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INTRO





























TM400, IS400

Introduction to Lectrosonics



or more than 40 years, the fanatics at Lectrosonics ■ have held the philosophy and business plan to: "Build the best product we know how to make, and support it with the best service we can possibly provide." The company was founded in 1971 in Albuquerque, New Mexico with the Voice Projector product line. In the mid-1970s, the first wireless microphone was added to the product line under the Freedomike® trademark. Following that, he "Mouse Years" lasted a little over two decades, beginning in the late 1970's. The products caught on in New York City and San Francisco where street musicians needed the portability and economy of rechargeable battery power. In New York, every music store along 48th street stocked the products and within a few years thousands of them could be found all over Manhattan. The last production run of Maxi Mouse took place on September 25, 2000.

With new management in August of 1981 under the leadership of John Arasim, an emphasis on mechanical engineering and manufacturing capabilities ushered in the beginning of a new era in wireless microphone development. Machining capability opened up new possibilities and new machined aluminum housings were designed to improve the ruggedness and appeal of the product line. Portable PA systems with built in wireless microphone systems began with the VP300 in the early 1980's, followed by the Long

Ranger a few years later. Being ideally suited to outdoor use, markets and dealer networks were quickly developed to serve auctioneers and marching band directors.

As other electronics manufacturers were moving off-shore, Lectrosonics stayed here at home as the importance of being made in the USA began to grow. Customers appreciated the fact that they could call the factory directly to discuss any issues they had with the products. This direct feedback was invaluable to the company, and the responsive attitude led to changes in the product designs accordingly. As a result, the infectious sense of ownership in the products within the staff was shared by dealers and customers.

By the summer of 1988, several new products had proven successful and new markets had been entered and the plant was moved to Rio Rancho, 15 miles north of the original location. The television broadcast market eagerly adopted the new plug-on transmitter and compact receiver for ENG and documentary production, and sales were growing quickly. Engineering had begun working on audio processing equipment targeted at the sound contracting and audio visual markets. It was an exciting time and enthusiasm ran high.

Time to air was faster for broadcasters and ENG crews using wireless and the station that aired the story first captured



1971

Company founded in Albuquerque, New Mexico USA. First products: Voice Projectors and amplified lecterns



1979

Mouse® product line starts rolling



1988

Company moves to Rio Rancho, NM. VHF compact system -CR185, H185



1994

LecNet products



the largest audience. The plug-on transmitter let them use their familiar microphones, and the compact receiver could be mounted directly on the video camera. Initially, the company was not aware of how much overlap existed between television and motion picture production. News and documentaries were one type of field production, while motion picture and television series production often took place in studios or at least in controlled environments. We learned that even though the production techniques were different, the equipment was often the same, and many of our customers worked in both fields. The reliability of the first compact VHF system granted us access into the motion picture production market. Dropouts were almost non-existent, and the audio quality was good enough for the finished sound track.

The first audio processing product was the MAP (Modular Audio Processor) system, introduced in 1989. It was a card cage design with a variety of automatic mixing, signal processing and logic control modules that allowed the sound system designer to customize the hardware for each installation.

The years from 1995 through 2002 saw modest growth, but an expansion of production equipment in the factory and increased engineering efforts to develop new

products. The wireless IFB system was introduced in 1998, and became a workhorse product in broadcast and film markets. In 2002 the fruits of several years of engineering effort began to appear. The Digital Hybrid Wireless® system and DM Series processors were introduced. Other new products in development for a number of years were steadily released into production.

In the most recent decade, variable power miniature transmitters, encrypted digital wireless systems, and pure digital wireless systems have been developed for use in field production and live sound. A significant engineering effort developed the ASPEN family of advanced digital audio processors that were introduced in 2009. ASPEN (Audio Signal Processing Expansion Network) delivers leading edge technology with a massive digital matrix, IP and serial connectivity, a comprehensive macro programming language and versatile control interfaces.

The fanatics at Lectrosonics are on the verge of several new and ground-breaking product developments including digital wireless, networked audio and tools for field production. As always, we enjoy hearing from you and hope that you'll come to visit us in New Mexico sometime soon for a factory tour and some green chile.



2002Digital Hybrid Wireless®
400 Series



2005SM Transmitter,
DMTH4 DSP Hybrid



2009ASPEN Series DSP



2012HH Handheld transmitter

Teresa Duran

Fanatic Since 2006 Final Assembly





SM Series Transmitters

Super Miniature Transmitters

- Current-servo input for maximum dynamic range and acceptance of a wide variety of microphone types
- Ultra-small size, backlit LCD interface and remotecontrol capable (with RM)
- SMV: Variable isolated RF output, smallest size
- SMQV: Variable isolated RF output, dual battery for extended operational time
- Digital Hybrid Wireless® for compandor-free audio or compatibility with analog receivers

The SM Series family brings Digital Hybird Wireless® technology to super-small transmitters in two different configurations for essentially any application requiring a lavaliere or head worn microphone. The tiny size of these transmitters makes concealment easy, yet with state-of-the-art audio and RF performance. The splash-proof and sweat-proof housings allow reliable operation even in demanding environments.

The SMV model has a fixed antenna and offers 3 power levels: 50 mW, 100 mW and 250 mW, depending on the application. The lower power setting provides longer battery life while the higher setting gives greater range and resistance to dropouts.

The SMQV is a dual-AA battery model offering selectable power of 100mW for extended battery life and 250mW for extended operating range. A third selection of 50mW satisfies the requirements in some theatrical applications where the system design specifies lower power output from the transmitters.

Setup and control is simplified with membrane switches and



an LCD interface. Multiple functions are clearly marked on the panel, with on-screen prompts on the LCD as reminders when another switch must be held or the selection is locked out.

The innovative servo bias input on the standard 5-pin connector provides a programmable, regulated voltage to accommodate a wide variety of electret microphones. Two bicolor LEDs make adjusting input levels for proper modulation easy and accurate.

RM. RM2

Remote Controls For All SM Series



The unique RM provides hands-free remote control for all SM Series models for frequency and audio gain settings, and sleep, wake, lock and unlock modes. A "dweedle" tone generated while holding the RM close to the wireless system microphone alters the settings and modes of the transmitter, so changes can be made without disturbing costuming. The sleep mode drops the transmitter power consumption to

20% of normal operation to prolong battery life during long periods of preparation before a production begins.

The RM2 is a cost-effective alternative, providing remote adjustment of level, lock, unlock, sleep and unsleep.

LectroRM*

Control your Lectrosonics SM Transmitter with your phone.

- Audio Gain
- Channel
- Sleep Mode
- Lock Mode

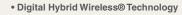






*LectroRM is a 3rd party product and not made by Lectrosonics, Inc.

Handheld Transmitter



- Standard thread-on capsules
- Membrane switch and LCD interface
- AA battery power
- Selectable RF power at 50 and 100 mW
- Talkback feature



The HH Digital Hybrid Wireless handheld transmitter represents an elegant solution for a variety of wireless microphone applications including live performance, broadcast, AV rental and houses of worship. The HH incorporates many advanced features to provide high quality speech and vocal reinforcement. Along with providing peerless audio quality with wide frequency response and dynamic range in native 400 Series mode, the technology used in the HH includes compatibility modes for Lectrosonics 200 Series, 100 Series and IFB receivers, and some systems from other top manufacturers. (Contact Lectrosonics for details.)

Interchangeable Capsules

Lectrosonics offers the HHC cardioid condenser thread-on capsule. Thread-on capsules from other manufacturers with a 1.25"/28 thread pitch can also be used.







Digital Hybrid Plug-On Transmitter

- Converts microphones with XLR jacks to wireless operation
- Backlit LCD and membrane switches for setup
- Selectable 5, 18 and 48 volt phantom power plus off position for dynamic microphones
- · Adjustable low frequency roll-off
- · Powered by two AA batteries
- · 256 synthesized UHF frequencies
- 100 mW output power
- · Rugged machined aluminum housing

The HM Digital Hybrid Wireless® plug-on transmitter features a DSP-based design that allows the transmitter to operate in its native Digital Hybrid Wireless® mode, Lectrosonics 200 Series, 100 Series, IFB product groups, plus two modes for compatibility with analog receivers from other manufacturers. A unique multi-voltage phantom power feature allows the transmitter to be used with virtually any microphone, including high-current condenser types, expanding its usefulness in high-end applications such as motion picture production and test & measurement.

MM400c Transmitters

Water-Resistant Miniature Transmitter

- · Waterproof Power/Mute switch (programmable)
- Water-resistant, rugged, machined aluminum housing with noncorrosive, superhard finish
- 100mW isolated RF output for long range and minimal interference
- Digital Hybrid Wireless® for compandor-free audio
- · Compatibility modes for use with analog receivers

The rugged, water-resistant MM400c offers Digital Hybrid Wireless® technology in a package that can withstand the most extreme moisture and temperature environments.

The MM400c is conveniently powered by a single AA battery, with internal switching power supplies providing constant voltages to the transmitter circuits from the beginning (1.5 volts) to the end (0.85 volts) of battery life. The 100 mW output with an RF circulator/isolator in the output stage provides excellent operating range while virtually eliminating intermodulation problems common in multi-channel environments.



WM

Water-Resistant Transmitter

- Water resistant, rugged, machined aluminum housing with noncorrosive, super-hard finish
- Digital Hybrid Wireless™ system for compandor-free audio
- · Selectable RF output power
- 2xAA battery powering
- · Membrane switches and backlit LCD interface
- Remote settings with RM

The new, water-tight WM transmitter is based on the SM Series with Digital Hybrid Wireless® technology for outstanding audio quality with the addition of a special case design for extreme durability in all environments. The WM features a backlit LCD, membrane control surface, and 2xAA battery powering for long operating time. The WM can be set to operate at 50, 100 or 250 mW RF output (25 & 50 mW for EU version) with an RF circulator/isolator in the output stage for applications where large channel counts are needed.



Transmitters LMa



50mW Belt-Pack Transmitter

- Current-servo input for maximum dynamic range and acceptance of a wide variety of microphone types
- 50mW RF output for good range and interference resistance
- Digital Hybrid Wireless® for compandor-free audio
- Isolated output
- Compatibility modes for use with analog receivers
- Super-tough metal housing and wire belt clip for durability

The LMa transmitter brings Digital Hybrid Wireless® technology to a moderate cost level while preserving superb performance and maximum flexibility in a belt pack transmitter for voice or instruments. The LMa is light weight and made of powder-coated, extruded aluminum for durability and incorporates a wire belt clip for secure mounting. A 50mW RF output provides plenty of range and resistance to interference.

The LMa is ideal for use as a musical instrument transmitter when combined with MI39-type interface cables.

UM400a

100mW Belt-Pack Transmitter

- Current-servo input for maximum dynamic range and acceptance of a wide variety of microphone types
- 100mW isolated RF output for long range and minimal interference
- Digital Hybrid Wireless® for compandor-free audio
- · Adjustable low-frequency roll-off
- Compatibility modes for use with analog receivers
- Super-tough metal housing and belt clip for durability

The UM400a implements the latest Digital Hybrid Wireless® technology in a classic Lectrosonics belt-pack transmitter with a 100mW, isolated RF output. The super-tough extruded, powder-coated housing ensures years of trouble-free use even in the most demanding applications. The springloaded belt clip provides quick, secure mounting on the talent. The current-servo input amplifier accepts a wide range of gain from different types of microphones.



Accessories

Transmitters



Part Number: 13585

Description: Mic Clip for UT Handheld Transmitters



Part Number: 21359

Description: Plug Cord, Female,

5 Pin TA5F



Part Number: 21472

Description: Right angle power cord, coaxial plug, stripped/tinned leads,

6' long



Part Number: 21750

Description: Polarity-reversing XLR

barrel adapter



Part Number: 26481

Description: Audio Plug Cover for

MM400 Transmitters



Part Number: 26486

Description: Replacement Wire Belt Clip for MM400 watertight transmitters



Part Number: 26526

Description: Replacement Wire Belt Clip for LM Transmitters



Part Number: 26862

Description: Thumb screw for beltclips

on the SM Series transmitters



Part Number: 28832

Description: Replacement set screw

for SM series wire belt clip

(all variations)



Part Number: 35679

Description: Lectrosonics Screwdriver



Part Number: 35510

Description: Water/Dust protective boot for SM series Transmitter and SM5P

Microphone connectors



Part Number: 35923

Description: Thermal insulation pad for SM/SMa Transmitters



Part Number: 35924

Description: Thermal insulation pad for SMD/SMDa/SMQ/SMQa



Part Number: 55007

Description: Clear AA battery caddy



Part Number: 55008

Description: Blue AA battery caddy



Part Number: A7U

Description: UHF Antenna for UM190, UM195, UM195b, 470-608 MHz



Part Number: ACOAXTX

Description: Antenna, Coaxial, SMA Plug for Transmitters, Specify Freq. Block



Part Number: AMJXX

Description: Swivelling whip antenna

with standard SMA connector

(Specify Block)



Part Number: AMJKIT

Description: Swivelling whip antenna kit

with Color Caps



Part Number: AMM KIT

Description: Transmitter Antenna Kit

With Color Caps



Part Number: AMM-O

Description: Transmitter Antenna

Color Caps



Part Number: AMM (Specify Block)

Description: Transmitter Antenna for

UHF Belt-pack Unit



Part Number: BATTSLED

Description: General purpose battery adaptor. Optional spring loaded clip is available. BATTERY NOT INCLUDED



Part Number: BCHINGED

Description: Hinged Belt Clip Kit for UM

and LM Transmitters



Part Number: BCWIRE

Description: Wire Belt Clip Kit for UM200- and UM400-type Belt-pack units



Part Number: CCHH

Description: Pouch for Handheld

Transmitters

Transmitters

Accessories



Part Number: CH12

Description: AC Adapter, 115VAC in, 12VDC out for ISO9V Battery Eliminator



Part Number: HH2SEN

Description: HH adapter for capsules designed for G2, G3 and 2000 Series



Sennheiser®*wireless.

