

Remote Controlled Motorcycle Security System

STRIKER - MCA500

OPERATION GUIDE INSTALLATION INSTRUCTIONS & WIRING DIAGRAM

Thank you for purchasing the Mongoose STRIKER MCA500 motorcycle security alarm/immobiliser system. This manual includes installation instructions and wiring information is detailed in this manual. All major wiring looms are included, but you may need to shorten or extend certain wires for your size of motorcycle. If extending, always use wire of the same gauge or thicker - never thinner.

WARNING: INTERFERRING WITH THE ELECTRICAL SYSTEM ON YOUR MOTORCYCLE MAY CAUSE DAMAGE TO IT OR THIS PRODUCT, OR INFRINGE THE TERMS OF ANY WARRANTIES OR INSURANCE REQUIREMENTS.

Many insurance companies require professional installation, so please contact a suitably experienced motorcycle dealer or auto electrician who can carry out the installation for you.

Certain features of this product may not operate or be connected by the installer on your particular motorcycle, eg: remote engine start if your motorcycle is not equipped with electric start or is prohibited by legislation, has a built-in factory immobiliser, or the seat pin switch may not be fitted if the only location is chassis rails which may weaken the chassis.

MCA500 REMOTE CONTROL FUNCTIONS

SILENT ARM

'SILENT' BUTTON
PRESS TO SILENTLY ARM THE
SECURITY SYSTEM WITHOUT THE
CHIRPS.
SILENT ARMING ALSO BYPASSES

SILENT ARMING ALSO BYPASSES THE SHOCK SENSOR. DISARMING WILL AUTOMATICALLY

SENSOR BYPASS

'SILENT' BUTTON
PRESS TO BYPASS THE SHOCK
SENSOR AT ANYTIME AFTER BEING
ARMED BY USE OF THE 'ON'
BUTTON.

ENGINE START

START' BUTTON PRESS TO REMOTE START THE ENGINE.
PRESS AGAIN IF ENGINE FAILS TO START ON FORST ATTEMPT



<u>'ON' BUTTON</u> PRESS TO ARM THE SECURITY SYSTEM

WHEN ARMED PRESS FOR 'PANIC/BIKE FINDER' FUNCTION

DISARM

'OFF' BUTTON
PRESS TO DISARM THE SECURITY
SYSTEM

IF THE ENGINE HAS BEEN STARTED BY REMOTE CONTROL, PRESS THE 'OFF' BUTTON TO STOP THE ENGINE

DISABLE REMOTE

'ON' & 'SILENT' AT SAME TIME PRESS BOTH BUTTONS TO TURN OFF ALL REMOTE FUNCTIONS TO AVOID ACCIDENTAL USE, OR IF SOMEONE STEALS YOUR KEYS

AUTOMATIC ARMING:

IF THIS FEATURE IS PROGRAMMED ON, THE SIREN WILL CHIRP WHEN THE IGNITION IS TURNED OFF TO WARN THAT AUTO ARMING IS COMMENCING. 30 SECONDS LATER, THE SIREN CHIRPS AGAIN TO CONFIRM THE SYSTEM IS ARMED.

OPERATION OF YOUR SECURITY SYSTEM

ARMING THE SYSTEM

Before arming the system, turn off the ignition, remove the keys and place the motorcycle on it's side or centre stand.

Arm by pressing the 'ON' button on the remote control momentarily (approx. 1 second).

The indicators or park lights (depending on how the system was connected) will flash once and the siren will echo a high tone once to indicate that the system is armed. The alarm is fully armed after 3 seconds. Arming too soon after placing the motorcycle on it's centre stand may trigger the alarm due to residual movement of the shock sensor.

AUTOMATIC ARMING - PROGRAMMABLE

The MCA500 can be programmed to automatically arm 30 seconds after the ignition has been turned off.

Disarm the alarm by remote. Turn on the ignition and press buttons 1 & 4 at the same time.

You will hear different sounds to enable or disable this function.

- (1) Three high tones: enable auto arming.
- (2) Three low tones: disable auto arming.

DISARMING THE SYSTEM

Press the 'OFF' button on the remote control to disarm the system. The siren will echo two tones and the indicators or park lights will flash twice. If the system was armed silently, see next feature, only the lights will flash on disarming and no chirps will be heard.

