

## **MV-ALS-STFM-D**

# **Professional Installation Guide**

## **Table of Contents**

Overview	1 - 2	
Introduction	2	
Product Highlights	2	
Product Package	2	
General Information	3	
RF Power	3	
Single MV-ALS-STFM-D Rack Kit Installation		
Double MV-ALS-STFM-D Rack Kit Installation		
Helical Antenna		12 – 13
Remote Dipole Antenna		
Installation Technica	17 - 18	

#### Overview

This manual covers basic configuration and installation of the Media Vision Assistive Listen System which consists of the MV-ALS-STFM-D (Dante Enabled Stationary Base Transmitter), MV-ALS-PRFM (Portable Receiver), MV-ALS-AT01 (Helical Antenna), and MV-ALS-AT02 (Remote Dipole Antenna). Together these devices are classified by the FCC as a professional install device. To be in compliance with FCC guidelines, the radios must be installed with one of the approved antennas listed in this document. The MV-ALS-STFM-D is currently FCC certified for use with three external antennas.

Antenna Part #	Description	Power Handling
Capability		
MV-ALS-AT01	8.89" Helical Antenna	20 mW, Nominal
MV-ALS-AT02	7.09" Remote Dipole Antenna	20 mW, Nominal

The MV-ALS-STFM-D Base Unit works in conjunction with the MV-ALS-PRFM. Please see the Media Vision Assistive Listening User Manual for general information on overall system implementation, connecting to the Dante Network and software configuration.

#### **Federal Communication Commission Interference Statement**

This device complies with Part 15 of FCC Rules and Regulations. Operation is subject to the following two conditions: (1) This device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio-frequency energy and, if not installed and used in accordance with these instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in any installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to correct the interference by one of more of the following measures:

- 1) Reorient the antenna;
- 2) Increase the separation between the affected equipment and the unit;
- 3) Connect the affected equipment to a power outlet on a different circuit from that which the receiver is connected to:
- 4) Consult the dealer and/or experienced Assistive Listening Technician.

FCC ID: 2AHER -MVALSSTFMD

### **Warranty Information**

The Media Vision Assistive Listening Core products carry a Lifetime Warranty against manufactory defects. Please visit www.media-vision.com for more information.

## **Installation only by Professional Installers:**

The Media Vision Dante Enabled Stationary Base Transmitter requires professional installation. A professional installer is required to install the MV-ALS-STFM-D. You must follow Part 15 of the FCC rules, and specifically Part 15.203 pertaining to antenna requirements of an intentional radiator.

## **1 Introduction**

The Media Vision Assistive Listening system is a powerful Dante Enabled Stationary Transmitter that delivers a high quality personalized audio signal that allows everyone to understand.

## **2 System Highlights**

- Operates on the FCC protected 72-76 Mhz FM bandwidth
- 57 programmable channels with settings lock
- Simultaneous operation of up to 6 channels Easy Integration:
- Balanced and unbalanced Inputs, Dante Interface

## 3 Product Package

The following items are included in the MV-ALS-STFM-D package:

- Dante Enabled Stationary Base Transmitter (MV-ALS-STFM-D)
- Rack Kit (MV-ALS-RK01)
- Power Adapter Cord
- Programming Cable

#### 4. General Information

#### 4.1 Contents

The MV-ALS-STFM-D Stationary Base Transmitter comes with the Dante Enabled Stationary Base Transmitter, Rack Kit, Power Adapter Cord, and programming Cable. Required to make the MV-ALS-STFM-D function properly are one of the two FCC approved Antenna:

A. MV-ALS-AT01 (Helical Antenna).

B. MV-ALS-AT02 (Remote Dipole Antenna)

#### 4.2 Connections

See Media Vision Assistive Listening User Manual for detailed diagram for connecting the system to a verified outlet.

#### **MV-ALS-STFM-D**

Input 1 Dante Network

Input 2 XLR - TRS Combo Jack - Line, Mic,

Mic+PH

Input 3 Stereo RCA

Audio Out Stereo RCA. Mix of Aux and Mic Signal

Headphone Out 1/8" TRS Connector

Programming Channel Enable / Disable & Custom

Labels Via Software

RF Power Lo, Mid, Hi

Antenna Connector BNC

Power Supply DC adaptor 12 ~ 15V, 1A

Operating temperature range -10 °C - 60°C

# NOTE: DO NOT APPLY DC POWER TO THE MV-ALS-STFM-D UNTIL THE ANTENNA IS ATTACHED OTHERWISE DAMAGE TO THE RADIO MAY OCCUR.

