

TuneMatic Ata1

OPERATING AND INSTRUCTION MANUAL

Rev: 052323 sw: 1.1x

TuneMatic Ata1 is a self-contained, motorized antenna controller that allows universal control of the Yaesu* ATAS-style antennas. It will operate between 1.6-50MHz, 200w max power. It provides a function that will allow manual or 'tune-on-the-fly' adjustment of the antenna,

Installation and connections:

Red & Black fused power leads: Connect power leads to a 12v-15v DC power source with red as the positive connection, and black as the negative connection (**NEGATIVE GROUND SYSTEMS ONLY!**). The fuse is a 5x20mm GMA 3 or 3.15A standard fuse; DO NOT EXCEED THIS RATING, as it will void the warranty. Note that when the device is off, there is no current flow through the **TuneMatic Ata1**, and can be wired to either a switched, or non-switched power source.

Interface: The interface connection (flat 4-pin male connector) plugs into the rig interface for the specific radio you are using. The interface provides the 'wake-up' signal from the rig, so when rig power is applied, the wake-up signal allows the **TuneMatic Ata1** to activate.

RIG INTERFACE : The rig interface is the communications between the the **TuneMatic** and your specific radio (refer to the interface supplement) for wiring information and details). The factory-supplied interface controls the keying and control for the specified radio, using a keyline and switched 12v. Each manufacturer is unique in the communications, and the interface allows the unit to work universally with multiple rig makes and models. Some rigs do not contain a 'tune' feature (or the complication of communications is not compatible directly with the **TuneMatic** interface models), and those rigs will operate in AM mode (10-25w) when keying the rig. Any rig with switched 12v (low current) and a ground-enabled PTT keyline will operate with **TuneMatic Ata1**. Contact the factory if you have a rig that is not listed in the **TuneMatic** interface materials for instructions on how to connect to your specific rig.

Remote head

The remote head provides all the necessary functions for operation of the **TuneMatic Ata1**. The connections are made through a standard RJ45 CAT5/6 cable type, and the signals are optically isolated for maximized protection against stray RF energy. A factory 12' (3M) cable is supplied with couplers, for remotely locating the remote head, and can be safely run with lengths up to 50 feet.

Antenna/rig coax connections:

The UHF-style connections provide the RF path from the rig to the ATAS antenna. **Observe proper connection, as DC voltages exist on the ANT connection port, and could cause damage to the rig if improperly connected.**

The ANT connection supplies a switched voltage to the antenna, which is passed to the ATAS antenna for proper movement. The voltage is determined by either up or down selection.

The RIG connection is the RF path from the rig to the unit.



OPERATION:

Once the connections are completed, you can apply power to your rig. This will activate the **TuneMatic Ata1**, and the remote power LED will illuminate. You can now raise/lower the antenna, with the added ability to tune the antenna to the resonant operating frequency. Use whatever method is acceptable to tune the antenna to the proper resonance for your operating frequency (internal/external SWR meter, receiver noise peak, etc).

Operation of controls:

1) up/down- These buttons allow up or down movement of the antenna. Pressing either button will allow the antenna to move in the corresponding direction. Pressing and holding the up or down button for at least 2 seconds will cause the antenna to move on its own for 5 additional seconds without having to continuously hold the button. You can cancel the 5 second movement by momentarily pressing the opposite direction button, which will immediately stop the movement of the antenna.

2) up/down (together)- pressing up and down together will 'park' the antenna to its lowest resting position. Once it reaches the resting position, it will automatically stop. The STAT LED will flash twice, indicating the **TuneMatic Ata1** is entering the park mode. After flashing twice, the antenna will move to the park position.

3) PTT button (RED)- pressing this button will immediately key the rig at the low power level controlled by the interface unit. It is completely independent of other button operations, and can be used at any time,

4) TT slide switch- When in the UP position, the rig will key when the up or down button is pressed. When down, it will not key the rig when the up/down buttons are pressed. The power/mode LED will illuminate with the appropriate color when the switch is in the corresponding position (see 4a below).

**note- when this mode is activated, and in the 5 second movement, the rig will not remain keyed during the 5 second movement interval.*

4a) Power/mode LED- The dual-colored LED above the switch doubles as a power indicator, and status of the TT slide switch position (red=up, green=down). When the rig is turned on, this LED will illuminate.

5) MOT LED (dual-colored)- This LED will illuminate when the motor is moving. RED=up movement, and GREEN=down movement.