Part Number: HHXTND

Description: Extender for mic flag which allows for access to LCD screen and talkback button



Part Number: ISO9VOLT

Description: Isolated Battery Eliminator

Without Door



Part Number: ISO9VOLTH

Description: Isolated Battery Eliminator with H-Style Battery Door for Plug-on

Transmitters



Part Number: ISO9VOLTM

Description: Isolated Battery Eliminator with M-Style Battery Door for

UM Transmitters



Part Number: MC35

Description: Adapter Cable, 37", Line

Level, XLRF to TA5F



Part Number: MC36

Description:Adapter Cable, 37", Right-Angle 3.5mm Mono Mini Plug to Straight 3.5mm Mono Mini Plug



Part Number: MC40

Description: Adapter Cable, 37", Mic Level, XLRF to TA5F. Wired for dynamic mic input to transmitters



Part Number: MC41

Description: Adapter Cable, 37", Mic Level, XLRF to TA5F. Works with early 5-pin inputs and servo bias inputs.



Part Number: MC44

Description: Adapter Cable, 37", Male 1/4" Mono Plug to Male Locking Micro Plug.



Part Number: MC46

Description: Adapter Cable, 37", for Dynamic Microphone, 1/4" Mono to



Part Number: MC47

Description: Adapter Cable, 37",

RCA to TA5F



Part Number: MC60

Description: Adapter Cable, 37",Mic Level, XLRF to TA5F, 5V Bias on XLR



Part Number: MCA5X

Description: Adapter, TA5F to XLRM, for Lav Mics with Plug-On Transmitters





Part Number: MCABRLTA5MUWP

Description: Universal Barrel Adapter, 5-pin Mic to MM400/b/c Input and WP



Part Number: MCATA5MUWP

Description: Universal Mic Cable

Adapter, TA5F To WP



Part Number: MCA-TA5PAD

Description: Mic Cable Adapter, XLRF

to TA5F, -10dB attenuation



Part Number: MCA-TPOWER

Description: Mic Cable Adapter, T-Power from UH400A, UH200 and

HM Transmitter



Part Number: MCAXLRLINE-WP

Description: Cable Adapter, XLR to WP

for MM400/b/c, Line Level



Part Number: MCAXLRMIC-WP

Description: Cable Adapter, XLR to WP

for MM400/b/c, Mic Level



Part Number: MI39ARA

Description: Instrument Cable, for passive pickups, 1/4" Right Angle

to TA5F



Part Number: MI39AST

Description: Instrument Cable, for passive pickups, 1/4" Straight to TA5F



Part Number: MI33PRA

Description: Instrument Cable, 1/4" Right Angle to TA5F, for High-Output

Active Pickups



Part Number: MI33PST

Description: Instrument Cable, Passive, 1/4" Straight to TA5F, for High-Output

Active Pickups



Part Number: MMCABLE

Description: Batt Cap, Lanyard, Hardware for All MM Transmitters

Accessories

Transmitters



Part Number: ORINGKIT/WM

Description: Replacement O-ring kit for

the WM Transmitter.



Part Number: MUTE

Description: Audio muting switch, belt mount, for all current 5-pin beltpack

transmitters.



Part Number: PHTRAN2

Description: Cordura Holster, "H" Series Plug-on transmitters

Part Number: PHTRAN3

Description: Leather pouch for HM

plug-on transmitters



Part Number: PSLZRDUAL

Description: LZR style plug to LZR

style plug. 6 ft. power cable



Part Number: PSM

Description: Leather pouch for SM

single-battery transmitters



Part Number: PSMD

Description: Leather pouch for SM

dual-battery transmitters



Part Number: QRLANYARDRM

Description: Lanyard Kit for RM

Remote Control Units



Part Number: RATPAC

Description: Kit for a single right angle 3- or 5-pin TA conn. for transmitter inputs

or SR receiver outputs



Part Number: REFUMCABLE

Description: Connecting cable for Mute switch, used between switch and

transmitter.



Part Number: SMA-MD0R

Description: Replacement battery door for SM Series single battery transmitters



Part Number: SMBATELIM

Description: Battery eliminator for SM

Series transmitters



Part Number: SMDA-MD0R

Description: Replacement battery door for SM Series dual battery transmitters



Part Number: SMKITTA5

Description: Connector Kit for SM-type transmitters, 5-pin TA5F Plug

with Sleeve



Part Number: SMBCDN

Description: Machined, wire Belt Clip for single-battery SM transmitters,

Antenna Down



Part Number: SMBCUP

Description: Machined, wire Belt Clip for single-battery SM transmitters,

Antenna Up



Part Number: SMDBC

Description: Machined, wire Belt Clip for dual-battery SM Series transmitters,

Antenna Up or Down



Part Number: SMBCDNSL

Description: Spring-loaded Belt Clip for single-battery SM Series transmitters,

Antenna Down



Part Number: SMBCUPSL

Description: Spring-loaded Belt Clip for single-battery SM Series transmitters,

Antenna Up



Part Number: SMDBCSL

Description: Spring-loaded Belt Clip for dual-battery SM Series transmitters

V

Part Number: T187-MD

Description: Replacement battery

cover for UT Transmitter



Part Number: WMBCSL

Description: Spring-loaded machined aluminum clip for WM Transmitter



Part Number: WMBCWIRE

Description: Machined, wire Belt Clip for dual-battery WM Series transmitters,

Antenna Up or Down



Part Number: WMDESIKIT

Description: includes replacement battery caps with desiccant beads, O-rings, lanyards, thumbscrew and allen wrench.



Part Number:WPMC-10

Description: Connector Kit, Watertight, for Mics Used with MM Transmitters, 10

Pcs.



Part Number: WPMC-3

Description: Connector Kit, Watertight, for Mics Used with MM Transmitters, 3 Pcs.



Microphones

Headset Microphones

HM172

The HM172 omni "earset" microphone mounts securely to the user's ear with a comfortable,

bendable silicone frame and provides excellent vocal quality in a nearly invisible package. The length is ideal for maximum gain



before feedback while keeping the element away from the user's breath stream for low noise. The HM1725P comes wired for use with any UHF Lectrosonics belt pack transmitter including LM, LMa, UM400, UM400a, SM, SMa, SMV, SMDa and SMQV. Sensitivity is moderate for use with speech or singing. Complete with windscreen and HF peak cap.



HM162

Lightweight headworn microphone with bi-directional, noise cancelling element for increased gain before feedback with public address systems such as the Long Ranger. Adjustable mic boom and neckband for comfortable fit over the ears and around the back of the neck. Includes foam windscreen for outdoor use. The HM162 is available with 2.5mm locking micro.



Lavaliere Microphones

M119 M140 M152

Choosing the right miniature microphone depends mainly on the intended application and the specific transmitter used.

Lectrosonics provides a variety of solutions at reasonable costs. The M152 in particular is a high-performance omnidirectional capsule with a wide dynamic range and low noise. Connector choices cover every type of transmitter from Lectrosonics, past and present.



This chart represents the capsule connector combinations available.

This chart represents the capsule connector combinations available.					
Lavaliere & Headset Microphone Capsules	SM5P Locking 5-Pin Plug with Dust Boot	5P Locking 5-Pin Plug (Switchcraft TA5F)	MC Straight, Locking Micro Plug	WP Waterproof Locking Micro Plug (two wire configuration)	
	N/A	HM1725P	N/A	N/A	
4	N/A	N/A	HM162MC	N/A	
M119 Omnidirectional Capsule	N/A	M1195P	M119MC	N/A	
M140 Miniature Cardioid Capsule	N/A	N/A	M140MC	N/A	
M152 High-Performance Omnidirectional Capsule	M152/SM5P	M152/5P (M152-7005P available for 700 Series Compatibility)	M152/MC	M152/WP	

Accessories

Microphones



Part Number: 21357

Description: Locking Switchcraft micro

plug, 1/8"



Part Number: 21359

Description: Plug Cord, Female,

5 Pin TA5F



Part Number: 35510

Description: Water-tight replacement boot for SM5P Microphone connectors



Part Number: 35690

Description: Strain Relief, Clip-on for



Part Number: 35746

Description: Cushion for Headset Mic

HM142V & HM152V



Part Number: 35939

Description: Replacement blue canvas zipper case for HM172 Earset Mic. MIC SOLD SEPERATELY



Part Number: C119

Description: Mic Clip, for M119/M140,

Tie Bar Style



Part Number: C119RA

Description: Mic Clip, Right Angle for

M119/M140, Tie Bar Style



Part Number: C140

Description: Mic Clip for M119/M140,

Cable Mount



Part Number: C150

Description: Mic Clip for M150/152



Part Number: C172

Description: Mic Clip for HM172, Cable

Mount



Part Number: FC172-BE

Description: Beige colored filter cap for

HM172 Earset Microphone



Part Number: MC16C

Description: Mic Cord, Coiled, 16ft, 1/4"

to 1/4" Male



Part Number: MC35

Description: Adapter Cable, 37", Line

Level, XLRF to TA5F



Part Number: MC36

Description: Adapter Cable, 37" Right-Angle 3.5mm Mono Mini Plug to Straight 3.5mm Mono Mini Plug



Part Number: MC40

Description: Adapter Cable, 37", Mic Level, XLRF to TA5F. Wired for dynamic mic input to transmitters



Part Number: MC41

Description: Adapter Cable, 37", Mic Level, XLRF to TA5F. Works with early 5-pin inputs and servo bias inputs.



Part Number: MC44

Description: Adapter Cable, 37" Male 1/4" Mono Plug to Male Locking

Micro Plug.



Part Number: MC46

Description: Adapter Cable, 37", for Dynamic Microphone, 1/4" Mono



Part Number: MC47

Description: Adapter Cable, 37",

RCA to TA5F



Part Number: MC60

Description: Adapter Cable, 37", Mic Level, XLRF to TA5F, 5V Bias on XLR



Part Number: MC65

Description: Adapter Cable, 10ft, 1/4"

Male to Mini TRS



Part Number: MCA5X

Description: Adapter, TA5F to XLRM,

for Lav Mics with Plug-On (H)

Transmitters



Part Number: MCABBI TA5MLIWP

Description: Universal Barrel Adapter, 5-pin Mic to MM400/b/c Input and WP



Part Number: MCATA5MUWP

Description: Universal Mic Cable

Adapter, TA5F To WP



Part Number: MCA-TA5PAD

Description: Mic Cable Adapter, XLRF

to TA5F, -10dB attenuation

Microphones

Accessories



Part Number: MCA-TPOWER

Description: Mic Cable Adapter,
T-Power from UH400A Transmitter



Part Number: MCAXLRLINE-WP

Description: Cable Adapter, XLR to WP for MM400/b/c, Line Level



Part Number: MCAXLRMIC-WP

Description: Cable Adapter, XLR to WP
for MM400/b/c, Mic Level



Part Number: MICBOX

Description: Replacement mic case for lav mics and lav mic accessories.



Part Number: RK119

Description: Windscreen for M119 Lav Mic



Part Number: RK142

Description: Windscreen for HM142V and HM152V Headset Mics



Part Number: RK150

Description: Windscreen for M150/

M152 Lav Mic



Part Number: RK172-BE

Description: Windscreen for HM172

earset mic, biege



Part Number: SMKITTA5

Description: Connector Kit for SM-type transmitters, 5-pin TA5F Plug with

Sleeve



Part Number: WPMC-10

Description: Connector Kit, Watertight, for Mics Used with MM Transmitters,

10 Pcs.

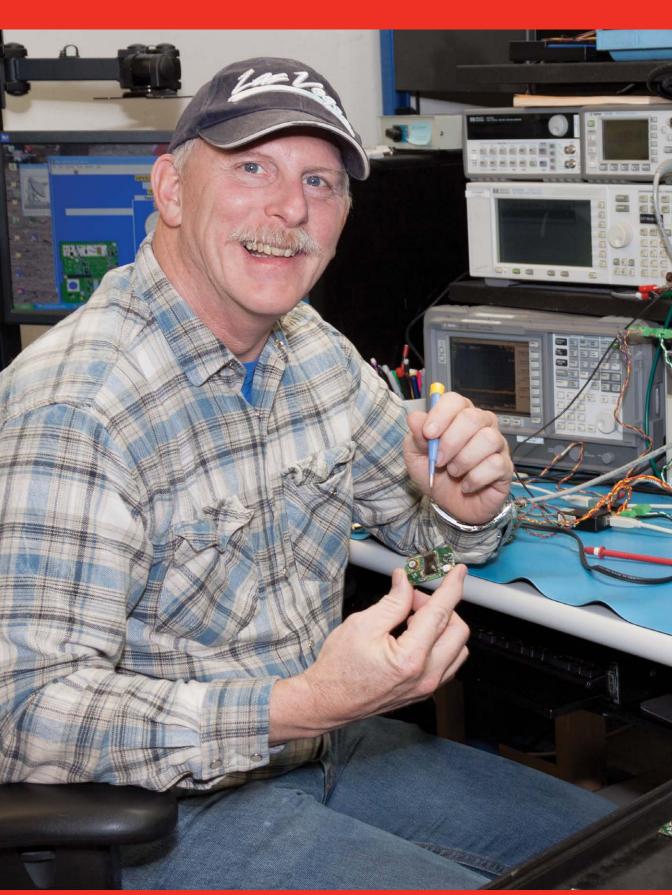


Part Number: WPMC-3

Description: Connector Kit, Watertight, for Mics Used with MM Transmitters,

3 Pcs.

Made In The USA By A Bunch Of Fanatics





Gregg Rosenberg

Fanatic Since 2008
Production Test

SRb Series

Portable Receivers

Dual-Channel Slot Mount Receivers

- Two independent channels in one housing
- . Digital Hybrid Wireless® for pristine audio quality
- · All-metal construction for superior durability
- RF Spectrum scanner for ease of finding clean channels
- · The SRb requires one of the following kits:
 - SRUNI
 - SRSNY
 - SNEXT
 - SRBATTSLED
 - SRHARNESS

SRUNI for Unislot-type cameras (Panasonic, Ikegami, JVC)



SRSNY for Sony® slot-mount cameras



SREXT for external camera mounting



The SRBATTSLED adapter allows powering with "L" or "M" type rechargeable batteries



SRNARNESS Audio output and power adapter panel with

12"pigtails







The SRb receiver is now available in two versions with detachable antennas. The SRb5P version includes a 5-pin, dual channel audio output next to the control panel. Front and rear outputs operate simultaneously to expand the flexibility of the design.

