INVOTONE

OWNER'S MANUAL

MOD-2800R/2800H/2800P SERIES

WIRELESS MICROPHONE SYSTEM

IMPORTANT SAFETY INSTRUCTION

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

TO REDUCE THE RISK OF ELECTRIC SHOCK PLEASE DO NOT REMOVE THE COVER OR THE BACK PANEL OF THIS EQUIPMENT. THERE ARE NO PARTS NEEDED BY USER INSIDE THE EQUIPMENT. FOR SERVICE, PLEASE CONTACT QUALIFIED SERVICE CENTERS.

This symbol, wherever used, alerts you to the presence of un-insulated and dangerous voltages within the product enclosure. These are voltages that may be sufficient to constitute the risk of electric shock or death.

This symbol, wherever used, alerts you to important operating and maintenance instructions. Please read.

⏚ Protective Ground Terminal
~ AC mains (Alternating Current)
ϟ Hazardous Live Terminal
ON: Denotes the product is turned on.
OFF: Denotes the product is turned off.

CAUTION
Describes precautions that should be observed to prevent damage to the product.

1. Read this Manual carefully before operation.
2. Keep this Manual in a safe place.
3. Be aware of all warnings reported with this symbol.
4. Keep this Equipment away from water and moisture.
5. Clean it only with dry cloth. Do not use solvent or other chemicals.
6. Do not damp or cover any cooling opening. Install the equipment only in accordance with the Manufacturer's instructions.
7. Power Cords are designed for your safety. Do not remove Ground connections! If the plug does not fit your AC outlet, seek advice from a qualified electrician. Protect the power cord and plug from any physical stress to avoid risk of electric shock. Do not place heavy objects on the power cord. This could cause electric shock or fire.
8. Unplug this equipment when unused for long periods of time or during a storm.
9. Refer all service to qualified service personnel only. Do not perform any servicing other than those instructions contained within the User's Manual.
10. To prevent fire and damage to the product, use only the recommended fuse type as indicated in this manual. Do not short-circuit the fuse holder. Before replacing the fuse, make sure that the product is OFF and disconnected from the AC outlet.

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

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

11. Move this Equipment only with a cart, stand, tripod, or bracket, specified by the manufacturer, or sold with the Equipment. When a cart is used, use caution when moving the cart / equipment combination to avoid possible injury from tip-over.

12. Permanent hearing loss may be caused by exposure to \ extremely high noise levels. The US. Government's Occupational Safety and Health Administration (OSHA) has specified the permissible exposure to noise level.
These are shown in the following chart:

HOURS X DAY	SPL	EXAMPLE
8	90	Small gig
6	92	train
4	95	Subway train
3	97	High level desktop monitors
2	100	Classic music concert
1,5	102	
1	105	
0,5	110	
0,25 or less	115	Rock concert

According to OSHA, an exposure to high SPL in excess of these limits may result in the loss of heat. To avoid the potential damage of heat, it is recommended that Personnel exposed to equipment capable of generating high SPL use hearing protection while such equipment is under operation.

The apparatus shall be connected to a mains socket outlet with a protective earthing connection.

The mains plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.

8. WARRANTY

1. WARRANTY REGISTRATION CARD

To obtain Warranty Service, the buyer should first fill out and return the enclosed Warranty Registration Card within 10 days of the Purchase Date.
All the information presented in this Warranty Registration Card gives the manufacturer a better understanding of the sales status, so as to provide a more effective and efficient after-sales warranty service. Please fill out all the information carefully and genuinely, miswriting or absence of this card will void your warranty service.

2. RETURN NOTICE

2.1 In case of return for any warranty service, please make sure that the product is well packed in its original shipping carton, and it can protect your unit from any other extra damage.
2.2 Please provide a copy of your sales receipt or other proof of purchase with the returned machine, and give detail information about your return address and contact telephone number.
2.3 A brief description of the defect will be appreciated.
2.4 Please prepay all the costs involved in the return shipping, handling and insurance.