SILENT ARMING / DISARMING (i.e. arming without the chirps)

To silently arm the system, press the 'SILENT' button. Please note that silent arming also bypasses the siren output from the shock sensor and any trigger of the shock sensor will only flash the lights. However, a sensor trigger will operate the optional pager. Disarming will automatically be silent when the 'OFF' button is pressed.

SHOCK SENSOR

The impact sensor is built into the alarm module and is designed to detect impact (shock) or major movement to the motorcycle. It may also be triggered by shock waves produced from loud exhausts, thunder and heavy vehicle traffic. It should not be triggered by normal wind or rocking motions. When the sensor receives an initial impact, the siren sounds and the lights flash for 10 seconds. A second impact sounds the siren and flashes the lights for 30 seconds.

SHOCK SENSOR DISABLE - BY REMOTE

To turn off the shock sensor and arm the rest of the system, press 'SILENT' button. Arm/disarm chirps will now be silent as well. If you have already armed the system by pressing the 'ON' button, you can disable the shock sensor at any time by pressing the 'SILENT' button.

IMPACT/SHOCK SENSOR ADJUSTMENT

The sensor has eight levels of sensitivity and is adjustable through the remote control as follows:

- Disarm the alarm, turn the ignition ON then OFF then press both the remotes 'ON' and 'OFF' buttons at the same time. The siren will echo a low tone twice.
- Press the 'ON' button to incrementally increase sensitivity. The siren will echo a high tone for each increase. A long sound indicates you have reached maximum sensitivity.
- Press the 'OFF' button to decrease sensitivity. The siren will echo a low tone once for each decrease. A long sound indicates you have reached minimum sensitivity.
- Leave the system for three seconds and the siren will echo a low then high tone to indicate memory of the impact sensitivity adjustment.

REMOTE ENGINE START - may not be possible to operate with some factory engine immobiliser systems

The engine of your motorcycle can be remotely started when the alarm is disarmed - for those motorcycles which have electric start and the feature has been connected.

Press the 'START' button on the remote - the ignition will turn on and the engine will crank. Choke may be required depending on the motorcycle's characteristics.

The siren will echo a low tone and the lights will flash once prior to engine starting.

Press 'START' again if the engine did not start on first attempt.

If the engine does not start, the ignition will remain on, so press the 'OFF' button to turn the ignition OFF, thereby preventing a possible flat battery.

To turn the engine off, press the OFF button.

BEFORE RIDING AFTER REMOTE ENGINE START, TURN ON THE IGNITION ON WITH THE IGNITION KEY AND THEN PRESS THE 'OFF' BUTTON ON THE REMOTE CONTROL.

When wired correctly, putting the motorcycle into gear, or removing the seat before the ignition has been turned on will stop the engine to prevent the motorcycle being ridden by the power from the alarm. During remote engine running, the siren will emit an increasing number of chirps every 30 seconds as a warning. The engine will automatically stop after 5 minutes if the ignition has not been turned on.*

* This feature may not be available on all versions.

NOTE: Government legislation in some countries prohibit the use of the remote start feature. Legal obligations must be met and are therefore your responsibility. An installer may refuse to connect the remote start feature if prohibited by legislation.

AUTOMATIC RESET

When triggered, the siren will sound for 30 seconds, after which time it will stop and reset to the armed position. It will then re-sound on the next trigger.

ARM CONDITION MEMORY

Should the motorcycle battery be disconnected, the system memorises the last set position of the alarm. If the alarm was disarmed prior to battery disconnection, reconnection does not cause the alarm to sound. But if the battery was disconnected whilst the system was armed, reconnection will return the system to the armed state.

EMERGENCY OVERRIDE

There is no override override facility for this alarm. In the event of the remote failing to operate the alarm or is lost, simply remove the main power fuse to the alarm. To prevent tampering by thieves, ensure the installer has concealed the fuse but it's location is known to you.

AUTOMATIC SECURITY REARM

The system will automatically rearm if it has been disarmed by remote but the ignition has not been turned on within 30 seconds. This feature cannot be programmed off.

BIKE FINDER / PANIC BY REMOTE (in the armed state)

Pressing the 'ON' button on the remote when the alarm is armed will cause the siren to echo the low-high sound twice and the lights will flash.

