# WIRELESS MOBILE MICROPHONE MODEL WX-2400

#### INSTRUCTION MANUAL

Thank you very much for your purchase of "ADONIS" Wireless Mobile Microphone model WX-2400.

The model WX-2400 is non-directional high-performance mobile microphone with wireless method(between microphone and control box) by weak radio wave, Integrated microphone and TX/RX Switch and Non-modulation Prevention circuit with alarm.

Before using, please read this instruction carefully and use this microphone regularly for a long time.

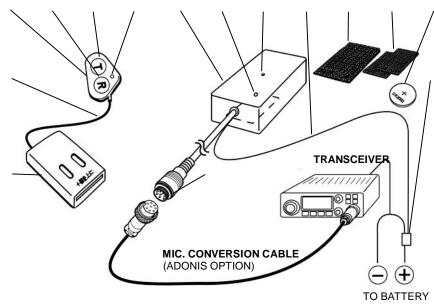
#### Matters to be attended to

- ⚠Danger Never re-install or adjust the microphone during driving a car. Be sure to adjust the microphone before actual use.
- △Danger Be sure to fix the cords and mount the microphone avoiding the possible trouble for safety driving.
- ⚠Warning Do not pull or wind the cords by force . It may cause a traffic accident.
- ⚠Warning The inside of this microphone is already adjusted and never modify or adjust the unit.
- ⚠ Caution Do not make impact on the microphone. It may cause a trouble or damage.
- ACaution Do not use this unit in the place of direct sunlight, high moisture and temperature, or poorly ventilated place.
- $\triangle$ Caution This unit is exclusively available with DC12V( $\pm$ 2V) power source.

#### Warning and Note

- •Do not use this unit nearby microwave oven or electronic products equipped with "blue-tooth". Please note there may be a case not to use this unit depending on the environmental condition according to a radio wave, noise and mounting surroundings.
- ·When finding any malfunction or damage on operation of this unit, stop your use and contact the dealer.
- · Please note we are not responsible for the trouble caused by disassembly, modification and mistake on use.
- Do not use and put the unit in the place of full sunlight or high temperature.
- ·The design and specifications are subject to change without advance notice.

#### PART NAMES (Please refer to the illustration.) (Fig. 1)



MICROPHONE
TX BUTTON
RX BUTTON
TX/RX CONTROL PART
CONNECTING CABLE
BATTERY CASE(TRANSMITTER)
CONTROL BOX
OUTPUT ADJUST. VOLUME
TX INDICATOR LAMP ( LED )
POWER FEEDING LINE( RED)
8 P INTERCONNECT. JACK
( 8 P ADONIS ARRANGE )

ACCESSORY

MAGIC TAPE LARGE ( 1 PC.)

MAGIC TAPE SMALL (2 PCS.)

LITHIUM BATTERY(COIN TYPE)

POWER FEED. CONNECTOR

MIC. CONVERSION CABLE IS NOT PROVIDED TO THIS UNIT.

## **HOW TO MOUNT AND CONNECT**

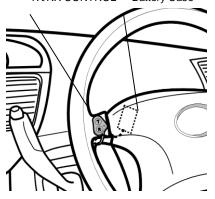
- Put the TX/RX CONTROL PART on flat space of steering wheel by using accessory magic tape small (Fig.2) The Magic tape(small) should be put on the place not to cause trouble for safety driving after cleaning the space to put on.
- Insert the coin type Lithium Battery into TX BATTRY CASE. (Fig.6a)
- Put the TX BATTERY CASE on flat space of the other(hidden) side of steering
  wheel by using the accessory magic tape(small) . (Fig. 2) The place to put
  Magic Tape(small) should be cleaned before put. The CONNECTING CABLE
  should be put on steering wheel closely and firmly so that the driver does not
  have any trouble for safety driving.

# $\underline{\mathbb{A}}$ WARNING DO NOT MOUNT ON THE HORN SWITCH OR AIR-BAG. IT IS VERY DANGEROUS.

- Mount the CONTROL BOX with accessory Magic Tape(large) to the place where you may watch the TX Indicator Lamp (LED).
- Connect the Mic. Conversion cable suitable to the transceiver(Optional) between
   8 P INTERCONNECT. JACK and transceiver.(Fig.1)

(The Microphone Conversion Cable has a directional characteristics. Please check it before connecting.)

(Fig.2) Put TX/RX Control Part onto Handle TX/RX CONTROL Battery Case



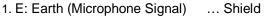
Connect the POWER FEEDING LINE (RED) to the (+) side of transceiver Power Source with accessory POWER FEED CONNECTOR (DC12V ± 2V) (Fig. 3)

If the transceiver microphone terminal has a output of DC Power feeding, DC5V~9V 50mA, "D" Series microphone conversion cable, optionally available, can be connected directly with getting the DC Power from transceiver microphone terminal. The wiring of Power Feeding Line (RED) is not required.