3. TERMS AND CONDITIONS

3.1 INVOTONE warrants that this product will be free from any defects in materials and/or workmanship for a period of 1 year from the purchase date if you have completed the Warranty Registration Card in time.
3.2 The warranty service is only available to the original consumer, who purchased this product directly from the retail dealer, and it can not be transferred.
3.3 During the warranty service, INVOTONE may repair or replace this product at its own option at no charge to you for parts or for labor in accordance with the right side of this limited warranty.
3.4 This warranty does not apply to the damages to this product that occurred as the following conditions:

- Instead of operating in accordance with the user's manual thoroughly, any abuse or misuse of this product.
- Normal tear and wear.
- The product has been altered or modified in any way.
- Damage which may have been caused either directly or indirectly by another product / force / etc.
- Abnormal service or repairing by anyone other than the qualified personnel or technician.

And in such cases, all the expenses will be charged to the buyer.
3.5 In no event shall INVOTONE be liable for any incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion or limitation may not apply to you.
3.6 This warranty gives you the specific rights, and these rights are compatible with the state laws, you may also have other statutory rights that may vary from state to state.

7. TECHNICAL SPECIFICATION

Model	**MOD-2800R**
Channel	Multi-channels, up to 80 frequency presets for each frequency band
Frequency band	UHF 710-726 MHz (Dependent on applicable country regulations)
Receiver type	PLL UHF SYNTHESIZED
Frequency response	50 Hz-15 kHz (±3 dB)
Frequency stability	±0.005% (-10℃-50℃)
T.H.D.	1 kHz＜0.8%
Modulation mode	FM (F3E)
S/N Ratio	＞90 dB
Dynamic	＞100 dB
RF sensitivity	-100 dBm/30 dB SINAD
Audio output	Unbalanced 6.3mm phone jack 550mV; ±20KHz deviation
Balance output	110 mV, 20 kHz deviation
Power supply	DC 15V/ 500mA (AC 115V/230V 50/60Hz adaptor)
Dimensions (WxDxH)	210x155x44 mm; (8.2" x 6.1" x 1.7")
Weight	1.10 Kg

Model	**MOD-2800H**
Oscillation mode	PLL UHF SYNTHESIZED
Carrier Frequency Band	UHF 710-726 MHz Dependent on applicable country regulations
Frequency Response	50 Hz-15 kHz (±3 dB)
Frequency Stability	±0.005% (-10℃～ 50℃)
T.H.D.	1 kHz<0.8%
Modulation Mode	FM (F3E)
RF Output Power	5mW(adjustable 3 bands)
Dynamic	＞100 dB
Tone Trequency	30-33 kHz
Current Drain	100 mA
Max. Deviation	±35 kHz
Battery	"AA" type x 2
Optional	Nickel hydrogen battery+charger
Mic. Capsule(Optional)	Condenser or Dynamic Capsule
Dimensions	277x Φ36.5mm (10.9"xΦ1.44")
Weight	0.246 Kg

Model	**MOD-2800P**
Oscillation mode	PLL UHF SYNTHESIZED
Carrier Frequency Band	UHF 710-726 MHz Dependent on applicable country regulations
Frequency Response	50 Hz-15 kHz (±3 dB)
Frequency Stability	±0.005% (-10℃～ 50℃)
T.H.D.	1 kHz<0.8%
Modulation Mode	FM (F3E)
RF Output Power	5mW(adjustable 3 bands)
Dynamic	＞100 dB
Tone Trequency	30-33 kHz
Current Drain	100 mA
Max. Deviation	±35 kHz
Battery	"AA" type x 2
Optional	Nickel hydrogen battery +charger
Mic. Capsule(Optional)	Condenser or Dynamic Capsule
Dimensions(WxDxH)	97 x 68 x 22 mm (3.82"x2.68" x 0.87")
Weight	0.090 Kg

IN THIS MANUAL:

1. INTRODUCTION

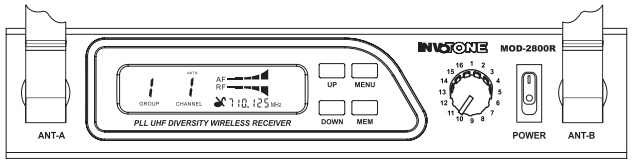
Thank you for your purchasing the MOD-2800 INVOTONE wireless system.

Your MOD-2800 is based on a new revolutionary UHF PLL (phase loop locked) circuit which allows the simultaneous use of more than 80 channels (depending on your country regulations). The Receiver is provided with 2 antennas that constantly monitor the incoming RF (radio frequency) signal and send only the stronger RF signal to the MOD-2800 Receiver. Your MOD-2800 system is full of key features such as AUTO-SCAN function, battery level monitoring and others.

