

# **CYCLONE**

**MOTORCYCLE SECURITY**

# **866F**

**ADVANCED MOTORCYCLE SECURITY**



*Owner's Guide*



**WestCoastCycle**

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**Thank you** for purchasing this CYCLONE 866F Motorcycle Security System. The 866F is a state of the art device that will provide you with years of trouble free service if used properly. Please familiarize yourself with the content of this Owner's Guide to get the most out of your new system. We trust you will enjoy using the product.

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**NOTICE!** Although reasonable efforts have been taken to ensure accuracy in this Owner's Guide, West Coast Cycle shall not be held liable for any errors, omissions, property damage, or injury resulting from the use of this information.

All product specifications and features are subject to change without notice.

## LIMITED LIFETIME WARRANTY

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The CYCLONE 866F system alarm unit and transmitter are backed by a limited lifetime warranty against defective components and/or improper product assembly to the original purchaser for as long the vehicle is owned by that same purchaser, contingent upon installation by a certified motorcycle mechanic or professional installation shop, and contingent upon the product registration card having been mailed back to WCC within 30 days of purchase. All product warranties become void if the CYCLONE 866F system was not sold and installed by a certified mechanic or professional installation shop, or the system is moved to another vehicle, or if the registration card was not clearly/completely filled out and returned to WCC within 30 days of purchase. All other parts and/or accessories that connect to CYCLONE 866F systems, including the internal backup battery, are warranted for one (1) year from the original date of purchase. (Transmitter batteries are not covered under this warranty.)

During the warranty period, West Coast Cycle (hereafter, WCC) will repair or replace, at its sole discretion, any system component that is found defective in material or assembly during the warranty period, provided that the product is returned to WCC by a certified motorcycle mechanic or professional shop and is accompanied by a clear and legible copy of the original purchaser's receipt. Any damage to your CYCLONE 866F system that results from normal wear-and-tear, accidents, improper use, neglect, faulty wiring, incorrect installation, modification, removal or defacement of the product serial number, alteration or repair outside WCC or its certified dealers immediately voids this warranty.

This warranty is limited to defective parts only and does not provide any compensation whatsoever for damages associated with the CYCLONE 866F system or its accessories. This warranty does not cover installation labor, product removal and/or reinstallation fees. This warranty is valid for the original purchaser only and may not be transferred to another party. WCC makes no warranty against theft or vandalism of the vehicle in which the CYCLONE 866F system was installed. This warranty shall not be interpreted as an insurance policy against loss, nor shall WCC be liable any way for such loss, financial or otherwise.

**⚠ WARNING! DO NOT ATTEMPT TO INSTALL THIS CYCLONE 866F PRODUCT YOURSELF BECAUSE SUCH WILL IMMEDIATELY VOID THE WARRANTY. THIS SECURITY SYSTEM MUST BE PROFESSIONALLY INSTALLED FOR SAFETY AND TO VALIDATE YOUR WARRANTY.**

# TECHNICAL SPECIFICATIONS

## Alarm Unit

<b>Operating Voltage:</b>	12Vdc (8v min.; 15v max.)
<b>Current Consumption:</b>	Armed = 4mA; Disarmed = 3mA; Full Siren Blast = 270mA; SLEEP = 1mA (Immob. Off)
<b>Int. Batt. Charge Time:</b>	Approx. 3 hours (continuous charging)
<b>Int. Batt. Alarm Time:</b>	2 hours (battery used only when 12v line is cut)
<b>LED Flashing (Armed):</b>	1 flash every 2 sec. (LED is off when Disarmed/SLEEP)
<b>Operating Temp.:</b>	-20°C to +60°C (limited by specifications of int. batt.)
<b>Siren Blast Volume:</b>	120dB @ 30cm/1ft. (105dB when driven by int. batt.)
<b>Siren Chirp Volume:</b>	110dB @ 30cm/1ft. ("Soft Chirp")

## Status LED

<b>Housing:</b>	Waterproof (intended for outside-bike use)
<b>Light Color:</b>	Blue

## Transmitter

<b>RF Output:</b>	Xtal-controlled 303.875MHz (SAW filter) @ 6,500µV/m
<b>Digital Code:</b>	66-bit Rolling Code (anti code grabbing)
<b>Batteries:</b>	Two CR1616, 3V Lithium cells
<b>Transmit Range:</b>	15m / 50ft. (typical in-city use)
<b>Batt. Life:</b>	1 year avg. @ 6 presses per day
<b>Housing:</b>	Waterproof (can be submerged)

