DUKANE

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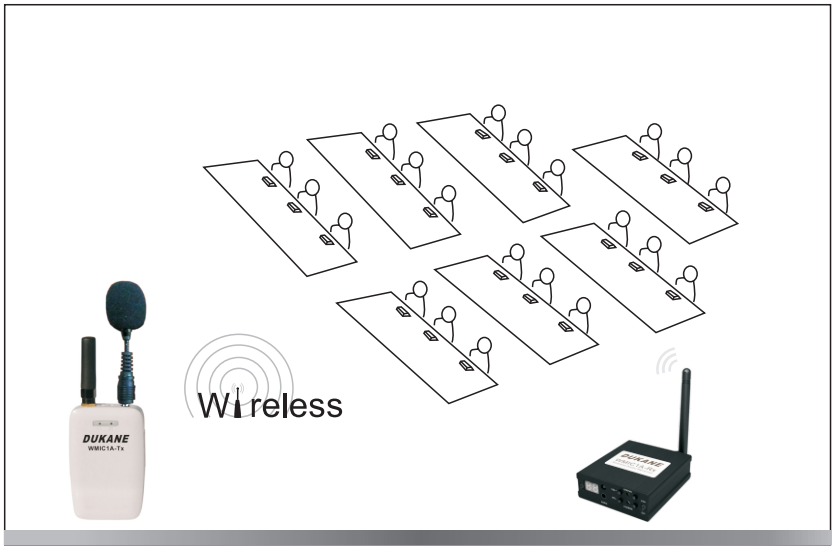
DUKANE

USER GUIDE



Wireless Mic and Receiver System

2.4GHz WIRELESS MICROPHONE SYSTEM
FOR MODEL: DUKANE WMIC1A

Packing List

- Receiver Part # WMIC1-Rx.....1Pc
- Transmitter Part # WMIC1-Tx.....1Pc
- Cable, Audio, 3.5mm mini to same.....1Pc
- Cable, Charging, USB to 3.5mm mini.....1Pc
- Mic Headset.....1Pc
- Insert Mic.....1Pc
- Adapter, Receiver Power.....1Pc
- Adapter, Battery Charger , USB port.....1Pc
- Antenna.....1Pc
- Velcro.....1Pc
- User Guide.....1Pc

Wireless Microphone and Receiver System

Your projector with speakers

GENERAL INFORMATION

Thank you for purchasing the Dukane Wireless Microphone System WMIC1A. This system operates using digital voice coding which is transmitted by radio frequency signal at 2.4GHz.

The system consists of a small lightweight transmitter into which a headset or insert mic can be plugged. The transmitter unit has a lanyard or cord so it can be worn around the user's neck.

The wireless radio frequency, RF, signal is sent to a receiver unit that can be placed somewhere in the room. The receiver is typically near a audio amplifier. Or the receiver can be placed on or near a projector which has a "mic input". The projector can then amplify the signal for it's internal speakers. Inside the projector the signal can also be switched and mixed with other audio inputs. Furthermore the projector can control the volume level and the signal can be obtained from the audio output for use with external amplifiers and speakers.

The range for the mic transmitter is about 98 feet. The system can operate on any of 120 selectable channel frequencies. The channel is set by the receiver and visible on the LED numeric display of the receiver.

Upon initial operation the transmitter is paired to the preset receiver channel automatically.Once paired the system can operate at the full range. Due to the many channels available,other identical mic systems paired to a different channel can operate in close proximity.

The transmitter has a red LED to indicate low battery charge, and a green LED to indicate the "paired to receiver" status. A flashing green LED on the transmitter or receiver means the system is "seeking a device" for pairing.

FCC Statement: DECLARATION OF CONFORMITY

Operation is subject to the following two conditions: (1) this device may not cause harmful interference.(2)this device must accept any interference received, including interference that may cause undesired operation.

Radio Frequency Interference Warnings & Instructions 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 communications.

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 and correct the interference by one or more of the following measures.

Reorient or locate 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.

CAUTION:

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. This device and its antenna(s)must not be co-located or operating in conjunction with any other antenna or transmitter.

SETUP

1. RECEIVER

Screw on the long antenna (see 10 below). The receiver audiooutput (6 below)is via a 3.5 mm mini plug on the front of the unit.Connect this output to an amplifier or the MIC input of a projector.

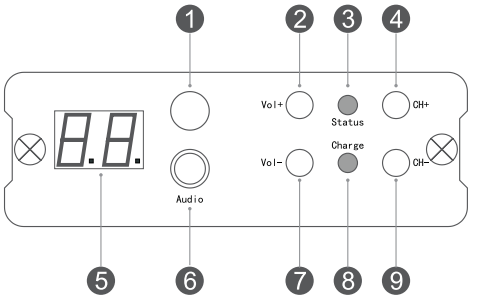
The audio out is at line level, so if connecting to a Dukane projector set the miclevel to HIGH.This is found on the projector at advanced menu then audio /MIC level / then high. For the projector set the volume to about mid-range.

