LECTROSONICS M2T Digital IEM Transmitter

LECTROSONICS M2T Digital IEM Transmitter Instruction Manual

Contents

LECTROSONICS M2T Digital IEM Transmitter

Product Information

Specifications:

- **Model:** M2T
- **Input Type:** Analog and digital Dante network audio inputs
- **Channels:** Two stereo digital channels
- **Latency:** Ultra-low
- **Frequency Response:** 20 Hz to 11.5 kHz
- **RF Modulation:** Digital

Product Usage Instructions

System Setup Procedures:

1. Connect the M2T transmitter to your audio source using the appropriate cables.
2. Power on the transmitter and navigate through the LCD menu to set up RF and audio parameters.
3. Ensure proper frequency synchronization using the Sync Scan feature.

RF Setup:

- **RF Enable/Level:** Adjust the RF level based on your environment to ensure optimal signal strength.
- **Frequency:** Set the desired operating frequency for the transmitter.
- **Sync Scan:** Use this feature to scan for available frequencies and synchronize with the receiver.

Audio Setup:

- **Audio Level/Trim:** Adjust the audio input gain to achieve the desired volume level.
- **Audio Input Type:** Select between analog and digital Dante network audio inputs based on your setup.
- **Audio Polarity:** Configure audio polarity settings if needed.
- **Headphone Monitor:** Enable or disable headphone monitoring for real-time audio monitoring.

IR Sync:

- **Sync Settings:** Configure synchronization settings for seamless operation.

- **Sync Flexlist Profile:** Customize synchronization profiles for different scenarios.

FAQ:

- **What is Dante?**
  Dante is a digital audio networking technology that allows high-quality audio to be transmitted over standard Ethernet networks.
- **How do I update the firmware?**
  You can update the firmware by connecting a USB drive with the latest firmware to the front-panel USB port of the M2T transmitter.

Introduction

The M2T Digital Half-Rack Transmitter with analog and digital Dante™network audio inputs presents an excellent-sounding IEM system with a unique level of performance in a wireless in-ear monitor system. With ultra-low latency, digital RF modulation, and two stereo digital channels, the Duet System provides a truly unique IEM product for demanding, professional applications. The M2T includes a front-panel USB port for firmware updates and an IR port for fast setup. A large, high-resolution, backlit LCD and large membrane switches provide an intuitive interface that is highly visible in daylight or dimly lit conditions.

The half-rack transmitter provides four audio inputs which can be individually configured to be analog or Dante compatible. The input connectors are full-size XLR/TRS combo types for balanced line-level analog signals. Input preamp circuits use a special balanced amplifier with very high common mode rejection to minimize hum and noise. Analog signals are converted to an internal digital format which is then encoded, organized into packets, and passed to an RF modulator. The modulated RF signal is filtered before and after amplification to suppress out-of-band noise and spurious signals. Conventional in-ear wireless monitor systems rely on decades-old technology: FM transmission with multiplexed, compounded audio. The Duet system employs unique technology to provide ruler-flat frequency response from 20 Hz to 11.5 kHz and maximum channel separation. In addition, the digital audio eliminates a compandor and the associated artifacts. The result is crystal clear sound and extremely low distortion of <0.15%.

In today’s world, signal encryption is becoming ever more important. The Duet systems offer both unencrypted (Duet compact mode) and encrypted (DCHX compact mode) audio encoding. By selecting the DCHX compact mode in your M2Ra, the Duet system offers AES 256-bit encryption with four different key policies, giving you a wide range of tools for information security. The M2T is designed and developed with professional touring, installation, theater, and broadcast customers in mind. The transmitter chassis is all-metal. The front panel is an aluminum extrusion with a durable powder coat finish.

What is Dante?
Audinate’s patent-pending Dante™ technology is a flexible Internet Protocol (IP) and Ethernet-based digital AV network technology that eliminates the many bulky cables needed to provide point-to-point wiring for analog AV installations. With Dante, existing infrastructure can be used for high-performance audio as well as for ordinary control, monitoring, or business data traffic. Digital networks utilize standard IP over Ethernet offering a high bandwidth capacity for transporting hundreds of high-quality channels over Gigabit Ethernet.

Setting up and configuring the system is made easy as well, saving enormous installation costs and long-term costs of ownership on a digital network. The physical connecting point is irrelevant: audio signals can be made available anywhere and everywhere. Patching and routing now become logical functions configured in software, not via physical wired links.

Summary of Dante’s Benefits

- Plug-and-play technology – automatic discovery and simple signal routing
- Reduced Cost & Complexity- No special skills required to set up audio networking
- Sample accurate playback synchronization
- Add/remove/rearrange components at will
- Deterministic latency throughout the network
- Support mixed bit depths and mixed sample rates over one network
- Scalable, flexible network topology supporting a large number of senders and receivers
- Supports 1Gbps networks
- Supports a single integrated network for audio, video, control, monitoring
- Uses inexpensive, off-the-shelf computer networking equipment

System Setup Procedures

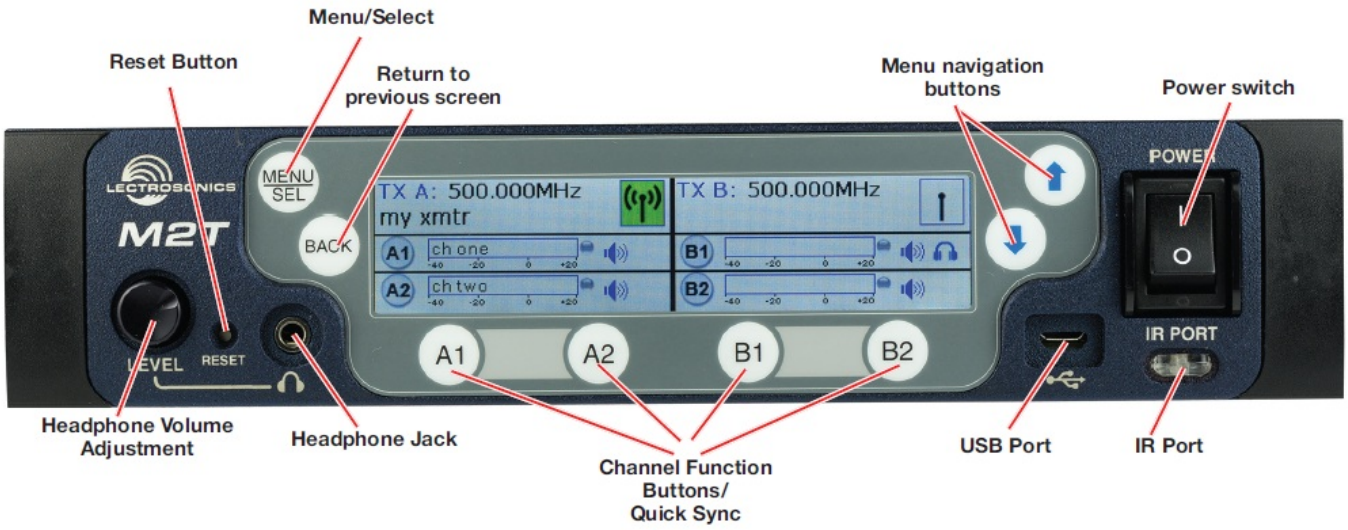
Summary of Steps

1. Connect power using the supplied DCR15/4AU power supply.
2. Power receiver and scan RF spectrum on site.
3. Sync Scan to transfer information from receiver to transmitter.
4. Tune the transmitter to unoccupied channels in the scan.
5. Sync receiver (refer to receiver manual).
6. Turn on the transmitter RF.
7. Send audio sources to the transmitter.

