



XD-V70 Wireless



Advanced Guide

For single and multi-channel
operation of XD-V70 Wireless

ElectroPhonic Limited Edition - Rev A

Table of Contents

About The XD-V70 System	1•1
--------------------------------------	------------

XD-V70 Receiver	2•1
------------------------------	------------

User Interface.....	2•1
Front Panel LED Ladders	2•2
Mute	2•2
Antenna Management.....	2•3
Audio Outputs	2•4
Rack Mounting	2•5
Power Supplies	2•5

XD-V70 Wireless Microphone	3•1
---	------------

User Interface.....	3•1
Mic Capsules	3•3

Beltpack Transmitter	4•1
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User Interface.....	4•1
Inserting And Removing The Microphone.....	4•3
Pinout To TA4F Connector.....	4•3

Advanced Applications	5•1
------------------------------------	------------

Recommendations for best performance	5•1
Wi-fi.....	5•1
Near / Far.....	5•1
Cell Phone Interference.....	5•2
Batteries.....	5•2
SAR.....	5•3

Appendix: Specifications A•I

System A•1

V70 Handheld Transmitter..... A•2

V70 Beltpack Transmitter..... A•2

V70 Receiver..... A•3

ABOUT THE XD-V70 SYSTEM

- 24 bit digital converters
- Up to 120 dBA dynamic range, compander free
- DCL™ and PDP™ technologies eliminate audio interference and minimize dropouts
- Full bandwidth 10 – 20kHz frequency response
- 12 user selectable channels (for simultaneous use) always available, no intermodulation issues. No scanning for channels is required
- Quick setup- no gain, pads, squelch or level adjustments necessary
- “Future Proof” 2.4GHz ISM band operation prevents concerns from DTV/DSO/700MHz channel assignments and White Space Devices and avoids competition from high power transmitters such as commercial TV, mobile phone and public safety
- Real-time LCD indicators display critical performance indication including: operating channel, RF status, Link Status, Battery Life and Diversity Mode
- 2 x AA Alkaline batteries provide 8 hour operation on “high” power, 10 hours on “low” power

Supplied System Components

- half rack receiver (RX212)
- power supply; 9Vdc/500mA, input – 90 – 240 Vac (DC-1G)
- ½ wave rubber ducky antennas, pair (model RDrac)
- Rackmount kit (includes short and long rack ears, mounting screws and dovetail key)
- Front mount antenna kit (including BNC connectors and antenna cables)
- 50 ohm BNC termination plugs (pair)

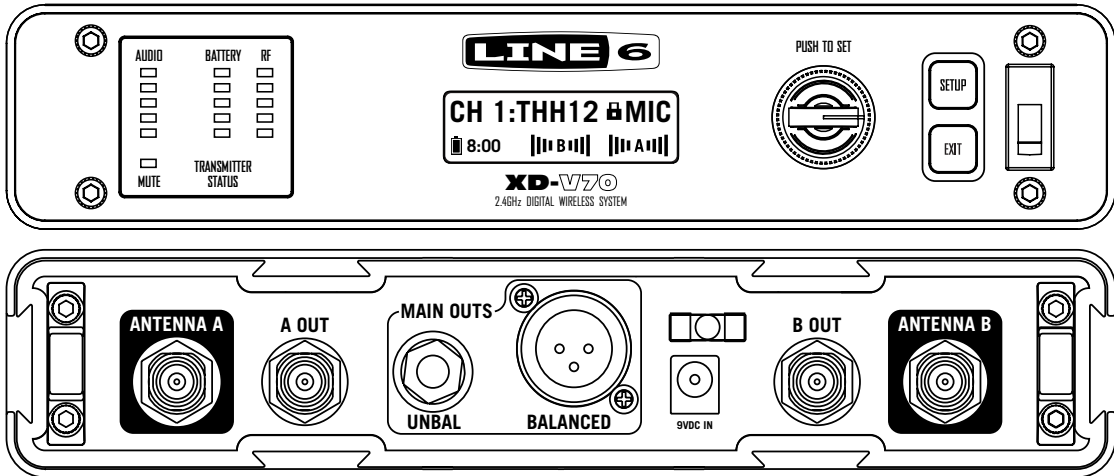
Handheld TX

- Handheld transmitter (THH12)
- Mic clip
- 2 x AA alkaline batteries
- Rugged zippered carry case

Beltpack System

- Beltpack transmitter (TBP12)
- LM4-T cardioid lav mic w/ clip and windscreen
- 2 x AA alkaline batteries
- Rugged zippered carry case

XD-V70 RECEIVER



2•1

User Interface

Pressing the “SETUP” button will select the setup mode. Rotate the “EDIT” knob to scroll through the menu options. Press the “EDIT” knob while the desired option is highlighted in the LCD to select it for editing. Rotate the “EDIT” knob to change the option then press the knob to save the change.