DISABLE REMOTE (SOFTKEY LOCKOUT)

The remote control can be turned off to prevent accidental usage or stop an unauthorised person from using it.

- Press buttons ON & SILENT together <u>after</u> arming to turn the remote off. The siren will sound 3 high pitched sounds.
- 2. Press buttons **ON & SILENT** again to turn back on the siren sounds 3 low tones.

REMOTE CODE LEARNING

To learn new remotes into memory, or to erase a remote that may be lost:

- Disarm the alarm and turn ignition on then off.
- Wait one second then turn the ignition on and off very quickly five times and leave on for the sixth time. The siren will echo the high tone four times. The timing of this sequence is critical.
- Within ten seconds, press both the 'OFF' button and the 'SILENT' button at the same time. The siren will echo one low tone.
- As this will also erase all other remote codes in the alarm memory you must now press the
 corresponding buttons on the other remote transmitters you wish to program into the alarm. The siren
 will echo two low tones for the second remote, three low tones for the third, and four low tones for the
 fourth remote.
- Turn off the ignition or leave for 10 seconds to complete the learning process. The siren will then
 echo a low-high tone twice.

OPTIONAL ACCESSORIES - EXTRA COST

PAGER - MP1000

This is a personal pager which transmits directly from the motorcycle to your belt receiver. It does not connect via the telephone system so does not attract additional call costs.

If the alarm is triggered, the belt receiver beeps a warning and the LED flashes.

The pager includes a choice of melodies, tones or vibrate mode.





MERCURY TILT SWITCH - MMS500

The switch is ideal for motorcycles which only have a side stand. The switch is mounted at an angle so that when the motorcycle is lifted upright, the alarm triggers.

If the engine has been started by remote, and the ignition not yet turned on, the activation of this switch will stop the engine.

SPARE REMOTE CONTROLS

Two remote controls are supplied with the MCA500. but others may be added if required.

REPLACEMENT BATTERIES

Batteries to use are 12v 23a alkaline type available from your Mongoose dealer or electronic supply shop.





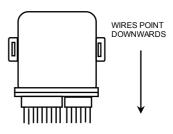
INSTALLATION INSTRUCTIONS

A COPY OF THE MOTORCYCLE'S MANUAL & WIRING DIAGRAM WILL ASSIST IN THE INSTALLATION OF THIS PRODUCT

COMPONENT LOCATION

MAIN MODULE:

For security reasons the main module should be located under a lockable seat, or behind a fairing or side panel where it is not easily accessed and is protected from rain and water splashes. Although the module itself is waterproof, the wiring connectors and the wires to which they connect are not. Wrapping the module and a certain length of it's loom in a plastic bag will assist in protecting from water damage. Mounting so that the modules wires point downwards assists in water protection.



Also keep away from extreme heat sources such as the engine and exhaust system. The module is attached by an adhesive Velcro pad supplied. Alternatively the module can be attached using rubber washers with screws or nuts and bolts – not supplied.

DO NOT PLUG IN THE WIRING LOOM INTO THE ALARM MODULE UNTIL ALL CONNECTIONS HAVE BEEN MADE.

SIREN:

The siren should be mounted behind a fairing or behind a side cover panel to avoid tampering. It should be situated in a place to protect it from heat and water damage. Driving through deep water or puddles may cause water ingress. If washing the engine, cover the siren with a plastic bag to prevent water damage. Heat or water damage is not covered by the warranty. The siren can be attached by the supplied self-adhesive Velcro pad or by screws. The siren plugs into the alarm module.

SEAT PIN SWITCH:

The switch should be mounted under the seat so that removal of the seat triggers the alarm. As the supplied switch mounting requires drilling to fix it in place, we do not advise drilling the chassis or main frame members as this may weaken the structure of the motorcycle. On most motorcycles, the seat locking mechanism is located on a steel bracket which is not normally an integral chassis member. An alternative switch may have to be sourced or simply not installed if mounting proves difficult. An alternative is the mercury tilt switch but this can only be used for motorcycles with only a side stand - see section on extra cost accessories. Additional switches, not supplied, can be installed to protect any item that is removable, such as panniers or fairing panels.