Enjoy your MOD-2800 and make sure to read this Manual carefully before operation!

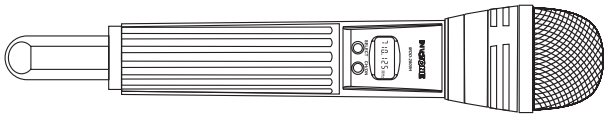
Depending on the options available your MOD-2800 system consists of:

1. MOD-2800R, PLL UHF Diversity Receiver



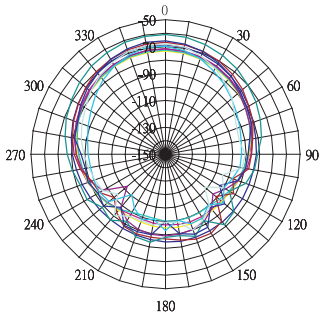
Either one of the following transmitters:

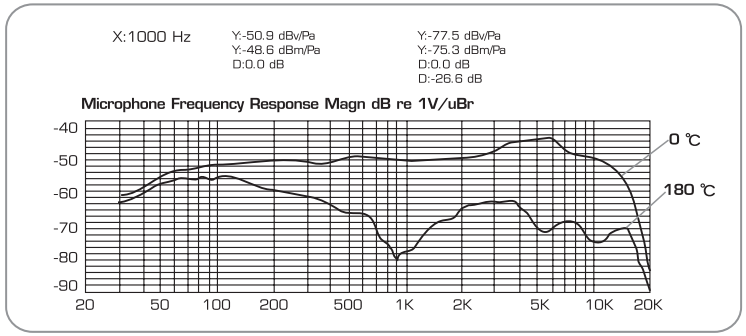
MOD-2800H: It is a handheld transmitter with rubberised finished and level hi-fi microphone capsule.



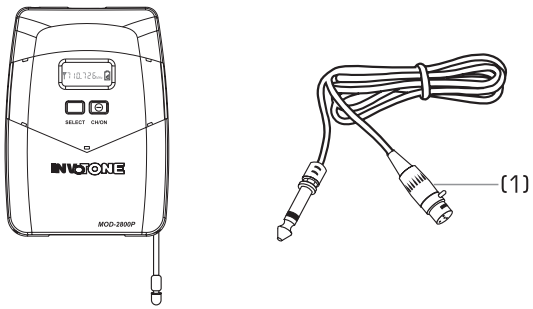
1. INTRODUCTION

Type: Dynamic Mic.
Frequency response: 50 Hz~16 kHz(±3 dB)
Impedance: 300Ω ±20% at 1kHz
Sensitivity: -71 dB ±3 dB
Direction: Omni-directional





MOD-2800P: A bodypack transmitter with belt clip. The bodypack transmitter will come with either:



(1). A cable to be connected to an electric guitar or bass.
(2). A Lavalier Microphone. This is the little "bug" to be clipped on ties, shirts, nipples, etc.
(3). A Headset Microphone that is fit like a pair of sunglasses so that the Player has both hands free to play an instrument, dance, shot the Audience, etc.

6. ANNEX

Frequency Band Selection

Most countries closely regulate the radio frequencies used in the transmission of wireless information. These regulations state which devices can use which frequencies, and help to limit the amount of RF(radio frequency)interference in all wireless communications. To be flexible enough to operate worldwide, MOD-2800R Wireless receivers are available in a number of models, each with a unique frequency range. Each frequency range, or band, spans up to 16 MHz of the wireless broadcast spectrum. Available bands are:

F5: 710.000-726.000(710-726)MHz

	Group1	Group2	Group3	Group4	Group5	Group6	Group7	Group8
1	710.125	710.325	710.525	710.725	710.925	711.125	711.325	711.525
2	711.725	711.925	712.125	712.325	712.525	712.725	712.925	713.125
3	713.325	713.525	713.725	713.925	714.125	714.325	714.525	714.725
4	714.925	715.125	715.325	715.525	715.725	715.925	716.125	716.325
5	716.525	716.725	716.925	717.125	717.325	717.525	717.725	717.925
6	718.125	718.325	718.525	718.725	718.925	719.125	719.325	719.525
7	719.725	719.925	720.125	720.325	720.525	720.725	720.925	721.125
8	721.325	721.525	721.725	721.925	722.125	722.325	722.525	722.725
9	722.925	723.125	723.325	723.525	723.725	723.925	724.125	724.325
10	724.525	724.725	724.925	725.125	725.325	725.525	725.725	725.925

Remark:

1. The values with underlines should be scanned manually by adjusting the UP/DOWN key.
2. The following channels can be used simultaneously without any interference.