1. Channel Select

When selected the channel number displayed will be the currently selected receiving channel number. Push the encoder wheel and brackets will appear around the channel number. Turn the encoder knob to scroll through the 12 channels. When you arrive at the desired channel number, push the encoder knob to set it. The brackets disappear indicating the change is complete. The receiver will not actually switch to the new channel until the encoder knob is pushed. Press the EXIT button to exit editing

2. Find Open Chan

The “Find Open Chan” feature allows the user to determine what channels are available for use and what channels already have Line 6 XD-V or Relay transmitters operating on them. “TX” will appear above any channel number if it is occupied by an operating Line 6 XD-V or Relay transmitter. You may turn the encoder to the right or left and the underscore will follow. Place the underscore under any open channel, press the encoder to set, and that channel will be selected from this screen.

3. Environmental Filter

The Environment filter combines a downward expander with a dynamic high pass filter. It should be used to minimize handling noise and stage vibrations that are not intended to be a part of your program material. When the microphone falls below a fixed threshold the filter backs down the overall level by about 6 dB while simultaneously rolling off frequencies below 200 Hz. “Norm” is the default setting for musical performance. The filter may be bypassed entirely by selecting “off”, or may be increased by selecting “Talk” which is more appropriate for speech applications of the system.

Front Panel LED Ladders

The XD-V70 receiver features an array of LED ladders so that critical performance elements can be viewed when you are too far away to read the LCD screen.

Audio

This row shows the relative strength of the audio output. The more lights the stronger the signal at the output connector. This ladder will be off when the system is muted. It is normal in operation for these LEDs to move around between a single LED to all five being on.

Mute

A red LED will signal that the mute switch has been engaged on the transmitter and output to the rear panel output jacks will be turned off.

Battery

Each LED lit represents approximately 1.5 hours of remaining battery life when green. The bottom LED will light red when approximately two hours of operating time or less remain, and will flash red when approximately .5 hour remains. For more detailed information on remaining batter life, please read the LCD screens on the transmitter or receiver.

RF

These LEDs indicate Radio Frequency signal strength. When all five LEDs are lit green the receiver is receiving full signal. As signal strength is diminished, LEDs will begin to turn off. If you experience fewer than all five LEDs, one or more of the following steps should be attempted:

- Antenna placement should be moved closer to transmitter
- Move transmitter closer to receiver
- Provide a clearer line of sight between transmitter and receiver
- Place transmitter into high power mode
- Utilize external antennas when receiver and transmitter positioning cannot be improved

When no transmitter is turned on, these LEDs may light red indicating that there is some non-Line 6 RF in the area. This is usually not a concern. When an XD-V transmitter is turned on the receiver will lock to it and disregard the RF noise because of DCL™ technology.

Antenna Management

1. External Antennas

The XD-V70 system must be operated with external antennas. The supplied “rubber duckie” antennas should be connected to the BNC connectors marked “Antenna A” and “Antenna B” before operating. The user may wish to front mount the antennas by installing the supplied BNC bulkhead connectors in the long rack ear when installing in a rack. Connect the supplied antenna cables from the BNC terminals to the “Antenna A” and “Antenna B” connectors on the rear panel. Optional Line 6 P180 or P360 paddle antennas may be used in place of the standard “rubber ducky” antennas for increased performance or when the receiver cannot be physically placed in a location within range of the transmitter. See the Paddle antenna owner’s manuals for details.