The SRb version is supplied without the front panel 5-pin audio output for use with two channel slots and for standalone operation.

Two diversity modes are offered in the SR. Microprocessor controlled SmartDiversity™ reception is employed by independently combining antenna phase for each receiver channel. Alternately, the two channels can be used together in "Ratio Diversity" mode as a single receiver. Graphic spectrum scanning provides quick and easy location of clear operating frequencies for interference-free operation.

The two Digital Hybrid Wireless® receivers inside the SR offer 256 frequencies and operate with any of the Lectrosonics Digital Hybrid transmitters without a compandor in the audio path. In addition, compatibility modes also facilitate operation with Lectrosonics 100 Series, 200 Series, and IFB analog systems, along with analog transmitters from two other manufacturers. Transmitter battery strength is monitored in the SR when using compatibility modes for 200 and Digital Hybrid Series transmitters.

While mounted on a camera, the receivers are splash resistant—thanks to sealed membrane switches and LCD, along with a special gasket covering the slot opening.

A new battery sled adapter allows using "L" and "M" type rechargeable batteries for stand-alone use with either version of the receiver.

Portable Receivers

Octopack



The OctoPack™ is an exceptionally small and lightweight multicoupler that is ideal for field production, with studio quality performance.

With four receivers installed, the multicoupler can provide up to eight audio channels by selecting ratio diversity or switching diversity on the receivers in various combinations.

Standard BNC inputs can be used with any type of antenna or coaxial cable. Antenna power can be switched on to provide DC on the coaxial cable for remote RF amplifiers.

Balanced audio outputs are provided on the side panel. Front panel audio outputs are also available with the 5P version of the receivers.

The OctoPack can be powered by external DC or with rechargeable "L" or "M" type batteries. Power circuits are protected with auto resetting polyfuses to guard against damage that might be caused by shorts.

The rear panel of the assembly is recessed behind reinforced panels that extend from the top and bottom covers. The DC power connector is a threaded, locking type, with a variety of right angle and straight mating connectors available.

SRa/SRb Receiver Multicoupler Box

- Holds up to 4 SR Series Slot Receivers for a total of 8 channels.
- · High performance RF distribution
- · Power distribution
- · Accommodates both versions of SRa/b receivers
- Powered by external DC or rechargeable batteries
- Requires SRUNI 25-pin unislot adapter







SR9VBP

9V Battery Pack For BATTSLED, SRBATTSLED & OCTOPACK

The SR9VBP is a machined aluminum battery pack that can be used in lieu of an "L" type battery on the SRBATTSLED and OCTOPACK. Can be used with alkaline, lithium or rechargeable 9 volt batteries. Great for locations where electricity is unavailable for rechargeable battery packs. Note: This can not be used with a battery charger.



- · Uses two 9V batteries
- · Fits "L" style battery receptacles
- Great for emergency backup power

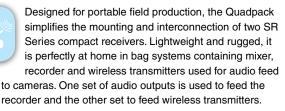


Quadpack

Portable Receivers

Power/Audio Interface

- * Accepts two SR Series receivers
- Requires SRUNI 25-pin unislot adapter
- * Balanced XLR audio outputs
- * Balanced TA3M audio outputs
- * Output jack panels can be reversed
- * Locking coaxial DC power connector
- * 4-pin Hirose DC power connector
- * Powder coated aluminum housing



Power is taken from an external DC source via one or both connectors. Circuitry is employed between the two jacks that takes power from the source with the higher voltage. This can be used to provide a backup power supply where the DC is automatically taken from the opposite jack if power is interrupted at one of them.



UMCWB

Multi-Coupler



The UMCWB provides a mechanical rack mount with power and RF signal distribution for four diversity compact receivers in a single rack space. The wideband design allows the multi-coupler to be used with receivers in all frequency blocks from 21 through 29. This provides flexibility, however, the antennas used with this system must also cover the range of the installed receivers.

The UMCWB frame with UHF RF/power distribution can accept the following receivers: UCR195D, UCR200D, UCR205D, UCR210D, UCR211, UCR300, UCR310, UCR411A. PS70 power supply sold separately.

Portable Receivers

UCR411a



Compact Receiver

- Digital Hybrid Wireless® for compandor-free audio
- SmartSquelch™ and SmartDiversity™ for optimum reception
- Auto-tracking front-end filters for maximum rejection of RF noise
- Graphics type backlit LCD display for settings and monitoring
- · Internal 9V batteries or external DC powering options
- Compatibility modes for use with analog transmitters

The UCR411A receiver provides professional performance and a versatile feature set in a compact design for field and location production. All settings are made from the front panel with an LCD interface, making the unit ideal for use in Six Packs, on sound carts, in portable bags and in rack mount multi-couplers. To alleviate interference problems in an increasingly congested RF spectrum, an RF spectrum analyzer is built into the receiver, thus finding clear operating frequencies is a quick, simple process. The UCR411A is compatible with all 400, 200, 100 Series and IFB Lectrosonics transmitters and units from two other manufacturers. The UCR411A can be powered with internal 9V batteries or external DC.







- Digital Hybrid Wireless® for compandor-free audio
- SmartSquelch™ and SmartDiversity™ for optimum reception
- LCD display with spectrum scanner
- Two AA batteries or DC power
- Compatibility modes for use with analog transmitters

The UCR401 is a high performance compact UHF wireless microphone receiver for mobile applications such as ENG and film production. The compact size, powering options and rugged attached antennas are ideal for video camera mounted use. Unique DSP algorithms in the design provide full compatibility with all Lectrosonics 400 Series Digital Hybrid Wireless® transmitters and variety of analog transmitters from Lectrosonics and some other manufacturers. Power is provided by two AA batteries, typically NiMH rechargeable types, or external DC supplied via a jack on the rear panel.

UCR100 Portable Receivers

Ultra-Compact Analog Compact Receiver

- · Ideal for compact DV camcorders
- · 256 selectable UHF frequencies offered in each of 7 blocks
- · High sensitivity for extended range

ating range and freedom from drop outs.

- · Dual-band compandor for excellent audio quality
- · Machined aluminum construction for durability

The Lectrosonics 100 Series was designed to operate with the new generation of DV camcorders, offering an ultra-

compact receiver and modest cost, yet preserving the performance that has become the hallmark of Lectrosonics. The system is offered in seven different blocks each with 256 selectable frequencies over a 25.6 MHz band to avoid interference from local RF sources. The UCR100 receiver is highly sensitive for exceptional oper-



VR FIELD - 230 MHz

Portable Modular Receiver



There are 2 versions of the VRM, each covers a 230MHz range.

- Wideband Low covers blocks 470 (470.100) through 26 (691.100).
- Wideband Mid covers blocks 21 (537.600) through 29 (767.900).

Any VRS or VRT receiver module in the respective blocks can be used.

- · Ultra portable and self-contained
- · Six channel modular configuration
- . "NP1" style battery or external DC power
- Digital Hybrid Wireless® for compandor-free audio
- · 3 different diversity reception schemes
- Compatibility modes for use with analog transmitters
- USB and RS-232 computer interface for control and programming with included software
- · Front-panel headphone jack for monitoring
- VRS (Standard) and VRT (Tracking) receiver modules available

The VR Field Receiver is a battery or DC powered modular UHF design that operates with Digital Hybrid Wireless® transmitters, and a variety of analog transmitters. The modular design allows use of one to six plug-in receiver modules and includes an antenna multi-coupler, computer communications interface and battery receptacle. The VR Field offers a tremendous degree of flexibility in portable applications such as film production, ENG and documentaries. The NP1-style battery receptacle allows for long operational time between charges.

Accessories

Portable Receivers



Part Number: 21425

Description: 6 ft. long power cord; coaxial to stripped & tinned leads



Part Number: 21499

Description: Power Cable for Sixpack

UHF, 60320 to Edison



Part Number: 21586

Description: Power cable; locking LZR type plug to stripped and tinned leads.



Part Number: 21642

Description: Euro Power Cord CEE 7/7

(Schuko) plug



Part Number: 21643

Description: UK Power Cord BS

1363 plug



Part Number: 21644

Description: Australian Power Cord

S3112 plug



Part Number: 21713

 $\textbf{Description:} \ \mathsf{Cable} \ \mathsf{,} \ \mathsf{MB} \ \mathsf{USB} \ \mathsf{A2B}$



Part Number: 21746

Description: DC Power Cord, 1ft, for VR

Field, Stripped & Tinned



Part Number: 21747

Description: DC Power Cord, 6ft, for VR

Field, Stripped & Tinned



Part Number: 21762

Description: Neutrik right angle XLR female connector; cast metal housing



Part Number: 21793

Description: Male SMA to Female SMA

Right Angle Adapter



Part Number: 26289

Description: Panel, blank, for RMP195/

SDM4D/RDM4



Part Number: 35554

Description: Rain cap for SRa5P output



Part Number: 35908

Description: Adhesive battery strap for easy removal of NP1 style batteries.

BATTERY NOT INCLUDED
Part Number: 55007

Description: Clear AA battery caddy



Part Number: 55008

Description: Blue AA battery caddy



Part Number: A195S

Description: Straight VHF helical whip antenna for CR187 and other portable

VHF receivers.



Part Number: A195RA

Description: Right Angle VHF helical whip antenna for CR187 and other

portable VHF receivers.



Part Number: A500RA (Specify Block)

Description: Antenna, UHF, Right Angle

BNC (Specify Block)



Part Number: A500S

Description: Antenna, UHF, Flexible,

Straight BNC 470-608 MHz



Part Number: A8U (Specify Block)

Description: Antenna, UHF, Straight

BNC (Specify Block)



Part Number: AMJXX

Description: Swivelling whip antenna

with standard SMA connector

(Specify Block)



Part Number: AMJKIT

Description: Swivelling whip antenna kit

with Color Caps



Part Number: AMM KIT

Description: Transmitter Antenna Kit

With Color Caps



Part Number: AMM-0

Description: Transmitter Antenna Color

Caps



Part Number: AMM (Specify Block)

Description: Transmitter Antenna for UHF Belt-pack Unit, Specify Block

Portable Receivers

Accessories



Part Number: BATTSLED

Description: General purpose battery adaptor. Optional spring loaded clip is available. BATTERY NOT INCLUDED



Part Number: BIAST

Description: DC Power Supply, Inline,

for UFM50. UFM230



Part Number: CCMINI

Description: Zip Pouch for Compact

Wireless System



Part Number: CH12

Description: AC Adapter, 115VAC in, 12VDC out for ISO9V Battery Eliminator



Part Number: CH20

Description: Power Supply, 110VAC in,

12VDC Regulated out, 400mA



Part Number: DCR15/1A6U

Description: Power Supply with universal socket. 90-240VAC in, 15VDC

regualted output



Part Number: MC55

Description: Adapter Cable, 15", Unbalanced Line-Level Mini Right-Angle Plug to Balanced Mic Level (45dB Attenuation). Includes Ca-

pacitors to block DC



Part Number: MC100RCA

Description: Output Cable, TRS to

RCA, for UCR100



Part Number: MC100TRS

Description: Output Cable, TRS to TRS,

for UCR100



Part Number: MC100XLR

Description: Output Cable, TRS to XLR

(Unbalanced), for UCR100



Part Number: MCAXI BATTEN

Description: Balanced XLR male to

stripped and tinned leads



Part Number: MCSRPT

Description: Audio Cable, for SR Re-

ceiver. TA3F plug to Stripped,

Tinned Leads, 15".



Part Number: MCSRTRS

Description: Audio Cable, for SR Receiver. 3.5mm TRS (stereo) plug to dual

TA3F plugs; 12"



Part Number: MCSRXLR

Description: Audio Cable, for SR Re-

ceiver. TA3F plug to XLRM; 12".



Part Number: MCSR/5PXLR1

Description: Audio cable for SR receiver. Right angle TA5 to 3-pin male XLR



Part Number: MCSR/5PXLR2

Description: Audio cable for SR receiver. Right angle TA5 to two 3-pin

male XI Rs



Part Number: MCSR/5PXLR5P

Description: Audio cable for SR receiver. Right angle TA5 to 5-pin

male XLR



Part Number: MCVRFIELD

Description: Cable, XLRF Right Angle to Mic Cable with Stripped, Tinned

Leads, 3 Ft.



