SDR-2716
WT-716/WM-716
VHF PLL 16 CHANNEL WIRELESS SYSTEM
OPERATING MANUAL

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1. Introduction

Congratulation in owning one of these state-of-the-art PLL Synthesized 16 channels frequency agile VHF high band (SDR-2716) professional wireless receivers. According to their frequency range, these receivers are designed to be matched with ITEC VHF high band PLL Synthesized transmitters (handheld or beltpack).
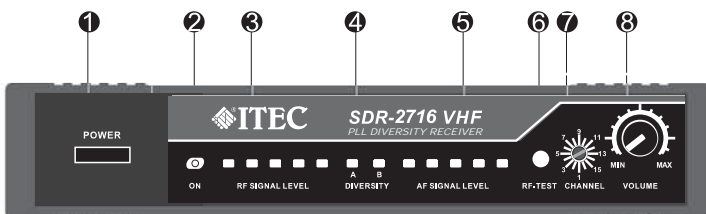
The standard combinations are as follow:
SDR matches WT, or WM

As this is a shared operating manual of SDR-2716, we suggest you to read this operating manual thoroughly in order to familiarize with each part of function before using.

2. Receiver
2.1 Diversity Receiver ITEC SDR-2716

1. Power switch
2. Power on indicator
3. RF signal indicator
4. Diversity indicator
5. AF signal indicator
6. RF test button
7. Channel selector
8. Volume control
9. Antenna B socket
10. XLR (balanced) audio output
11. Unbalanced audio output
12. Squelch (SQ) control
13. DC IN jack
14. Antenna A socket

2.1.1. Receiver Installation

For best operation, the receiver should be at least 1m above the ground and at least 1m away from a wall or metal surface to minimize reflection. The transmitter should also be at least 1m away from a wall or metal surface to minimize reflection. The transmitter should also be at least 1m away from the receiver, as shown in Fig.1.

Keep antennas away from noise source such as motors, automobiles, neon light as well as large metal objects.
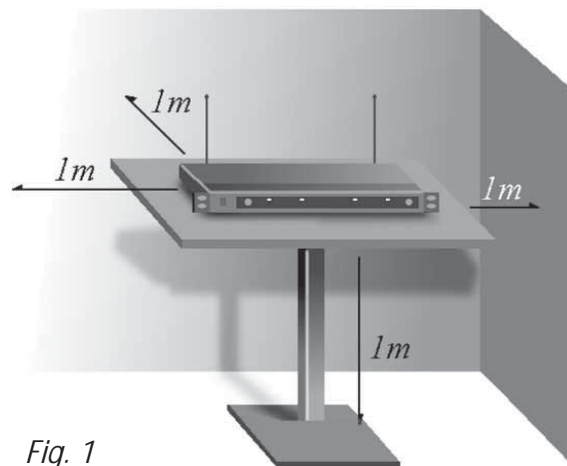
Fig. 1

2.1.2. Audio output connection

There are two audio outputs on the back of the Diversity SDR receivers. Mic-level balanced and Line-level unbalanced. Use shielded audio cable for the connection between the receiver and the mixer. If the mixer / amp is a 1/4" phone jack, connect a cable from the 1/4" unbalanced audio output from the receiver to the mixer / amp. If the mixer has an XLR input, connect a cable from the balanced XLR audio output from the receiver to the mixer input. Audio output connection is as Fig.2.
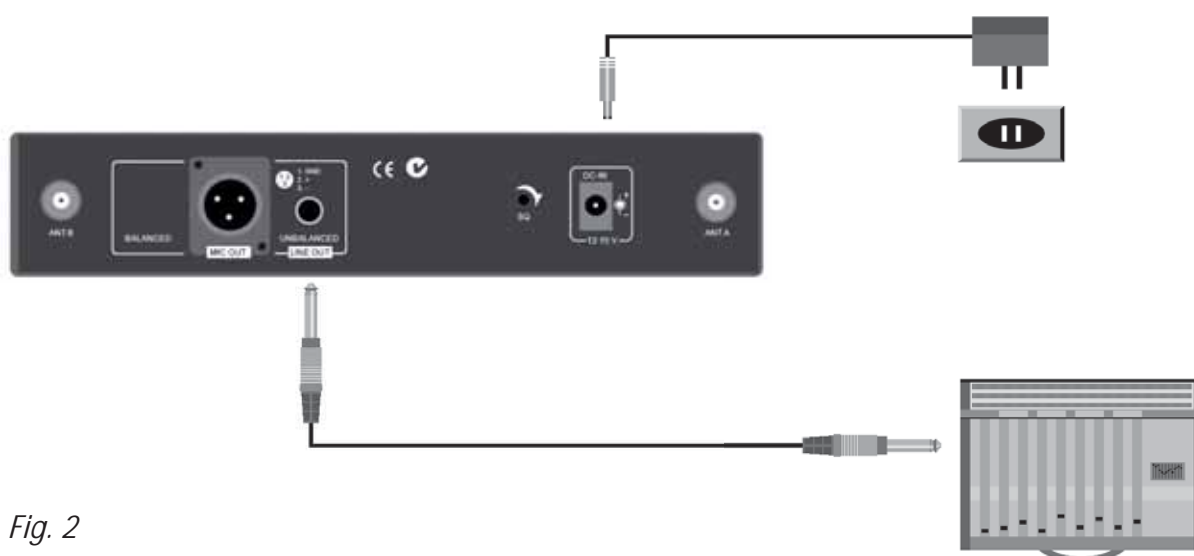
Fig. 2