2. Looping – Antenna Distribution System

If you are operating more than one system you may conveniently connect multiple receivers to a single pair of antennas using XD-V70’s built-in antenna distribution system. After attaching antennas to the primary receiver, simply use the supplied cables and connect from the BNC connector marked “A Out” to the “Antenna A” input of the second unit. Similarly, connect from the “B Out” on the primary unit to the “Antenna B” input on the second receiver. You may continue this process connecting up to 12 systems total. For

best results, no more than 6 receivers should be connected to a pair of antennas. The last receiver in the chain must be terminated by connecting the supplied “BNC terminators” to the last “A & B Outs”. It is highly recommended to use a 50 ohm low leakage type of antenna cable such as LMR-195 for these connections (such as the ones supplied with the XD-V70).

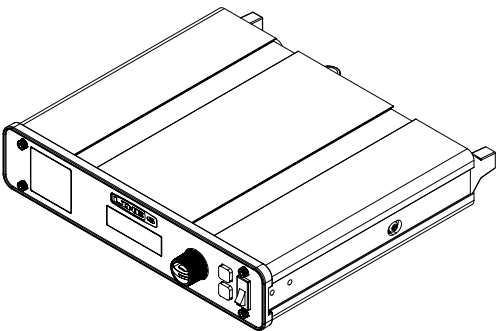
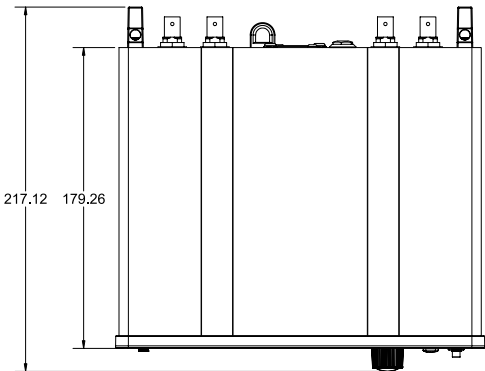
3.Terminating

The supplied “BNC terminators” should be installed on any unused “A & B Outs” for maximum performance.

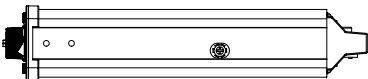
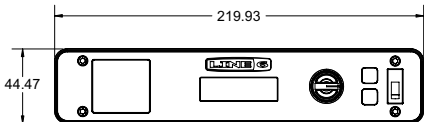
Audio Outputs

The XD-V70 receiver is equipped with both a balanced three pin XLR connector and an unbalanced ¼” output. These are “mic level” and are basically “unity” compared to the input microphone used. Treat the XLR connector just the way you would treat the output jack of a wired microphone. The ¼” is convenient should you wish to plug into an instrument amplifier or an unbalanced input on a mixer.

As different mic models are selected on the handheld transmitter the output level will vary just as it would if you were to “hot-swap” the wired versions of these mics .



ISOMETRIC REFERENCE VIEW



Rack Mounting

XD-V70 systems include all necessary hardware to make rack mounting simple. The unit can be setup as either left or right sided to make mounting in your rack convenient. A “long” and a “short” rack ear are screwed to the sides of a single receiver and fit in the dovetail slots.

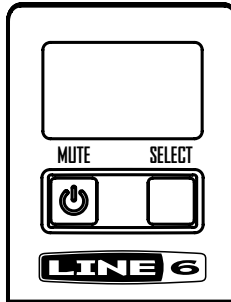
A “dovetail key” is provided to couple two receivers into a single rack pair. Slide the dovetail key into a side channel of receiver one from the rear towards the front. Then slide the second receiver to the other edge of the dovetail key and slide until the two front surfaces meet. A small tap with a mallet will seat the dovetail key into place flush with the rear panel. Install the “short” rack ear that was supplied with each receiver into the outside slots and you are ready to bolt the pair into a rack.

When additional “pairs” are constructed, the un-used dovetail keys can be used in the top and bottoms between the pairs locking them together into a single block.

Power Supplies

The XD-V70 is supplied with the Line 6 DC-1G power supply. The supply can be used with any AC input voltage from 90-240VAC.

XD-V70 WIRELESS MICROPHONE



3•1

The Line 6 XD-V70 handheld transmitter is constructed with a metal body and mic capsule and features a polycarbonate battery cover. It features six mic models based on some of the world's leading wired dynamic microphones, as well as the L6-DC7 Line 6 model. In addition, the mic capsule is interchangeable with many other popular models. An LCD screen provides real time performance data, and a pair of recessed buttons allow users to edit performance parameters while protecting from unintentional button pushes.