Part Number: P1196

Description: Retainer clip for Venue, VR

Field receiver modules



Part Number: P1199

Description: Rain Cover for UCR211,

411. 411a



Part Number: P1200

Description: Rain Cover for UCR201 &

UCR401



Part Number: PF25 - (Specify Block)

Description: Passive inline filter 25 MHz bandwidth. Specify block.



Part Number: PF50 (Specify Block)

Description: Passive In-Line Filter with Bias-T. Specify block range -

(XX-XX = two block range)



Part Number: PS12A

Description: Power Cable, 12", Hirose4

to DC Coax



Part Number: PS1214

Description: Hole cover for VRFIELD



Part Number: PS1215

Description: Battery cover for NP1 style

battery on VRFIELD

Accessories

Portable Receivers



Part Number: PS200A

Description: Power Cable, 12", Hirose4

to LZF



Part Number: PS212A

Description: Power Cable, 12", Hirose4

to Dual DC Coax



Part Number: PS2200

Description: Power Cable, 12", Hirose4

to Dual LZR



Part Number: PS2212

Description: Power Cable, 12", Hirose4

to 1 DC coax, 1 LZR



Part Number: PS70

Description: Power Supply, 115VAC in,

12VDC coaxial out, US



Part Number: PSLZRDUAL

Description: LZR style plug to LZR

style plug



Part Number: RATPAC

Description: Kit for a single right angle 3- or 5-pin TA conn. for transmitter inputs

or SR receiver outputs



Part Number: SRSNY

Description: Mounting adapter for SR

Receiver. For Sony cameras.



Part Number: SRSNYSCREWKIT

Description: Replacement screw kit for SRSNY adapter and one spare screw for

each size.



Part Number: SRUNI

Description: Mounting adapter for SR Receiver Unislot kit for Ikegami and

Panasonic cameras.



Part Number: SRUNISCREWKIT

Description: Replacement screw kit for SRUNI adapter and one spare screw for

each size.



Part Number: SREXT

Description: Adapter kit for SR receiver, two TA3 audio output jacks, locking power connec-

tor, includes 6' power cord.



Part Number: SRBATTSLEDTOP

Description: Battery Adapter for SR Receivers. Accepts L and M type recharge-

able batteries



Part Number: SRBATTSLEDBOTTOM

Description: Battery Adapter for SR Receivers. Accepts L and M type recharge-

able batteries



Part Number: SRSLEEVE

Description: Mounting sleeve for SR

Receiver, includes velcro.



Part Number: SRHARDWARE

Description: Hardware kit for SRSLEEVE, right angle and straight brackets for cold shoe mounting.



Part Number: SRHARNESS

Description: Output/Power adapter panel for SR receiver, strain relief at-

tached cables.



Part Number: SR5PRETROKIT

Description: Converts SR receiver to

SR5P receiver



Part Number: SR9VBP

Description: 9V battery pack for SR-

BATTSLED and OCTOPACK



Part Number: UFM230

Description: UHF Filter/Amp Module,

230MHz Bandwidth



Part Number: UFM50

Description: UHF Filter/Amp Module,

50MHz Bandwidth



Part Number: VSR1

Description: Velcro® Cable Strain Relief



Part Number: VRFIELD-EC

Description: Replacement module at-

tachment clip for VR Field



Part Number: ZSC24

Description: Passive Splitter, 2-way



Part Number: ZFSC41

Description: Passive Splitter, 4-way



Part Number: ZFSC843

Description: Passive Splitter, 8-way



Introducing the WM Water-Tight Transmitter, Only from Lectrosonics.





Digital Wireless

4-Channel Digital Wireless System

- · 2 or 4 channel operation
- DTV-free unlicensed ISM band 902-928 MHz
- · Digital or analog inputs; digital or analog outputs
- 24-bit, 48 kHz audio
- · Exceptional operating range

The D4 digital wireless system provides 2 or 4 channels of flawless audio wirelessly with up to 1200 ft of range. The system is designed for line level analog audio and AES/EBU digital audio signals, and operates at 24 bits and 48kHz sample rate.



The D4 system operates between four and eight selectable operating channels within the license and DTV-free ISM band between 902 and 928 Mhz. Each channel carries two or four separate audio signals, digitally multiplexed within a common carrier.

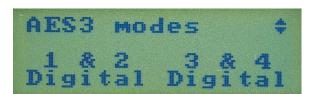
Front panel controls enable all setup and monitoring using an LCD interface. RF and audio levels and currently selected modes are displayed in the main window.

The compact size and light weight make the D4 extremely portable - ideal for use in television and film production. A typical application will be for "bag systems" along with a portable mixer and several wireless microphone receivers in a over-shoulder soft case. The D4T transmitter relays up to 4 audio channels from the bag back to one or more D4R receivers mounted on cameras.









Digital Wireless

Accessories



Part Number: 21422

Description: Replacement Antenna

for D4 system



Part Number: 21425

Description: 6 ft. long power cord; coaxial to stripped & tinned leads



Part Number: 21472

Description: Right angle power cord, coaxial plug, stripped/tinned leads,

6' long



Part Number: 21499

Description: Power Cable for 60320

C13 to Edison



Part Number: 21586

Description: Power cable; locking LZR type plug to stripped and tinned leads.



Part Number: 21746

Description: DC Power Cord, 1ft, for VR

Field, Stripped & Tinned



Part Number: 21747

Description: DC Power Cord, 6ft, for VR

Field, Stripped & Tinned



Part Number: 21798

Description: USB cable for firmware updates; USB 2.0 to mini-b; 2 meter length



Part Number: AMJR915

Description: Whip antenna with reverse gender SMA connector for D4 System

and M4T Quadra Transmitter



Part Number: BATTSLED

Description: General purpose battery adaptor. Optional spring loaded clip is available. BATTERY NOT INCLUDED



Part Number: DCR15/1A6U

Description: Power Supply with universal socket. 90-240VAC in, 15VDC

requalted output



Part Number: DCR12/A8U

Description: Power Supply for D4

system



Part Number: MCSRPT

Description: Audio Cable, for SR Receiver. TA3F plug to Stripped,

Tinned Leads, 15".



Part Number: MCSRXLR

Description: Audio Cable, for SR Receiver TA35 plug to XL RM: 13"

ceiver. TA3F plug to XLRM; 12".



Part Number: MCSRXLRF

Description: Audio Cable, for SR Re-

ceiver. TA3F plug to XLRF; 12".



Part Number: PSLZRDUAL

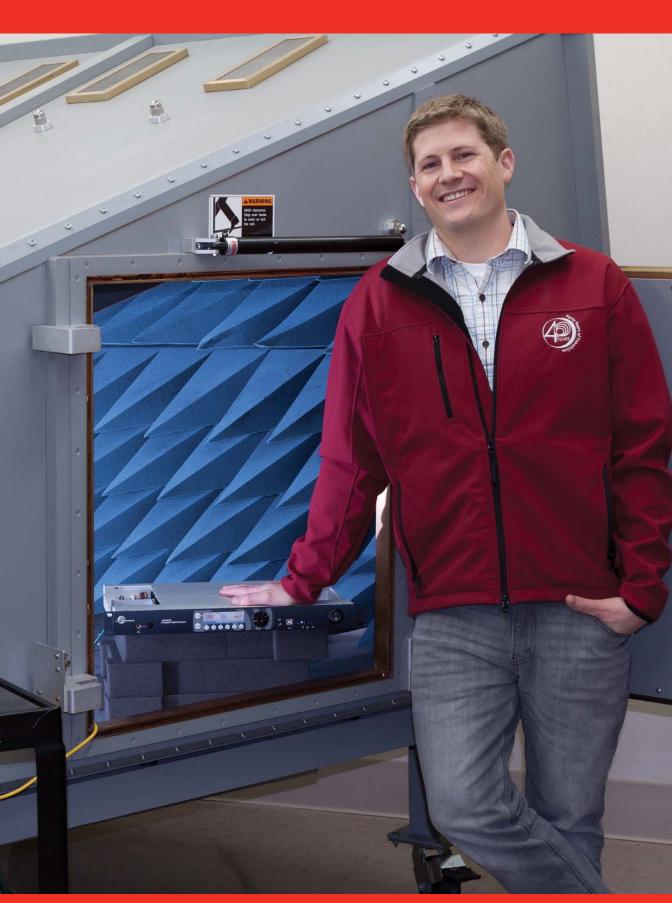
Description: LZR style plug to LZR style

plug. 6 ft. power cable

Dustin Jones

Fanatic Since 2005 Engineering





VRM (Venue)

Studio Receivers

Rack-Mount Modular Receiver

- · Six-channel modular configuration in 1 RU
- Digital Hybrid Wireless® for compandor-free audio
- · Three different diversity schemes
- · Compatibility modes for use with analog transmitters
- . USB and RS-232 computer interface and VRpanel software
- VRS (Standard) and VRT (Tracking) receiver modules available



The Venue Receiver system is a modular design that operates with Digital Hybrid Wireless® transmitters, and a variety of analog transmitters. It consists of a Venue Receiver Master (VRM) and one to six plug-in receiver modules. The VRM includes an antenna multi-coupler, computer communications interface and the mechanical rack mounting for the receiver modules. The VR's design offers a tremendous degree of flexibility including diversity reception schemes, compatibility modes, and tracking and non-tracking modules. The included software provides an excellent interface for setup and monitoring via USB or RS232 connections. The Venue receiver can be controlled with AMX® and CREST-RON® systems.





VRM WB - 230 MHz Range

Wideband Modular Receiver

There are 3 versions of the VRM, each covers a 230MHz range.

- Wideband Low covers blocks 470 (470.100) through 26 (691.100).
- Wideband Mid covers blocks 21 (537.600) through 29 (767.900).
- Wideband High (Export Only) covers blocks 25 (640.000) through 33 (861.900).

Any VRS or VRT receiver module in the respective blocks can be used.



Studio Receivers

VRS, VRT

Digital Hybrid Wireless® Receiver Modules

Two different receiver modules are available for the Venue receiver. Both are triple conversion, frequency synthesized UHF receivers controlled by the DSP in the host assembly.

VRS (Standard) - fixed bandwidth front-end design that is an excellent value and well suited to all but the most congested RF environments.

VRT (Tracking) - same as the VRS module but with the addition of advanced frequency tracking front-end filters. Excellent for congested and hostile RF environments.







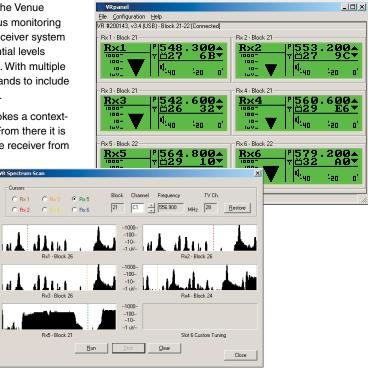
VRPanel Software

VRPanel is a software package provided with the Venue receiver to simplify setup and enable continuous monitoring during operation. A summary of each Venue receiver system is displayed with real time indications for essential levels and settings on each installed receiver module. With multiple Venue receivers, the main display window expands to include a pane for each receiver module in the system.

Right clicking anywhere in a receiver pane invokes a contextsensitive and position-sensitive popup menu. From there it is possible to alter settings, add or delete a Venue receiver from

VRPanel, perform a spectrum scan, start the Walk Test Recorder and more.

A spectrum scanner is included to enable site surveys and find clear operating frequencies. The receiver is tuned across the entire band and RF signals are presented in a graphical display, with signal strength indicated by a scale in the center of the screen. A walk test recorder is also included to make a record of signal strength as a walk test is being conducted.



R400a Studio Receivers

Table-Top Receiver

- . Digital Hybrid Wireless® for compandor-free audio
- · Compact design and metal construction
- · Compatibility modes for use with analog transmitters
- SmartTune™ function for quick, accurate tuning
- Separate XLR and 1/4" outputs with independent level control
- · Available as stand-alone, single or dual-rack versions

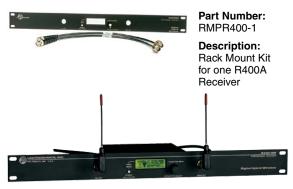
The R400a is a high performance, Digital Hybrid Wireless® diversity receiver compatible with all Lectrosonics 400 series transmitters, and a number of analog models. The R400a features a powerful menu-driven LCD graphic display as a convenient means of monitoring performance and altering settings. A built-in RF spectrum analyzer is included to conduct site surveys to find interference-free operating frequencies. Balanced XLR and unbalanced ¼" outputs can

be controlled separately. The R400A is offered as a stand-alone unit, as a single-channel 1RU rack unit, or as a dual-channel 1RU rack unit (see below).



R400a Rack Mount Receiver*

R400a + RMPR400-1



(2) R400a + RMPR400-2



Part Number: RMPR400-2

Description: Rack Mount Kit, two R400A Receivers



*Racks should be ordered with unit and are assembled at the factory

UMC16B - 230 MHz (Multicoupler for all receivers)



The UMC16B multi-coupler combines ceramic filtering with low noise, high intercept point RF distribution to provide outstanding performance and flexibility. Up to eight diversity receivers or up to 16 non-diversity receivers can be utilized in up to a 230 MHz passband.

The UMC16B can be powered from an external supply, 12 to 18 VDC for mobile applications, or from 90 to 240 VAC for installations using the regulated power supply furnished with the unit. A locking connector on the rear panel secures the power connection.

A 50 MHz passband version is available on a build-to-order basis. Allow several weeks for delivery.