### TRANSMITTER NOTES:

- *Even though the transmitter is waterproof, it is not advised to swim or surf or dive with the transmitter, or press buttons underwater. If water does get inside, immediately remove the batteries and allow to thoroughly dry out for 24 hours.*
- *Avoid leaving in direct sunlight for extended periods, and avoid leaving near sources of intense heat.*
- *There are no screws used to hold the case together. To open, you may use a flat head screw driver, but note that excessive force may dent the plastic.*

# SYSTEM OVERVIEW

## Hardware

- World's smallest all-in-one security system for motorcycles.
- Waterproof Alarm Unit Housing
- Built-in Digital Tilt Sensor (3° alarm trigger)
- Built-in 2-stage Shock Sensor (separate adjustments for 1st/2nd stages)
- Built-in High Power 120dB Piezo Siren (selectable 10s or 30s blast duration)
- Built-in Backup Battery (activates siren if main power disrupted)
- Built-in Starter Immobilizer Relay (25A "switching")
- Waterproof System Status LED (cool blue illumination)
- Waterproof 2-button rolling code RF transmitter (2<sup>66</sup> codes)

## Options

- Waterproof Battery Backup Siren (for exterior mounting)
- Bike-specific, Quick Connect Wiring Harnesses
- Spare/Replacement 2-Button Transmitters
- 1-Way Pager System (alerts you when siren goes off; up to 2,000ft range)

## Included Items

QTY	DESCRIPTION	DIMENSIONS (mm)
1	Alarm Unit	58 x 83 x 28
1	Transmitter	32 x 52 x 14
1	2-Sided Tape (for Alarm Unit)	42 x 1.2
2	Wire Ties (for Alarm Unit)	250 (length)
1	Mini Phillips (+) Head Screw Driver	42 (length), 3 (head)
1	Universal Installation Harness	1450 (wire length)
1	LED	20 (body diameter) 1480 (wire length)

**NOTE:** "Bike-Specific" installation harnesses must be purchased separately.

# MAIN FEATURES EXPLAINED

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- **Digital Tilt Sensor**

When armed, system records bike inclination on two separate axis. If bike is then tilted  $\pm 3^\circ$  or more on either axis, the siren will be triggered. Note that the siren may trigger even when bike has not been tilted due to the shock sensor.

- **2-Stage Shock Sensor**

When armed, system can be set to trigger Warning Chirps and/or Full Siren Blast based on the level of shock to the bike. Sensor 1st and 2nd stage triggers are user-adjustable, and either setting or both can be turned completely off.

- **Starter Immobilizer**

Used to cut ignition or fuel lines when system is Armed (optional in Sleep).

- **Panic Siren**

Allows siren to be activated via transmitter to alert others in an emergency.

- **Sleep Mode**

Shuts down most functions to conserve power. Useful to prevent battery drain when bike not used for extended periods. Also acts as a **Valet mode**.

- **Silent Mode**

Disables full siren blast (allows Warning and Confirmation chirps). Useful in combination with optional pager to learn of threats without alerting thief.

- **Manual Disarm**

Enables you to disarm the system without the transmitter simply by turning the ignition key on/off a certain number times (a number which you program).

- **Auto Arm**

Automatically arms system 5 min. after ignition goes off. Auto Arm cannot be disabled; however, you can control which sensors are active during Auto Arm.

- **Sector Bypass System (SBS)**

Prevents siren from becoming a public nuisance. Shock, tilt or ignition sensors will be individually bypassed if they trigger 5 times. You can disable this feature.

- **Siren Trigger Memory**

When you disarm, system informs you (via siren chirps and LED flashes) if the siren went off in your absence.

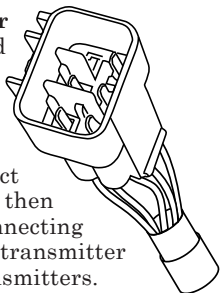
# INSTALLATION

## Before You Begin

**⚠ WARNING!** Never route security system wires in a way that would impede safe operation of the vehicle in which you are installing. Ensure the operator of the vehicle cannot become tangled in security system wires or otherwise be hindered in a way that could cause a traffic accident. Take time to ensure all wiring is connected, mounted and covered so that electrical shorts will not occur. As the installer, you are responsible to verify the safety of your work.