To turn on the microphone, press and hold the “POWER/MUTE” button for two seconds. The display light up, indicating that the unit is on. To turn the transmitter off, hold the “POWER/MUTE” button for more than two seconds. The display will momentarily say “OFF”, and the unit will power down.

The buttons on the microphone are intentionally recessed sufficiently to avoid the possibility of them accidentally being pressed while in normal use. As a result, it will require deliberate force downward into the button cavities in order to make the buttons function.

User Interface

Basic operation: Press and hold (for two seconds) the “SELECT” button to enter the edit mode. once in edit mode press the “SELECT” button to advance edit screens. Press the “POWER/MUTE” button to advance the adjustable parameters.

Transmit Channel (“Chan”)

Press and hold the “SELECT” button for two seconds to enter the edit mode. The LCD backlight will illuminate and the LCD screen will flash the current transmit channel. Each press of the “POWER/MUTE” button will advance through the 12 user channels, however the transmit channel will not be activated until the “SELECT” button is again

pushed, or no further action occurs for several seconds causing the edit time out to return the user to the main screen.

RF Power (“Power”)

The second push to the “SELECT” button will advance the user to the Transmit Power high/low select page. If the anticipated range usage falls short of about 100 feet, it is recommended to switch the Tx power range to “low” as it will conserve battery life and reduce RF interference to other devices. If sufficient range is not possible in low power mode then the user should switch up to high power mode. Press the “POWER/MUTE” button to toggle between the two power modes.

Microphone (“Model”)

There are seven available mic models for the user to choose from in this screen. The models are labeled in the display as follows:

Display	Model based on*	*All product names used in this webpage are trademarks of their respective owners, which are in no way associated or affiliated with Line 6. These trademarks of other manufacturers are used solely to identify the products of those manufacturers whose tones and sounds were studied during Line 6’s sound model development.
58	Shure® SM58®	
b58	Shure® Beta 58A	
835	Sennheiser® e 835	
41	Audio-Technica® AE4100	
767	Audix® OM5	
o5	Electro-Voice® N/D767	
L6	Line 6 optimized model	

Pushing the “POWER/MUTE” button will scroll through the model choices, and they may be auditioned in real time. Switching models will affect the frequency response, the proximity effect, and the output level at the receiver output just as though you were to “hot-swap” the wired mics that the models are based on. Mic models do not change the basic cardioid polar pattern of the microphone. Should a different polar pattern be desired, third party capsules may be used (see the section on mic capsules below).

Transmitter Name (“Name”)

The default for the name feature is off. Pressing the “POWER/MUTE” button and selecting “On”, advances the user to the naming screen. Here you may scroll through the alpha-numerical list by pressing the “POWER/MUTE” button and assign up to 6 characters (A-Z, blank space, -, and 0-9 are available) to name the transmitter. Pressing “SELECT” advances the user to the next character to the right. This name will be transmitted to the receiver, where it will be displayed in the receiver’s LCD window allowing easy match-up of transmitter to receiver. When the name feature is off, the receiver will show the model name of the transmitter (e.g., “THH12” for the handheld microphone).

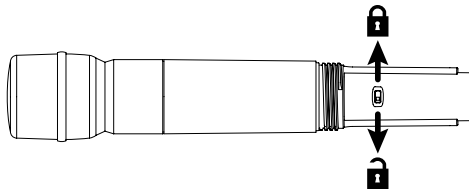
Exit Edit Mode

Pressing and holding the “SELECT” button stores the performed edits into the microphone’s memory. The edits are remembered when powering down and then turning back on, and when the batteries are replaced. They are also remembered should the batteries die during a performance. If no actions are performed for 10 seconds, “time out” will occur and the transmitter will automatically exit edit mode (and save any edits that had been made).

Mute Function

While not in Edit Mode, press the “POWER/MUTE” button for approximately one second to initiate the mute function. Press again to return to active mode. The LCD will remain illuminated while in Mute mode.