Studio Receivers

Accessories



Part Number: 21499

Description: Power Cable 60320 C13

to Edison



Part Number: 21642

Description: Euro Power Cord CEE 7/7

(Schuko) plug



Part Number: 21643

Description: UK Power Cord BS

1363 plug



Part Number: 21644

Description: Australian Power Cord

S3112 plug



Part Number: 21713

Description: Cable, MB USB A2B



Part Number: 21730

Description: 12" BNC antenna looparound cable for R400 rack mount kit



Part Number: 25877

Description: Angle Bracket for Rack Mounting UDR200/700 Receivers (part of kit, see RMP200-1 or RMP200-2)



Part Number: 25878

Description: Block for Rack Mounting UDR200/700 Receivers, narrow (part of kit, see RMP200-2)



Part Number: 25879

Description: Block for Rack Mounting UDR200/700 Receivers, wide (part of kit. see RMP200-2)



Part Number: BIAST

Description: DC Power Supply, Inline,

for UFM50, UFM230



Part Number: CCIS400

Description: Waterproof Case for

R400A and IM Transmitter



Part Number: CCTM400

Description: Waterproof Case for R400A and UH400TM Transmitter



Part Number: DCR12/A4U

Description: Power Supply for R400a

Receivers



Part Number: DCR15/1A6U

Description: Power Supply for Venue Receiver. 90-240VAC in, 15VDC regualt-

ed output



Part Number: MCAXLRATTEN

Description: Balanced XLR male to

stripped and tinned leads



Part Number: P1196

Description: Retainer clip for Venue. VR

Field receiver modules



Part Number: PF25 - (Specify Block)

Description: Passive inline filter 25 MHz bandwidth. Specify block.



Part Number: PF50 (Specify Block)

Description: Passive In-Line Filter with Bias-T. Specify block range

(XX-XX = two block range)



Part Number: RMP200-1

Part Number: RMP200-2

Description: Rack Mount Kit for one UDR200 or UDR700 receiver

Description: Rack Mount Kit for one UDR200 or UDR700 receiver



Part Number: UFM230/UFM230L

Description: UHF Filter/Amp Module,

230MHz Bandwidth



Part Number: UFM50

Description: UHF Filter/Amp Module,

50MHz Bandwidth



Part Number: ZSC24

Description: Passive Splitter, 2-way



Part Number: ZFSC41

Description: Passive Splitter, 4-way



Part Number: ZFSC843

Description: Passive Splitter, 8-way



ALP Series

Remote Antennas

LPDA Antennas

The ALP Series antennas are a Log Periodic Dipole Array (LPDA) design that provides a useful directional pattern over a broad frequency bandwidth (500 - 800 MHz), allowing coverage of the entire UHF band used for Lectrosonics wireless microphone and IFB systems. These antennas provide 4dB of gain in the forward direction.

ALP 500

Economical Design With Uncovered Connectors



ALP 620



Skeletonized Design For Low Wind Resistance When Used In Mobile Locations



ALP 650

Amplified Design For Use With Long Coaxial Cable Runs

Passband:

ALP650L/E (RoHS compliant) ALP650M/E (RoHS compliant) ALP650H/E (RoHS compliant)

470.000 - 692.000 MHz 537.000 - 768.000 MHz 640.000 - 862.000 MHz



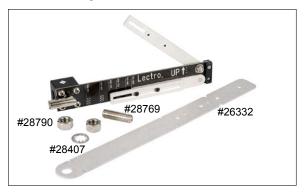
Remote Antennas

SNA600

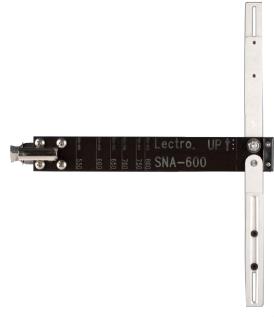
Folding Antenna Kit

Collapsible dipole antenna kit with 100MHz bandwidth, adjustable from 550 MHz to 800 MHz. Ideal for situations where a full 360 degree receiving pattern is required (as opposed to a directional pattern).

Includes mounting kit.



The SNA600 comes complete with mounting hardware. (parts and part numbers shown above)

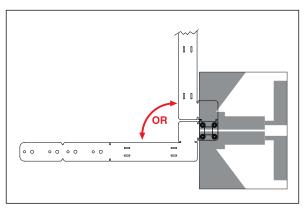




PCA900

Printed Circuit Antenna

A unique and very useful design, the PCA900 antenna provides wide bandwidth (825 MHz - 1 GHz) and a circular pattern in a compact, rugged package. A BNC connector allows direct connection to receivers and multicouplers with standard 50 ohm coaxial cable. An aluminum mounting strap for fixed installation is included and a variety of other mounting options are also available for mobile applications.





In-Line RF Amplifiers

Remote Antennas

UFM230/UFM230L

In-Line RF Amplifier

The UFM230 provides a unique solution for antenna systems requiring long cable runs or distribution to multiple receivers or locations. The amplifier in the unit provides 12 dB of gain without attenuation. Gains of 5 dB and 8 dB can also be selected using the supplied attenuators. The built-in filters provide a 230 MHz passband to cover all standard Lectrosonics frequency blocks.

*Power supply not included



UFM50

In-Line RF Amplifier

The UFM50 performs the same function as the UFM230 but with a 50 MHz passband to cover two standard Lectrosonics frequency blocks. User must specify frequency range when ordering. (Available by special order only.)



*Power supply not included



PF50

Passive In-Line Filter With Bias-T

Passive in-line RF filter with 50MHz passband and DC Bias insertion port. Designed for use with VRMWB and VRField WB wide-band receiver systems in cases where the full bandwidth of the receiver is not needed. Specify two-block range when ordering.

*Power supply not included



PF25

Passive In-Line Filter

Passive in-line RF filter with 25MHz passband. Designed for use with VRMWB and VRField WB wide-band receiver systems in cases where the full bandwidth of the receiver is not needed. Specify block when ordering.



Remote Antennas

Accessories



Part Number: 21769

Description: Female BNC to Female

BNC Connector



Part Number: 21770

Description: Male SMA to Female BNC

Adapter



Part Number: 21793

Description: Male SMA to Female SMA

Right Angle Adapter



Part Number: 28769

Description: Antenna Mounting Stud



Part Number: 26311

Description: Thread Adapter, 1/2" Dia.

6" long, 3/8-16 Thread



Part Number: 26312

Description: Thread Adapter, 1/2" Dia. 1 3/4" Long, 3/8-16 & 1/4-20 Threads



Part Number: 26313

Description: Mic Stand Adapter, 1 1/2"

Long, 5/8-27 & 3/8-16 Threads



Part Number: ACOAXBNC

(Specify Block)

Description: Coax Cable Antenna. Right Angle BNC, 48", Specify Block



Part Number: ALP700RK

Description: Rod Repair Kit for

ALP700/ALP700A



Part Number: ALPKIT

Description: Accessory Mounting Kit for

ALP/SNA



Part Number: ARG2

Description: Antenna Cable, Mini Coax,

2ft



Part Number: ARG2RT

Description: 24 inch coaxial RF cable with right angle BNC male at both ends; commonly

used in portable "bag systems."



Part Number: ARG15

Description: Cable, Mini Coax, 15ft.

Belden 9258



Part Number: ARG25

Description: Cable, Low-Loss Coax,

BNC/BNC, 25ft. Belden 9913F



Part Number: ARG50

Description: Cable, Low-Loss Coax,

BNC/BNC, 50ft. Belden 9913F



Part Number: ARG100

Description: Cable, Low-Loss Coax,

BNC/BNC, 100ft. Belden 9913F



Part Number: ARX125

Description: Cable, Belden 9258,

BNC/BNC, 125ft. Requires RF

amplifier like UFM230



Part Number: BIAST

Description: DC Power Supply, Inline,

for UFM50, UFM230



Part Number: PALP600

Description: Pouch for ALP Antennas,

Zippered Cordura



Part Number: ZSC24

Description: Passive Splitter, 2-way



Part Number: ZFSC41

Description: Passive Splitter, 4-way



Part Number: ZFSC843

Description: Passive Splitter, 8-way





Jon-Eric Sanchez

Fanatic Since 2008 Machine Shop

IFBR1a IFB System

Compact IFB Belt-Pack Receiver

- · Preset frequency can be set without power or signal
- · Scan mode stores up to five additional frequencies
- Multi-color LED and rotary control for programming and operation
- High sensitivity for extended operating range indoors or outdoors
- Rugged machined aluminum housing with attached battery door
- · Long battery life

The IFBR1a portable receiver provides simplicity and flexibility in a package that is intuitive for untrained users to operate. Five programmable operating frequencies can be accessed simply by pressing down on the volume knob. The unit is housed in a rugged machined aluminum package and comes complete with a belt clip pouch. An optional springloaded belt clip (BezelkitR1a) provides a secure mounting on a wide variety of belts, pockets and fabrics.



IFBT4

Digital Hybrid Compact IFB Transmitter



- Digital Hybrid Wireless® for compandor-free audio
- 250 mW power output for long range use
- Multi-use XLR input jack and built-in mic preamp
- · DIP switch programmable intercom input
- Tuning mode for frequency scrolling
- · Compact size and rugged, metal construction
- · Includes CH20 power supply

The IFBT4 is a 250mW Digital Hybrid Wireless® base-station transmitter for IFB and other types of radio links. It is compatible with all Lectrosonics 100, 200, 400, and IFB receivers, along with receivers from two other manufacturers. In 400 mode, the IFBT4 and associated receivers operate without analog companding artifacts.

The IFBT4 is designed for use in broadcast, motion picture, theater and stage applications where extended operating range and high-quality audio are essential. The IFBT4 can be used as part of a stand-alone system or patched directly into popular intercom systems.



IFB Systems

Accessories



Part Number: 21586

Description: Locking Power Plug W/6 ft.

Pigtail, DC16A



Part Number: 26289

Description: Panel, blank, for RMP195/

SDM4D/RDM4 rack mount



Part Number: A500RA (Specify Block)

Description: Antenna, UHF, Right Angle

BNC (Specify Block)



Part Number: A500S

Description: Antenna, UHF, Flexible,

Straight BNC 470-608 MHz



Part Number: A8U (Specify Block)

Description: Antenna, UHF, Straight

BNC (Specify Block)



Part Number: CCMINI

Description: Zip Pouch for Compact

Wireless System



Part Number: BATTSLED

Description: General purpose battery adaptor. Optional spring loaded clip is available. BATTERY NOT INCLUDED



Part Number: ACOAXBNC

(Specify Block)

Description: Coax Cable Antenna, Right Angle BNC, 48", Specify Block



Part Number: ARG2

Description: Antenna Cable, Mini Coax,

2ft. Belden 9258



Part Number: ARG2RT

Description: 24 inch coaxial RF cable with right angle BNC male at both ends; commonly used in portable "bag systems." Belden 8216



Part Number: ARG15

Description: Cable, Mini Coax, 15ft.

Belden 9258



Part Number: ARG25

Description: Cable, Low-Loss Coax,

BNC/BNC, 25ft. Belden 9913F



Part Number: ARG50

Description: Cable, Low-Loss Coax,

BNC/BNC, 50ft. Belden 9913F



Part Number: ARG100

Description: Cable, Low-Loss Coax,

BNC/BNC, 100ft. Belden 9913F



Part Number: BEZELKITR1A

Description: Kit, Belt Clip, Bezel,

Frequency Door for IFBR1a Receiver



Part Number: CH20

Description: Power Supply, 110VAC in,

12VDC Regulated out, 400mA



Part Number: IFBR1KIT

Description: Top bezel replacement kit

for IFBR1a receiver



Part Number: MC55

Description: Adapter Cable, 15", Unbalanced Line-Level Mini Right-Angle Plug to Balanced

Mic Level (45dB Attenuation). Includes

Capacitors to block DC



Part Number: PR1A

Description: Pouch for IFBR1/a

Receiver



Part Number: PS200

Description: Power Cable, 12", Hirose4

to LZR



Part Number: PSLZRDUAL

Description: LZR style plug to LZR

style plug. 6 ft. power cable



Part Number: RMP195

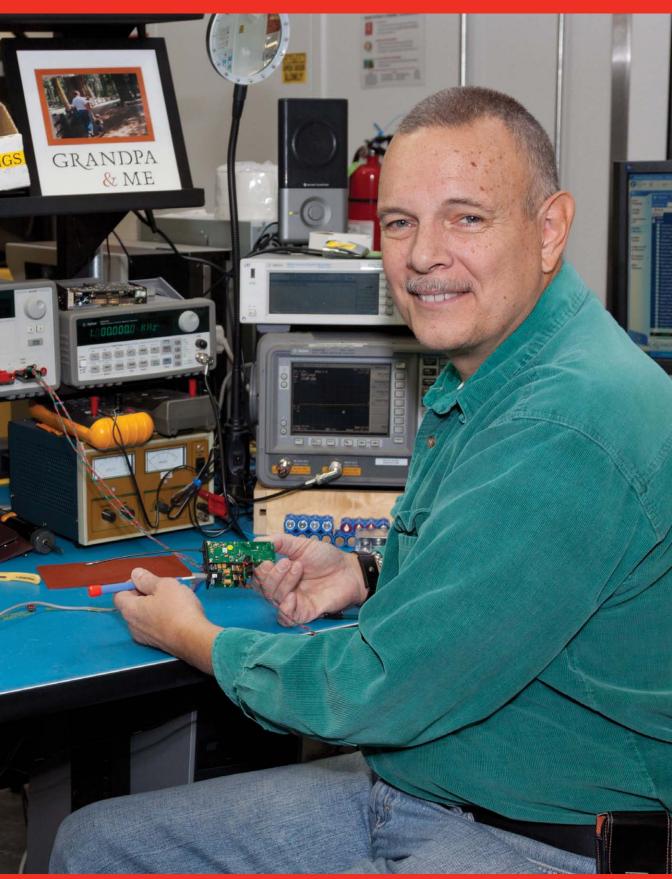
Description: 4 Channel Rack Mount for

Base Station Receivers

Charlie Wright

Fanatic Since 1997 Service & Repair Dept.





