

MS-1 Modulus® Satellite

Infinity Loudspeaker Troubleshooting/Repair Tips

Most customers prefer to do simple loudspeaker repairs themselves. By following the steps below, a majority of loudspeakers can be returned to their original factory performance with minimum effort. Choose the example that best describes the problem you are experiencing.

Problem 1: No sound or distorted sound from one loudspeaker in a pair (or set)

Connect the dead/distorting loudspeaker to a different amplifier channel (one that had a functioning loudspeaker connected to it). If it functions normally, the problem is not loudspeaker-related. If the loudspeaker still makes no sound or sounds distorted, a wire may have become loose or disconnected, the network (also known as a crossover) may be defective, the drivers (woofer, tweeter, etc.) may be defective or, in very rare cases, all may be defective.

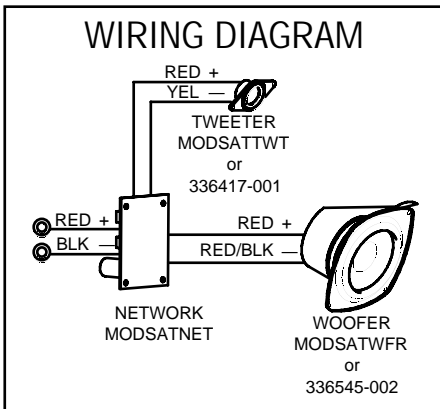
Refer to the wiring diagram and exploded view below. The network is a small circuit board found on the inside of the terminal cup, or mounted to an inside wall of the enclosure. It sends low-frequency sounds to the woofer, high-frequency sounds to the tweeter and, if applicable, mid-frequency sounds to the midrange driver. Make sure all wires are secure and connected. Look for components on the network that look burnt, "bulged," or abnormal. If everything looks normal, connect the network to the drivers from another matching loudspeaker. MAKE SURE you attach the correct wires to each driver – mid- and low-frequency sounds can damage the tweeter! If there is still no sound or distorted sound, the network is defective. If there is clean undistorted sound, the drivers are defective.

Problem 2: No sound or distorted sound from one or more (but not all) drivers in an enclosure

Remove the problem driver(s) from the enclosure and make sure all wires are secure and connected. If they are, proceed with the following test:
Woofer or midrange driver – Connect the driver's + and – input terminals directly to the loudspeaker wires from your receiver/amplifier and play some music at a reasonable volume. If the driver now sounds normal (produces a clean, undistorted sound), the network is most likely defective.
Tweeter – Replace the tweeter with a functioning tweeter from another loudspeaker. If the tweeter now functions normally (produces clean, undistorted sound), the original tweeter is defective. If the replacement tweeter also sounds distorted or produces no sound, the network is most likely defective.

Problem 3: Loudspeakers distort, rattle or pop at higher volumes

This is usually NOT a loudspeaker problem. Common causes are too much power (playing the loudspeakers too loud and causing them to distort), an amplifier with not enough power (the amplifier can't produce the required volume without distorting), excessive equalization (turning the tone controls too far clockwise, and/or engaging the loudness/bass boost button on your receiver) or some combination of the above. If only one loudspeaker is exhibiting the problem, and you're confident that it's not caused by too little power/too much power/excessive equalization, see solutions for Problems 1 and 2.



- TO SERVICE THE MODULUS MS-1 SATELLITE**
1. Remove the grille.
 2. Remove the (4) exposed rubber grille retainers; this can be accomplished by carefully pulling them out of their cavities with long-nosed pliers or similar tool.
 3. Remove the (4) Phillips screws that are now exposed.
 4. Two additional screws lie underneath the front trim panel; this can be carefully removed by applying a blow dryer (high or maximum) or heat gun to the trim panel. Take care not to direct the gun directly at the woofer or tweeter; do not burn yourself after the panel has been heated – gloves are recommended. See illustration.
 If this trim panel is damaged upon removal, order:
 part# MODSATDECCHAR (Charcoal)
 part# MODSATDECPLAT (Platinum)
 5. Remove the (2) additional Phillips screws that are now exposed.
 6. Carefully lift the front baffle, with drivers attached, off the cabinet.
 7. Reassembly: Adhesive already in place, if encrusted on the front baffle, must be removed by scraping it off as it may prevent the trim panel from sitting flush on the front baffle. New adhesive must be added to reattach the trim panel.

The exploded view diagram shows the speaker's components numbered 1 through 20. 1-5 are the main speaker parts (satellite), 6-12 are the grille and tweeter assembly, and 13-20 are the base and mounting hardware.

ITEM NO.	DESCRIPTION	QTY.	PART NO.	ITEM NO.	DESCRIPTION	QTY.	PART NO.
1.	Whole Sat, less base, Charcoal	1	MODSATCHAR	8.	Whole assembled base, Charcoal	1	MODSATBASECHAR
	Whole Sat, less base, Platinum	1	MODSATPLAT		Whole assembled base, Platinum	1	MODSATBASEPLAT
2.	Woofer	1	MODSATWFR or 336545-002	9.	Foot pads	1	MODSATFT
3.	Baffle, Char. Modulus Sat	1	MODSATBAFFCHAR	10.	Hex wrench	1	MODSATHEX
	Baffle, Plat. Modulus Sat including trim panels	1	MODSATBAFFPLAT	11.	Rubber-coated ball	1	MODSATPLUG
4.	Trim panel, with silkscreen logo Char.	1	MODSATDECCHAR	12.	Tweeter	1	MODSATTWT or 336417-001
	Trim panel, with silkscreen logo Plat.	1	MODSATDECPLAT	13.	Network	1	MODSATNET
5.	Complete grille with cloth, Charcoal	1	MODSATGRCHAR	14.	Red binding post	1	MODSATBP-R
	Complete grille with cloth, Platinum	1	MODSATGRPLAT	15.	Black binding post	1	MODSATBP-B
6.	Grille cup, rubber, Charcoal	4	MODSATGCUP or 336880-002	16.	Owner's Manual	1	336782-001
	Grille cup, rubber, Platinum	4	MODSATGCUPPLAT	17.	Survey Card	1	335868-002
7.	Wall cleat, steel	1	MODSATCLEAT	18.	Warranty Card	1	335841-001
				19.	Leveling bubble	1	MODSATBUBBLE
				20.	Rubber cover	1	MODSATTCOVER