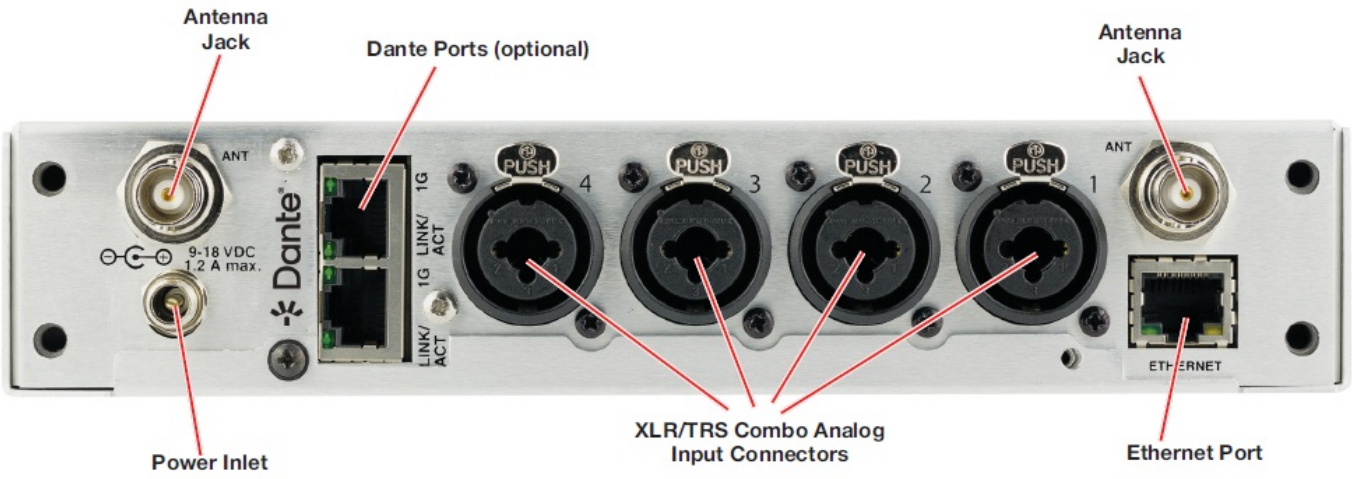
WARNING:
Increasing the Pregain can make the headphone volume excessively loud. Use caution when setting and using.

Panels and Features

M2T, M2T/E01, M2T/E02, M2T/E06 Front Panel



M2T, M2T/E01, M2T/E02, M2T/E06 Back Panel



Operating Instructions

- **IR (infrared) Port**

  Settings, including frequency, name, limiter, mix mode, etc. can be transferred to and from the M2T, M2T/E01, M2T/E02, and M2T/E06 transmitter via this port to an IR-enabled receiver to simplify setup.
- **USB Port**

  For firmware updates and connection to Wireless De-signer Software.
- **Reset Button**

  For MCU recovery in the event of an interrupted firmware update.
- **Headphone Volume Adjustment**

  Adjust the headphone volume, and select the source with A1, A2, B1, and B2 buttons.
- **Antenna Output Jacks**

  Two standard 50-ohm BNC connectors can be used with whip antennas or coaxial cables connected to remote antennas.
- **Dante Ports (optional)**

  A Dante Digital Audio Network Interface.
- **Ethernet Port**

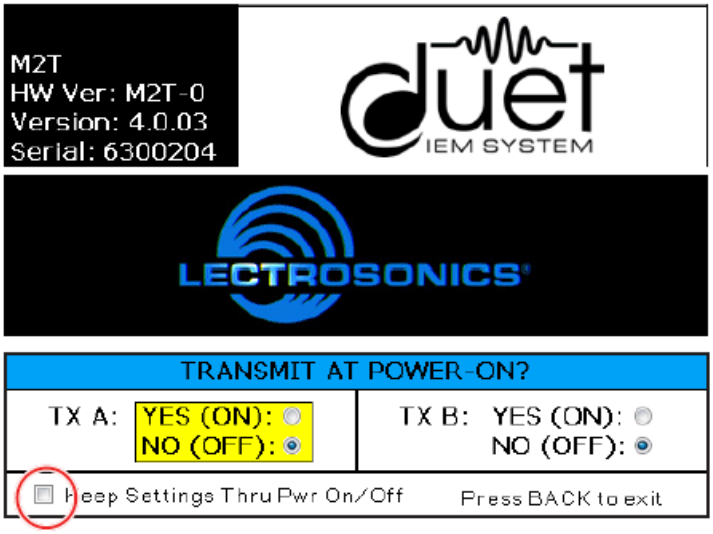
  Used for setup, monitoring, and control with Wireless Designer Software.
- **Power Inlet**

  The threaded-locking DC coaxial jack accepts 9-18 VDC and draws 1.2A maximum.
- **Quick Sync**

  Sync an M2R or M2Ra rapidly by utilizing the Channel Function Buttons. A long (1-second) press of one of the buttons (A1, A2, B1, or B2) on the front panel initiates Quick Sync. Two options are available, “SYNC ALL” or “SPLIT MONO”. The mode is selected before sync in System Settings> Front Panel Setup.

  NOTE: See Front Panel Setup for more instructions on the Quick Sync function.

Power Screens
When powering on the M2T three screens appear in the following order, Duet (showing firmware versions), the Lectrosonics logo, and RF On/Off:

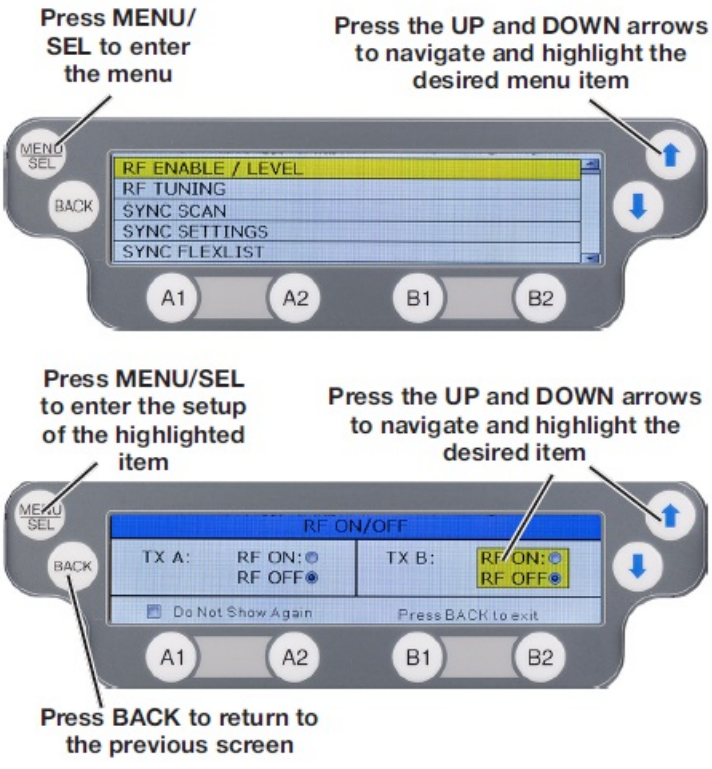


Simultaneous long press of A1/A2 (TX A) or B1/B2 (TX B) will also enable or disable RF.

WARNING:
If RF ON is selected and the user chooses to “Do Not Show Again” RF transmissions will be on when the M2T is powered on and may interfere with frequencies already in use. This can be reset in System Settings> FRONT PANEL SETUP.

