

# MS-900MAX

## INSTALLATION AND USERS GUIDE



28-2031  
Wireless Antenna

To install antenna, carefully thread it onto the gold connector on top of the MS-900MAX

Questions or technical issues? Please call:

**TECH SUPPORT: 650-965-8020 ext. 703**



3019 Alvin DeVane Blvd.  
Ste. 560  
Austin, TX 78741  
Phone: (650) 965-8020

The Setcom MS-900MAX is a Wireless Radio Interface for use with up to 7 Liberator MAX Series Wireless Headsets:

Radio Transmit Headsets:

CSB-900MAX (standard)

CSB-902MAX (vented)

Intercom-Only Headsets:

CSB-901MAX (standard)

CSB-905MAX (vented)

The MS-900MAX is typically connected to a single mobile radio through use of the proper radio cable.

Adding an RRC-950 Radio Routing Controller and a 25-0108 connecting cable will allow operation with two radios. One radio cable will be required for each radio. The RRC-950 has a toggle switch that allows for switching TX, RX, and PTT functions between the two radios (RX can be either summed or switched).

The MS-900MAX can be powered from 12 to 24 VDC, supplied by a vehicle power system. The unit has an internal 1 Amp ATO-type fuse, but it is recommended that the vehicle power source also be fused (at least 1 A).

The system starts up as soon as power is applied.

No "pairing" is required to use headsets with the base unit, the headsets only need to be on the same channel as the base unit (displayed in the CHANNEL indicator).

Changing channels is accomplished by pressing the CHANNEL SELECT button.

Typically no adjustments are required, but if transmit or receive audio levels to and from the radio need adjustment, see page 3.

**Instructions for operating the LiberatorMAX Series headsets can be found in the LiberatorMax Fire Users Guide**

## MS-900MAX Typical Installation



CSB-9xxMAX Wireless Headset

If 2 radios are required, a Setcom RRC-950 can be connected to the RRC Jack. Refer to the RRC-950 User Guide for more information.

Mount the MS-900MAX using the 4 small mounting holes or the 2 larger holes on the enclosure flanges. Mounting screws supplied by user.

There are two LED 'dots' at the bottom of the Channel display – the left dot flashes to indicate the unit is powered up and operating normally, and the right dot lights up when PTT has been activated by a headset.

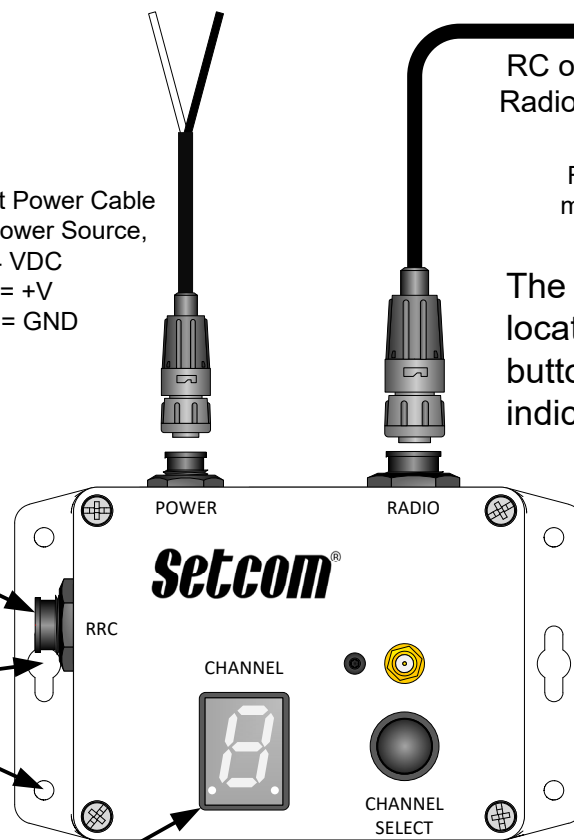
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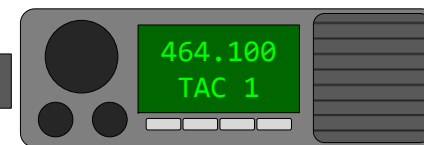


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Connect Power Cable to DC Power Source,  
12 to 24 VDC  
WHITE = +V  
BLACK = GND



RC or RCB  
Radio Cable



Mobile Radio

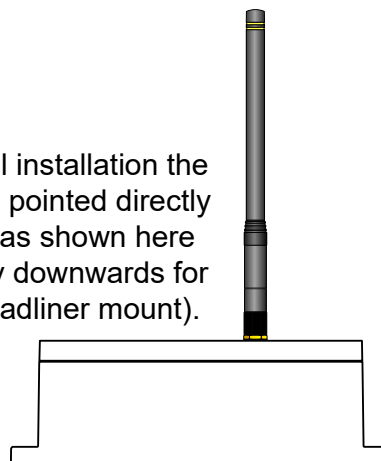
Radio Cable part number is determined by radio manufacturer, model number, and length of cable

The MS-900MAX should be mounted in a location where the CHANNEL SELECT button is accessible and the CHANNEL indicator can be easily seen.

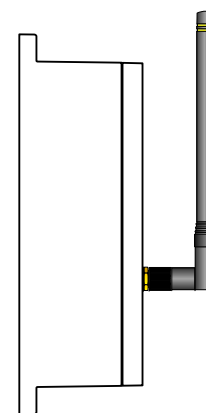
If the MS-900MAX must be installed on a vertical surface, it is recommended to "fold" the antenna so the main shaft is vertical.

To orient the antenna, loosen the connector, place the antenna in the desired position, then re-tighten the connector. Once the antenna connector is tightened, do not try to turn the antenna.

In a typical installation the antenna is pointed directly upwards as shown here (or directly downwards for ceiling/headliner mount).



