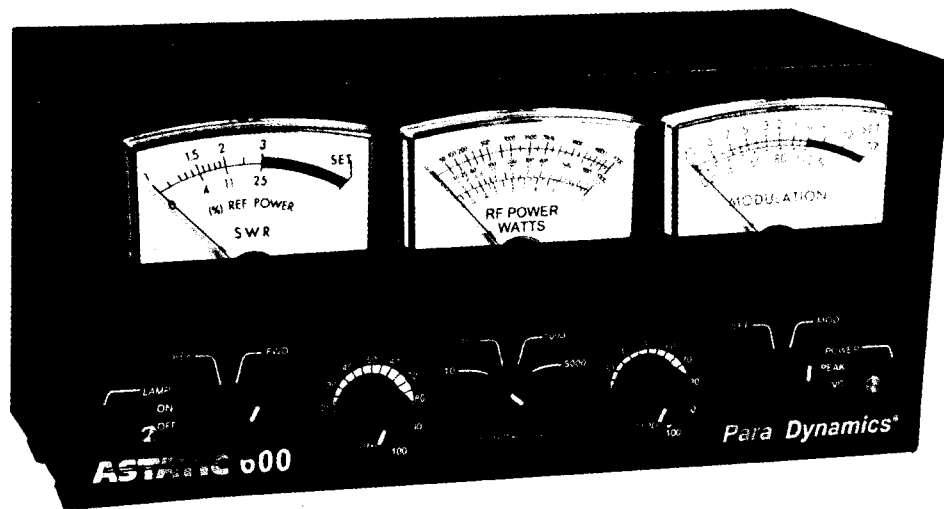


ASTATIC

World Famous Radio Mics



Features & Operation

Astatic Model 600

RF Power Scanner

ASTATIC Power Scanners have become the recognized standard for quality in the consumer electronics market. Astatic Scanners are easy to install (requiring only 2 coax connections), and can be left inline during operation for full-time monitoring of the following output functions:

1. **Power** - Output RF power is read from any one of the four power reading scales: 0-10, 0-100, 0-1000, 0-5000 Watts. The power scales are independently calibrated and factory set at 27 MHz. Each of the four scales can be recalibrated to a different frequency, creating four watt meters in one.
2. **Modulation** - The Voice Level output is indicated on the extremely sensitive modulation meter. Ideal modulation would be 100%. An operator can make adjustments to voice level, microphone position, mic gain and monitor changes on the meter.
3. **Standing Wave Ratio** - SWR is the ratio of maximum to minimum voltage along a coaxial line. An SWR of 1 to 1 is a perfect impedance match that results in all of the 27 MHz power output of the transmitter being radiated. A poor impedance match can cause permanent damage to a transceiver. Scanners with SWR meters enable the fine tuning of systems plus continuous monitoring of the SWR to detect changes due to breaks, oxidations, and other cable and antenna problems.

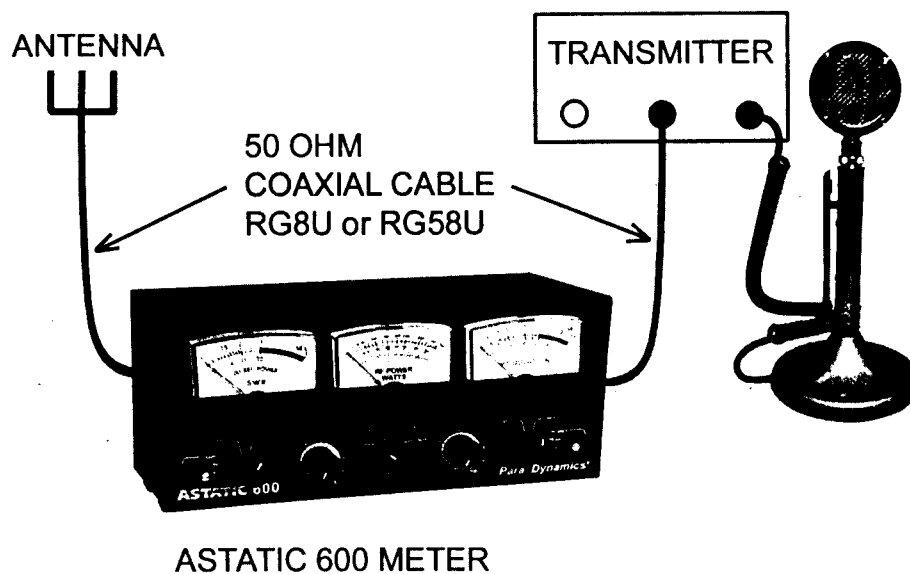
Unpacking:

1. Make sure shipping box is not damaged
2. Carefully open Astatic 700 Meter box
3. Remove plastic from around the meter
4. Visually check that the meter's exterior is not damaged
5. Check to make sure the lenses are in place and not damaged
6. All 5 knobs should be in place on the front of the instrument
7. Check that all the meters are set on zero

Cleaning Instructions:

When cleaning the front face plate of meter, static charges could build-up causing the needle of the meter to stick. If this happens, try using a rag moistened with an anti-static spray or a fabric softener sheet to remove the static build-up.

Note: Save box and packaging materials to return the meter if a problem develops.



For connection from the transceiver to the Astatic 600 and from Astatic 600 to the antenna as illustrated above, use 50 ohm coaxial cable; RG8U or RG58U.

Operation:

Look directly at the meter for an accurate adjustment of each function listed:

1. SWR Scale

- a. Place switch (**S1**) on the Astatic 600 to the FWD position.
- b. "KEY" transmitter
- c. Rotate potentiometer (**P1**) on the Astatic 600 slowly clockwise to the "SET" position (full scale) on SWR meter (**M1**)
- d. Release "PTT" (Push To Talk)
- e. Place switch (**S1**) on Astatic 600 to REF position
- f. "KEY" transmitter
- g. Look directly at SWR meter (**M1**) on Astatic 600. A reading higher than 3:1 on the SWR scale may cause permanent damage to your transmitter. Make corrections before proceeding. The ideal ratio is 1:1.
- h. Release "PTT" (Push To Talk)

Caution: If SWR is 3:1 or over do not use; you may cause permanent damage to your transceiver. Make sure all connections are tight and antenna dummy load is connected correctly to the transceiver. If everything is connected correctly, check the cable or antenna for problems.

2. Peak/Average Switch (**S4**)

This switch allows the operator to toggle between peak readings and average power output on all scales 10W/100W/1000W/5000W.

3. RF Power Scale:

- a. When the power range is unknown, start with the switch (**S2**) set on 0-5000 watt position.
- b. Use scale 0-10, 0-100, 0-1000, or 0-5000. Choose the scale that reads closest to the center (**M2**). The center scale will give you the most accurate power reading.

4. 10 Watt Scale:

- a. Place switch (**S2**) on the Astatic 600 to the 10 Watt position.
- b. "Key" transmitter
- c. Look directly at the 10 watt output meter which is on the bottom red scale. Meter (**M2**) will read 0-10 watts of transmitter output power.
- d. Release "PTT" (Push To Talk)

5. 100 Watt Scale:

- a. Place switch (**S2**) on the Astatic 600 to the 100 Watt position.
- b. "Key" transmitter
- c. Look directly at the 100 watt output meter which is on the top red scale. Meter (**M2**) will read 0-100 watts of transmitter output power.
- d. Release "PTT" (Push To Talk)

6. 1000 Watt Scale:

- a. Place switch (**S2**) on the Astatic 600 to the 1000 Watt position.
- b. "Key" transmitter
- c. Look directly at the 1000 watt output meter which is on the bottom black scale. Meter (**M2**) will read 0-1000 watts of transmitter output power.
- d. Release "PTT" (Push To Talk)

7. 5000 Watt Scale:

- a. Place switch (**S3**) on the Astatic 600 to the 5000 Watt position.
- b. "Key" transmitter
- c. Look directly at the 5000 watt output meter which is on the top red scale. Meter (**M2**) will read 0-5000 watts of transmitter output power.
- d. Release "PTT" (Push To Talk)