2.1.3. Rack Mounting

SDR series are 1/2 19″ casing design and the specially designed 19″ rack mount adapter (MP-50) is available as optional purchase for customers' installation request. The installation instructions are shown as Fig. 3.
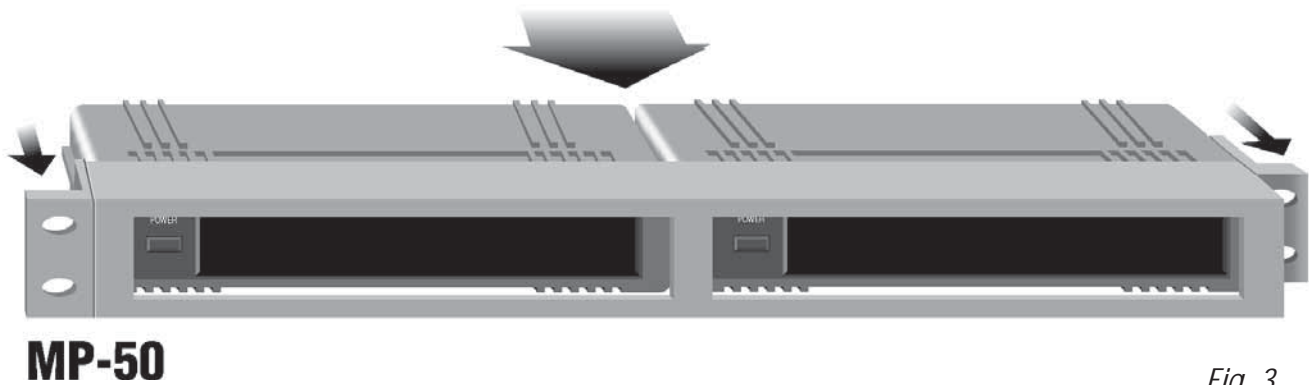
MP-50

Fig. 3

2.1.4. RF Interference

If you encounter receiving interference (from other than an operating TV station), often it can be overcome by adjusting the receiver's squelch control, as described on 5.2 (below).Please note that wireless frequencies are shared with other radio services. According to FCC regulations, wireless microphone operations are unprotected from interference of other licensed operations in the band. If any interference is received by any Government or non-Government operation, the wireless microphone must cease operation. The above statement is valid in the U.S.A.

2.1.5. Receiver Squelch control

The squelch control on the back panel of the receiver is preset at the factory, but can be adjusted if you must use the system in a high RF interference area. If there is audio output from the receiver when your transmitter is OFF, adjust the squelch control so the system will receive the signal from your transmitter but squelch or eliminate the unwanted background RF noise. This adjustment can cause a reduction in usable range of the wireless transmitter, so set the control to the lowest position which reliably mutes the unwanted RF signal.

3. Hand-Held Microphone WM716 (VHF)

1. Capsule with metal grill
2. Battery Good indicator (green)
3. Battery Low indicator (red)
4. Power on/off switch
5. Channel switch
6. Charging contacts

3.1. Battery

These two microphones require 3 pieces of „AA„ size batteries to operate.Please insert the batteries according to the correct polarity indication. Remove the cover to open the battery compartment as indicated in Fig.4.

Fig. 4

Caution

Many batteries are known to have leakage problem of conductive and corrosive liquid. Please observe the rule to remove the batteries if they are not to be used for a period of a few days.
Due to various unstandardized sizes (diameters) of „ AA „ batteries, this battery compartment is designed to accommodate the most commom Alkaline batteries only.

