carton, packing and proof of purchase to simplify and accelerate any needed action.

✓ **WARNING**

To prevent fire or shock hazard, do not expose this product to rain or any type of moisture. If accidentally dropped into water, this product should immediately be unplugged from the AC outlet jack.



THIS SYMBOL IS INTENDED TO ALERT THE USER TO THE PRESENCE OF IMPORTANT OPERATING AND MAINTENANCE (SERVICING) INSTRUCTIONS IN THE OWNER'S MANUAL.

☞ **INSTALLATION PRECAUTION**

1. Never install docking station wiring during a lightning storm.
2. Never install power jacks in wet locations unless the jack is specially designed for wet locations.
3. Never touch insulated power terminals unless the telephone line has been disconnected at the network interface.
4. Use caution when installing or modifying telephone lines.

☞ **MAINTENANCE**

1. Use a damp cloth to the plastic cabinet. A mild soap will help to remove grease or oil. Never use polish, solvents, abrasives or strong detergents since these can damage the finish.
2. Your phone should be situated away from heat sources such as radiators, heater, stoves or Any other appliance that produces heat.

☞ **CAUTION**

To reduce the risk of fire or injury to persons, read and follow these instructions:

1. Use only the following type and the size battery :
1200mAh, 3.6V (Li-polymer /3.6V, or equivalent)
2. Do not dispose of the battery in a fire. The cell may explode. Check with local codes for possible special disposal instructions.
3. Do not open or mutilate the battery. Released electrolyte is corrosive and may be toxic if swallowed.
4. Exercise care in handling in order not to short the battery with conducting material such as rings, bracelets and keys. The battery or conductor may overheat and cause burns
5. Recharge only the battery type that is provided with or identified for use with this product. If a different type of battery is used, it may leak or explode.

6. Do not attempt to rejuvenate the battery provided with or identified for use with this product by heating them. Sudden release of the battery electrolyte may occur, causing burns or irritation to eyes or skin.
7. When inserting the battery into this product, the proper polarity or direction must be observed. Reverse insertion of battery may result in leakage or explosion.
8. Remove the battery from this product if the product will not be used for a long period of time (several months or more) since during this time they could leak in the product.
9. Discard the "dead" battery as soon as possible since "dead" battery is more likely to leak in a product.
10. Do not store this product, or the battery provided with or identified for use this product, in high-temperature areas. Battery that are stored in a freezer or refrigerator for the purpose of extending shelf life should be stabilized at room temperature prior to use after cold storage.
11. Always disconnect all telephone line cords from the wall modular jacks before installing or replacing the battery.

CARTON CONTENTS

KT-24TR DOCKIN STATION and TRANSMITTER AND MIC units

User's Manual, Warranty and Safety Information

Li-polymer1200mA/h 3.6V battery

Warranty card

INSTALLATION

HOW to Install the Battery

1. Remove the battery compartment cover of the transmitter by sliding it down.
2. Connect the battery plug along the slot into the transmitter's battery connector.
3. Insert the Li-ion battery pack into the battery compartment by sliding it up.

NOTE : The battery must be fully charged at least 4 hours before initial use.

Please refer to the "Charging the Battery (Full Charge)" section.

POWER CONNECTION

CAUTION : You must use a 120Volt AC/9-12Volt DC adaptor that delivers at least 300-500mA for charger.

The plug must correctly fit the machine's DC 12V jack.

1. Plug the AC Adaptor into a standard AC outlet.
2. Plug the adaptor plug into the DC 12V jack on the rear of the docking station.

CHARGING THE BATTERY (FULL CHARGE)

1. Once the docking station has power connection, place the transmitter in its cradle on the docking station.
2. Leave the transmitter on the cradle for at least 4 hours for a full charge.

NOTE : The battery is continuously charged when the transmitter is on the cradle of the docking station.

PREPARING FOR INITIAL USE

5. Ensure that the fully charged before initial use.
6. Check line and power connections to the BASE.
7. Select the ON position of power switch
8. Push the TALK button of the transmitter to check the operation.

OPERATION

8. Supply 12 VDC power into the BASE using the Car Battery.
9.
 - 1) Separate the transmitter from the BASE and turn on the transmitter.
 - 2) When In-Use LED blinks for a few seconds and stops blinking, communication channel between Base and Transmitter has been set up. When In-Use LED keeps blinking, the communication channel between Base and Transmitter does not match.
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Each of master Transmitter and slave Transmitter is marked on the label on each of the Transmitter.
10. When the In-Use LED on the top of Transmitter turns on by pressing the toggle Talk button, the Transmitter transmits the audio signal and the Base outputs the active-high(12V) digital signal on the Talk mode output pin.
Active-high or active-low on the bottom of the Base is selectable.
11. When the active-low digital signal is transmitted to the video-on input pin of the Base, Transmitter turns on automatically. When input signal switches from active-low to high, Transmitter goes to Standby mode automatically.
12. KT-24N has Emergency function. Whether Transmitter is either in Standby mode or In-Use mode, Emergency function is operable. Siren turns on/off by pressing toggle red(EMG) button.
In case toggle red(EMG) buttons on both transmitters are pressed, the siren turns on/off not

independently. When the siren turns on with master Transmitter, for example, the siren turns off if pressing toggle red button of slave Transmitter once.

13. When the distance between the Base and Transmitter is within the coverage range, In-Use LED stays on, but if the distance is out of the area, In-Use LED blinks and out-of-range beep sound is heard. There is beep on/off switch on the left side of Transmitter to mute the beep tone.
14. There are two microphones on a Transmitter. One is Internal Mic and the other is External. Basically Transmitter operates with Internal Mic, but when External Mic is plugged in the Jack on the top of Transmitter, Internal Mic switches off and External Mic switches on. When External Mic is removed or damaged, Internal Mic switches on automatically.

TROUBLE SHOOTING

<i>SYMPTOM</i>	<i>SOLUTION</i>
<i>No recording sign</i>	<ul style="list-style-type: none"> ◆Check for the line cord connectors at both ends that they are pushed in firmly until they click.(docking & recorder) ◆ IF you had a power failure or had unplugged the docking station, replace the transmitter on the docking station for two to five seconds to reset the system.
<i>No power on the transmitter unit</i>	<ul style="list-style-type: none"> ◆Check the Ni-MH battery pack connection inside the battery compartment on the transmitter. ◆The transmitter rechargeable Li-ion battery pack may need to be charged.
<i>Does not charge</i>	<ul style="list-style-type: none"> ◆Make sure the charging contacts on both the docking station and the transmitter are in contact during charging. ◆The charging contacts may need to be cleaned with an alcohol-moistened cloth. ◆The Ni-MH battery pack may need to be discharged first before a full charge.
<i>Range is limited</i>	<ul style="list-style-type: none"> ◆Raise or reposition the antenna on the docking station.
<i>Sign received flutters or fades</i>	<ul style="list-style-type: none"> ◆The transmitter rechargeable Li-ion battery pack may need charging. ◆You may be out of normal operating range. Move closer to the docking station.

FCC NOTICE

This DEVICE COMPLIES WITH PART 15 OF THE FCC RULES.
OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS
(1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND
(2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING
INTERFERENCE THAT MAY CAUSE UNDERSIRED PERATION.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer of an experienced radio/TV technician for help.

NOTE : The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.