Group 1-1: 710.125
Group 2-2: 711.925
Group 3-4: 715.325
Group 5-8: 722.125
Group 8-6: 719.525
Group 1-10: 724.525
Group 2-5: 716.725
Group 2-6: 718.325
Group 8-8: 722.725

5. MODELLING TECHNOLOGY

Here is a List and description of the MODELS available on theINVOTONE Receivers:

MODEL 1: FLAT- In this position, the Modeller is in bypass mode. The INVOTONE Modeller is not adding any character to the Audio Output

MODEL 2: CONFERENCE- To be used during Meetings. Especially made for speech and to avoid the typical boominess of many wireless microphones used for such purpose.

MODEL 3: BROADCAST- This Model will add a certain character to the signal. It is typical of the Male Announcers through a solid state Transmitter.

MODEL 4: WARMTH- Good for Lead Vocalist Male and Female. It will make the Male voice warmer and the Female voice more body.

MODEL 5: DE-ESSER- The name tells everything. Use it to de-emphasize the sibilants, like the letter sound 's', for example, from your vocals.

MODEL 6: VINTAGE RADIO- Old tube based Receivers made the Announcer voice sound like... yeah, we call it Vintage. Try it for a smooth satin voice. Ideally used for speech, but we found some other neat applications in the studio as well!

MODEL 7: MID-WARMTH, a moderate voice enhancement making use of Bass enhancer.

MODEL 8: GROOVY- to add a touch of groove to Male and Female Lead Vocalist. Perfect for Blues.

MODEL 9: SHARP- makes human voice quite crispy. Perfect for voice poor in high frequencies or if you get a cold...

MODEL 10: KARAOKE- yes, microphones are used in a very peculiar way in Karaoke Bars and Venues. Usually the sound systems there are poor. Use this Model to add high frequencies and have your voice sound like a Pro's!

MODEL 11: PIANO BAR- it similar to the Karaoke Model but we have also added key low frequencies to give the voice more body.

MODEL 12: HEAVY METAL- This model will make your voice sound very aggressive. Good for Rock & Roll and if you have an argument with your Mother in law...

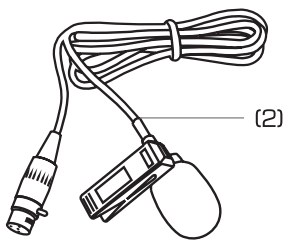
MODEL 13: DISCO- It is similar to the Heavy Metal model but more tailored for Disco Music.

MODEL 14: CHOIR- Selected frequencies have been manipulated to make this Model suitable for more than one vocalist when singing in a choir

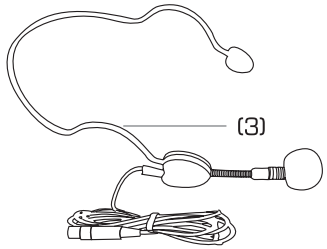
MODEL 15: FEMALE VOICE- Female Singers voices present a frequency response that is quite different from the Male voice. This Model gently adds certain low frequencies to make the female voice more consistent and at the same time will make the highest frequencies of the female voice more sparkling and defined.

MODEL 16: PIANO BAR CHOIR- It is a combination of the Karaoke Model and the Piano Bar Model. Good when more than one voice is singing along together.

1. INTRODUCTION



LM-10, Clip microphone
Preset Impedance: 680 ohm
Freq. Response: 50-12 kHz;
Sensitivity: -65 dB ±3 dB at 1kHz
Directional: Φ12x180 mm(Φ0.47"x7.1")
Weight: 22g(0.049lb)



HM-38, Condenser microphone
Preset Impedance: 600 ohm
Freq. Response: 80-12 kHz;
Sensitivity: -68 dB+/-3 dB at 1kHz;
Directional: Uni-directional;
Weight: 52g (0.12lb)

2. FEATURES

- FEATURES OF MOD-2800R, PLL UHF DIVERSITY RECEIVER

▲User Friendly interface including a large blue back lighted display and an intuitive MENU system for easy operation.
▲Auto Scan Function
▲2 Antennas and switching diversity circuit
▲Selector for three different audio output levels depending of kind of mixer used
▲Squelch control to minimize RF interferences

- FEATURES OF MOD-2800H AND MOD-2800P TRANSMITTERS

▲Soft touch rubberised painting to avoid handling noise
▲Rechargeable battery design
▲Selector for three different output levels depending of kind of receiver used
▲LCD display
▲Battery status display
▲Mute function (this function is very welcomed by Politicians...)
▲Lock function to avoid miss action during a live performance

Each MOD-2800 System complies with EMC regulations and includes 144 different channels. (Not all channels may be available in certain Countries depending on local regulations).