The receiver is powered by a DC voltage from a power adaptor (5V,500 mA) which is next plugged into a 115 VAC power line outlet. The adapter connector is plugged into the rear of the receiver(see 13 below).

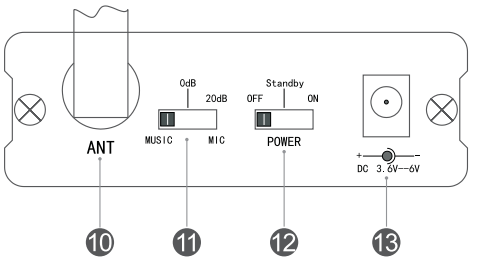
Next turn the power switch to ON (12 below) on and switch (11 below) to “20 dB /MIC” you will see green LED light “Status” (3 below) begin flashing.

The NUMERIC LED display (5 below) may light up with the “01” . This display shows the channel number or the volume level of the receiver. For initial setup the volume can be set to about mid range at 17 (Vol Range is 0 to 31) . The Ch(Channel) can be set to avoid another know system channel (channel range is 1 to 120). For initial operation any channel may work.The LED display of “A0” to “A9” is for channels 100 to 109. The LED display of b0 to b9 is for channels 110 to 119.

Note the green “Status” LED (3 below) on the receiver continues flashing. This flashing continues till the receive is locked (paired) to a transmitter.



Front Panel

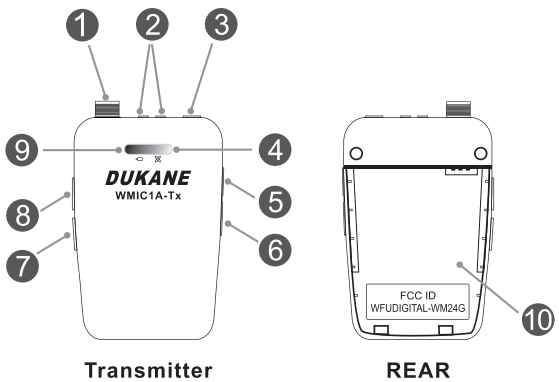


Rear Panel

1. Remote Control Sensor(NOT USED)
2. Volume Up
3. Power LED Indicator
4. Channel Up
5. Channnel/Volume Display
6. Audio Out
7. Volume Down
8. Charging LED Indicator(NOT USED)
9. Channel Down
10. Antenna
11. Setup Mode
12. Power Switch
13. DC In

2.TRANSMITTER

Wireless microphone transmitter (cream colored plastic unit)



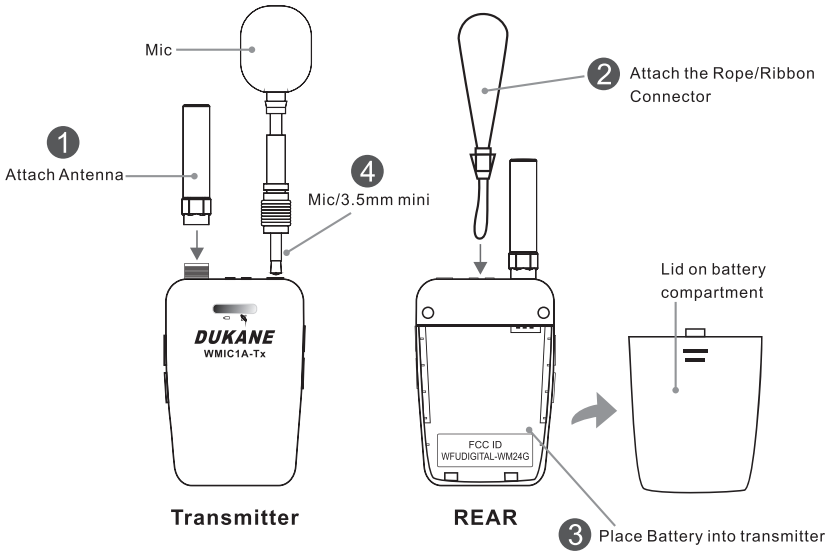
1. Antenna jack
2. Lanyard attachment
3. Microphone jack/Charging jack
4. Charging status indicator light
5. Volume up
6. Volume down
7. Channel button
8. Power switch
9. Signal indicator light
10. Battery compartment

OPERATION

1. Press and hold transmitter Power button (8 above) for 3 seconds. The left side LED indicator will be red and then turn green.

2.The right side LED will flash green. It will continue flashing until pairing with the receiver is established. Once the pairing is completed the LED will show solid green.

3. If the left LED remains red or is flashing red the battery needs to be charged.



SET UP

1. Attach an antenna.
2. Lanyard
3. Open backside compartment and insert the Li-battery into transmitter.
4. Connect a microphone unit to the transmitter via the 3.5mm mini jack port on the transmitter top. Use either the headset mic or insert MIC.

3. Pairing

Turn the transmitter ON and get within 10 feet of the receiver.

The transmitter will automatically lock on to the receiver. When this happens, the transmitter led light will remain on, a solid green.The green receiver led will also be on.