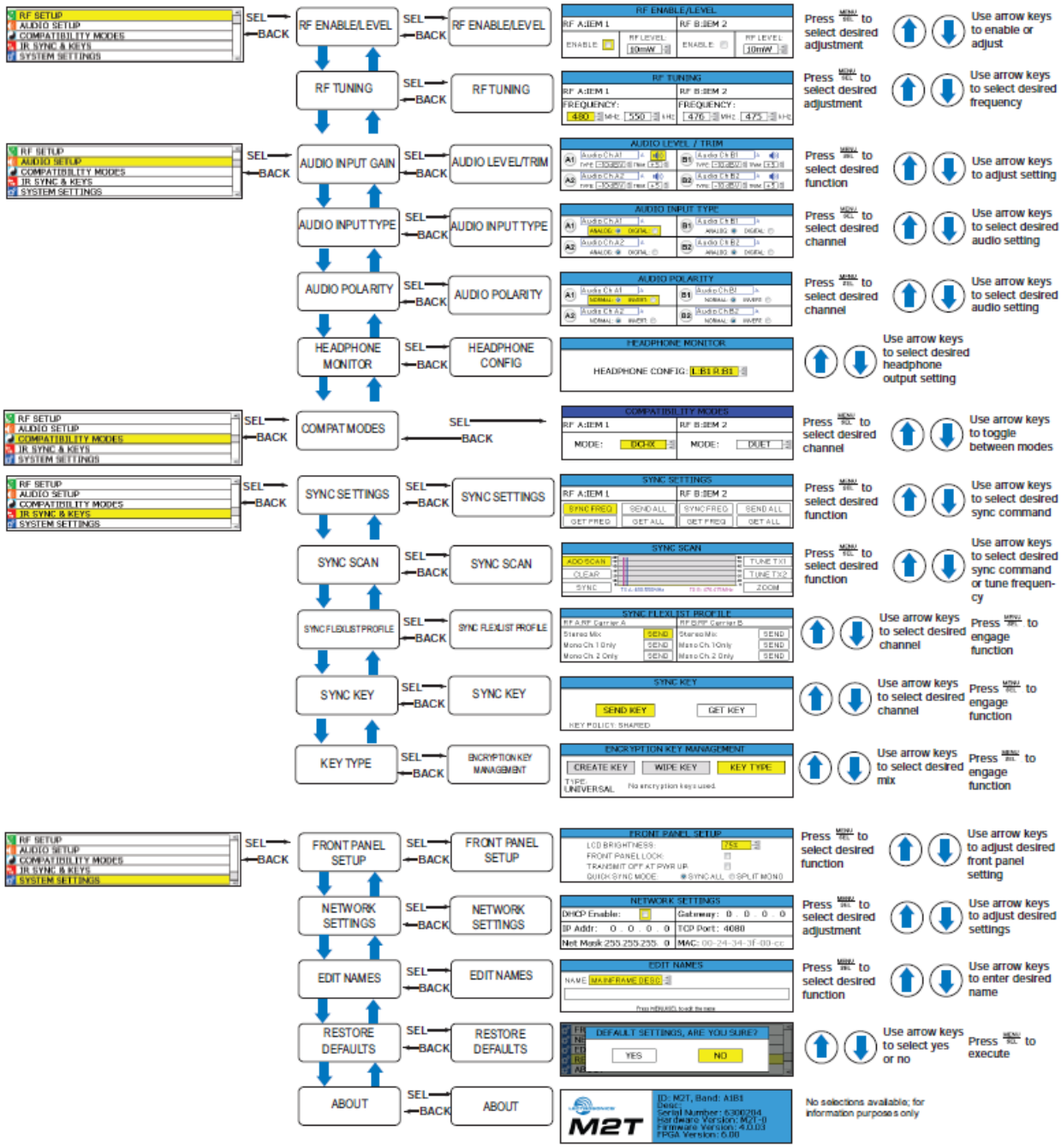
Navigating the Menus
All Menu setup items are arranged in a vertical list on the LCD. Press MENU/SEL to enter the menu, then navigate with the UP and DOWN arrows to highlight the desired setup item. Refer to the menu map on the following page.

NOTE:
To guarantee chosen parameters are saved, exit a setup screen BEFORE powering down the M2T.

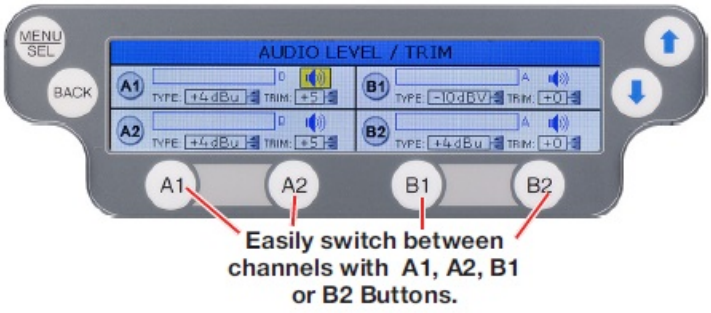


LCD Menu Map

Main Menu Tree

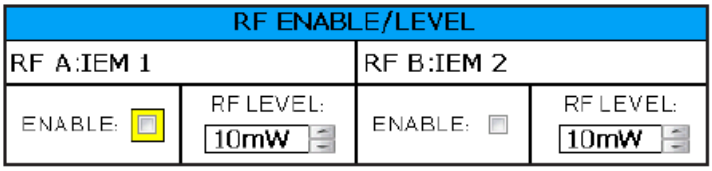


Menu Item Descriptions

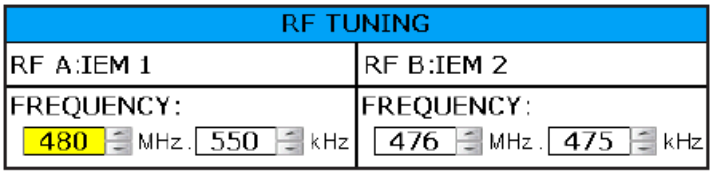


RF Enable/Level

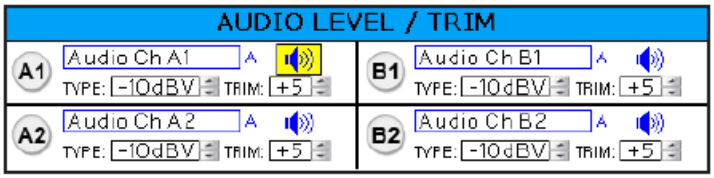
Allows RF transmission to be turned on and off and sets RF levels at 10, 25, or 50 mW (E06 options are 20, 50, or 100 mW EIRP).



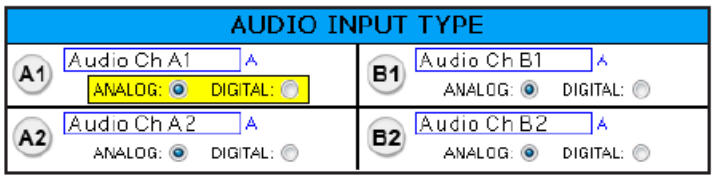
RF Tuning
Allows manual selection of the operating frequency.



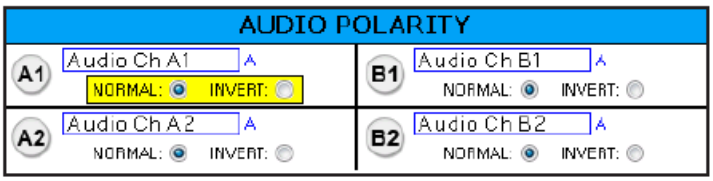
Audio Input Gain
Allows adjustment of input sensitivity and trim for each audio input channel for analog sources.



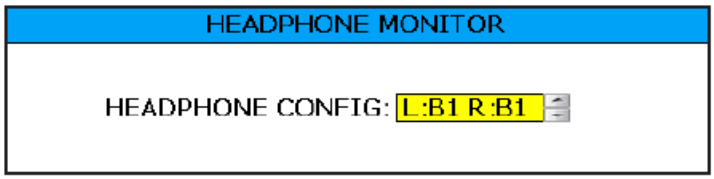
Audio Input Type
Allows selection of input type by channel, either analog or digital (Dante).



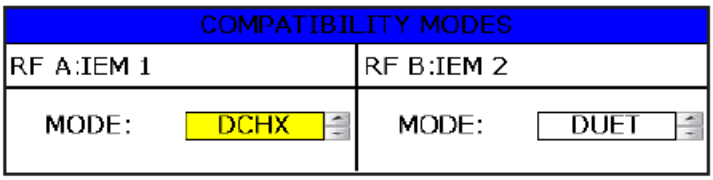
Audio Polarity
Allows selection of audio polarity by channel.



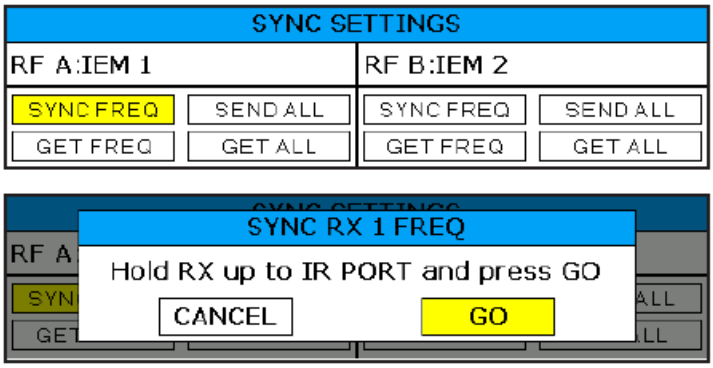
Headphone Monitor
Allows selection of audio channels fed to headphones.