MAIN FUSE

The main fuse can be removed to bypass the alarm should the remote controls fail to operate or are lost. The location of the fuse must therefore be accessible but hidden so that thieves cannot readily locate it. Where possible, mount it alongside other existing fuses.

WIRING - PLEASE READ THIS SECTION PRIOR TO MAKING ANY CONNECTIONS AND THEN IDENTIFY THE MOTORCYCLE'S CORRESPONDING WIRES TO WHICH THIS PRODUCT CONNECTS

BLACK WIRE

This is the permanent ground wire. Connect to a suitable chassis ground point such as under an existing chassis bolt or (-) battery terminal. Ensure a good ground by removing excess paint, oil or grease from under the mounting. Connect this wire first

RED WIRE DO NOT CONNECT THIS WIRE UNTIL ALL OTHER WIRES HAVE BEEN CONNECTED.

This wire is the main power supply and must be connected to a constant +12volts supply – normally, direct to the battery.

STARTER DISABLE:

The <u>BLACK/WHITE</u> and <u>LIGHT BLUE</u> wires are connected to the normally closed contacts of the alarms starter disable relay. They will open circuit whenever the alarm is triggered or when the motorcycle is remote started.

Cut the starter switch wire close to the starter switch and connect the <u>LIGHT BLUE</u> wire to the switch side and the <u>BLACK/WHITE</u> wire to the relay side. Do not use these wires to interrupt the high current starter wire directly before the starter motor

Do not use to immobilise the ignition. Why? If for some reason the alarm malfunctions, or the relay contacts 'bounce' whilst the motorcycle is in motion, the motorcycle engine could cut out resulting in loss of control.

REMOTE START

The motorcycle must not be able to be started by remote when in gear and/or with the side stand down, thereby preventing possible damage to the motorcycle and/or other property.

It is important that you carefully study the wiring diagram for your particular motorcycle to see how your system works. Motorcycles generally have safety features built into the wiring to prevent them being started either in gear or when the side stand is down, or both. However, it is possible to incorrectly wire up the motorcycle for remote start bypassing these safety features. Therefore careful study of how the electrical system operates will prevent this from happening.

The motorcycle's engine starter relay will have protection features using the side stand switch, the neutral switch, the clutch switch, or a combination of all three. These protection features may be on the earth side or the positive side of the starter relay coil.

WHITE WIRE:

This is the remote starter polarity wire and should be connected to (+12 volts) for positive starter type, or to (- ground) for negative starting type. For motorcycles that have protection features on the feed side to the starter switch, attach the white wire to the feed side of the starter switch on the handle bar, after all the protection devices.

YELLOW WIRE:

This is the alarm's remote start wire and must be connected to the motorcycle's starter relay wire **after** the alarm's black/white starter disable wire.

DARK BLUE WIRE:

This wire connects to the ignition wire and will both sense if the ignition is turned on when the alarm is armed, thereby triggering the alarm, and will also put 12 volts onto the ignition wire of the motorcycle when the motorcycle is remotely started. Attach this wire to the ignition wire at the ignition switch.

GREEN/YELLOW WIRE:

This wire provides a (+) positive output for light flash arm/disarm confirmation and during an alarm condition. It can either be connected to the park light circuit o, to the indicator circuit via two 3 Amp diodes (not supplied).

Many motorcycles do not have separate park light and headlight circuits, so connecting to these types may result in too much current draw which could flatten the motorcycles battery or overload the light output of the alarm system. It is therefore recommended to flash the indicators if the motorcycle has them.

PURPLE WIRE

This is the antenna wire. Do not cut off or shorten. Do not 'loom' or wrap around with other wires as this will affect reception. Doubling the antenna length helps to increase reception range if range is a problem.

GREEN WIRE:

This wire connects to the supplied pin switch and is a (-) ground trigger. The plastic pin switch plunger can be cut to the correct length to allow for different seat the chassis heights.

If the optional mercury tilt switch is used or added, connect the green wire to one side of the mercury switch and the other side of the switch to ground. If the green wire receives a ground signal after the engine has been started by remote, but the ignition has not yet been turned on, the engine will stop.

GREY WIRE:

This is a (+) output to trigger the optional pager. See pager installation instructions. If not used, cut off and insulate to avoid a short circuit.