

# SEIKAKU TECHNICAL GROUP LIMITED

客戶	SHOW		
料號	NF03650		
品名	說明書-RS 英文		
規格	WL-200R/H SHOW_V1.3		
公司機種(客戶機種)成品料號	WL-200R/H		
重量/基數	0.035KG/1		
材質	105G銅版紙 NH00149(3:8)		
紙張展開性質	<input type="checkbox"/> A3 <input checked="" type="checkbox"/> A4 <input type="checkbox"/> A5 <input type="checkbox"/> 其它		紙張展開數量
核准	審查	校稿	3
產品文件編號： 陽片數量： 6 張			

備注:依SH-201011001出圖  
附菲林

依謝偉良工程師要求修改  
變更單號:QHFB004-201111000012  
修改底板圖片

變更單號:  
依郵件修改圈出部分

NO	修改記錄	版本	更改者	日期
1	修改底板圖片	V1.2	鄧紅軍	11/10/24
2	依郵件修改圈出部分	V1.3	鄧紅軍	12/04/16





THE UNIVERSE OF INSTALLATION

# WIRELESS MICROPHONE SYSTEM

User's Manual



**WL-200R/H/P**



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SEIKAKU TECHNICAL GROUP LIMITED

**SEIKAKU TECHNICAL GROUP LIMITED**

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**Technical Specifications**
**WL-200H/P**

Specification \ Model	WL-200P	WL-200H
Carrier Frequency Range	VHF Band 175-186MHz	VHF Band 175-186MHz
Oscillation Mode	PLL controlled fixed frequency	PLL controlled fixed frequency
Modulation Mode	FM(F3E)	FM(F3E)
Frequency Stability	±0.005%/25°C	±0.005%/25°C
RF Radiation Fcc	10mW	10mW
RF Radiation CE	0.04mW	0.15mW
Spurious Emission	45dBm ↓	45dBm ↓
Total Harmonic Distortion	<1.0 %	<1.0 %
Frequency Response	50Hz-15KHz ±3dBm	50Hz-15KHz ±3dBm
Current	<130mA	<130mA
Power Supply	“AA”1.5type×2 pcs (used for more than 8 hours)	“AA”1.5type×2 pcs (used for more than 8 hours)
Operating Temperature	-10°C to 50°C	-10°C to 50°C
Dimensions	65×108×23 mm	250(L) mm (9.1 in.)
Weight	82 g	208 g
Dynamic	>100dB	>100dB
Max.Deviation	±35 KHz	±35 KHz
Mic. Capsule (optional)	Condenser Dynamic Capsule	Dynamic Capsule
4 band choice	1. Condenser	/
	2. Dynamic	
	3. Electric instrument	
	4. Ground	

**IMPORTANT!**

Please read this manual carefully before operating this unit for the first time.

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## Technical Specifications

### WL-200R

Reception Mode	Quartz-controlled, Fixed Frequency, Single Antenna
Frequency Range	VHF Band 175-186 MHz
RF Sensitivity	20dB SINAD = -95dBm
Frequency Response	50Hz-15KHz ±3dBm
Total Harmonic Distortion	Under <1.0%
Signal/Noise Ratio	>85 dBV, A-weighted
Audio Output Level	550mV at +/-20KHz Deviation
Balance Output Level	180mV at +/-20KHz Deviation
S/N Ratio	>85dBm at +/-15KHz de Deviation
Squelch Adjust	-80dBm --95dBm
Power Requirement	DC 12 - 15 V
Operating Temperature	-10 °C to 40 °C
Dimensions	230 X 114 X 40 mm
Weight	0.35kg
Current	300mA

## SAFETY RELATED SYMBOLS



The symbol is used to indicate that some hazardous live terminals are involved within this apparatus, even under the normal operating conditions.



The symbol is used in the service documentation to indicate that specific component shall be only replaced by the component specified in that Documentation for safety reasons.



Protective grounding terminal.



Alternating current /voltage.



Hazardous live terminal .

ON: Denotes the apparatus turns on.

OFF: Denotes the apparatus turns off, because of using the single pole switch, be sure to unplug the AC power to prevent any electric shock before you proceed your service.

**WARNING:** Describes precautions that should be observed to prevent the danger of injury or death to the user.



Disposing of this product should not be placed in municipal waste and should be separate collection.

**CAUTION:** Describes precautions that should be observed to prevent danger of the apparatus.

## WARNING

### • Power Supply

Ensure the source voltage matches the voltage of the power supply before turning ON the apparatus.

Unplug this apparatus during lightning storms or when unused for long periods of time.

### • External Connection

The external wiring connected to the output hazardous live terminals requires installation by an instructed person, or the use of ready-made leads or cords.

### • Do not Remove any Cover

There are maybe some areas with high voltages inside, to reduce the risk of electric shock, do not remove any cover if the power supply is connected.