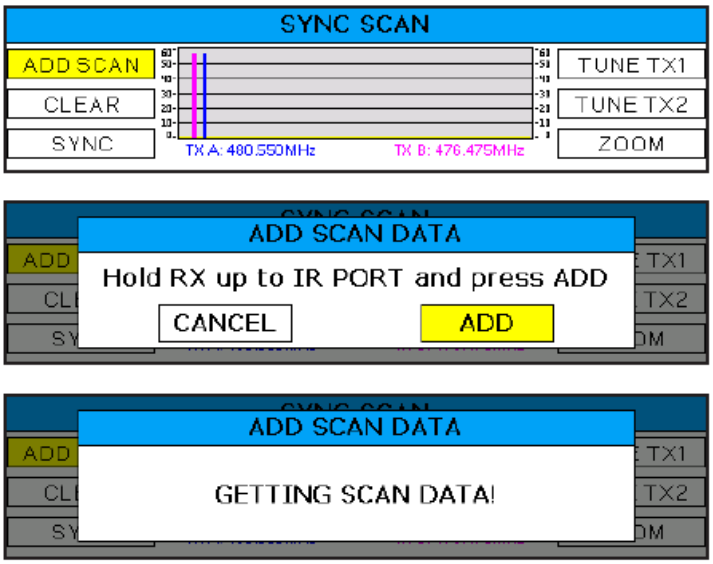
Compatibility Modes
Allows selection of encrypted (DCHX) or non-encrypted (Duet) audio encoding.



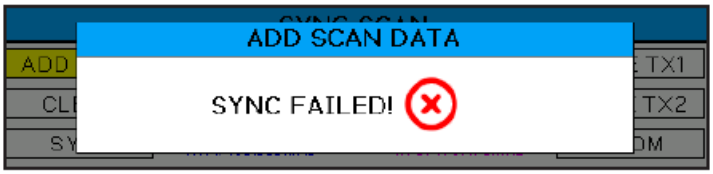
Sync Settings
Allows sending or retrieving setup data via IR port.



Sync Scan
Receive frequency scan via IR port or tune transmitters manually.



The screen will alert the user if the scan is unsuccessful.



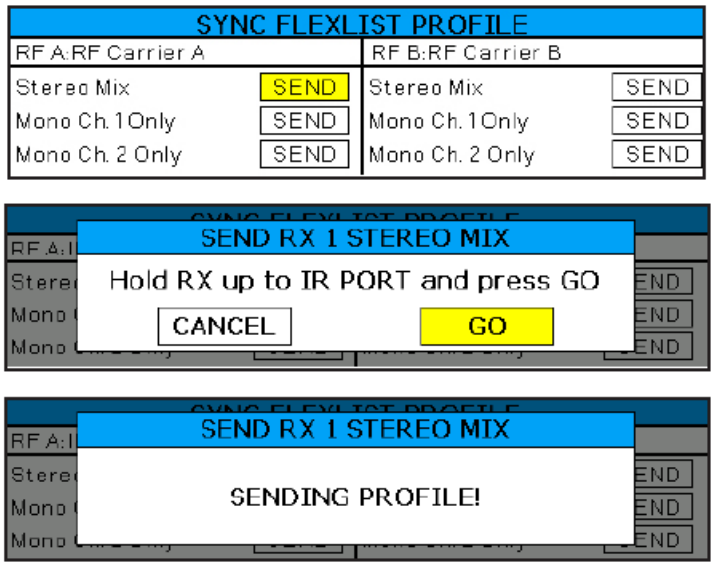
Sync FlexList Profile
FlexList allows the user to set up a list of profiles, by name, in the receiver. This allows quick and easy access to listen to any of the mixes on-site.

After putting the receiver into Sync Flex mode, choose the function and then use the transmitter to send the profile over IR:

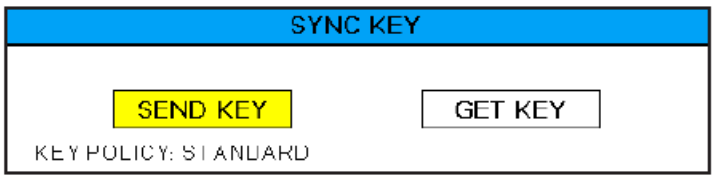
- **Stereo Mix:** The current receiver settings are sent as is, except the mix mode is set to stereo.
- **Mono Ch. 1 Only:** The current receiver settings are sent as is, except the mix mode is set to Mono Ch. 1.
- **Mono Ch. 2 Only:** The current receiver settings are sent as is, except the mix mode is set to Mono Ch. 2.

NOTE: See Mix Mode for more information.

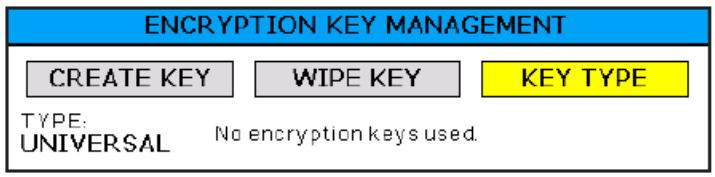
Also see Page 20 for details on creating, editing, and storing Flexlists within Wireless Designer



Sync Key
Allows sending of encryption key to other devices, or getting key from another device using IR sync.

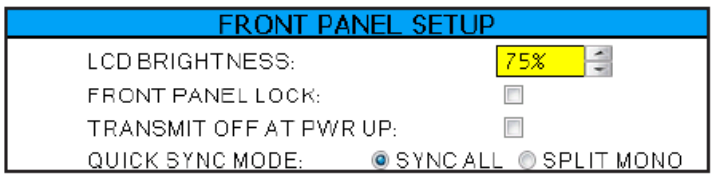


Key Type
Allows selection of encryption key policy: universal, shared, standard, or volatile. Allows creation of new key or deletion of the current key.



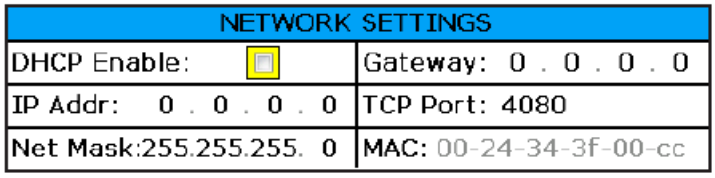
Front Panel Setup
Front panel settings may be customized as follows:

- LCD brightness
- Front panel lock
- Startup RF state
- Quick Sync Mode
  - **Sync All:** A long (1 second) press of either the A1, A2, B1, or B2 buttons sends all RX1 settings.
  - **Split Mono:** A long press of the or B1 buttons sends all RX1 settings with the mix mode forced to Mono Ch. 1. A long press of the A2 or B2 buttons sends all RX1 settings with the mix mode forced to Mono Ch. 2.



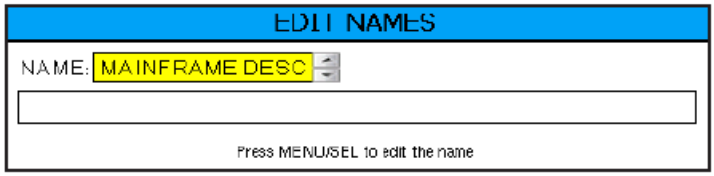
Network Settings
Allows the user to set an IP address or other network settings when needed.

NOTE:
New network settings require the unit to reboot to take effect. Making a change and pressing the BACK key will prompt the user to Reboot Now, Save and Exit, or Discard and Exit.

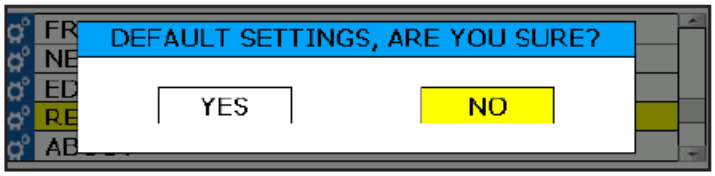


Edit Names
Edit names to match talent for easy location in the Flex-List or easily identify multiple M2T, M2T/E01, M2T/E02, and M2T/E06 transmitters in a rack.