## 5. Setting the Maximum RF Power

When installing MV-ALS-STFM-D we offer two FCC certified antennas options.

Only the antennas listed below are allowed to be used with the MV-ALS-STFM-D.

Antenna Model	Antenna Gain	Radio Max power
setting		
MV-ALS-AT01	0.3dBi	20mW
MV-ALS-AT02	1dBi	20mW

# NOTE: IT IS THE RESPONSIBILITY OF THE INSTALLER TO ENSURE THAT THE FCC REQUIREMENTS DESCRIBED ABOVE ARE MET.

## 7. Installing single MV-ALS-STFM-D - Rack Kit

### Rack Kit (Pictured below)

Includes (In Order):

- 1. (2) Rack ears
- 2. (1) Linking bars
- 3. (2) Rack ear screws
- 4. (8) Linking bar screws
- 5. (8) Long rack ear



Note: For installation of (2) MV-ALS-STFM-D into Rack System please skip to section 8.

#### Step 1.

The feet on the MV-ALS-STFM-D are secured and locked in by a pressure fit plug. Utilizing a flathead screwdriver or comparable tool, remove the (4) feet from the MV-ALS-STFM-D by inserting it into the foot and gently lift the screw until you are able to remove it.

Once you have removed the screw, grab the foot and gently pull it out of the MV-ALS-STFM-D.

(Removing Foot from MV-ALS-STFM-D)



(Screw Removed from the MV-ALS-STFM-D Foot.)

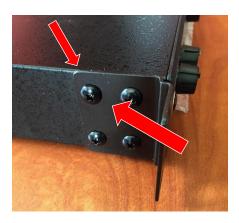


(MV-ALS-STFM-D with feet removed.)



## Step 2: Rack Ears

A. Attach the short rack ear to the left or right side of the MV-ALS-STFM-D with the four rack ear screws.



B. Attach the long rack ear to the right or left side of the MV-ALS-STFM-D with four rack ear screws.



(Rack Kit Installed on the MV-ASL-STFM)



## Step 3.

A. Select the position within the Rack System for your MV-ALS-STFM-D.

B. Place the MV-ALS-STFM-D in the Rack System and utilize rack screws (not included) to secure both ends.

(Short rack ear screwed into rack system.)



(Long rack ear screwed into rack system.)



(MV-ALS-STFM-D with Rack Kit installed in Rack System)

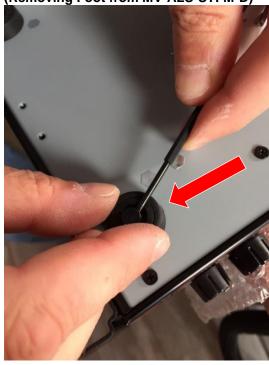


#### 8. Installation of two MV-ALS-STFM-D - Rack Kit

Step 1. The feet on the MV-ALS-STFM-D are secured and locked in by a pressure fit plug. Utilizing a flathead screwdriver or comparable tool, remove the (8) feet from the (2) MV-ALS-STFM-D by inserting it into the foot and gently lift the pressure fit plug until you are able to remove it.

Once you have removed the pressure fit plug, grab the foot and gently pull it out of the (2) MV-ALS-STFM-D.

(Removing Foot from MV-ALS-STFM-D)



(Pressure fit plug removed from the MV-ALS-STFM-D foot.)



(MV-ALS-STFM-D with feet removed.)



## Step 2: Linking bars

A. Place the MV-ALS-STFM-D side by side. The indent on the top of the MV-ALS-STFM-D should meet to form a complete linking bar indent.



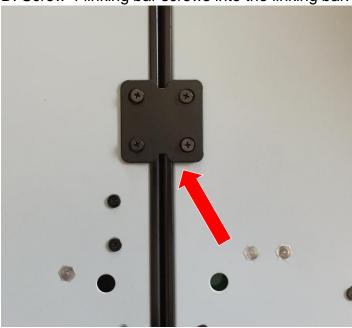
B. Line the linking bar up with the indent between the two MV-ALS-STFM-D. Then screw in the linking bar screws.