(Fig. 3)

#### **HOW TO CONNECT POWER FEEDING CONNECTOR** (Fig. 3)

- 1. Put the (+) side power cord of transceiver and Microphone Power Feeding Line (Red) on grooves in the connector.
- 2. Fix them tentatively.
- 3. Press the insulation cover down to be locked with pliers. (Fig. 5 ) **8P ADONIS ARRANGEMENT**



- 2. M: Microphone Signal .... Yellow
- 3. P: PTT(press to talk) .... Red 4. G: Earth (for PTT) .... Purple
- 5. U: Up .... Green
  6. D: Down .... White
- 7. C: U/D Common .... Orange

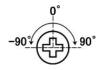
8. B: DC Power Feeding(+) .... Gray







(Fig. 4) Output Adjust Volume



#### **HOW TO USE**

- Press the TX BUTTON and the CONTROL BOX sounds out "pip" and TX INDICATOR lights up for indicating the transmitting condition.
- Press the RX BUTTON and the CONTROL BOX sounds out "peep" TX INDICATOR(LED) lights off. The condition is returned to RX (Receiving) mode.
- The Output Level is factory-preset to optimum level. But, the modulation level is too deep or shallow, the level can be adjusted to appropriate level under following procedure.

Rotate the OUTPUT ADJUSTMENT VOLUME to "Clockwise" for increase of output volume. Rotate it to "Anti-Clockwise" to decrease volume. Under monitoring by Local Station, rotate it with "minus" driver carefully in the rotation range indicated at (Fig.4). It turns 90 ° only for both left and right. Excessive turn may damage the OUTPUT ADJUSTMENT VOLUME. Please be careful.

#### NON-MODULATION PREVENTION CIRCUIT

In case you set the condition to Transmitting mode without any intention, the condition of non-modulation will continue and it may cause trouble to other stations. To prevent such a condition, the alarm circuit built-in will activate after 2.5 minutes continuous transmitting. The alarm sounds for 30 seconds and the condition will be reset to receiving mode automatically.

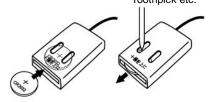
If you want to continue Transmitting just after alarm sound, press the BUTTON for stopping Transmitting Mode, then, press the TX BUTTON to change to the transmitting mode.

### CAUTION

After pressing the TX BUTTON, the microphone may turn to transmitting or receiving condition with "pip" or "peep" sound without control of microphone. This condition is caused by imperfect positional adjustment between TX BATTRY CASE and CONTROL BOX.

In this case, Non-Modulation Prevention circuit activates and after 2 or 3 minutes of continuous transmitting condition, the condition will return to receiving mode automatically. However, Alarm circuit does not activate and no alarm sounds from the unit It looks as the transmitting condition is interrupted on the way of transmitting. Please be careful to this phenomenon. In such a case, change the mounting position of CONTROL BOX.

( Fig. 6 ) Replacement of Battery
(a)
(b)
Toothpick etc.



Caution: Please be sure to have always spare coin type Lithium battery so you may change it immediately when you find the battery power is out. (You cannot control the TX or RX.)

#### HOW TO REPLACE THE COIN TYPE LIGTHIUM BATTERY

When you cannot control TX/RX from TX/RX CONTROL PART, Coin Type Lithium Battery is dead. Replace the battery to new one as following order.

- (A) Take Coin type Lithium Battery from Battery Case(TX) with toothpick or stick. (Push it out from TX/RX CONTROL PART.) (Fig. 6b).
- (B) Press the new Coin Type Lithium Battery (CR2032) into the Battery Case(TX) while keeping the (+) pole of battery upper side. (Fig. 6a)

#### RF FEEDBACK NOISE

When transmitting with low power, the noise may be negligible. But when transmitting high-power, there are possibilities to have abnormal modulation interference with offensive sound and other noise. In such a case, the bad matching between antenna and coaxial cable may cause the problems., i.e., the Standing Wave effects onto microphone cable. To get the better condition, please do not place the microphone cable in parallel to the antenna coaxial cable. Also please check the SWR between antenna and transceiver.

SPECIFICATIONS: · Non-Directional Electret Condensor Microphone 1pc. · Cord Length of 8P Interconnect. Jack 70cm

- Matching Output Impedance 500 ~ 50K Output Voltage 0 ~ 50mV(rms)
- Power Voltage: TX Battery Case... Coin type Lithium Battery CR2032 x 1(DC3V) totaling 10 hours (For Transmitting)
   Control Box...by Mic. Cable ("D" Series)... DC5V ~ 10V, by Power Feeding Line(Red)...DC12V ± 2V
- Size and Weight: MIC. TX/RX Control Part...20(H) x 30(W) x 8(D)mm 5g TX Batt. Case..13(H)x33(W)x45(D)mm 15g Control Box.. 90(H)x50(W) x 25(D)mm 200g

Operating Frequency 2.4GHz band digital Effective Receiving Distance... about 1m from TX Battery case