- Use the UP and DOWN Arrows to select letters and MENU/SEL to set and move the cursor.



Restore Defaults
Returns all settings to the factory defaults.



About
Displays general information about the M2T, M2T/E01, M2T/E02, and M2T/E06, including serial numbers, and the hardware, FPGA, and microcontroller firmware versions.

Accessories

DCR15/4AU

Front Mount Antenna Kit FMAKM2T

- **27080 Dante Port Cover**
  (included with Non-Dante Model)
- **Dante 4X4-TM Dante Card Kit**
  (Included in Dante Model)
  RMPM2T-1
  Rack kit for mounting one M2T, M2T/E01, M2T/E02, M2T/E06 into a single rack space

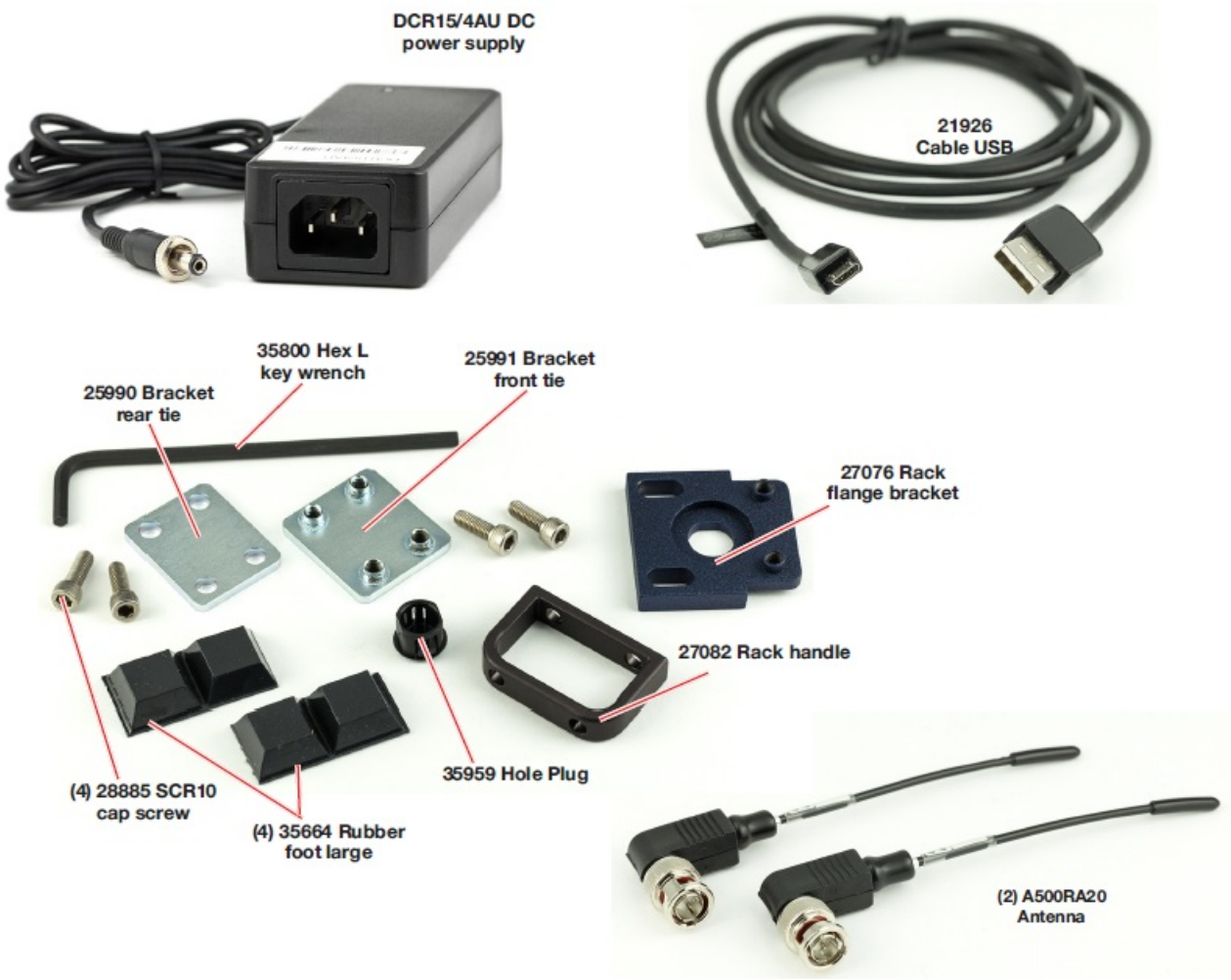
SNA600a Antenna

SNA600a Accessories:

- **ARG 15**
  A 15-foot antenna cable of standard RG-58 coax cable with BNC connectors at each end.

- **ARG 25**
  Antenna cable of Belden 9913F low-loss coax cable with BNC connectors at each end. 25-foot length.

Hardware Installation



Unpacking the Unit
Compare the packing list enclosed with the M2T, M2T/E01, M2T/E02, M2T/E06 with the original order. Inspect all items for damage. Immediately call 1-**800-821-1121** to report any items that are missing or damaged. The sooner we get notified, the sooner we can get any needed replacement items shipped to your location.

Items Included in the Box:

- Instruction manual
- (DCR15/4AU) Power supply cable
- (21926) USB cable
- (35800) Hex L key wrench
- (25990) Bracket rear tie
- (25991) Bracket front tie
- (27076) Rack flange bracket
- (27082) Rack handle
- (28885) (4) SCR10 cap screw
- (35664) (4) Rubber foot large
- (35959) Hole plug
- (A500RA19) (2) Antennas (A500RA22) (2) Antennas] A1B1 Units
- (A500RA22) (2) Antennas (A500RA25) (2) Antennas] B1C1 Units

Installing two M2T, M2T/E01, M2T/E02, M2T/E06 Transmitters into a Single Rack Space
The M2T, M2T/E01, M2T/E02, and M2T/E06 transmitter occupy a half rack space and come with hardware to

mount two transmitters into a single rack space.

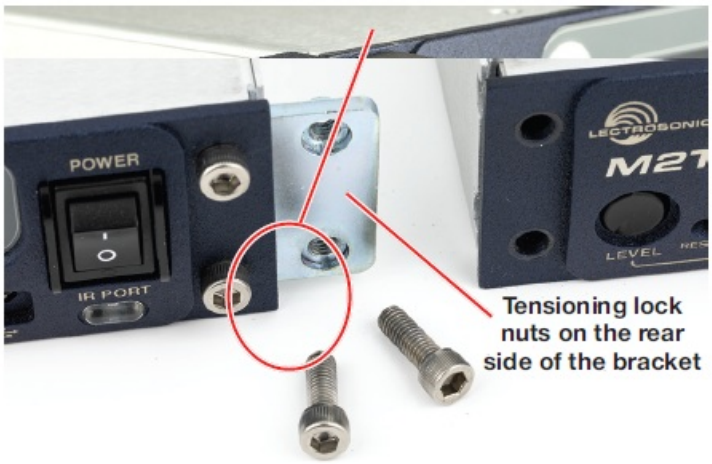
1. Remove the Trim Cap (Part #P1330) from both sides of the front panel on both transmitters.

2. Remove the breakaway tabs on both sides of the chassis side panels. Use a flat-blade screwdriver to pry the tabs outward and snap them off of the chassis.