Lock Out Switch



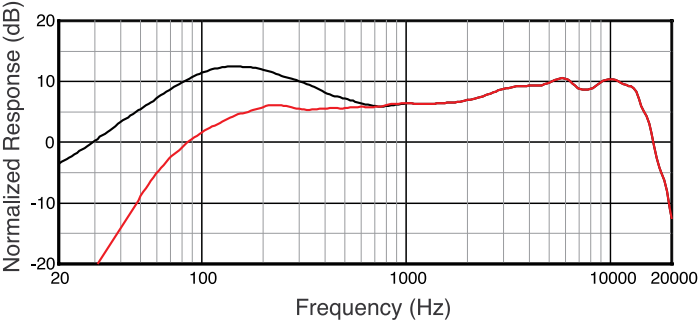
A small slide switch is provided under the battery cover and behind the battery compartment for user lockout. Sliding the switch locks out all button functions on the top panel including channel selection, muting and power off. If the switch is engaged before the power is turned on the performer is allowed to turn on the transmitter. At that point all button function is locked until the switch is physically reset.

Mic Capsules

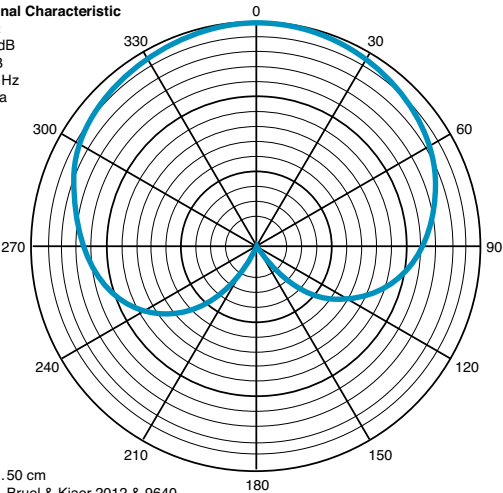
Certain third party wireless mic capsules may be installed in place of the Line 6 Mic capsule, offering users even more flexibility in choosing performance characteristics and

for pattern control. Approved elements include Shure® SM58, Beta58 and Beta 87a capsules and Heil RC-22 and RC-35 capsules. When a third party capsule is used, the internal Line 6 mic modeling is disabled. Performance and level will be determined by the output of the installed capsule. The output from the capsule should not exceed 3.6V p-p to insure best performance.

Pattern & freq response L6-DC7 model shown [1" (black) and 18" (red)]

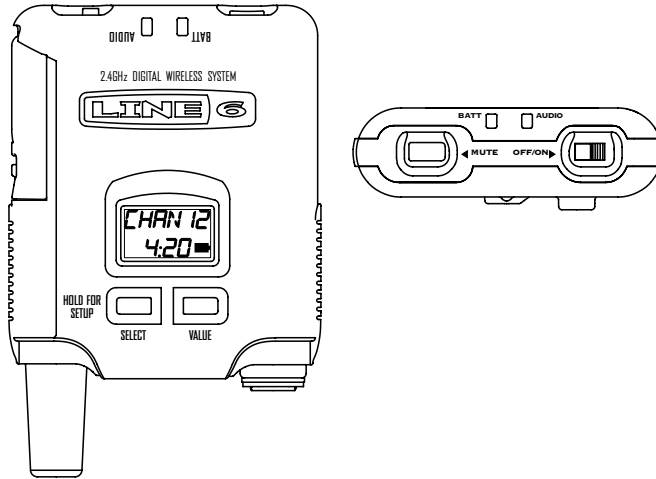


Microphone Directional Characteristic
Type:250Ω
Top Level:57.8 dB
Range:30 dB
Frequency:1000 Hz
Source Level:..0.1 Pa



Measure Distance.....50 cm
Test InstrumentBruel & Kjaer 2012 & 9640

BELTPACK TRANSMITTER



4•1

User Interface

Basic operation: Press and hold (for two seconds) the “SELECT” button to enter the edit mode. once in edit mode press the “SELECT” button to advance edit screens. Press the “VALUE” button to advance the adjustable parameters.

Transmit Channel (“Chan”)

Press and hold the “SELECT” button for two seconds to enter the edit mode. The LCD backlight will illuminate and the LCD screen will flash the current transmit channel. Each press of the “VALUE” button will advance through the 12 user channels, however the new transmit channel will not be activated until the “SELECT” button is again pushed, or no further action occurs for several seconds causing the edit time out to return the user to the main screen.

RF Power (“Power”)

The second push to the “SELECT” button will advance the user to the Transmit Power high/low select page. If the anticipated range usage falls short of about 100 feet, it is recommended to switch the Tx power range to “low” as it will conserve battery life and reduce RF interference to other devices. If sufficient range is not possible in low power mode then the user should switch up to high power mode. Press the “VALUE” button to toggle between the two power modes.