Digital Matrix Processors

ASPEN Series DSP





Single Point of Control

ASPEN offers simultaneous native and 3rd party system control from a single, central point.

The ASPEN protocol supports simultaneous use of Ethernet, USB and RS232 ports by the PC software control panel and a third-party serial control system such as AMX® or Crestron®. Installers and operators can use the GUI to monitor the state of the ASPEN device for the purpose of verifying that commands sent from the 3rd-party controller (over RS232) are working correctly. Commands to the master unit are conveyed to all other units in the chain automatically via the ASPEN port.

Superior Sound Quality and Performance

Studies show that Lectrosonics DSP units are consistently rated as "best" in sound quality by actual system operators.

High-resolution microphone preamps, low latency, centralized echo cancellation and Optimized Architecture give ASPEN the edge in performance and sound quality. With a maximum near-side latency of 1.46 ms for the first unit and only 0.25 ms max for each additional unit in the chain, conversations always flow easily and transparently. True 48 Volt phantom powering (conforms to IEC 61938) provides you with the ability to use studio-quality microphones in any application. When your installation demands pristine sound quality.

TCP/IP Addressable

ASPEN gives you the tools you need.

Connect ASPEN with Ethernet, give it an address, and it's part of your network.

or even when you simply don't want to compromise the audio,

The ASPEN port provides 1Gbps throughput capability for audio and control data over a single CAT6 line. All units in the network can be accessed in real time with the associated software.

Reliability

When your audio system absolutely must not fail.

Lectrosonics is well-regarded in the film production & broadcast markets for providing the most robust and reliable equipment in the industry. ASPEN is the 4th generation of audio processing products from Lectrosonics and takes this concept even further, being designed with special care towards critical component choice, manufacturing methods and attention to detail. 100% of Lectrosonics' products are made in-house in the U.S.A. In addition, 100% of these products are tested for quality in multiple stages before ever leaving the factory. ASPEN products now come with a 3-year, all-inclusive, warranty.

Centralized Echo Cancellation

An important part of any teleconferencing system, done beautifully.

A centralized echo canceller, possible only with a Proportional Gain Automixer, concentrates extensive DSP power towards total system echo cancellation. The result is faster convergence, excellent system performance, low latency and reasonable cost. Centralized Echo Cancellation also does not require the system to be "trained" before it works properly and allows an unlimited number of inputs. One further benefit is bridging support for use in Telepresence systems.

Seamless Auto-Mixing with PGA™

The Proportional Gain Algorithm used in the ASPEN series provides lightning-quick, transparent mixes.

Gate-based auto-mixing systems can clip words, modulate the noise floor, and aggravate feedback problems. Lectrosonics has pioneered the application of proportional gain automatic mixing at the matrix crosspoint – a much more sophisticated and elegant way to handle automatic mixing.

4= •

24 Input/12 Output Digital Matrix Processor

Ideal for large number of inputs in automated sound reinforcement systems. Every input can be routed to any or all outputs. The same patented proportional gain algorithm allows for greatly increased intelligibility and gain before feedback in sound reinforcement systems such as in churches, boardrooms and teleconferencing, without glitches.

All ASPEN matrix units have 256 macros available with a selection of sample macros pre-programmed.

- · 24 mic/line inputs
- 12 outputs
- 48-bus matrix
- PGA auto-mixing
- True 48 V phantom
- · High-resolution mic preamps
- · Individual input channel noise reduction



SPN1624

16 Input/24 Output Digital Matrix Processor

Ideal for large-scale automated sound reinforcement systems. Every input can be routed to any or all outputs. The same patented proportional gain algorithm allows for greatly increased intelligibility and gain before feedback in sound reinforcement systems such as in churches, boardrooms and teleconferencing, without glitches.

All ASPEN matrix units have a built-in signal generator including pink noise, white noise, sweep and tone.

- 16 mic/line inputs
- 24 outputs
- · 48-bus matrix
- PGA auto-mixing
- True 48 V phantom
- · High-resolution mic preamps
- Individual input channel noise reduction





SPN1612

ASPEN Series DSP

16 Input/12 Output Digital Matrix Processor

- · 16 mic/line inputs
- 12 outputs
- 48-bus matrix
- PGA auto-mixing
- True 48 V phantom
- · High-resolution mic preamps
- · Individual input channel noise reduction

Perfect for medium-sized systems, the SPN1612 features a scalable digital matrix mixer allowing every input to be routed to any or all outputs. The proportional gain automatic mixing algorithm allows for greatly increased intelligibility and gain before feedback in sound reinforcement applications such as in churches, boardrooms and teleconferencing.

All ASPEN matrix units include five auto mix modes, selectable at each cross point.



SPN812

8 Input/12 Output Digital Matrix Processor

- 8 mic/line inputs
- 12 outputs
- 48-bus matrix
- PGA auto-mixing
- True 48 V phantom
- High-resolution mic preamps
- · Individual input channel noise reduction

Ideal for small to medium-sized installations with up to eight sources including microphones. The SPN812 features a scalable digital matrix mixer allowing every input to be routed to any or all outputs. Automatic microphone mixing using a proportional gain algorithm allows for greatly increased intelligibility and gain before feedback in sound reinforcement systems.

All ASPEN matrix units feature 48 mix busses with full output matrixing.



ASPEN Series DSP

SPN32i

32 Channel Input-Only Unit

An input-only unit with 32 additional mic/line inputs, each with 48V phantom power available.

- All ASPEN units feature individual input channel EQ, noise reduction, true 48 V phantom power, delay and compression.
- · 32 mic/line inputs
- True 48 V phantom
- . High-resolution mic preamps
- · Individual input channel noise reduction



SPN16i

16 Channel Input-Only Unit

An input-only unit with 16 additional mic/line inputs, each with 48V phantom power available.

All ASPEN units have AMX® and Crestron® modules available for controller-based systems.

- 16 mic/line inputs
- True 48 V phantom
- · High-resolution mic preamps
- · Individual input channel noise reduction





SPNTrio Wideband

ASPEN Series DSP

8 Input/12 Output Mixer With Multi-Port Conference Interface

- 8 mic/line inputs
- PGA auto-mixing
- True 48 V phantom
- · 48-bus matrix
- · Advanced Wideband AEC (Acoustic Echo Cancelation)
- 2 power amp channels

The Trio combines patented proportional gain auto mixing with a teleconferencing unit and a power amplifier to provide a single-box solution for conferencing. 8 mic/line inputs, 1 TELCO input, and 2 CODEC inputs (line level), 12 Outputs (4 of which are mic/line level switchable), 1 TELCO output, and 2 CODEC outputs (line level).

All ASPEN matrix units feature individual output delay and EQ with Butterworth, Bessel or Linkwitz-Riley filter characteristics.



SPNConference Wideband

Multi-Port Conference Interface

- Advanced Wideband AEC (Acoustic Echo Cancelation)
- · 2 power amp channels
- · Ultra-low near-side latency

The SPNConference is used with an ASPEN mixer to combine far-end audio with a local sound system and integrate the signals into the ASPEN matrix. The ASPEN Acoustic Echo Cancellation (AEC) addresses the growing need for a single acoustic echo canceller

to handle the challenges of multi-site bridging (such as for telepresence) and an unlimited number of microphones.

The AEC in combination with the patented gain proportional mixing algorithm provides outstanding audio quality without echo heard at the far ends.

A two-channel power amplifier is included for loudspeakers in the local sound system.

The power amplifier is driven by final mix outputs from the matrix and has a full set of signal processing, including delay, parametric EQ, compressor and limiter.

All ASPEN matrix units include individual output compression/limiting and gain control.



4= •

ASPEN Series DSP

SPNDNT

The SPNDNT network interface combines Dante networked digital audio with the ASPEN digital matrix for outstanding flexibility in signal routing and system configuration. The processor includes an Audinate Brooklyn II circuit board module to function as a native Dante device using standard ethernet switches.

The SPNDNT is compliant with AVB as well as 100Mbps ethernet

- 32 Dante™ Network Send Channels
- 32 Dante[™] Network Receiving Channels
- 1 GB/s ASPEN bus

<u>**audinate**</u>





Audinate® is a registered trademark of Audinate Pty Ltd.

Dante™ is a trademark of Audinate Pty Ltd.

DNTBOB 88



BOB 88 is a high quality, general purpose interface to transmit and receive line level analog audio signals via a Dante network. Analog inputs are converted to digital and appear on the network as transmit channels. Audio for the analog outputs is taken from subscriptions to transmit channels on the network from other sources. When connected to a network, each break out box will appear as a separate device in the Dante Controller software interface.

- · 8 balanced line level analog inputs
- 8 balanced line level analog outputs
- Dante[™] primary and secondary ports
- 8 Dante™ network outputs
- 8 Dante™ network inputs
- Uses standard ethernet hardware
- Gigabit compatible
- AVB ready



iPad Developers Toolkit



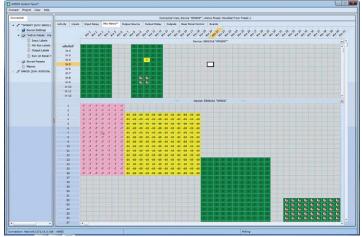
Viewer 3.3, a free software download available online the Apple App Store, has already received rave reviews for its ability to transform an iPad into a control interface for home or commercial automated systems where units in the system are addressed via TCP/IP over Ethernet. Developers can use iViewer for free with a single landscape-oriented and a single portrait-oriented page. Multi-page designs require a licensing fee.

The iPad developer's kit includes sample configurations and tutorial videos, and is available for download from the Lectrosonics web site in the Aspen Support area.

ASPEN Software

ASPEN Series DSP

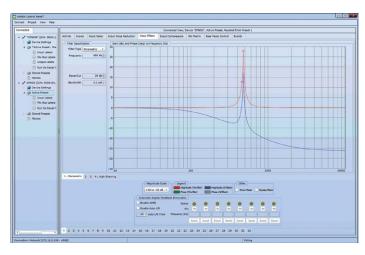
All ASPEN models support simultaneous use of Ethernet, RS232 and USB ports for setup, monitoring, diagnostics and control. Installers and operators can use the software GUI to monitor the state of the processor via the USB port to verify that commands sent from the 3rd party controller (over RS232) are working correctly. Remote monitoring and setup can be conducted via a network connection and from remote sites over the internet.



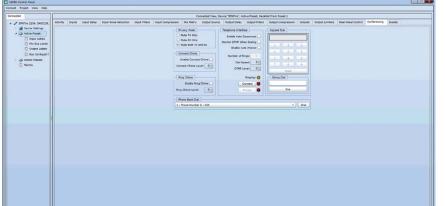
ASPEN Matrix

ASPEN Filters

Try the new ASPEN 2.0 GUI - Available for download now!







ASPEN Conference

ASPEN Series DSP

Accessories



Part Number: 21499

Description: Power Cable 60320 C13

to Edison



Part Number: 21552

Description: Cable, 15ft, Wall to Phone



Part Number: 21558

Description: Plug, Female D-25 Pin



Part Number: 21580

Description: Plug, 5 Position, Deplug-

gable



Part Number: 21642

Description: Euro Power Cord CEE 7/7

(Schuko) plug



Part Number: 21643

Description: UK Power Cord BS

1363 plug



Part Number: 21644

Description: Australian Power Cord

S3112 plug



Part Number: 21802

Description: 12" Cat-6 cable for con-

necting ASPEN units



Part Number: 24719

Description: Cable Wrap, Velcro®, Blue,

w/Lectro Logo



Part Number: 35679

Description: Lectrosonics Screwdriver



Part Number: DB2CAT5SPN

Description: Adapter for pre-wired connections between processor logic ports and the RCWPB8 remote control



Part Number: RCWPB4

Description: Remote Control for audio processors, Four Buttons, LEDs, cover

plate included



Part Number: RCWPB8

Description: Pushbutton Remote Control, single Decora standard

(Decora cover plate not included)



Part Number: RCWPB8DESK

Description: Versatile remote control

for ASPEN and DM Series processors through the logic I/O ports



Part Number: RCWTH4

Description: Remote Control for SPN

Conference, Desktop Style



Part Number: RCWVLS

Description: Remote Volume Control for AM, DM, and ASPEN Series, Cover

plate included



Part Number: XLR8

Description: Jack Panel, XLR and RCA

Inputs/Outputs



DM1624F DM Series DSP

16X24 Digital Matrix Automixer

- 16 mic/line inputs, 24 line outputs (8 outputs are mic/line switchable)
- Proportional gain auto mixing algorithm with AutoSkew[™] -US Patent 5,414,776 and 5,402,500
- No "horsepower" limitations all functions available all the time, regardless of expansion
- 128 macros available for storing up to 64 commands per macro
- . USB, RS-232 interfaces for setup and control
- Digital I/O ports for "daisy chaining" and to connect other LecNet 2 devices
- AMX[®] and CRESTRON[®] compatible
- Simultaneous LecNet2 and Third-Party control

The DM1624F is a 16-in, 24-out digital matrix mixer/processor ideal for large-scale automated sound reinforcement systems. Every input can be routed to any or all outputs. The proprietary automatic microphone mixing using Adaptive Proportional Gain™ algorithm allows for greatly increased intelligibility and gain before feedback in sound reinforcement systems such as in churches, boardrooms and teleconferencing, without glitches. Each input can incorporate up to 6 filter stages plus compressor, feedback elimination and delay. Each output provides optional delay, up to 9 filters and compression/limiting.