3. Insert the flange bracket (Part #27076) into the open slot on the side of the chassis cover panel.

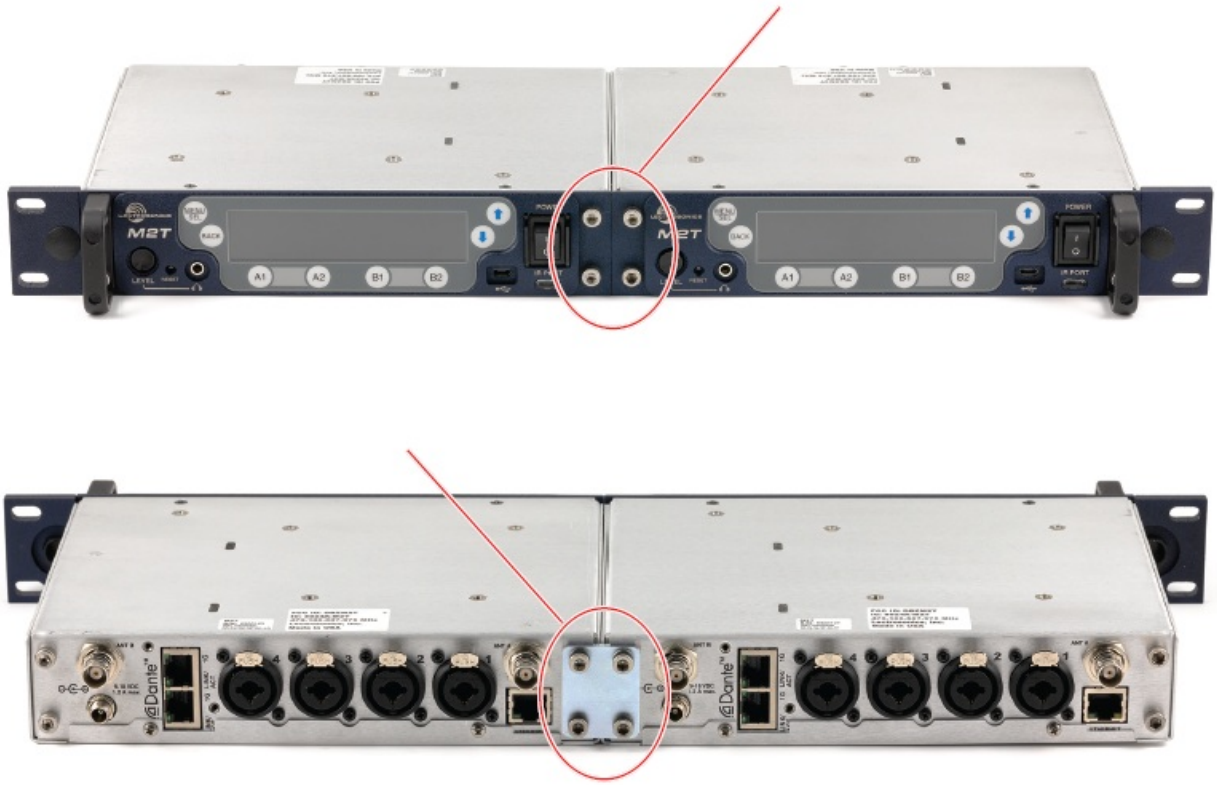
4. Insert two (2) cap screws (Part #28885) through the rack handle (Part #27082) holes and install the rack handle onto the flange bracket through the holes in the unit's front panel. Firmly tighten the cap screws using the hex key (Allen wrench) as shown.

5. If antennas will NOT be mounted on the front panel of the transmitters, install the hole cap (Part #35959) by aligning the flat on the cap with the flat on the opening.



6. Install one side of the front tie bracket (Part #25991) into the side panel opening in one of the transmitters. Insert the screws, but do not tighten them completely at this point.
   NOTE: The retaining nuts on the panel and tie brackets are “tensioning lock nut” types designed to prevent the screws from coming loose due to vibration. You will usually feel resistance as you tighten the screws – this is normal. Slide the other transmitter over the tie bracket and insert the screws, but do not tighten them completely until the rear tie bracket is installed.
7. Remove the four cap screws from the adjacent rear panels, and then use them to attach the rear tie bracket. Do not tighten the screws completely.
8. After the front and rear tie brackets are installed, place the transmitters on a flat surface so that the front panels are even with each other. Hold the transmitters in place and tighten all cap screws on the front and rear brackets.

NOTE:
If the supplied rubber feet are installed on the underside of M2T, M2T/E01, M2T/E02, and M2T/E06, it will not fit in a rack unless there is a space below it.

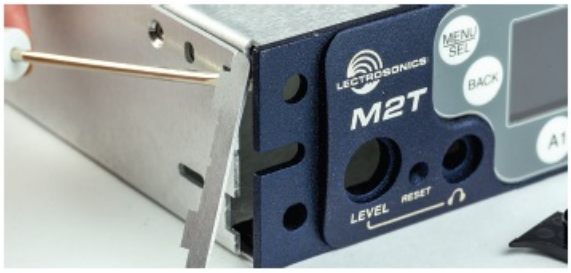


Installing One M2T into a Single Rack
The M2T transmitter occupies a half-rack space. This kit provides the hardware needed to mount one M2T or DSQD into a single rack space.

NOTE:
Steps 1-6 will require the original mounting hardware that came with the units. Part numbers are included in case individual items need to be reordered.

1. Remove the Trim Cap (Part #P1330) from both sides of the front panel of the M2T unit to be rack mounted.

2. Remove the breakaway tabs on both sides of the Chassis Cover Panel. This requires the use of a flat-blade screwdriver inserted into the slots and levering the tabs away on each side of the unit.



3. Insert the Flange Bracket (Part #27076) into the open slot on the left-front side of the Chassis Cover Panel.

4. Insert two (2) Cap Screws (Part #28885) through the Rack Handle (Part #27082) holes and install the Rack Handle onto the Flange Bracket through the holes in the unit's front panel. Firmly tighten the Cap Screws using the long leg of the Hex Wrench as shown.

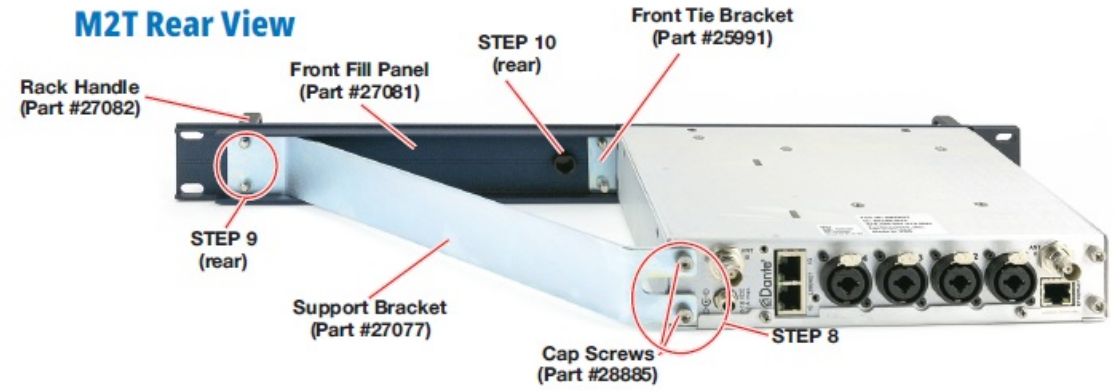
5. Unless also installing a Front Mounted Antenna, insert the Hole Plug (Part #35959) into the open antenna hole in the Flange Bracket by aligning the flat sides of the plug with those of the bracket hole and pushing into place until flush.

6. Install the Front Tie Bracket (Part #25991) into the open slot on the right side of the M2T Chassis Cover Panel with the protruding nuts facing rear-ward, affix with two (2) Cap Screws (Part #28885) provided and firmly tighten with the Hex Wrench. See the next page.

NOTE:

Steps 7-11 require parts from the (RMPM2T-1) M2T Single Rack Mount Kit.