The mic should now be active,the range extends to 98 ft. And can pass through most solid objects.

The “vol +/- ” buttons on the right side of the transmitter will change the mic sensitivity and the resulting system volume. One suggestion is to set levels at the midpoint and adjust from there. Remember the receiver volume was already adjusted to midpoint level.

Inside a projector there are also “Mic vol”and output “Vol” controls. Also, the internal projector speaker can be set to the ON or OFF state.

Please note that the 3.5mm insert microphone is a little more sensitive than the headset type mic. The transmitter can be worn by placing the lanyard around the user’s neck.

System operation

The system operation uses 48k digital audio sampling. There are 120 channels available for the transmitter and receiver. The frequency of operation is 2.400 to 2.480GHz.

Channel changing: Changing the channel on the receiver will cause the transmitter and receiver to loose their lock. The receiver channel can be set using the “CH+” or “CH-” buttons (to avoid interference, we highly recommend channel 80 to channel 119 on the receiver, when there are other WI-FI systems around).

Please turn the transmitter off for about 3 seconds. Then turn it back on and the transmitter green LED will flash till it locks to the receiver. The receiver LED will also flash till the lock occurs and then it will go on solid.

A flashing green LED indicates the system components are seeking a pairing.

Turning OFF the transmitter or receiver requires the system when turned ON to again seek and pair.

Low Battery

Operation with a low battery in the transmitter can result in weak signals which will result in noise and loss of pairing.

A fully charged battery in the transmitter can operate for over 13 hours. The low battery is indicated by a red transmitter LED. The transmitter battery is charged using the line plug adapter with the USB port. Use the USB to 3.5mm mini jack cable.The battery is a rugged cell phone battery, Nokia BL-5B Lithium-ion, 3.7V. It is charged by the 5V DC from USB ports.

ONE-YEAR LIMITED WARRANTY

This Dukane product is warranted to the original purchaser for a period of one (1) year from the original purchase date – in normal operating conditions –against defects in material and workmanship. Dukane corporation expressly disclaims all other warranties of merchantability and fitness for a particular purpose.

During the warranty period, dukane corporation's liability for any defective product is limited to the repair or replacement of product at dukane corporation's option. Replacement products may be new or used. The following are not covered by the limited warranty and Dukane Corporation shall not be liable for:

Any product which is not distributed in the U.S.A. or Canada by Dukane Corporation or an authorized dealer.

Damage, deterioration or malfunction resulting from: Mispackaging, accident, misuse, abuse, neglect, improper ventilation,fire,dust, smoke, water, lightning or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.

Repair or attempted repair by anyone other than a Dukane Corporation authorized service center.

Any shipment of product (claims must be presented to the carrier).Removal or installation of the product.

Any other causes which do not relate to a product defect. Cartons, carry cases, shipping cases, batteries, or any accessories used in connection with the product.Service required as a result of third party components. Product used as commercial rental units.

Dukane Corporation will pay labor and material expenses for covered items, but Dukane Corporation will not pay for the following: Cost of technical adjustment, set-up, maintenance, or adjustment of user controls. Payment of shipping and related charges incurred in returning the product for warranty repair.

Dukane Corporation disclaims all liability for incidental or consequential damage of any kind, including all damages arising out of any interruptions in operation of the product and all damages to software.

No person, firm, or representative is authorized to assume any obligation or to make any warranty on behalf of the Dukane Corporation other than as stated above. Doc; 0107AS

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Specifications

DUKANE WMIC1A-Rx:

NO.	Description	Wireless Audio Receiver
1	Work frequency	2400 - 2483 MHz
2	Frequency response	20 Hz - 20 KHz
3	Work temperature	-25 ~ 85 ºC
4	Work voltage	DC 2.5V~6V
5	Latency time	1.8 ms
6	Work current	35 mAh
7	Distortion	0.8% @1 KHz
8	Frequency stability	+/-156KHz
9	Receiver sensitivity	90 dBm
10	Baud rate	2 M bps
11	SNR	95 dB
12	Stereo output	1. 30 mW, RL = 32Ω (microphone)
		2. 50 mW, RL = 16Ω (stereo audio)
13	Output impedance	1k Ohm

DUKANE WMIC1A-Tx:

NO.	Description	Mini Wireless Microphone
1	Power(input voltage)	3.7 V rechargeable lithium battery
2	Work currency	76.9 mAh
3	Operate temperature	-25 ~ 85 ºC
4	Frequency	2400 ~ 2483MHz
5	Modulate	GFSK
6	Channel width	1 MHz
7	Transmit power	20 dBm
8	Input levelMax	1.0Vpk
9	Input impedance	10k Ohm
10	Input interface	Two kind input mode: 1. Microphone input 2. Stereo sound input
11	Output impedance	1k Ohm
12	Input-output gain ratio	1:1
13	Delay	1.8 ms
14	SNR	95 dB
15	Distortion	0.8 % @ 1kHz
16	Dynamic range	90dB