### ⚠ POINTS TO CONSIDER:

- This system is only intended for use in vehicles with 12v batteries.
- The **5-pin Alarm Unit main wiring connector** (pictured at right) which mates with the included Installation Harness is waterproof but the other two (smaller) connectors are not waterproof. Protect the smaller 2-pin connectors from water.
- If you need to disconnect the battery, first disconnect Alarm Unit wiring harness at the connector, and then disconnect the battery. In some rare cases, disconnecting the battery first can result in the loss of learned transmitter memory, in which case you must re-learn your transmitters.
- When operating the 866F, if you see smoke or detect some abnormal operation, immediately discontinue using the system and consult with the vendor who sold you the CYCLONE system.
- In cases where the bike is not driven for an extended period (greater than 2 weeks) or in the event the battery voltage is already very low, it is strongly suggested to either use SLEEP mode or start the engine from time to time to ensure the battery does not die. You may also wish to check the battery voltage now and then if you have other 3rd party electronics installed.
- If the battery dies or the voltage level drops very low, the 866F may not have adequate voltage to function properly. In this case, you will not be able to start the engine (due to the immobilizer) until the battery is re-charged.



**⚠ CAUTIONARY POINTS:**

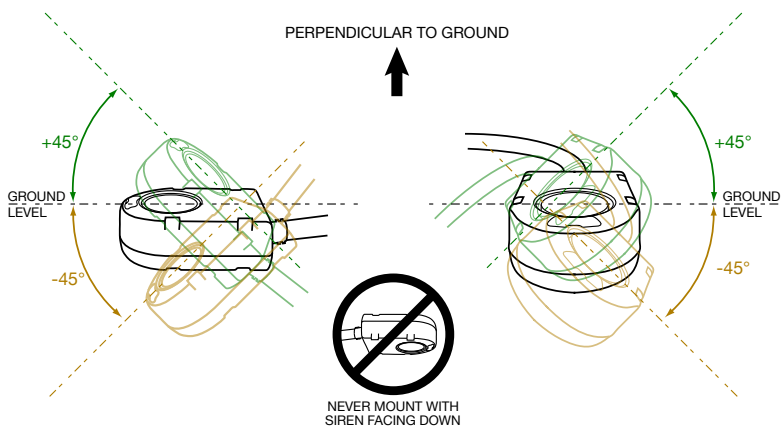
- Although the 866F alarm unit is waterproof, it should not be submerged in water. Make certain the installation location is not in an area that water will collect around the alarm unit. Install only in locations that are sheltered from the outside elements (such as within the seat).
- Do not leave the 866F mounted in locations with condensing humidity, high temperatures, and/or a high concentration of dust or airborne particles.

**Connecting & Mounting the Alarm Unit**

**NOTE:** *The installation described in this manual does not cover details of connecting the “universal” or “bike specific” Installation Harness. Please consult the manual that came with your installation harness for details. Once the installation harness is installed, you may then complete the installation by following the steps below.*

1. **Ensure the battery is connected and the Installation Harness is properly installed.**
2. **Plug the Installation Harness connector into the 5-pin Alarm Unit main wiring connector.** Note that the full alarm blast will go off when the connection is made. Press button-1 on the transmitter (for about 1 sec.) to stop the siren sound. The siren will then chirp 3 times to confirm the system is disarmed. *(If you later need to disconnect the vehicle battery, remember to first disconnect the Alarm Unit main wiring connector and then you may proceed with disconnecting the battery.)*
3. **Consider a mounting location for the 866F alarm unit somewhere inside the seat.** Keep in mind that your mounting location may impact the range of the transmitter. If you later find the transmitter range to be unacceptable, you will need to relocate the 866F alarm unit. For this reason it may be best to avoid affixing the 2-sided tape or the wire ties until you have confirmed that the transmitter range is acceptable. (Included tape is useful for flat-surface mounting, while the wire ties are for mounting the alarm unit on a support bar.)

**Note:** Mounting the 866F alarm unit on its side (with the siren facing to the side instead of straight up) may cause sensitivity problems for the onboard tilt sensor. Prior to mounting, it is recommended that you first test the operation of the tilt sensor to confirm it will work in your intended mounting position. To help you decide an appropriate mounting position, please consider **Fig. 1** below.