DM1612F

16X12 Digital Audio Matrix Mixer

- 16 mic/line inputs, 12 line outputs (4 outputs are mic/line switchable)
- Proportional gain auto mixing algorithm with AutoSkew[™] - US Patent 5.414.776 and 5.402.500
- Auto mixing operates at the output of the matrix each input channel can participate differently in each output mix
- 128 macros available for storing up to 64 commands per macro
- USB and RS-232 interfaces for setup and control
- Digital I/O ports for "daisy chaining" and to connect other LecNet 2 devices
- AMX[®] and CRESTRON[®] compatible
- Simultaneous LecNet2 and Third-Party control

Perfect for medium-sized installations, the DM1612F features a 16-in, 12-out digital matrix mixer allowing every input to be routed to any or all outputs. The proportional gain automatic mixing algorithm allows for greatly increased intelligibility and gain before feedback in sound reinforcement applications such as in churches, boardrooms and teleconferencing. Each input can incorporate up to 6 filter stages plus compressor, ADFE and delay. Each output provides delay, up to 9 filters and compression/limiting.





DM Series DSP DM812

Ideal for small to medium-sized installations with up to eight sources including microphones. The DM812 features an 8-in, 12-out digital matrix mixer allowing every input to be routed to any or all outputs. Automatic microphone mixing using a proportional gain algorithm allows for greatly increased intelligibility and gain before feedback in sound reinforcement systems. Each input can incorporate up to 6 filter stages plus compressor, ADFE and delay. Each output provides delay, up to 9 filters and compression/limiting.

8X12 Digital Audio Matrix Mixer

- 8 mic/line inputs, 12 line outputs (4 outputs are mic/line switchable)
- Proportional gain auto mixing algorithm with AutoSkew[™] -US Patent 5.414.776 and 5.402.500
- Auto mixing operates at the output of the matrix each input channel can participate differently in each output mix
- 128 macros available for storing up to 64 commands per macro
- USB and RS-232 interfaces for setup and control
- Digital I/O ports for "daisy chaining" and to connect other LecNet 2 devices
- AMX[®] and CRESTRON[®] compatible
- . Simultaneous LecNet2 and Third-Party control



DM84

8X4 Digital Audio Matrix Mixer

Perfect for smaller applications where a few microphones or audio sources are needed.

The DM84 features an 8-in, 4-out digital matrix mixer allowing every input to be routed to any or all outputs. Seamless automatic microphone mixing allows for greatly increased intelligibility and gain before feedback in sound reinforcement systems such as in churches, boardrooms and teleconferencing. Programmable front-panel knobs allow for intuitive adjustment while in operation.

- · 8-in/4-out digital matrix architecture
- Stackable with enlarged matrix up to 800 x 14
- · USB and RS-232 interfaces for setup and control
- · Fully balanced audio signal flow through entire system
- Proportional gain auto mixing algorithm with AutoSkew[™] -US Patent 5,414,776
- AMX[®] and CRESTRON[®] compatible
- Simultaneous LecNet2 and Third-Party control





DMTH4 DM Series DSP

Digital Telephone Hybrid Processor

The DMTH4 is a 3-in, 24-out digital matrix mixer that integrates telephone lines, video codecs and external audio sources into the digital bus structure of DM Series processors so these sources operate as additional microphone or audio inputs in the sound system.

Centralized acoustic echo cancellation converges quickly and reduces near-side latency to 2ms. Two echo cancellers are provided, one for the CODEC and one for the TEL connection.

- · 3-in/24-out digital matrix architecture
- . Fully integrates with DM Series processors
- · Telephone, codec and auxiliary inputs and outputs
- . Two Acoustic Echo Cancellers 126 ms tail time
- Line echo canceller 30 ms tail time
- USB and RS-232 interfaces for setup and control
- Digital I/O ports for "daisy chaining" and to connect other LecNet 2 devices
- Proportional gain auto mixing algorithm with AutoSkew[™] -US Patent 5,414,776
- . Simultaneous LecNet2 and Third-Party control



DMPA12

12 Channel Digital Audio Amplifier

The DMPA12 is a digital 12-channel power amplifier and DSP processor in a 1RU, 19" rack enclosure. Audio inputs are taken from the final master mix signals on the digital bus. These final mix signals can then be processed individually at each output channel to apply delay, filters, compression and limiting.

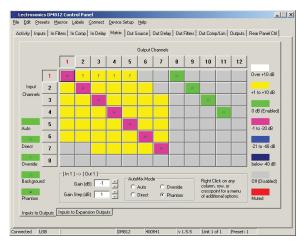
- 12-channel class-D power amp with bridge tied load (BTL)
- 10 Watts RMS per channel; adjacent channels can be tied together for doubled output power
- Every output channel includes a DSP delay, nine filters, compressor and limiter
- · Passively cooled for quiet operation
- Inputs are taken from the Lecnet 2 DANI™ bus forward or backward propagated final mix signals - no analog inputs are provided
- Front panel level controls and LED signal status indicators
- Only compatible with LecNet2 DM components



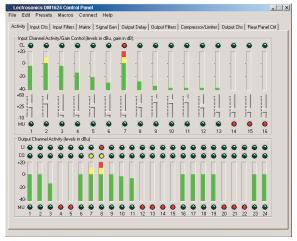


DM Series DSP

LecNet2™ Software

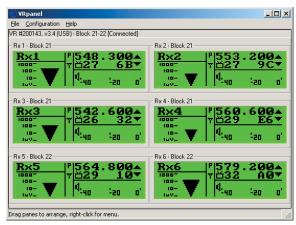


DM Matrix Settings



DM Channel Activity

LecNet2™ software is a user-friendly powerful software package designed for easy setup and control of Lectrosonics' DM Series Digital Audio Matrix Mixers and Venue Receivers. LecNet2™ is used primarily for system setup, with the configuration saved both in a file and into the unit's memory for actual operation. Once configured, the units run without a host computer. LecNet2™ runs under Windows XP 32-bit, Vista 32-bit, and Windows 7 32-bit & 64-bit systems.



VRPanel for Venue receiver (See page 34)



Accessories

DM Series DSP



Part Number: 21499

Description: Power Cable 60320 C13

to Edison



Part Number: 21552

Description: Cable, 15ft, Wall to Phone



Part Number: 21558

Description: Plug, Female D-25 Pin



Part Number: 21580

Description: Plug, 5 Position, Deplug-

gable



Part Number: 21642

Description: Euro Power Cord CEE 7/7

(Schuko) plug



Part Number: 21643

Description: UK Power Cord BS 1363 plug

roco piag



Part Number: 21644

Description: Australian Power Cord

S3112 plug



Part Number: 21710-1

Description: AMX/Crestron Cable



Part Number: 21713

Description: Cable, standard USB A2B



Part Number: 21716

Description: Cable, CAT5 RJ 45, 12"



Part Number: 24719

Description: Cable Wrap, Velcro®, Blue,

w/Lectro Logo



Part Number: 35679

Description: Lectrosonics Screwdriver



Part Number: DB2CAT5

Description: Adapter for pre-wired connections between processor logic ports and the RCWPB8 remote control



Part Number: RCWPB4

Description: Remote Control for audio processors, Four Buttons, LEDs, cover

plate included



Part Number: RCWPB8

Description: Pushbutton Remote Control, singl decora standard

(Decora cover plate not included)



Part Number: RCWPB8DESK

Description: Versatile remote control for ASPEN and DM Series processors through the logic I/O ports



Part Number: RCWTH4

Description: Remote Control for SPN

Conference, Desktop Style



Part Number: BCWVI S

Description: Remote Volume Control for AM, DM, and ASPEN Series, Cover

plate included



Part Number: XI R8

Description: Jack Panel, XLR and RCA

Inputs/Outputs

GHI BOTTE





Don't you wish life were simple and you could easily connect all kinds of different audio components together with a Dante[™] network? Yep, now you can. The BOB88 Break Out Box from Lectrosonics gives you 8 Dante network sends and 8 returns in a single, compact interface box. Low latency, studio-quality audio and Lectrosonics made-in-the USA build quality give you the confidence to put BOB into your next installation.

Any questions?

To arrange for a demonstration of BOB88 or any Aspen product, call 1-800-821-1121 or visit www. lectrosonics.com. In Canada, Call 877-753-2876.

Audinate[®] is a registered trademark of Audinate Pty Ltd: Dante™ is a trademark of Audinate Pty Ltd. Scan here for the Dante white paper









PA8 Analog Audio

8 Channel Power Amplifier

- · 8 separate amplifier channels in 1RU
- 10 Watts RMS per channel into 4 Ohms in non-bridged mode, 20 Watts RMS per channel bridged into 8 Ohms
- · Passively cooled for silent operation
- · Full short circuit and thermal overload protection

The PA8 8 Channel Power Amplifier is a unique single rackspace solution for zoned, distributed loudspeaker systems. The PA8 has eight separate power amplifiers, each with an output power capability of 10W (4 Ohms) or 6W (8 Ohms) RMS. The PA8 is passively cooled, and features full shortcircuit and thermal overload protection. The amplifier outputs are muted at turn-on and turn-off, to eliminate transients.



XLR8

Adapter Panel

- Provides standard XLR and RCA connectors for Lectrosonics automatic mixers
- 8 balanced XLR inputs
- Alternate RCA jacks on 2 inputs
- Balanced XLR output
- Dual mono RCA outputs
- Switchable 10dB output attenuator on RCA jacks
- Depluggable connectors on rear

The XLR8 adapter panel acts as an interface between the AM, DM and Aspen-series processors and standard XLR and RCA connectors on the front panel of the unit. This allows these mixers to be used in rental, staging, or mobile applications where audio cables are connected and disconnected frequently. The panel is often mounted either on the front or rear of an ATA-style case or other rack mount.

Lectrosonics 3-pin de-pluggable connectors (P/N 21531) are used to interconnect the XLR8 panel with the mixer.

Inputs 7 and 8 offer RCA jacks as an alternative to the XLR connectors for use with MP3 players or other audio equipment. Slide switches located on the rear of the panel select either the RCA or XLR jack as the active input.





Analog Audio

Accessories



Part Number: 21500

Description: Plug, 10 Position, w/Screw

Terminals, Depluggable



Part Number: 21505

Description: Plug, 7 Position, w/Screw

Terminals, Depluggable



Part Number: 21529-1

Description: Cable, RS232, DB-

9/3.5mm Stereo Plug



Part Number: 21531

Description: Plug, 3 Position, for 21530,

BEAU, 86053



Part Number: 21537

Description: Jack, D-Submini, M-15P,

Panel Mount



Part Number: 21538

Description: Shell, Plug, for D-Submini

15-Pin



Part Number: 21548

Description: Plug, 4 Position, Deplug-

gable, for 21549



Part Number: 21551

Description: 12" Cable, 8-pin Mini-DIN

to Mini-DIN



Part Number: 21552

Description: Cable, 15ft, Wall to Phone



Part Number: 21553

Description: Jack, Male, 9-pin D-Sub



Part Number: 21554

Description: Shell, Plug, 9-pin D-Sub



Part Number: 21580

Description: Plug, 5 Position, Deplug-

gable



Part Number: 21592

Description: 24" Cable, 8-pin, Mini-DIN

to Mini-DIN



Part Number: 21607

Description: Plug, 3 Position, w/Screw

Terminals, Depluggable



Part Number: RCWVLS

Description: Remote Volume Control for

AM, DM Series



Made In The USA By A Bunch Of Fanatics





Carla Zamora

Fanatic Since 2004 Surface Mount Electronics

IS400

Systems/ Packages

Wireless Instrument System

The IS400 with Digital Hybrid Wireless® technology sets new standards for wireless instrument systems. Flat frequency response, low distortion and compandor-free operation provides the closest thing to using a high-quality, short instrument cable. The IS400 reproduces the lowest fundamental from a 5-string bass (low B) up to the very highest overtones and harmonics. The IS400 can be paired with instrument cables such as the MI39A, microphones, or contact pickups depending on the application.

The standard Instrument System uses an LMa Transmitter, but several other transmitter models may also be used as part of the IS400.

For multi-channel systems, the Venue receiver can be used.

- Digital Hybrid Wireless® for Compandor-free audio
- 256 synthesized UHF frequencies in each of 9 available blocks
- · Rugged all-metal construction
- Independent XLR and 1/4" audio outputs
- SmartTune™ with graphic display for easy selection of clear RF frequencies
- · Level indicators for precise gain adjustment
- 50 mW RF output for long range and dropout-free performance



Recommended Cables for Pickup/Transmitter

	Standard-Input Transmit	ters	
$ ag{Transmitter} ightarrow ag{Pickup Type} \downarrow$	IM	LM	UM400
Acoustic	MI39A (or MI33A)	MI39A (or MI33A)	MI39A (or MI33A)
Acoustic High-Level	MI33P	MI33P	MI33P
Electric	MI39A (or MI33A)	MI39A (or MI33A)	MI39A (or MI33A)
Electric Active	MI33P	MI33P	MI33P

Current Servo-Input Tran	smitters		
LMa	UM400a	SM Series	Notes:
МІЗ9А	MI39A	МІЗ9А	For most acoustic instruments, using a soundhole pickup, or with built-in EO/preamps. Example: Taylor guitars with ES.
MI33P	MI33P	MI33P	Specifies acoustic instruments with exceptionally high output levels or low impedance outputs.
MI39A	MI39A	МІЗ9А	Most guitars & basses with passive pickups including high-output passive pickups.
MI33P	MI33P	MI33P	Instruments equipped with active pickup systems with low-impedance outputs.