6) STAT LED- This multi-function LED will indicate the following:

Constant flashing LED- power supply is outside the operational range of the unit (beyond the 11v-16v window). When the voltage is outside the operational range, it will shut down antenna movement.

Constant LED- will illuminate when the antenna is at the current limit position (far ends of travel). It only lights constant Red if the up/down button is being pressed, and the antenna is at the corresponding upper/lower limit. This LED also indicates the **TuneMatic Ata1** is in current limiting mode, protecting the antenna against over-current at the extremes.

Flash twice- stating the 'park' mode. See step (2) above for park operation.

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ONE-YEAR LIMITED WARRANTY ON PARTS AND LABOR-Covers Product purchased as new only. JT COMMUNICATIONS LLC provides a warranty to the original purchaser of new Products against defects in materials and workmanship for a period of One (1) year of normal consumer (non-commercial) use. This warranty is not transferrable. If a Product covered by this warranty is determined to be defective within the warranty period, JT COMMUNICATIONS LLC will, unless otherwise required by applicable law, either repair or exchange the Product at its sole option and discretion.

To obtain warranty service, contact JT COMMUNICATIONS LLC Technical Support via email: TechSupport@jtcomms.com or or via phone at 352-236-0744 from 8:00AM to 6:00PM Monday through Friday (holidays excluded), Eastern Time. PRE-AUTHORIZATION MUST BE OBTAINED BEFORE SENDING PRODUCT TO A JT COMMUNICATIONS LLC SERVICE CENTER. Proof of purchase in the form of a purchase receipt or copy thereof is required to show that a Product is within the warranty period.

Exchange: Should JT COMMUNICATIONS LLC elect to exchange a Product due to a covered defect during the warranty period, the replacement unit may at JT COMMUNICATIONS LLC's Sole option and discretion, be new or one which has been recertified, reconditioned, refurbished or otherwise remanufactured from new or used parts and is functionally equivalent to the original Product. Repair: Parts and Labor There will be no charge for parts or labor to repair a Product for a covered defect during the warranty period. Replacement parts may, at JT COMMUNICATIONS LLC's sole option and discretion, be new, used, reconditioned, refurbished or otherwise remanufactured or recertified as functionally equivalent replacement parts.

Remaining Warranty: Repaired or exchanged units are warranted for the remaining portion of the Product's original warranty or for ninety (90) days from warranty service or exchange, whichever is longer. Any upgrade to the original Product will be covered only for the duration of the original warranty period.

Returning a Product for Warranty Service: After obtaining pre-authorization from JT COMMUNICATIONS LLC Technical Support (see above), defective Products within the warranty period must be sent to a JT COMMUNICATIONS LLC service center to obtain warranty service. JT COMMUNICATIONS LLC is not responsible for transportation costs to the service center, but JT COMMUNICATIONS LLC will cover return shipping to the customer. Products returned to JT COMMUNICATIONS LLC's service centers must be shipped in either the original carton box and shipping material or packaging that provides an equal degree of protection. JT COMMUNICATIONS LLC Technical Support will provide instructions for packing and shipping the covered Product to the JT COMMUNICATIONS LLC service center.

Exclusions- This warranty does not cover, for example: abuse, accident, acts of God, protective coatings, cosmetic damage (e.g. scratches, dents, cracks), odor, damage caused by misuse with other products (e.g. accessories, housing, parts or software), damages from shipping, improper installation or operation, failure to follow installation/operation instructions, improper voltage supply or power surges, operating with higher than rated fuse, lack of reasonable use, misuse, modifications or alterations, normal wear and tear or aging, as well as installation and set-up issues or any tampering. Product repairs attempted by anyone other than by a JT COMMUNICATIONS LLC authorized service center. Products with unreadable or removed serial numbers or requiring routine maintenance are not covered. This one year limited warranty does not cover Products sold "AS IS", "FACTORY RE-CERTIFIED", or by a non-authorized reseller.

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In the event that any term or provision contained in this limited warranty is found to be invalid, illegal or unenforceable by a court of competent jurisdiction, then such provision shall be deemed modified to the extent necessary to make such provision enforceable by such court, taking into account the intent of the parties. The invalidity in whole or in part of any portion of this limited warranty shall not impair or affect the validity or enforceability of the remaining provisions of this limited warranty.

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Note: 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, and can radiate radiofrequency energy and, if not installed and used in accordance with the instructions, may cause 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, you are encouraged to try to correct the interference by one or more 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 electronics technician for help