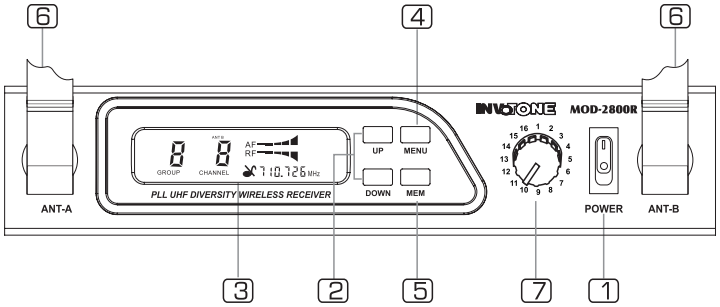
They are manufactured under ISO9000:2000, ISO/TS 16949:2002 quality management system.

3. CONTROL ELEMENTS

Ok, enough with numbers. Let's start to familiarize with your MOD-2800 System. First of all, the MOD-2800R Receiver:

3.1 MOD-2800R, PLL UHF Diversity Receiver

THE FRONT PANEL



1 Power Switch

It switches your MOD-2800R ON and OFF.

2 UP/DOWN Keys

You can adjust the right values through these two keys once the MENU is activated.

3 DISPLAY

All the key functions of your MOD-2800 Receiver are monitored through this big, amazing, blue back lighted display such as: Radio Signal, Audio Signal, Battery life (absolutely with some little magic you can see the battery life of the transmitter directly on the receiver!), group value, channel value and the selected frequency.

4 MENU Key

Via this key you can activate the desired function.

5 MEM Key

You can enter the selected frequency via this key, moreover you can also activate the AUTO-SCAN function via the same key.

6 Antenna Input Sockets

You must connected the two cute antennas you found in the box if you want to get proper RF transmission.

7 Models Preset Knob

Via this knob, you can select the desired effect. There are totally 16 options for your operation. For more details, please refer to chapter 5.

5. MODELLING TECHNOLOGY

-Modelling Technology for Wireless Microphones.

This document applies to all INVOTONE Wireless Receivers used in conjunction with INVOTONE Handheld and Bodypack Transmitters

Fundamentals: INVOTONE has created and integrated a wireless microphone system offering 16 modelling presets resulting in a range of tonal response for a wide variety of applications. Until this innovative introduction made for the first time in the world in a wireless system by INVOTONE, wireless systems consisting of receiver and microphone transmitters produced a single sound pattern. Each microphone capsule design, because of the laws of physics, features its own frequency response and adds a certain tonal colour to the signal it transmits. If you do not like the colour added, you must change the microphone section of your transmitter, much like a painter chooses a different colour from his palate. Many brands today offer several different microphone capsules for their wireless systems but this flexibility is far behind the wide choice of tones or "models", as we call them at INVOTONE.In fact, a specific model of wireless microphone may be used by a male vocalist or female vocalist during a live performance, by a Priest in a church service, by a speaker during a seminar, by and aerobics teacher during a training lesson, by a DJ, by a choir, by an announcer, by an auction director, we could go on and on forever with endless applications.

It is now evident that each one of these users would benefit from a different tone or "model". But even the same user would like to get a different voicing or "model" depending on the style he is singing. What model serves the music best? It's fair to say that it will be different whether he's singing Rock, Blues, or Folk and, of course can also change from song to song. It is unlikely to buy several different microphone capsules in order to get different tone or "model" depending of the kind of use of performance. This would be unpractical, since it would be impossible to change a microphone capsule during a performance, not to mention the cost involved.

INVOTONE has therefore created and integrated in some of its wireless receivers a range of MODELS. Using these 16 different MODELS the user can select different sound patterns simply with the turn of one knob. There are preset MODELS for male and female Vocalists, DJ, Speakers, Announcers, and more.
In a few words, with the INVOTONE modelling technology applied to wireless systems, the User can "fine tune" the sound of his microphone in 16 different ways.