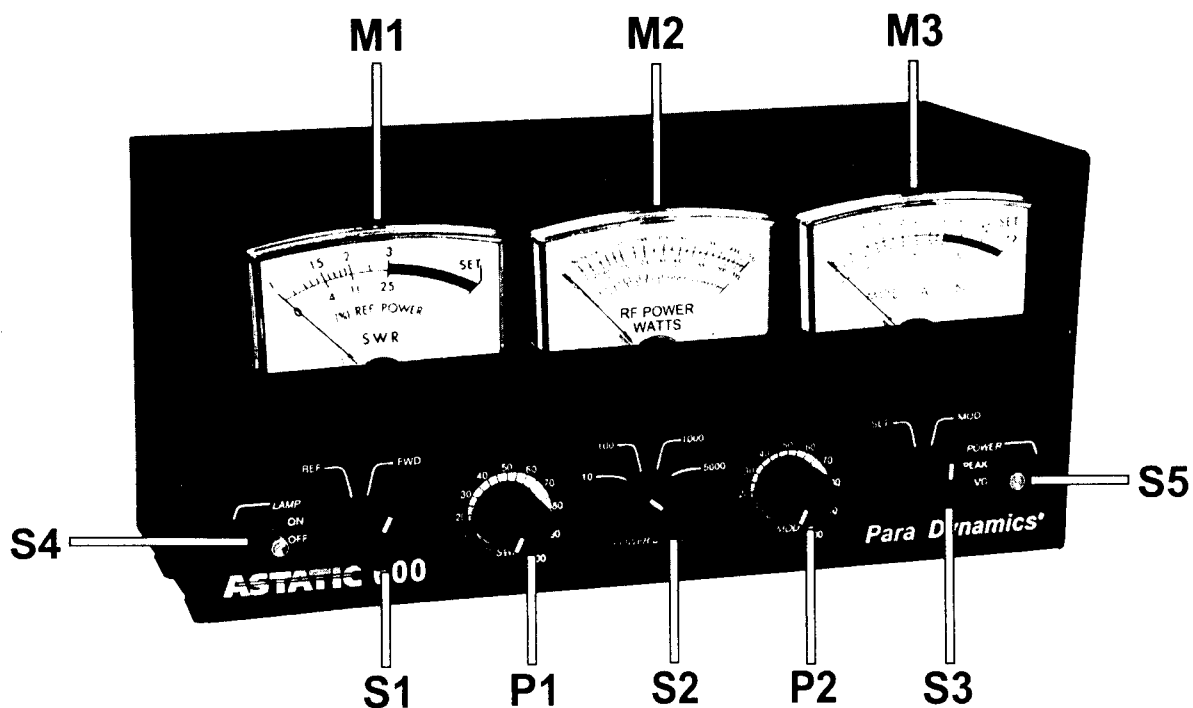
8. Modulation Scale:

- a. Place switch (**S3**) on the Astatic 600 to SET position.
- b. "Key" transmitter
- c. Rotate potentiometer (**P2**) on the Astatic 600 slowly clockwise, while looking directly at the MOD meter on Astatic 600 to "PTT" (Push To Talk), located on right side of (**M2**) scale.
- d. Release "PTT" (Push To Talk)
- e. Place switch (**S3**) on Astatic 600 to the MOD position
- f. "KEY" transmitter
- g. Talk or whistle into microphone and (**M3**) will give the percentage of modulation on the bottom scale.
- h. Release "PTT" (Push To Talk)

9. Lamp Switch

- a. Plug the supplied adaptor into the power jack located on the rear of the meter.
- b. Flipping the toggle switch (**S4**) up and down will turn the lights on and off.

Functions:



FRONT VIEW

- M1** **Standing Wave Ratio Meter** - Enables the fine tuning of antenna systems plus continuous monitoring of SWR to detect changes due to breaks oxidations and other cable and antenna problems

- M2** **RF Power Meter** - Used to read any one of the four power scales: 0-10, 0-100, 0-1000, 0-5000

- M3** **Modulation SWR Meter** - Used so an operator can make adjustments to voice level, microphone position and mic gain.

- S1** **REF/FWD Switch** - Used for checking SWR, forward and reflected power.

- P1** **SWR Control** - Potentionmeter is used to set the forward power reading.

