# **MIGHTY MULE 500**



The <u>MIGHTY MULE 500</u> #1 Do-It-Yourself Gate Opener, has NEW commercial features rarely found in a do-it-yourself gate opening kit. This heavy duty, commercial grade unit that is very easy to install. It has upgraded commercial features such as "soft start "and "soft stop" that will extend the life of your gate hardware and gate opener.

FM500 Kit Includes:

Operator arm with 6 ft. power cable Control box

(1) Entry transmitters

12 Volt transformer

(1) Batteries

Receiver with 10 ft. cable Mounting brackets/installation hardware

Bracket hardware

Instruction manual

Installation video

Customer support card

Warning signs (two)

The Mighty Mule FM500 Single can handle gates up to 850 lbs (~385 kg) or 18 ft (~5.5m). The Silver Series Kits is an upgraded kit from the Mighty Mule FM500 and comes ready to install with extra accessories normally not included in operator purchases.

### Features:

Designed for gates up to 18 ft long or 850 lbs

Large control box with room for extra battery and accessories

AC or Solar powered to meet the needs of 100% of the market

Professional GRADE Soft Start / Soft Stop feature increases life of hardware and opener

Designed for gates that open into or out from the property.

12-volt battery backup (included) opens and closes the gate even during power outage.

18 month Limited Warranty

## DRIVE

- Low friction screw drive (linear actuator) rated for -5 °F to +160 °F (-20 °C to +71 °C). Use of heater bands on arm and control box will enhance performance in extreme cold temperatures.
- Powered by a 12 V motor with integral case hardened steel gear reducer. Motor speed reduced to 260 rpm. Generates 680 ft. lb. of torque at 12 V.
- Maximum opening arc of 110°. Approximate opening time (90°): 20 seconds, depending on weight of gate.

# **POWER**

- The system is powered by a 12 Vdc, 7.0 Ah, sealed, rechargeable acid battery.
- Battery charge is maintained by a 120 Vac, 18 Vac output transformer rectified to 14.5 Vdc (40 VA) through the GTO control board. Blade-style control board fuse is rated for 15 A.

NOTE: The transformer should not be directly connected to any battery. Do not replace fuses with higher ampere rated fuses; doing so will void your warranty and may damage your control board.

• OPTIONAL: Battery charge is maintained by GTO Solar Panel Charger: float voltage of 14.5 Vdc output from a 10-7/8" x 10-1/2" solar panel. Generates minimum of 5 W at 300 mA. A gated diode on the control board prevents battery discharge.

#### CONTROL

- GTO microprocessor-based control board is set for single leaf, pull-to-open gate installations. DIP switches can be adjusted to accommodate an optional kit for push-to-open gates (see Accessory Catalog).
- Control board has temperature compensated circuits.
- A circuit on the control board regulates charging. "Sleep draw" is 25 mA; "active draw" is 2 to 5 A.
- Auto-memorization of digital transmitter code.
- GTO remote-mounted RF receiver tuned to 318 MHz.
- Operator length with push-pull tube fully retracted is 40-1/4" mounting point to mounting point. Max stroke 22".
- Adjustable auto-close timer (15 to 120 s), and obstruction sensitivity.
- Power terminal block accommodates a transformer or solar panels. NOTE: Do not use solar panel and transformer at the same time.
- DIP switches simplify setup of gate operator.
- Accessory terminal block fully compatible with push button controls, digital keypads, safety loops, etc.
- Control board allows connection of safety edge sensors and photoelectric sensors.
- Audio entrapment alarm sounds if unit encounters an obstruction twice while opening or closing