M2T Front View



Items Included in RMPM2T-1 Kit:

- Technical Data Sheet
- (27077) Support Bracket
- (27081) Front Fill Panel
- (27082) Rack handle
- (28885) (4) SCR10 cap screw
- (35800) Hex L key wrench
- (35959) Hole plug
- (28950) (2) Long mounting screws*
- (28951) (2) Short spacer tubes*

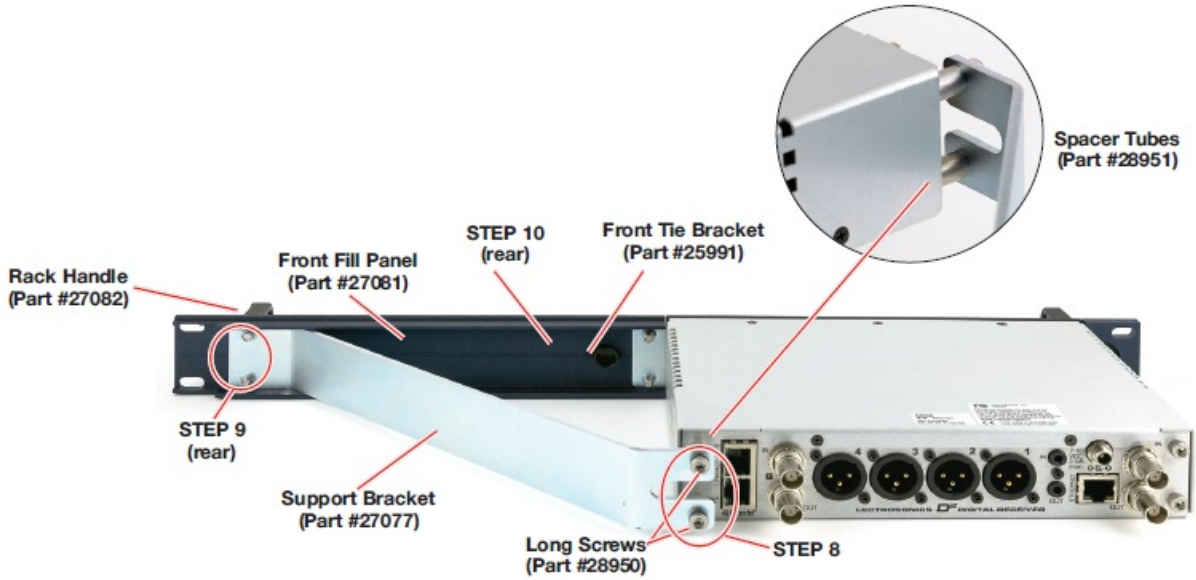
  NOTE: Starred (*) items are needed only when installing a DSQD, They are not needed for M2T installation and may be set aside.

7. Use two (2) Cap Screws (Part #28885) to attach the left side of the Front Fill Panel (Part #27081) to the two remaining nuts on the Front Tie Bracket (Part #25991) and firmly tighten with the Hex Wrench.
8. Use the Hex Wrench to remove the two (2) in-board Cap Screws from the rear of the M2T. Install the Support Bracket (Part #27077) to the rear panel of the M2T, reusing the two (2) Cap Screws previously removed and firmly tightening with the Hex Wrench. (See rear view image above.)
9. Insert two (2) Cap Screws (Part #28885) through Rack Handle (Part #27082) holes and install the Rack Handle onto the right side Front Fill Panel (Part #27081) through the holes in the panel, and into the nuts on the Support Bracket (Part #27076). Firmly tighten the Cap Screws using the long leg of the Hex Wrench. (See rear and front view images on the front page.)

10. Unless also installing a Front Mounted Antenna, insert the Hole Plug (Part #35959) into the open antenna hole in the Front Fill Panel (Part #27081) by aligning the flat sides of the plug with those of the bracket hole and pushing into place until flush. The M2T with Front Fill Panel is now ready for installation into a rack.

NOTE:
If supplied rubber foot/feet are installed on the underside of the M2T, they will not fit in a single rack space.

DSQD Rear View



Installing One DSQD into a Single Rack
The process to install the DSQD is the same as for the M2T transmitter through Step 7. The DSQD looks similar to the M2T in the frontal view. Follow the steps for the M2T, then resume at Step 8:

- Use the Hex Wrench to remove the two (2) in-board Cap Screws from the rear of the DSQD. Put them aside and save them for later use or spares; you will not need them for this installation. Install the Support Bracket (Part #27077) to the rear panel of the DSQD, using the two (2) long mounting screws, threaded with Spacer Tubes, and firmly tighten with the Hex Wrench. See the rear view image and call-out photo above. The kit is designed
  to handle the M2T and the DSQD with a shorter chassis, so the spacers are included.
- Insert two (2) Cap Screws (Part #28885) through the Rack Handle (Part #27082) holes and install the Rack Handle onto the right side Front Fill Panel (Part #27081) through the holes in the panel, and into the nuts on the Support Bracket (Part #27076). Firmly tighten the Cap Screws using the long leg of the Hex Wrench.
- Unless also installing a Front Mounted Antenna, insert the Hole Plug (Part #35959) into the open antenna hole

in the Front Fill Panel (Part #27081) by aligning the flat sides of the plug with those of the bracket hole and pushing into place until flush.

The DSQD with Front Fill Panel is now ready for installation into a rack.

NOTE:
As with the M2T, if the supplied rubber foot/feet are installed on under side of the DSQD, it will not fit in a single rack space.

Mounting M2T To DSQD
When mounting two M2Ts or two DSQDs together, the units lie flush together as shown. This is not the case with an M2T and a DSQD, as the DSQD housing is shorter and the spacer tubes are needed.

Two M2T units

Two DSQD units

When attaching an M2T to a DSQD unit, the preferred configuration (when viewing from the back side) is to have the DSQD to the left and the M2T to the right. If the units are mounted the opposite way, the mounting plate will partially block the Dante® ports on the DSQD, making it difficult to remove the cables. Having the DSQD on the left as shown below eliminates this inconvenience.

Recommended DSQD-M2T mounting

Wireless Designer Software

- Download the Wireless Designer software installer from the websites under the SUPPORT tab at:

http://www.lectrosonics.com

- Once the software is installed, updates are available by simply clicking on “Check for updates” in the Help Menu.

Create, Edit, Store Flexlists in Wireless Designer
Starting with Wireless Designer v2.1.0 for Mac or PC, users now can create, load, save, and send Flexlists to receivers via an M2T-type device. Flexlists now include an optional compatibility mode setting, allowing Flexlist entries for receivers operating in different compatibility modes.

NOTE:
These functional enhancements are available with M2T firmware update M2T v4.0.03 (SUPER)/v6.00 (FPGA, H/W v0 & v1)/v7.00 (FPGA, H/W v2 & v3) and later.

Firmware Update Instructions

- Firmware updates are made with a file downloaded from the website and the M2T connected via USB.
- The USB port on the transmitter requires a micro-B male plug on the connecting cable. The other end of the cable would normally be a USB A-type or C-type male connector to fit the most common type of USB jack used on computers.

Refer to Help in Wireless Designer software for the procedure.

Specifications

- **RF Power Output:**
  - Two carriers; two audio channels each
  - M2T, M2T/E01, M2T/E01: Power adjustable on each carrier to 10, 25 or 50 mW M2T/E06: Power adjustable on each carrier to 20, 50 or 100 mW EIRP
- **Antenna Output:** 2 x BNC sockets
- **Operating Frequencies:**
  - M2T (A1B1) 470.100 – 607.975 MHz
  - M2T/E01 (A1B1) 470.100 – 614.375 MHz
  - M2T/E01-B1C1 537.600 – 691.175 MHz
  - M2T/E02 470.150 – 614.375 MHz
  - M2T/E06 520.000 – 614.375 MHz

NOTE:
It’s the user’s responsibility to select the approved frequencies for the region where the transmitter is operating

Operating Temperature

- **Range:**
  - **Celsius:** -20° – 40°
  - **Farenheit:** -5° – 104°
- Frequency Selection
- Steps: 25 kHz

- Frequency Stability: ± 0.002%
- Modulation: 8 PSK

Emission

- **Designator:** 200KG7E
- **Spurious Radiation:** Compliant with ETSI EN 300 422-1
- **Encryption:** AES 256-bit CTR mode, when loaded with v3.X firmware

Equivalent input

- **Noise:** –128 dB
- **Latency: (overall system)**
  - **Digital Source:** 1.0 ms plus Dante network (on Dante unit)
  - **Analog Source:** <1.8 ms

Audio Frequency

- **Response:** 10 Hz – 11.5 kHz, -1 dB
- **Audio Input:** -10 dBV or +4 dBu settings w/ ±5 dB trim
- **Audio Input Jack:** 4 x combo XLR/TRS connectors
- **Input impedance:** Line: 2k Ohm
- **Dante Connection:** 2 x RJ45, 4 audio RX channels, internally routable
- **Ethernet Connection:** RJ45
- **USB Connection:** Micro USB on the front panel for firmware updates
- **IRDA:** IR transceiver for sync of receivers
- Headphone jack 3.5 mm stereo jack

Power

- **Requirements:** 9-18 VDC
- **Power Consumption:** 11 Watts
- **Weight:** 2.2 lbs (997.903 grams)
- **Dimensions:**
  - **Height:** 1.750 in. / 44.45 mm
  - **Width:** 8.375 in. / 212.7 mm
  - **Depth:** 7.750 in. / 196.8 mm
- **Origin:** Designed and manufactured in the USA

Specifications are subject to change without notice.