4. Belt-Rack Transmitter WT716 (VHF)

1. Battery status indicator
2. Power switch
3. Battery compartment
4. Charging point
5. Capsule
6. Mike clip

WT-716

Fig. 7

4.1. Channel selection and gain

Channel selector and gain adjustment are hidden in the designated cover in the front as shown in Fig. 7. To make channel selection and gain adjustment, please press the designated cover and flip it open. Channel selection can be made by rotating the selector with a small screw driver.Gain adjustment for Lavalier and Headset microphones can be done by adjusting the MT switch, whereas GT switch is for the gain adjust of electric Guitar and other high impedance line level inputs.

5. Frequency list

VHF SDR 2716/WM 716/WT 716

EUV-232

canal	frequency	canal	frequency
1	232.825	9	232.825
2	233.125	10	233.125
3	234.625	11	234.625
4	235.675	12	235.675
5	236.575	13	236.575
6	237.325	14	237.325
7	237.775	15	237.775
8	237.925	16	237.925

EUV-243

canal	frequency	canal	frequency
1	243.200	9	243.200
2	243.700	10	243.700
3	244.600	11	244.600
4	246.300	12	246.300
5	247.100	13	247.100
6	247.500	14	247.500
7	248.600	15	248.600
8	249.900	16	249.900

X	XXX.XXX	to prefer

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EG Konformitätserklärung
Declaration of Conformity

Hersteller/ Manufacturer	ITEC Tontechnik und Industrieelektronik GesmbH
Anschrift/ Adress:	8200 Lassnitzthal 300, Austria
Produktbezeichnung/ Product name:	Drahtlosmikrofone Wireless microphones
Type/ Type:	ITEC WM-716, WT-716

Das bezeichnete Produkt stimmt mit den Vorschriften folgender Europäischer Richtlinien überein, nachgewiesen durch die Einhaltung folgender Normen:

The above mentioned product has been manufactured according to the regulations of the following European directives proven throug compliance with the following standards:

Normen / Generic standards
EMC: EN 301 489-1: V 1.5.1 : 2004, EN 301 489-9: V 1.3.1 : 2002
Radio: EN 300 422-2: v.1.1.1 : 2000, EN 300 422-1: v.1.2.2 : 2000
Safety: EN 60065:2002

Notified Body CE 0682!

ING. WERNER LOIBNER
Name/Name

Geschäftsführer / Managing Director
Stellung/Position

2009-02-02
Datum/Date

Unterschrift/Signature

Diese Erklärung bescheinigt die Übereinstimmung mit den genannten Richtlinien, beinhaltet jedoch keine Zusicherung von Eigenschaften. Die Sicherheitshinweise der mitgelieferten Produktdokumentation sind zu beachten.

This declaration certifies compliance with the above mentioned directives but does not include a property assurance. The safety notes given in the product documentations, which are part of the supply, must be observed.

ITEC Tontechnik und Industrieelektronik GesmbH, A-8200 Laßnitzthal 300 / Austria / Europe
Tel.: +43 (0)3133/3780, Fax: +43 (0)3133/3780-9, ATU28706200, DVR: 0703109, HRB 3418 Landesgericht Graz, office@itec-audio.com

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GENERAL FEATURES OF THE SYSTEM	
Maximum Frequency Deviation	± 40 kHz
Frequency Response	50 Hz – 18 kHz
Harmonic Distortion	< 0,5 %
Signal-to-Noise Ratio	> 103 dB
SUPPLY VOLTAGE	
WT-716, WM-716	3 Alkaline batteries (AA) respectively 3 NiMH accumulators, 1800mAh
SDR-2716, SDR-716	12 – 15 VDC, circa 150 mA
RECEIVER SDR-2716	
Indicators	LED-chain for NF- and HF-levels, Diversity-display, Antenna A / B
NF-output MIC	XLR-M 3-poles, balanced, 150 mV / 600 ohms
NF-output LINE	Jack 6,3 mm, unbalanced, 1.5V / 15 kohms
Antenna connection	2 x TNC
Dimensions (W x H x D)	213 x 45 x 200 mm (9.5" / 1 HU)
Weight	0,75 kg
Included accessories	2 5/8 Lambda antennas, wall power supply 230 VAC / 12 VDC
Optional accessories	19" mounting adapter: Set 1 for one / Set 2 for 2 receivers
RECEIVER SDR-716	
Indicators	Diversity-display, Antenna A / B
All connections	Connector strip 3.96 mm, 2 x 10-poles
Dimensions (W x H x D)	78 x 38 x 152 mm
Weight	0,15 kg

MICROPHONES ◆ITEC