4. OPERATION

- LOCK Function

You don't want accidental change of frequency or other setting in the middle of a performance, do you? Any miss-operation during a live performance can be easily avoided thanks to the LOCK function. With the LOCK function ON no further change of setting is allowed until the Transmitter is unlocked. To access the LOCK Menu, press the CH/ON key four times and then press the SELECT key to lock or unlock the Transmitter Settings. Your choice of setting will automatically be saved into the Transmitter in a few seconds. The blue display shows "lock" and "unlock" depending on the operating mode.

Fig 10: LOCK

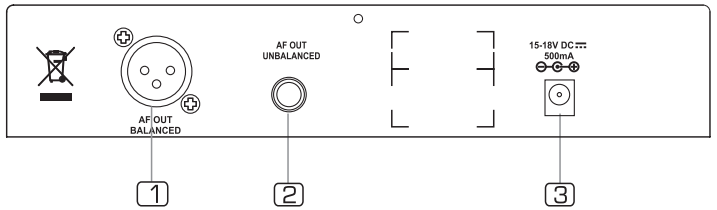
Fig 11: UNLOCK

- Mute Function

Sometimes, there are things that you want to tell to your Friends on stage or your nearby Companion during a Meeting but not necessarily to the rest of the world especially if you are ON LIVE on CNN... A smart feature on your Transmitter allows you to easily MUTE the microphone so you are free to talk to the people next to you without the rest of the world hearing what you say. To enter into MUTE function simply press the SELECT key for a few seconds and the Transmitter will mute any audio signal going to the Receiver. Press SELECT again for a few seconds and you will UNMUTE the Transmitter.

3. CONTROL ELEMENTS

THE REAR PANEL



1 Audio Output XLR

To connect a balanced cable with XLR connector (we forgot to tell you that although your MOD-2800 system is wireless, you will still need to connect the receiver to your Mixing Desk and to a wall plug!)

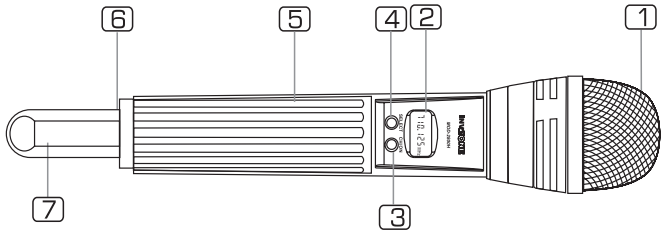
2 Audio Output Jack

To be used with an unbalanced cable and standard 1/4" mono jack.

3 DC Input

You can connect the supplied AC Adapter to this socket.

3.2 MOD-2800H, Handheld Transmitter



1 Front Grill

This spring steel mesh grill will protect the microphone capsule during a live performance. Especially made for heavy metal players, alcohol, drugs, etc.

2 LCD Display

This nice blue LCD will indicate the current operation status.

3 CH/ON Key

If you press this key for a few seconds, your Transmitter will be switched ON or OFF. Once you have switched the unit ON, just press this key again slightly and you can edit various parameters, such as CHANNEL, GROUP, RF POWER LEVEL and LOCK/UNLOCK. Once you are in the LOCK position, no further operation is allowed. And in a few seconds, the display will show the current selected frequency (In MHZ). Battery level will also be shown.

3. CONTROL ELEMENTS

4 SELECT Key

Once you are in operation mode, you can access this key to edit certain parameters. Press this key for a few seconds and the unit will enter in the MUTE mode. (In this way, you can tell your Bass Player what you think about the Sound Engineer without anybody knowing that!). Press it again for a few seconds and you will unmute the unit.

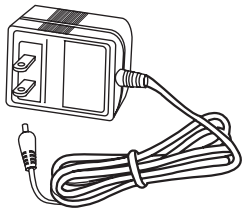
5 Battery Compartment

This unit may be powered from one pair of dry or rechargeable batteries, um3 size AA 1.5V.

6 Charge Jack

With the rechargeable batteries putting inside, use the charger supplied to recharge the batteries.