Transmitter Name (“Name”)

The default for the name feature is off. Pressing the “VALUE” button and selecting “On”, advances the user to the naming screen. Here you may scroll through the alpha-numerical list by pressing the “VALUE” button and assign up to 6 characters (A-Z, blank space, -, and 0-9 are available) to name the transmitter. Pressing “SELECT” advances the user to the next character to the right. This name will be transmitted to the receiver, where it will be displayed in the receiver’s LCD window allowing easy match-up of transmitter to receiver. When the name feature is off, the receiver will show the model name of the transmitter (e.g., “TBP12” for the handheld microphone).

Exit Edit Mode

Pressing and holding the “SELECT” button stores the performed edits into the microphone’s memory. The edits are remembered when powering down and then turning back on, and when the batteries are replaced. They are also remembered should the batteries die during a performance. If no actions are performed for 10 seconds, “time out” will occur and the transmitter will automatically exit edit mode (and save any edits that had been made).

Mute Function

Press the “MUTE” button for approximately one second to initiate the mute function. Press again to return to active mode. The LCD screen will remain illuminated while in Mute mode.

Lockout Switch

After the transmitter is powered up, simultaneously press and hold the “SELECT” and “VALUE” buttons to lock the beltpack transmitter from unauthorized editing by performers. In Lockout mode no changes can be made to the user interface, including channel selection, muting or power on/off. The LCD screen will show “LOCKED” and a small lock icon will appear in the bottom left of the screen. To return to active, again press and hold simultaneously the “SELECT” and “VALUE” buttons.

Inserting And Removing The Microphone

Plug the TA4 connector into the input jack on the beltpack transmitter. To remove the mic, push in the locking button and carefully pull the plug out while holding it by the body. Avoid pulling the cable.

LM4-T Microphone Specs

Element: Back Electret Condenser

Polar pattern: Uni-directional

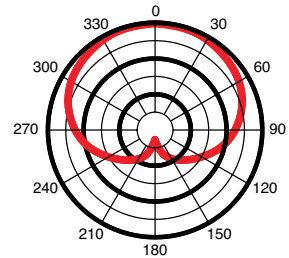
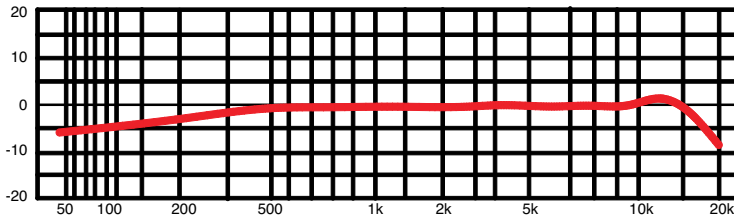
Frequency response: 50Hz – 16kHz

Sensitivity: -46dB, +/- 3dB (0dB=1v/pa @ 1kHz)

Output Impedance: 680 ohms (+/- 30%)

Bias voltage needed: 1.5 – 10V

4•3



Pinout To TA4F Connector

- 1 = gnd
- 2 = V+
- 3 = Signal
- 4 = Z (tie to signal for mics & to gnd or open for inst)

ADVANCED APPLICATIONS

Recommendations for best performance

- Maintain a clear line of sight between the transmitter and receiver antennas. Typically the receiver antennas should be above head level. Avoid placing the receiver in the bottom of the rack unless remote antennas are employed.
- Avoid placing the receiver behind walls. When this is necessary the receiver's antennas should be remotely located as to be in sight of the transmitter.
- Avoid placing the receiver in close proximity to RF generating equipment including computers, wireless access points and microwave ovens (see “near/far” below).
- Point the antennas up and 45 degrees from vertical while avoiding touching metal objects like rack or rack rails.
- Avoid blocking antennas in the transmitters. Do not “cup” the bottom of the handheld transmitter. Avoid placing the backpack transmitter in pockets.