The cover should be removed by the qualified personnel only.

No user serviceable parts inside.

### • Fuse

To prevent a fire, make sure to use fuses with specified standard (current, voltage, type). Do not use a different fuse or short circuit the fuse holder.

Before replacing the fuse, turn OFF the apparatus and disconnected the power source.

### • Protective Grounding

Make sure to connect the protective grounding to prevent any electric shock before turning ON the apparatus.

Never cut off the internal or external protective grounding wire or disconnect the wiring of protective grounding terminal.

### • Operating Conditions

This apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on this apparatus.

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

Do not use this apparatus near water. Install in accordance with the manufacture-r's instructions. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat. Do not block any ventilation openings.

No naked flame sources, such as lighted candles, should be placed on the apparatus.

## IMPORTANT SAFETY INSTRUCTIONS

- Read these instructions.
- Follow all instructions.
- Keep these instructions.
- Heed all warnings.
- Only use attachments/accessories specified by the manufacturer.

### • Power Cord and Plug

Do not defeat the safety purpose of the polarized or grounding type plug.

A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

### • Cleaning

When the apparatus needs a cleaning, you can blow off dust from the apparatus with

a blower or clean with rag etc.

Don't use solvents such as benzol, alcohol, or other fluids with very strong volatility and flammability for cleaning the apparatus body. Clean only with dry cloth.

### • Servicing

Refer all servicing to qualified personnel. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so .

Servicing is required when the apparatus has been damaged in any way , such as power supply cord or plug is damaged , liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture , does not operate normally, or has been dropped.

The mains plug is used as the disconnect device, the disconnect device shall remain readily operable.

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### FCC Rules and Regulations

SHOW wireless receivers are certified under FCC Rules part 15 and transmitters are certified under FCC Rules part 74.Licensing of SHOW equipment is the user's responsibility and licensability depends on the user's classification, application and frequency selected.

NOTE: 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

## Operating Instruction

WL-200 consists of transmitter (microphone) and receiver.

Automatically calibrate frequency to match up the frequencies of microphone and receiver

### Transmitter (microphone) functions description

1. Red LED, Orange LED and a push-button equipped at bottom
2. If red LED always lights up, it means that the transmitter (microphone) is muted; if the red LED blinks, it means that the battery is of low level.
3. If the orange LED always illuminates, it means that the battery is of high level. If the orange LED blinks, it means that the IR frequency calibration needs confirming.
4. Press and hold the push-button 2 seconds the push-button to power on the unit; press and hold the push-button 2 seconds to power off the unit. Press the MUTE button slightly, the volume will be muted.
5. Frequency calibration

Align the bottom of the transmitter (microphone)to IR indicator of the receiver within distance of 20cm until the orange LED at bottom of the transmitter (microphone) begins to blink. Then press push-button at the bottom for confirm. The orange LED always illuminates, presenting frequency calibration ok.

### Receiver function description

1. Press the SET button to manually set CHI ~CHI6 with corresponding LED on front panel displaying 0~F.
2. Press the SCAN button to automatically calibrate the frequency.
3. Frequency calibration  
Press the Scan button to automatically calibrate the IR frequencies. The receiver will automatically search the available frequency and send the IR signal. The blinking LED means that it's searching the signal. The LED will not stop blinking until the signal is received.
4. Up to 6 channels are available for the WL-200 without interference to each other. The six frequencies are as follows: CH00, CH02, CH04, CHB, CH09, and CHD.

## CONTROL ELEMENTS

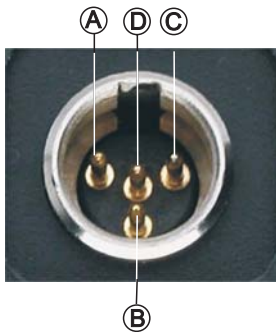
### WL-200P



- ① IR Receiving Section
- ③ Dual Colour LED
- ④ Power Switch/Mute
- ⑤ Volume Control

### ② MINI 4P CONNECTOR

This connector is used to connect the unit with the clip microphones, for example, HM-38 or HM-58 condenser microphones.



- Ⓐ Pin 1, GND
- Ⓑ Pin 2, Phantom power supply for Condenser microphone
- Ⓒ Pin 3, for Guitar, bass and keyboards
- Ⓓ Pin 4, for Dynamic or condenser microphone

### FREQUENCY TABLE

Channel	Frequency	Channel	Frequency	Channel	Frequency
00	175.125MHz	06	176.975MHz	C	182.025MHz
01	175.375MHz	07	177.925MHz	D	183.225MHz
02	175.775MHz	08	178.125MHz	E	184.525MHz
03	175.975MHz	09	178.925MHz	F	185.125MHz
04	176.175MHz	A	180.725MHz		
05	176.525MHz	B	181.525MHz		

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 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 or an experienced radio/TV technician for help.