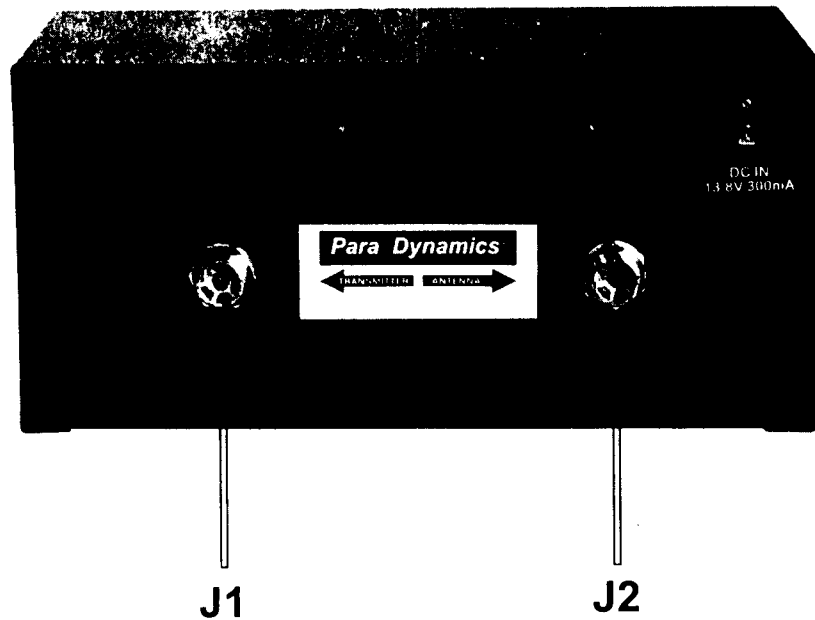
- S2** **Power Scale Switch** - Switch is used to set scales 0-10, 0-100, 0-1000, 0-5000 watts.

- P2** **Modulation Control** - Potentionmeter is used to set full scale modulation on **M3**.

- S3** **Modulation Set Switch** - Used to set and check modulation.

- S4** **Lamp Switch** - Enables lighted display on the meter. Allows operator to illuminate the meter in low light conditions.

- S5** **Peak/Avg. Power Switch** - Sets the power output meter to read peak RF power or average power.



Rear View

- J1** Standard SO-239 connector used to connect from the Astatic 600 to transceiver.
- J2** Standard SO-239 connector used to connect from the Astatic 600 to an antenna or dummy load.

Installation:

1. Before connections in-line with the transmitter, make sure:
 - **S1** is in REF position
 - **P1** is set on 0 (zero)
 - **S2** is set on 5,000 watt scale position
 - **P2** is set on 0 (zero)
 - **S3** is in Mod position
2. On **(J1)** connect a 50 ohm coax line from the meter to the transmitter and make sure connectors are secure.
3. On **(J2)** connect a 50 ohm antenna or dummy load, make sure the connectors are secure.
4. Now you are ready to use your new Astatic 600 meter.



World Famous Radio Mics

1 Year Limited Product Warranty

Astatic Mobile Communications are warrantied for one year from date of purchase by Omnitronics, LLC, to be free from defects in material and workmanship. In event of such defect, product will be repaired or replaced at Omnitronics, LLC discretion with a new unit of equal or superior value. This will be at no charge if delivered prepaid to Omnitronics, LLC, together with the proof of purchase and a Return Authorization number. The unit will be returned promptly prepaid. Warranty excludes exterior finish, appearance items, or malfunction due to abuse or operation under other than specified conditions. Consequential or incidental damages are excluded. Serial number of product and original purchaser's name must be registered immediately after purchase.

SHIPPING INSTRUCTIONS:

Please call our customer service department at (440) 593-1111 for a pre-approved return authorization number and carefully repack unit and return it to: Omnitronics, LLC • 341 Harbor St. • Conneaut, OH 44030

ALL RETURNS MUST HAVE A PRE-APPROVED RETURN AUTHORIZATION NUMBER OR IT WILL BE REFUSED. If outside the United States, contact your dealer or distributor for warranty details.

ASTATIC Purchase Registration

Model _____

Name _____ Company _____ Date Purchased _____

Address _____ City _____ State _____ Zip _____

Phone Number _____

Purchased From _____ City _____ State _____ Zip _____

From what type of store did you purchase your Astatic product?

_____ Communication Store

_____ HI-FI Store

_____ Electronic Parts Store

_____ Mail Order

_____ Department Store

Why did you purchase this Astatic product? _____

Additional Comments _____

If you have any questions or problems, please contact us at:



A Division Of Omnitronics, LLC
341 Harbor St.
P.O. Box 120
Conneaut, OH 44030
PH: (440) 593-1111 • (888) 872-3104
www.atic.com