Service and Repair

If your system malfunctions, you should attempt to correct or isolate the trouble before concluding that the equipment needs repair. Make sure you have followed the setup procedure and operating instructions. Check the

interconnecting cables and then go through the Troubleshooting section in this manual. We strongly recommend that you do not try to repair the equipment yourself and do not have the local repair shop attempt anything other than the simplest repair. If the repair is more complicated than a broken wire or loose connection, send the unit to the factory for repair and service. Don't attempt to adjust any controls inside the units. Once set at the factory, the various controls and trimmers do not drift with age or vibration and never require readjustment. There are no adjustments inside that will make a malfunctioning unit start working.

LECTROSONICS' Service Department is equipped and staffed to quickly repair your equipment. In warranty, repairs are made at no charge by the terms of the warranty. Out-of-warranty repairs are charged at a modest flat rate plus parts and shipping. Since it takes almost as much time and effort to determine what is wrong as it does to repair, there is a charge for an exact quotation. We will be happy to quote approximate charges by phone for out-of-warranty repairs.

Returning Units for Repair
For timely service, please follow the steps below:

- DO NOT return equipment to the factory for repair without first contacting us by email or by phone. We need to know the nature of the problem, the model number, and the serial number of the equipment. We also need a phone number where you can be reached 8 A.M. to 4 P.M. (U.S. Mountain Standard Time).
- After receiving your request, we will issue you a return authorization number (R.A.). This number will help speed your repair through our receiving and repair departments. The return authorization number must be clearly shown on the outside of the shipping container.
- Pack the equipment carefully and ship it to us, shipping costs are prepaid. If necessary, we can provide you with the proper packing materials. UPS is usually the best way to ship the units. Heavy units should be "double-boxed" for safe transport.
- We also strongly recommend that you insure the equipment, since we cannot be responsible for the loss of or damage to equipment that you ship. Of course, we insure the equipment when we ship it back to you.

Lectrosonics USA:

Mailing address:

- Lectrosonics, Inc. PO Box 15900 Rio Rancho, NM 87174 USA
- **Web:** **www.lectrosonics.com**.
- **Shipping address:** Lectrosonics, Inc. 561 Laser Rd. NE, Suite 102 Rio Rancho, NM 87124 USA
- **Telephone:**
  - **505-892-4501**
  - **800-821-1121** Toll-free
  - **505-892-6243** Fax
- **E-mail:**
  - **sales@lectrosonics.com**
  - **service.repair@lectrosonics.com**.

Lectrosonics Canada:

- **Mailing Address:**
  720 Spadina Avenue, Suite 600 Toronto, Ontario M5S 2T9

- **Telephone:**
  - 416-596-2202
  - 877-753-2876
- Toll-free (877-7LECTRO)
  - 416-596-6648 Fax
- **E-mail:**
  - **Sales:** colinb@lectrosonics.com
  - **Service:** joeb@lectrosonics.com.

Self-Help Options for Non-Urgent Concerns
Our Facebook groups and web lists are a wealth of knowledge for user questions and information. Refer to:

- Lectrosonics General Facebook Group: **https://www.facebook.com/groups/69511015699**
- D Squared, Venue 2 and Wireless Designer Group: **https://www.facebook.com/groups/104052953321109**.
- The Wire Lists: **https://lectrosonics.com/the-wire-lists.html**.

EU Declaration of Conformity

LECTROSONICS, INC. 581 Laser Road Rio Rancho, NM 87124 USA

Declares under our sole responsibility that the following product:

Model: M2T/E01

Wireless microphone transmitter
is in conformity with the provisions of the following EC directive(s) (including applicable amendments) and are designed and manufactured by the harmonized standards:

Document	Description	Date/Version
RL 2014/53/EU	**Radio Equipment Directive 2014/53/EU (RED)**	**2014-04**
EN 300 422-1	Wireless Microphones; Audio PMSE up to 3 GHz; Part 1: Class A Receivers	V2.1.2 (2017-01)
	Electromagnetic Compatibility	
EN 301 489-1	ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Common Technical Requirements	V2.2.0 (2017-03)
EN 301 489-9	Specific Conditions for wireless microphones, similar Radio Frequency (RF) audio link equipment, cordless audio and in-ear monitoring devices	V2.1.1 (2017-03)
	Safety and Health	
EN 60065-1	Audio, video and similar electronic apparatus – Safety Requirements	2014
EN 62311	Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz – 300 GHz)	2008
RL 2011/65/EU	**RoHS Directive 2011/65/EU: Restriction of the use of certain hazardous substances (RoHS Recast)**	**2011**

The EU-type examination was performed by the notified body Bay Area Compliance Laboratories.

- Software version of M2T/E01: v1 .04
- Rio Rancho, NM USA, 07 July 2017

Robert Cunnings
V.P. Engineering
Lectrosonics, Inc.

ISEDC Notices:

Per RSS-210
This device operates on a no-protection no-interference basis. Should the user seek to obtain protection from other radio services operating in the same TV bands, a radio license is required. Please consult Industry Canada's document CPC-2-1-28, Optional Licensing for Low-Power Radio Apparatus in the TV Bands, for details.

Per RSS-Gen
This device complies with Industry Canada's license-exempt RSSs. Operation is subject to the following two conditions:

1. This device may not cause interference
2. This device must accept any interference, including interference that may cause undesired operation of the device.

LIMITED ONE-YEAR WARRANTY

The equipment is warranted for one year from the date of purchase against defects in materials or workmanship provided it was purchased from an authorized dealer. This warranty does not cover equipment that has been abused or damaged by careless handling or shipping. This warranty does not apply to used or demonstrator equipment.

Should any defect develop, Lectrosonics, Inc. will, at our option, repair or replace any defective parts without charge for either parts or labor. If Lectrosonics, Inc. cannot correct the defect in your equipment, it will be replaced at no charge with a similar new item. Lectrosonics, Inc. will pay for the cost of returning your equipment to you. This warranty applies only to items returned to Lectrosonics, Inc. or an authorized dealer, shipping costs prepaid, within one year from the date of purchase.

This Limited Warranty is governed by the laws of the State of New Mexico. It states the entire liability of Lectrosonics Inc. and the entire remedy of the purchaser for any breach of warranty as outlined above. NEITHER ELECTRONICS, INC. NOR ANYONE INVOLVED IN THE PRODUCTION OR DELIVERY OF THE EQUIPMENT SHALL BE LIABLE FOR ANY INDIRECT, SPECIAL, PUNITIVE, CONSEQUENTIAL, OR INCIDENTAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THIS EQUIPMENT EVEN IF ELECTRONICS, INC. HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT SHALL THE LIABILITY OF ELECTRONICS, INC. EXCEED THE PURCHASE PRICE OF ANY DEFECTIVE EQUIPMENT.

This warranty gives you specific legal rights. You may have additional legal rights which vary from state to state.

581 Laser Road NE • Rio Rancho, NM 87124 USA • www.lectrosonics.com 505-892-4501 • 800-821-1121 • fax 505-892-6243 • sales@lectrosonics.com.

Documents / Resources

	LECTROSONICS M2T Digital IEM Transmitter [pdf] Instruction Manual M2T Digital IEM Transmitter, Digital IEM Transmitter, IEM Transmitter, Transmitter

References

- Lectrosonics: Quality wireless microphone, encrypted digital wireless and DSP audio processing systems
- The Wire-Lists
- User Manual