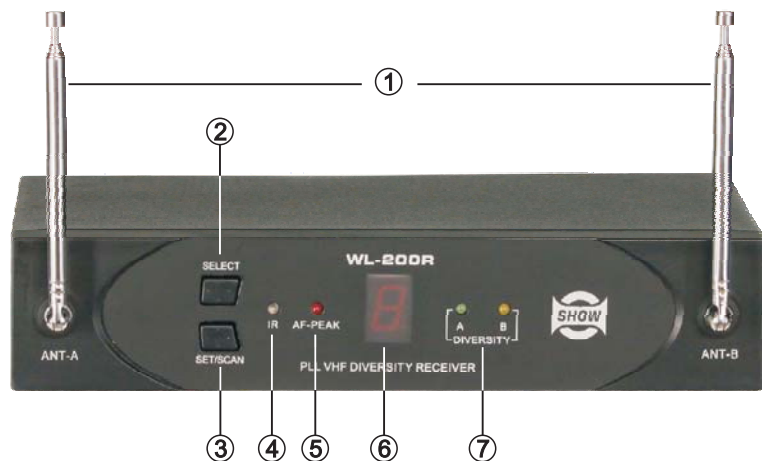
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:(1) this device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.

## INTRODUCTION

Thanks for purchasing the SHOW wireless microphone system. The WL-200 is the delicately designed VHF, PLL synthesized system, with antenna for smart switching diversity control, the higher level RF signals maybe fed into the system for greater reliability and coverage, therefore, the risks of breakdown and interference are to be effectively reduced.

The WL-200 features as follows:

- Switching diversity control to receive the RF signal;
- LED indication for RF, AF PEAK and POWER;
- Output volume control;
- Squelch control;
- Soft touch painting for comfortable use;
- Channel frequency adjusted manually
- PLL synthesized design;
- Consistent operating frequencies to comply with the EMC regulations;
- 16 channel frequency presets;

**CONTROL ELEMENTS**
**WL-200R  
FRONT PANEL**

**① ANT-A & ANT-B**

It is the flexible antenna. To get effective transmission, never cover the antenna with hand, clothes, etc during the operation, and always position the transmitter nearby the receiver.

**② SELECT button**

Press the SET button to manually set CH1~CH16 with Display showing 0~F.

**③ SET/SCAN**

The SET button is used for selecting the desired frequency available and then press for confirm. Press the SCAN button to automatically calibrate the frequency.

**④ IR Transmitting Section**
**⑤ AF-peak**

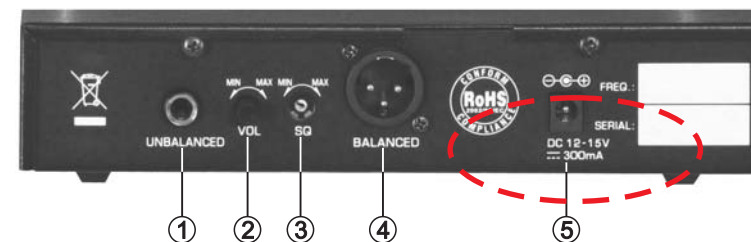
When this LED is illuminating, it means that the signal of the microphone is too strong.

**⑥ Display**

This sexy and smart display will show exact Channel selected from 0~F, totally 16 channels.

**⑦ Diversity LED A & B**

These two LED will light up when the ANT-A & ANT-B are used.

**CONTROL ELEMENTS**
**REAR PANEL**

**① AUDIO OUTPUT JACK**

This is a professional unbalanced output jack.

**② VOL SWITCH**

It is used to adjust the volume .

**③ Squelch SWITCH**

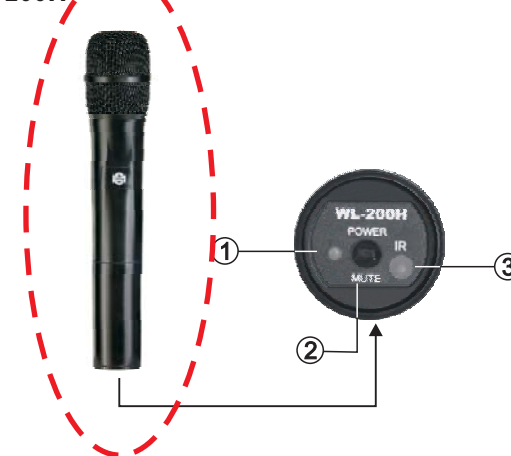
It is used to adjust the squelch level by using an adjusting bar which is placed in the microphone.

**④ XLR AUDIO OUTPUT**

This is a professional balanced XLR output connector.

**⑤ DC IN**

Connect 12V-15DC power supply to power on/off this unit.

**WL-200H**

**① Power LED(dual colour LED)**
**② Power Switch/Mute**
**③ IR Receiving Section**