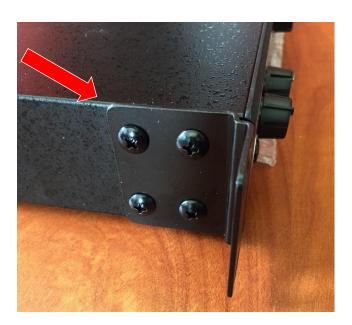
C. Flip the two MV-ALS-STFM-D upside down and align the linking bar with the 4 screw holes in the middle.



D. Screw 4 linking bar screws into the linking bar.

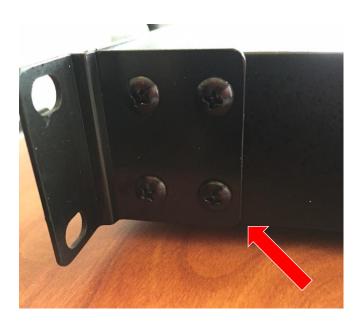


E. Flip the two MV-ALS-STFM-D over gently and attach the short rack ear to the left side of the MV-ALS-STFM-D with four linking bar screws.



F. Attach the short rack ear to the right side of the MV-ALS-STFM-D with four rack ear screws.





(Rack Kit Installed on two MV-ALS-STFM-D)



F. Place the two MV-ALS-STFM-D into the Rack System and utilize rack ear screws to secure both ends



## 9. Helical Antenna Installation

Included:

## (1) Helical Antenna



Step 1. Align the Helical Antenna with the BNC Antenna connector.



Step 2. Connect the Antenna and the BNC antenna connector. Secure and lock it into place.



## 9. Remote Dipole Antenna Installation

#### Includes:

- (1) Bracket with Mounted Antenna
- (1) 25" Coaxial Cable
- (6) Stoppers
- (6) Screws.



Step 1. Choose the location where you'd like to install the Antenna Bracket.

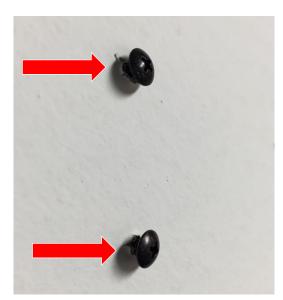
When selecting the location of your Antenna avoid any metal obstructions or steel beams between the Antenna and the receiver.

Once you have chosen the position where you'd like to mount the antenna. Utilizing #2 pencil, mark the position.

Step 2: Utilizing a screw driver, screw in the two bracket screws into the spots that were marked. Do not screw them in all the way.







Step 3. Position the two openings on each end of the bracket onto the screws and slide the bracket down until it can move no further.



Step 4. Using the cable clips, secure the coaxial cable onto a flat surface. Make sure that cable clips are at least 4 inches apart.



Step 5. Attach the coaxial cable to the BNC antenna connector on the back of the transmitter. Secure and lock it into place.



## 8. Installation - Technical Information

### 8a. MV-ALS-STFM-D



Channels 57 (6 Simultaneous)

Transmission Range Up to 1,500 ft.

SNR 80 dB

Frequency 70Hz-12Khz

Response

Distortion <2% Display OLED

Input 1 XLR - TRS Combo

Jack - Line, Mic,

Mic+PH

Input 2 Stereo RCA

Audio Out Stereo RCA. Mix of

Aux and Mic Signal

Headphone Out 1/8" TRS Connector

Programming Channel Enable /

Disable & Custom Lables Via Software

Lables via C

RF Power Lo, Mid, Hi

Antenna Connector BNC

Power Supply DC adaptor 12 ~

15V, 1A

Operating -10 °C - 60°C

temperature range

Size 8.46" X 8.26" X 1.96"

Weight 3.7 lbs.
Warranty Lifetime
Approvals / FCC, RoHS

Certifications

#### 8b. MV-ALS-AT01



Dimensions 8.89" Height; 1.14" Distance from MV-ALS-STFM-D

Weight 2 oz.

Frequency Range 72-76 MHz

Nominal Impedance 50  $\Omega$ 

VSWR 2:1 or Better

Power Handling Capability 20 mW, Nominal

Warranty 90 Days

#### 8b. MV-ALS-AT02



Dimensions (41 mm) High, Collapsed; (970 mm) Extended; (180 mm)

Distance from Wall

Weight 245g

Frequency Range 72-76 MHz Nominal Impedance 50  $\Omega$ 

VSWR 3:1 or Better
Power Handling Capability 20mW, Nominal

Warranty 90 Days