Wireless Instrument System



"Neal is extremely pleased with the sound quality of the Lectrosonics equipment—it's clear and extremely articulate. In all the time I've used the IS400 with Slash and, now Neal, I haven't experienced a single RF issue. This includes literally hundreds of shows in clubs, arenas, stadiums, and outdoor venues."

Adam Day, guitar tech for Neal Schon.

IS400 Users Include:

Malcolm Young - AC/DC Ricky Phillips - Styx

Dixie Chicks Carlos Santana

Slash Johnny Hiland

Neal Schon Taylor Guitars

Dan Crary Ricky Martin Band

Pearl Jam John Fogerty

Bob Weir The Killers

Alex Lifeson George Pajon - Black Eyed Peas

Foreigner Jerry Horton - Papa Roach

k.d. lang Ziggy Marley



TM400

Systems/ Packages

Wireless System For Test & Measurement

- Replaces long cable between calibrated microphone and test equipment
- Digital Hybrid Wireless® for compandor-free audio
- · Rugged all-metal construction
- SmartTune™ with graphic display for easy selection of clear RF frequencies
- Transmitter converts microphones with XLR jacks to wireless operation
- Selectable 5, 15, 48 Volt microphone powering
- 100 mW RF output power for long range

The TM400 system was designed to provide the ideal link between calibrated test microphones and measurement equipment such as SIM®, SIA SMAART Live®, TEF® or other systems. By using a radio link, long cables can be eliminated thus saving time and providing opportunities for additional

measurements to increase accuracy. The microphone can even be moved around in the venue while the audience is present – something that is impossible with a cabled measurement microphone.

The employed Digital Hybrid Wireless® technology has some very beneficial properties. Because the information being transmitted is digitally encoded, usable dynamic range is much higher than an analog system can offer and there is no compandor in the audio signal to interfere with your measurements.

The TM400 system comes standard with the HM transmitter, R400A receiver, and CCTM400 water-resistant case. However, the components can also be ordered separately. Also, the R400A receiver can be ordered with a rack-mount front panel, at an additional cost.

The Venue receiver can be used for multi-channel systems.



Microphone not included.



References

Modular Portable Receiver Blocks Available

Frequency Block	Frequency Range:	NTSC TV Channels	PAL D TV Channels	Color:	VRField WBL	VRField WB	VRS	VRT	Octopack L	Octopack M	Octopack H	D4R
470	470.1 - 495.6	14-18	21-24	Black								
19	486.4 - 511.9	16-20	23-26	Black								
20	512.0 - 537.5	21-25	26-29	Black								
21	537.6 - 563.1	25-29	29-32	Brown								
22	563.2 - 588.7	29-33	32-35	Red								
23	588.8 - 614.3	33-36	35-39	Orange								
606	606.5 - 631.5	37	38	Black								
24	614.4 - 639.9	38-42	39-42	Yellow								
25	640.0 - 665.5	42-46	42-45	Green								
26	665.6 - 691.1	46-50	45-48	Blue								
27	691.2 - 716.7	50-54	48-51	Violet								
28	716.8 - 742.3	55-59	51-55	Gray								
29	742.4 - 767.9	59-63	55-58	White								
30	768.0 - 793.5	N/A	58-61	Black								
779	779.12 - 809.75	N/A	61-63	Black								
31	793.6 - 819.1	N/A	63-64	Black								
32	819.2 - 844.7	N/A	64-67	Black								
33	844.8 - 861.9	N/A	67-69	Black								
806	806.1 - 809.75	N/A	N/A	Black								
ISM	902 - 928	N/A	N/A	None								
944	944.1 - 951.9	N/A	N/A	Black								

Studio Receiver Blocks Available

Frequency Block	Frequency Range:	NTSC TV Channels	PAL D TV Channels	Color:	VRM WBL	VRM WB	VRM WBH	VRM Narrow	VRS	VRT	R400a
470	470.1 - 495.6	14-18	21-24	Black							
19	486.4 - 511.9	16-20	23-26	Black							
20	512.0 - 537.5	21-25	26-29	Black							
21	537.6 - 563.1	25-29	29-32	Brown							
22	563.2 - 588.7	29-33	32-35	Red							
23	588.8 - 614.3	33-36	35-39	Orange							
606	606.5 - 631.5	37	38	Black							
24	614.4 - 639.9	38-42	39-42	Yellow							
25	640.0 - 665.5	42-46	42-45	Green							
26	665.6 - 691.1	46-50	45-48	Blue							
27	691.2 - 716.7	50-54	48-51	Violet							
28	716.8 - 742.3	55-59	51-55	Gray							
29	742.4 - 767.9	59-63	55-58	White							
30	768.0 - 793.5	N/A	58-61	Black							
779	779.12 - 809.75	N/A	61-63	Black							
31	793.6 - 819.1	N/A	63-64	Black							
32	819.2 - 844.7	N/A	64-67	Black							
33	844.8 - 861.9	N/A	67-69	Black							
806	806.1 - 809.75	N/A	N/A	Black							
ISM	902 - 928	N/A	N/A	None							
944	944.1 - 951.9	N/A	N/A	Black							

Licensing of wireless microphone equipment is the user's responsibility, and licensability depends on the user's classification and application, and on the selected frequency. The user is strongly urged to contact the appropriate telecommunications authority concerning proper licensing, and before choosing and ordering frequencies.

USA Only
USA & EXPORT
EXPORT Only



Transmitter Frequency Blocks Available

References

Frequency Block	Frequency Range:	NTSC TV Channels	PAL D TV Channels	Color:	SMV/ SMQV	SMb/ SMDb	UM400a	WM	MM400c	LMa	НМ	НН	IFBT4	D4T
470	470.1 - 495.6	14-18	21-24	Black										
19	486.4 - 511.9	16-20	23-26	Black										
20	512.0 - 537.5	21-25	26-29	Black										
21	537.6 - 563.1	25-29	29-32	Brown										
22	563.2 - 588.7	29-33	32-35	Red										
23	588.8 - 614.3	33-36	35-39	Orange										
606	606.5 - 631.5	37	38	Black										
24	614.4 - 639.9	38-42	39-42	Yellow										
25	640.0 - 665.5	42-46	42-45	Green										
26	665.6 - 691.1	46-50	45-48	Blue										
27	691.2 - 716.7	50-54	48-51	Violet										
28	716.8 - 742.3	55-59	51-55	Gray										
29	742.4 - 767.9	59-63	55-58	White										
30	768.0 - 793.5	N/A	58-61	Black										
779	779.12 - 809.75	N/A	61-63	Black										
31	793.6 - 819.1	N/A	63-64	Black										
32	819.2 - 844.7	N/A	64-67	Black										
33	844.8 - 861.9	N/A	67-69	Black										
806	806.1 - 809.75	N/A	N/A	Black										
ISM	902 - 928	N/A	N/A	None										
944	944.1 - 951.9	N/A	N/A	Black										

Portable Receiver Frequency Blocks Available

Frequency Block	Frequency Range:	NTSC TV Channels	PAL D TV Channels	Color:	SR Series	UCR411a	UCR401	UCR100	IFBR1a	D4R
470	470.1 - 495.6	14-18	21-24	Black						
19	486.4 - 511.9	16-20	23-26	Black						
20	512.0 - 537.5	21-25	26-29	Black						
21	537.6 - 563.1	25-29	29-32	Brown						
22	563.2 - 588.7	29-33	32-35	Red						
23	588.8 - 614.3	33-36	35-39	Orange						
606	606.5 - 631.5	37	38	Black						
24	614.4 - 639.9	38-42	39-42	Yellow						
25	640.0 - 665.5	42-46	42-45	Green						
26	665.6 - 691.1	46-50	45-48	Blue						
27	691.2 - 716.7	50-54	48-51	Violet						
28	716.8 - 742.3	55-59	51-55	Gray						
29	742.4 - 767.9	59-63	55-58	White						
30	768.0 - 793.5	N/A	58-61	Black						
779	779.12 - 809.75	N/A	61-63	Black						
31	793.6 - 819.1	N/A	63-64	Black						
32	819.2 - 844.7	N/A	64-67	Black						
33	844.8 - 861.9	N/A	67-69	Black						
806	806.1 - 809.75	N/A	N/A	Black						
ISM	902 - 928	N/A	N/A	None						
944	944.1 - 951.9	N/A	N/A	Black						



Not all products or frequency blocks available in all countries. LICENSING INFORMATION: A ministerial license to operate WIRELESS MICROPHONE EQUIPMENT may be required in certain areas. Consult your national authority for possible requirements. Changes or modifications not expressly approved could void your authority to operate the equipment.

USA Only
USA & EXPORT
EXPORT Only

References

AC Power Cords/Power Supplies

							±				
							DCR15/1A6U†	DCR12/A4U†	DCR15/2AU†	i	
	21499	21642	21644	СН12	СН20	СН40	DCR1	DCR1	DCR1	PS60E**†	CH80 ⁺
TRANSMITTERS UM400*											
UM400a*											
UH400a*											
UH400TM*											
REFUM*											
PORTABLE RECEIVERS											
SR Series											
VR Field											
UCR411a											
UCR401											
SixPack											
QuadPack											
OctoPack											
STUDIO RECEIVERS											
VRM											
R400a											
UDR700											
D4 DIGITAL & QUADRA SYSTEM	IS										
D4T											
D4R											
IFB SYSTEM											
IFB STSTEW IFBT4											
VHF											
CR187											
M187*											
H187*											
ASPEN SERIES											
SPN812											
SPN1612 SPN1624											
SPN1624 SPN2412											
SPN16i											
SPN32i											
SPNTrio											
SPNConference											
DM SERIES											
DM1624 DM1612											
DM1612 DM812											
DM84											
DMTH4											
DMPA12											
AM SERIES											
PA8											
LONG RANGER 4											
LR4 LR175											
ACCESSORIES											
Bias T											
UFM230											
UFM50											
PF50											

Consumer Alert - FCC Order DA 10-92

Most users do not need a license to operate this wireless system. Nevertheless, operating this microphone system without a license is subject to certain restrictions: the system may not cause harmful interference; it must operate at a low power level (not in excess of 50 milliwatts); and it has no protection from interference received from any other device. Purchasers should also be aware that the FCC is currently evaluating use of wireless microphone systems, and these rules are subject to change. For more information, call the FCC at 1-888-CALL-FCC (TTY: 1-888-TELL-FCC) or visit the FCC's wireless microphone website at www.fcc.gov/cgn/wirelessmicrophones.

FCC CONSUMER ADVISORY OPERATION OF WIRELESS MICROPHONES (AND SIMILAR DEVICES) IN 700 MHz BAND PROHIBITED AFTER JUNE 12, 2010

Under a new FCC rule, anyone who uses a wireless microphone (or similar device) that operates in the 700 MHz Band (698 to 806 MHz) must stop operating their wireless microphone (or similar device) no later than June 12, 2010.

All users of 700 MHz Band wireless microphones (and similar devices) who wish to continue to use their equipment – including users such as theaters, churches, schools, conference centers, theme parks, and musicians – will need to retune or replace, if necessary their equipment no later than June 12, 2010. Wireless microphones (and similar devices) that operate outside of the 700 MHz Band are not affected by the FCC's actions and may continue to operate.

Equipment that is a "similar device" to a wireless microphone is also known as equipment for a "low power auxiliary station". Typically these devices can transmit over distances of 100 meters. Examples devices include wireless intercoms, wireless in-ear monitors ("IEM"), wireless audio instrument links, and wireless cueing equipment (aka "IFB".)

When Use Must Stop Immediately

All wireless microphone users that cause harmful interference to a 700 MHz public safety or commercial licensee must cease operations immediately. If a consumer is informed that the device the consumer is using is causing harmful interference, the consumer must cease operations immediately.

60 Day Notice to Stop Use (Early Clearing Process)

In some instances, public safety and commercial licensees may need to initiate their services in the 700 MHz Band before June 12, 2010. In these instances, users of 700 MHz Band wireless microphones will be required to stop using their devices prior to June 12, 2010. This is called the "Early Clearing Process."

There are two ways that wireless microphone (and similar device) users may become aware of an Early Clearing Process that affects them. In both instances, wireless microphone users are required to cease operations within 60 days of the notice.

- 1) The FCC will issue a Public Notice identifying markets where wireless microphone operations must cease. The Public Notices and summary information will be available on the FCC's website www.fcc.gov/cgb/wirelessmicrophones/ or
- 2) Any 700 MHz Band public safety or commercial licensee may notify any entity operating low power auxiliary stations that the licensee is going to initiate use of their spectrum.

In the event that both of these notice provisions are used, the wireless microphone user will be required to stop operations based on the earlier of the two termination dates.

To receive information on this and other FCC consumer topics through the Commission's electronic subscriber service, visit www.fcc.gov/cgb/contacts/.

LECTROSONICS CONVERSION AND UPDATE PROGRAM

Contact the factory regarding the conversion of your 700 MHz Band equipment to comply with the FCC rules and orders. Equipment can be converted to new frequencies or exchanged for current, equivalent models at heavily discounted costs subsidized by the factory.

Call (800) 821-1121 or (505) 892-4501 in the USA • Fax (505) 892-6243 • Email: service.repair@lectrosonics.com

For additional contact information and repair services visit: http://www.lectrosonics.com/service/sands.htm







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