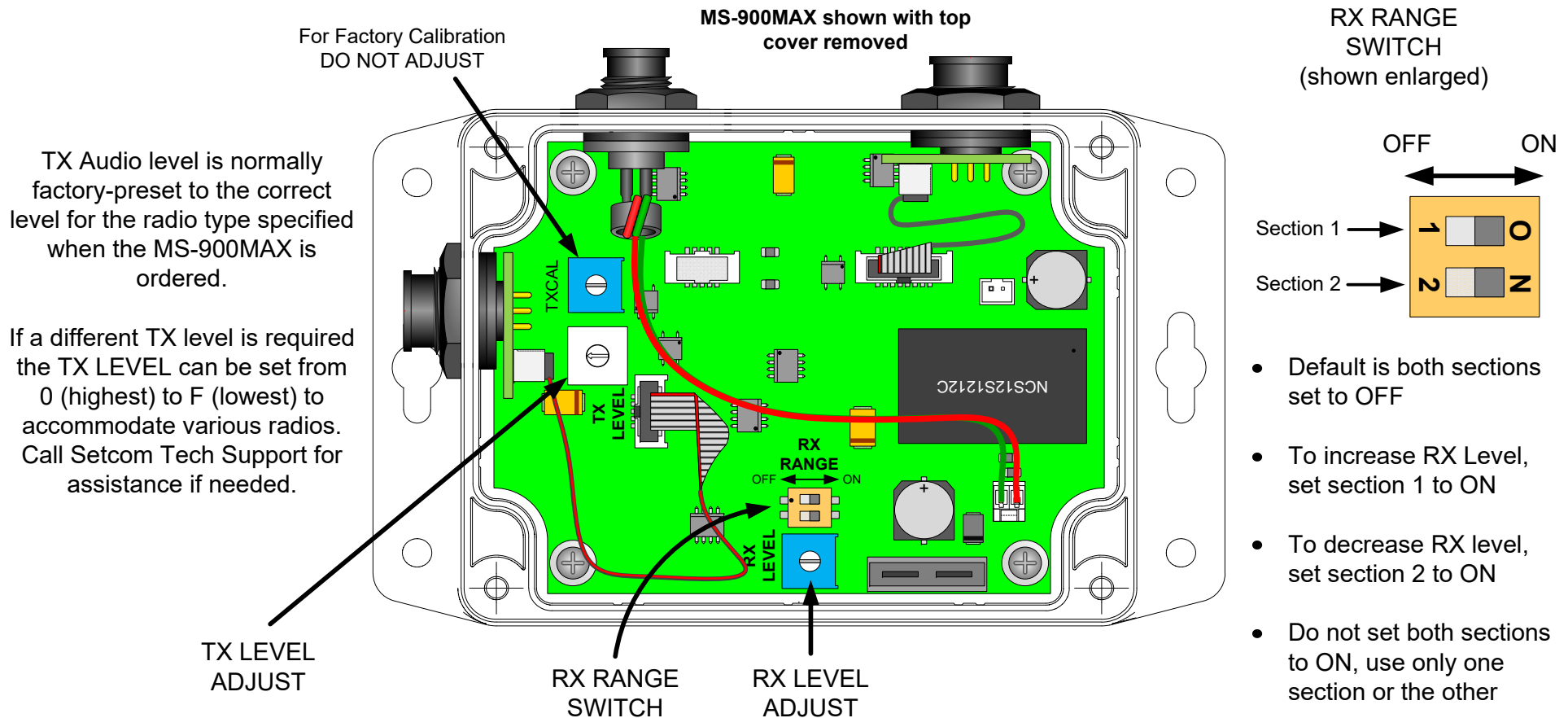
The system will work with the antenna oriented horizontally, but effective range may be somewhat reduced.



## MS-900MAX Controls and Adjustments

**NOTE: Remove top cover carefully to make sure internal cables, wiring, and ground contacts do not get damaged!**

If RX LEVEL control does not provide enough adjustment range, the RX RANGE switch can be set to allow higher or lower level settings.



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CORPORATION

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RX Audio level is normally set by the volume control on the mobile radio.

If further adjustment is needed, RX LEVEL control can be used to adjust RX volume.

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### Multiple Base Units on Location

While the MS-900MAX can be used with up to 7 Liberator MAX Series Wireless Headsets (forming a talk group of 8 total wireless devices), it is not designed to be used with another MS-900MAX.

When an MS-900MAX is connected to (i.e. on the same channel as and within range of) one or more additional MS-900MAX's, this may result in the malfunction, and on rare occasions the non-function, of one or more of the MS-900MAX's.

If one or more MS-900MAX's inadvertently connect in the same talk group (e.g. when two apparatus with MS-900MAX's arrive on a scene and both are on the same channel), simply change one of the MS-900MAX's (and its associated headsets) to another open channel.

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## REGULATORY NOTICES

### FCC Rules

#### FCC Compliance Statement (Part 15.19)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

#### FCC Warning (Part 15.21)

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### IC Rules

#### IC RF Exposure Statement / Déclaration d'exposition d'IC RF

This device meets the IC requirements for RF exposure in public or uncontrolled environments.

Cet appareil est conforme aux conditions de la IC en matière de RF dans des environnements publics ou incontrôlée.

The antenna(s) used for this transmitter must be used to provide a separation distance of at least 5 cm from all persons.

La ou les antennes utilisées pour cet émetteur doivent être utilisées de manière à assurer une distance de séparation d'au moins 5 cm de toute personne.

This transmitter with its antenna complies with FCC/IC RF exposure limits for general population / uncontrolled exposure.

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### FCC Part 15 Notice

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 the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular 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 try to correct the interference by one of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

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