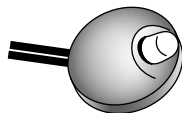


**FIG. 1** Positioning the alarm unit for maximum tilt sensitivity

As shown, the tilt sensor achieves maximum sensitivity when the siren is mounted face-up. Sensitivity declines rapidly for tilt angles outside the  $\pm 45^\circ$  shown (on two axis).

For some bikes, vertical mounting may be the only means of installing the alarm unit. In this case the tilt sensor may still work, but the sensitivity will be adversely affected. This may or may not be acceptable to the user. However, you must avoid mounting the alarm unit face down because it may cause the tilt sensor to false-trigger the siren.

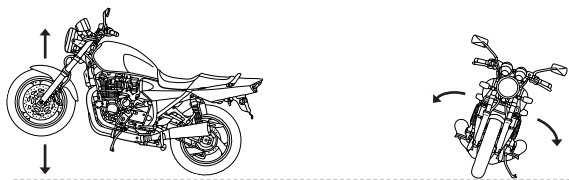
- Now it's time to connect the Status LED.** Note that there are two "2-pin" connectors on end of the alarm unit harness. The larger of the two, with orange & black wires, is for connecting to the optional pager system. The smaller connector, with red & blue wires, is the one you plug into the LED connector.



After connecting, run the LED to a suitable location on the bike, preferably near the ignition keyswitch (for visibility). The circular LED body is waterproof, so you are relatively free to mount it anywhere, so long as the 2-sided tape on the bottom can adhere to the mounting surface.

## After Installation Testing

**TILT SENSOR.** With the system armed, tilt the bike on two axis (as shown in the diagram below) and make sure the alarm goes off for 10 or 30 seconds (*depending on the program preset*). After a delay, the alarm should go off again if the bike remains tilted.



**SHOCK SENSOR.** When light shocks are administered to the bike, the siren should generate 2 chirps. Harder shocks should trigger the full siren (10 or 30s). If the factory default shock sensitivity is undesirable, adjustments can be made by removing the rubber cap on the alarm unit and adjusting the two POTs with the included screw driver. See “Shock Sensor Adjustments” on the next page for details.

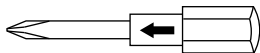
**IGN TRIGGER.** When the ignition switch is turned on, the siren should sound for 10 or 30 sec. If the switch remains turned on, the siren should go off again after a 45 second delay (the LED will flash on and off 30 times during the 45 sec.). If SBS is set to ON, then the siren will cycle on and off up to 5 times and then stop. With SBS off, the siren will cycle on and off an unlimited number of times, as long as the ignition switch is turned on.

**IMMOBILIZER.** When the 866F is Disarmed, the internal relay should switch closed when IG is turned on (WHT & GRN wires are shorted). The relay remains switched for 20 sec. after IG is turned off. When Armed, the relay should switch open and prevent the engine from being started.

**AUTO ARM.** The system should automatically Arm 5 minutes after you disarm.

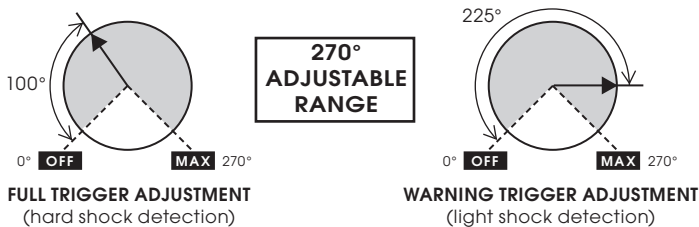
**BACKUP BATTERY.** If you have 3 hours, you can turn on the Ignition and leave the 866F to charge the battery. When fully charged, you should be able to disconnect the alarm unit's main 5-pin harness and hear the siren go off (up to 2 hours). To kill the siren, reconnect the main wiring harness, then wait for 10 or 30 seconds for the sound to stop. If the siren went off until the battery died, it will go off again when power is connected. Wait until the siren stops, and then you can disarm with the transmitter.

## Shock Sensor Adjustments



**Sensitivity POTs.** Remove the rubber cap, located just above the siren speaker on the front of the Alarm Unit. You will then see two small holes for accessing the shock sensor adjustment potentiometers (POTs). See *Fig. 3 on the next page*. Do not lose the rubber cap or forget to put it back on, otherwise water may enter and destroy the electronics!