5•1

Wi-fi

Because Wi-Fi and Line 6 2.4GHz wireless products share the same bandwidth, some users may experience a slowing down of their Wi-Fi capabilities when using microphone or instrument transmitters near computers. This is an example of a near/far interference problem. If your Line 6 transmitter gets within 6 feet of your laptop, you may witness this situation especially if your Wi-Fi access point is some distance away. Typically, simply moving your Line 6 transmitter farther away from your computer will remedy the situation. Switching your transmitters to the “low power” setting will aid in mitigating the problem as well. Users in Europe or Japan should switch their Wi-Fi channels to 12, 13 or 14 as Line 6 2.4GHz systems operate below the frequency of these channels.

Near / Far

The Near/Far interference problem is common to most radio systems and happens when a strong signal captures a receiver making it difficult or impossible for the receiver to decode the weaker signal.

Imagine having a conversation in a quiet room with a person 20 feet away from you. It is likely that you can carry on a conversation with normal voice levels. Now if you move to a noisy environment, with lots of other voices right around your ears, it may be very difficult for the conversation to continue with your long distance friend without the both of you shouting.

A similar circumstance occurs with radios, and since the long distance transmitter is incapable of increasing its power output, it is possible for a very near transmitter may interfere with it.

In the real world, this is rarely an unmanageable problem. You should avoid being closer than 3 feet to a receiver that is not on your channel if the intended transmitter is more than 50 feet from this receiver. If this is a regular requirement, you will need to remote your antennas.

Cell Phone Interference

The use of cell phones should be avoided when very close to XD-V70 transmitters. They will not cause audio interference in the RF section of XD-V wireless systems, but these cell phones emit a signal that can penetrate input cables and mic elements themselves, thereby creating audio that becomes part of your signal. The result will leave most users with familiar “brap-ap-ap” buzz. The only certain cure is to leave them completely shut off or to move them sufficiently away from your XD-V systems.

5•2

Batteries

Line 6 2.4GHz wireless transmitters have a circuit that measures the actual real-time voltage of the installed batteries and transmits that data to the battery meters in the receivers. The battery meters are very accurate when they have been running continuously from the time new batteries were installed in the transmitter and the transmitter power has not been cycled on and off. However, due to the chemical nature of Alkaline batteries, when they have been shut off the voltage begins to “rebound “ and the voltage actually increases compared to its value at shutoff. This rebound effect does not last long and the voltage reverts to true self over twenty minutes or so. For this reason when you first turn on a Transmitter that has been run but allowed to rest, the meter will give a higher reading that quickly falls over the first few minutes. This is normal behavior for Alkaline batteries.

Rechargeable batteries may be used in XD-V70 transmitters. NiMH are recommended in the 2400-2800 mAh range. It is essential that the charger and charge rate correspond to the actual batteries used. Make certain that any batteries selected fit properly in the transmitters as these batteries vary in maximum outside diameter. Do not charge these batteries inside XD-V70 transmitters. The battery meters in the XD-V70 units are calibrated for Alkaline battery discharge rates and will not be as accurate when using rechargeable batteries. Carbon-zinc batteries are not recommended.

SAR

Specific Absorption Rate, or SAR, is a measure of the heating value of radiated RF energy on human tissue. SAR evaluates the relative safety of low-power transmitters in close proximity to the human body or high-power transmitters at greater distances. Line 6 XD-V wireless transmitters are not required to have SAR testing as they fall below the 24.49 mW power limit established by the FCC. Line 6 XD-V output power is 10mW in “high” power mode and 3.3mW in “low” power mode.

APPENDIX: SPECIFICATIONS

System

		NOTES
Working Range	100M/300Ft	Line of sight, actual range depends on interference, reflection and RF signal absorption high & low
Audio Freq Response	10 Hz(-0.5 dB) to 20 kHz (-2.5 db)	
THD%	0.03% typical	
Dynamic Range	>115 dBA V70 >120 dBA V70L	system total audio in to audio out - no compander
Operating Temperature Range	1°C to 50°C	battery characteristics may limit this range
Transmitter Audio Polarity	positive pressure on mic dia-phragm produces positive voltage on pin 2 of XLR output and on Tip of 1/4 output	
RF Channel	2.4GHz ISM band	
System Latency Total	<4ms	Audio in to audio out