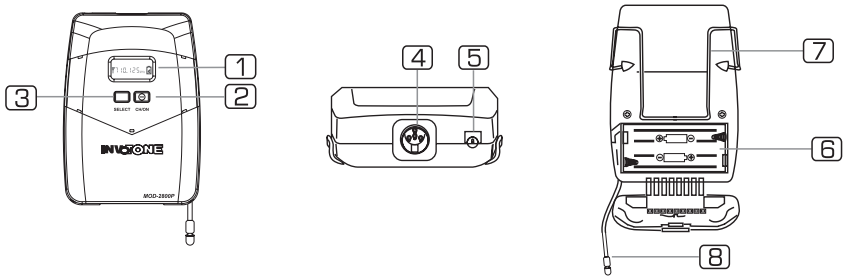
※Note: This charger is for buyer's option. You can buy it from your dealer.



7 Antenna

The Antenna of your MOD-2800H is integrated in the microphone body. Please do not cover the antenna for optimal RF transmission. We also include 7 different color antenna covers for multiple operation of frequency.

3.3 MOD-2800P, Body Pack Transmitter



4. OPERATION

Note: Why INVOTONE wireless systems come with 80 different frequencies? Not because you will need to use 80 different microphones at the same time. It is unlikely that you will use more than 8 systems at the same time so why 80 frequencies? This mainly depends on Countries regulations. We offer frequencies from 710 to 726 MHZ. Some of these frequencies are illegal in certain Countries and vice versa. Offering such a wide range of frequencies we make sure that each single Country on the planet will have more than enough choice of frequencies available. Not only: A certain frequency is close to the frequency generated by lighting equipment, a computer, a fax machine and so on. Therefore, thanks to the large number of frequencies available you can easily switch to another frequency that is interference-free.

In your Transmitter, there are 8 frequency bands or GROUPS. Each Group contains 10 channels according to EMC regulations.
To select a Group you must first switch your Transmitter ON by pressing the CH/ON key for a few seconds until you hear the beep and the blue display is lighted. Then press the CH/ON key again slightly and you will access the GROUP menu. At this point use the SELECT key to change the GROUP value from 1 to 8. Now, to access the CHANNEL menu, press again slightly the CH/ON key two times and use the SELECT key to change frequency from 1 to 10. Your setting will be automatically saved in a few seconds and the display will go back to the main menu showing the operating frequency.

Note: Once you have changed the operating frequency on your Transmitter, you need to activate the SCAN function in your MOD-2800R Receiver. In this way the Receiver with synchronize automatically on the Transmitter frequency.

- **RF Output Power Select**

Your Transmitter can operate on three different levels of output power. These are different from the Handheld Model and the Bodypack model.

For the Handheld model the levels are
- PL 0, the output power is -2 dBm
- PL 1, the output power is 3 dBm
- PL 2, the output power is 5 dBm

And for the Bodypack version the levels are
- PL 0, the output power is -2 dBm
- PL 1, the output power is 3 dBm
- PL 2, the output power is 10 dBm

position the transmitter nearby the receiver.

4. OPERATION

No.	Squelch Threshold
1	-100 dB
2	-96 dB
3	-93 dB
4	-90 dB
5	-87 dB
6	-85 dB
7	-83 dB
8	-81 dB
9	-79 dB
10	-77 dB

Table

Fig 4

4.2 For the MOD-2800H/2800P transmitters

Press the CH/ON key for a few seconds and the transmitter will be powered ON.
At this point the blue back lighted display will show:

- The frequency at which the unit is operating
- The Battery Status

Fig 5

And now that you know how to operate your MOD-2800R Receiver, let's learn how to use the MOD-2800 Transmitters. The following instructions apply both to the handheld version and to the bodypack version.
There are 2 keys on the Transmitter labelled CH/ON and SELECT.
With the Transmitter switching ON, you can slightly press the CH/ON key again and you will access to the following parameters:

- Preset Group

Fig 6

- Preset Channel

Fig 7

3. CONTROL ELEMENTS

1 LCD Display

This nice blue LCD will indicate the current operation status.

2 CH/ON Key

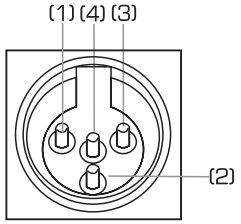
If you press this key for a few seconds, your Transmitter will be switched ON or OFF. Once you have switched the unit ON, just press this key again slightly and you can edit various parameters such as CHANNEL, GROUP, RF POWER LEVEL and LOCK/UNLOCK. Once you are in the LOCK position no further operation is allowed. And in a few seconds, the display will show the current selected frequency (in MHZ). Battery level will also be shown.