V70 Handheld Transmitter

		NOTES
Audio Input (max)	3.6Vpp	~3% THD (clipping)
Gain Range	N/A	patent pending auto gain compensation circuitry optimizes A/D converter bit rate
RF Output	10 mW (high power) 3.3 mW (low power)	
Dimensions (overall)	107mm x 40mm x 40mm	
Weight	11 oz. (w/o batteries)	
Housing	metal body, polycarbonate battery cover	
Battery Life	8 hours (high power) 10 hours (low power) -alkaline	
Power	2 x “AA” Alkaline	

V70 Beltpack Transmitter

		NOTES
Audio Input Level (max)	6.5Vpp	~3% THD (clipping)
Input Z	1.3M ohms	
Gain Range	N/A	patent pending auto gain compensation circuitry optimizes A/D converter bit rate
Supplied Bias Voltage	5 VDC	Pin 2 of TA4 Connector
RF Output	10 mW (high power) 3.3 mW (low power)	
Dimensions (overall)	107 mm x 70mm x 30mm	
Weight	6.5 oz (w/o batteries)	
Housing	metal body	
Battery Life	8 hours (high power) 10 hours (low power) -alkaline	
Power	2 x “AA” Alkaline	

V70 Receiver

		NOTES
Audio Output Level	Unity	referenced to mic model selected
Output Z	XLR: 150 ohm ¼": 1kohms	balanced unbalanced
Sensitivity	95dBm	
Image Rejection	56dB	
Power Requirements	9 Vdc, 350 mA	
Antenna	BNC 50 ohm	
Dimensions (overall)	220mm x 217mm x 45mm (half-rack)	
Weight	42 oz.	
Housing	extruded aluminum	

FCC DECLARATION OF CONFORMITY

Line 6 Digital Wireless Inc.
26580 Agoura Road
Calabasas, CA 91302-1921
Phone: (818) 575-3600
Fax: (818) 575-3607



FCC IDENTIFIER: U0B916THH12
Model: XD-V70
Equipment Class: Digital Transmission System
Description: 2.4 GHz Wireless handheld Microphone

Line 6, Inc. declares under our sole responsibility that Line 6 product XD-V70, to which this declaration relates, has been tested and found in compliance with the requirements of Part 15 of the FCC rules.

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.
(2) This device must accept any interference received, including interference that may cause undesired operation.



Jorge Aguila
Manager, Engineering Technical Services
Line 6, Inc.
USA

Date: September 30, 2010

FCC DECLARATION OF CONFORMITY

Line 6 Digital Wireless Inc.
26580 Agoura Road
Calabasas, CA 91302-1921
Phone: (818) 575-3600
Fax: (818) 575-3607



FCC IDENTIFIER: U0B916TBP12
Model: XD-V70L
Equipment Class: Digital Transmission System
Description: 2.4 GHz Wireless handheld Microphone

Line 6, Inc. declares under our sole responsibility that Line 6 product XD-V70L, to which this declaration relates, has been tested and found in compliance with the requirements of Part 15 of the FCC rules.

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.
(2) This device must accept any interference received, including interference that may cause undesired operation.



Jorge Aguila
Manager, Engineering Technical Services
Line 6, Inc.
USA

Date: September 30, 2010

CE DECLARATION OF CONFORMITY

LINE 6, Inc.
26580 Agoura Road
Calabasas, CA 91302-1921
Phone: (818) 575-3600
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Line 6, Inc. declares under our sole responsibility that Line 6 product XD-V70, to which this declaration relates, is in conformity with the following standards:

EMI and EMC Directive:
European Standards:
ETSI EN 301 489-1 V1.6.1 (2005-09)
ETSI EN 301 489-3 V1.4.1 (2002-08) [Article 3.1 (b) of R&TTE Directive]
ETSI EN 300 440-2 V1.2.1 (2008-05)

The specification ETSI EN 301 489-1 V1.4.1 (2002-08) is an EMC generic immunity standard which references the following test specifications:
EN 55022:2006
EN 61000-3-2:2000
EN 61000-3-3:1995
EN61000-4-2
EN61000-4-3
EN61000-4-4
EN61000-4-5
EN61000-4-6
EN 61000-4-11

Low Voltage Directive:
Relay XD-V70 is powered by the Line 6, DC-1g wall transformer which meets all applicable standards. Please refer to Declaration of Conformity for the DC-1g.

Year CE Markings Affixed: 11 (2009)
The authorized representative located in the European Community is:
Authorized Representative:

Jorge Aguila
Manager, Engineering Technical Services
Line 6, Inc.