3 SELECT Key

Once you are in operation mode, you can access this key to edit certain parameters. Press this key for a few seconds and the unit will enter in the MUTE mode. (In this way, you can tell your Bass Player what you think about the Sound Engineer without everybody knowing that!). Press it again for a few seconds and you will unmute the unit.

4 Mini 4P Connector

This connector is used to connect the unit with the clip microphones. for example, HM-38 condenser microphone or LM-10 clip microphone.



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

5 Charge Jack

With the rechargeable batteries put inside, use the charger supplied to recharge the batteries.

6 Battery Compartment

This unit may be powered from one pair dry or rechargeable batteries, Um3 size AA 1.5V.

7 Belt Clip

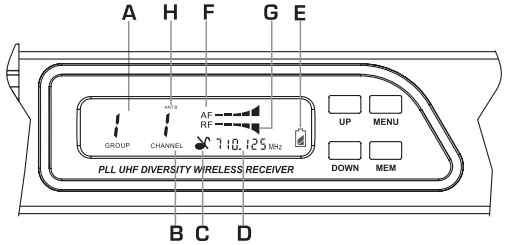
It is the detachable belt clip for easy carry during the live applications.

8 Antenna

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

OK, if so far you remember all the functions and features of your MOD-800 system you are ready to operate the Unit. Let's start from the Receiver:

4.1 For the MOD-2800R, PLL UHF Diversity Receiver



A. This indicates the Frequency Group. There are 8 Groups and each Group includes 10 different channels (frequencies).

B. This indicates the Channel Number. There are 10 channels for each one of the 8 Groups for a total of 80 channels.

C. MUTE: If the Display shows ♪, the Mute function is disengaged. If the display shows 🔇, the Mute function is engaged.

D. This shows the selected frequency.

E. This shows you the remaining life of the Battery of your Transmitter. 3 segments means full life, 1 segment means it is time to replace or recharge the battery. If this icon disappeared, it means that your transmitter is switched OFF.

F. This bar(AF) indicates the level of the audio signal coming into the Receiver.

G. This bar(RF) indicates the level of radio signal coming into the Receiver.

H. This indicates which of the 2 antennas is operating. Radio signal will automatically switch from Ant 1 to Ant 2, indicating that the diversity circuit is operating properly.

- And now, let's see the four keys in detail:

MEM key: The first function of this key is to activate the AUTO-SCAN function. Suppose that you have more than one INVOTONE transmitter in front of you with your MOD-2800R Receiver and you want to start to operate one of them with your MOD-2800 Receiver.

First of all, you should turn your Transmitter ON, then with your MOD-2800R Receiver turned ON, press the MEM key at least for one second. Your MOD-2800R will automatically look for the frequency where your INVOTONE Transmitter is operating. It will scan all the 8 Groups and Channels for a total of 80 frequencies available.

During this process, the audio output will be muted and the display will show you the Group Number scanned, the channel number scanned and the frequency that is being scanned. Once the transmitter frequency has been found, the display will flash and the RF bar indicator and Battery life icon will appear. Press MEM again slightly and such frequency will be stored into your MOD-2800R Receiver. Please note that frequencies can be scanned manually using the UP/DOWN key. See the Annex for more details.

MENU key: This key activates several functions:
Press this key slightly once and you will get into the MANUAL SELECT for the 80 frequencies. When the GROUP indicator is flashing, you can press the UP/DOWN keys to select manually the desired Group. Then you can press the MEM key to store this setting.

Press the MENU key twice and the CHANNEL indicator will flash. Use the UP/DOWN keys to selected the desired channel and then press MEM key to store this setting.

Press the MENU key three times and you can adjust the OUTPUT LEVEL. Using the UP/DOWN keys you have the choice to select three different levels:

PL 0 indicates that the output level is110mV
PL 1 indicates that the output level is 55mV
PL 2 indicates that the output level is 25mV

Fig 1

Note: This function is only available when using the XLR balanced output.

Press the MENU key four times and you will get into the MUTE function. Use the UP/DOWN keys to mute/unmute the Unit.

Fig 2 mute function off

Fig 3 mute function on

Press the MENU key five times and you will activate the SQUELCH function. To squelch or not to squelch, this is the issue...

Squelch is a complicated name to express a simple concept: The threshold above or below that a signal is made pass through the receiver or not.