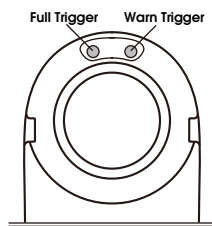
**Screw Driver.** Adjustments can easily be made using the included mini Phillips (+) screw driver. Note the arrow on the side of the screw driver handle. This arrow can help you be more precise in your adjustments by indicating what sensitivity level you are at, with respect to the illustrations in *Fig. 2* below.



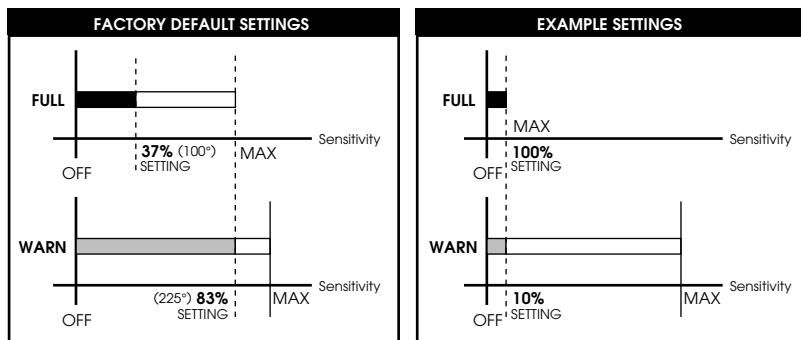
**FIG. 2** Shock sensor factory default settings for Full & Warn triggers

When you insert the screw driver into the adjustment holes, try to align the arrow on the handle in the same position as the arrows shown above in *Fig. 2*. If you find the shock setting is different from the factory default, or if you twist by mistake, simply turn both POTs to the far left OFF position, then align the arrow on the screw driver to the OFF position, and then you can adjust as appropriate. In this way, the arrow on the screw driver handle will show you precisely where you are in the 270° adjustment range.

**Adjust “Warn Trigger” First.** It is important to adjust the Warn Trigger *before* the Full Trigger. This is because the Warn Trigger adjustment defines the “maximum sensitivity level” of the Full Trigger. If you turn the Warn Trigger completely OFF, for example, the Full Trigger is also automatically set to OFF. Conversely, the higher (closer to MAX) you set the Warn Trigger, the greater range of control you have over the Full Trigger. Simply put, the Full Trigger can never be more sensitive than the Warn Trigger. This is illustrated graphically in Fig. 4 below.



**FIG. 3** Sensitivity POTs



**FIG. 4** Relationship between Warn & Full shock sensor adjustment ranges

In Fig. 4 above, you can see that the “factory default settings” (also shown in Fig. 2) allow a wide range of adjustment for the Full Trigger, without making the Warn Trigger overly sensitive. In the “example settings” bar graph shown, the Warn Trigger is set to 10% of Max. And even though the Full Trigger is set to 100% of Max in this example (*POT turned all the way to the right*), the adjustable range of the Full Trigger is very narrow because it’s Max sensitivity is defined by the Warn Trigger setting. To get more sensitivity out of the Full Trigger, you must first set the Warn Trigger sensitivity higher.

The 866F shock sensor digitally filters out “environmental vibrations” (e.g., large truck driving nearby, wind, rain, jackhammers, etc.) in order to minimize false triggers. However, please note that setting the Warn Trigger to Max may cause the 866F to detect these otherwise “harmless” vibrations.

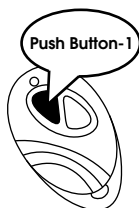
# SYSTEM OPERATION

## Transmitter Functions

### ARMING

- **With Tilt Sensor and Shock Sensor Enabled**

Ensure the Ignition key is turned off. Press button-1 on the transmitter for about 1 second and then release. (*Note that the 866F will Arm automatically 5 minutes after the Ignition is switched off.*) If Arming was successful, the siren will chirp 1 time, and the LED will flash 1 time; then 5 seconds later, the system Status LED will start flashing continuously and *both* sensors will become active.



- **With Tilt Sensor or Shock Sensor Enabled**

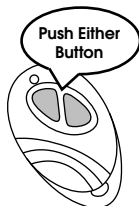
Ensure the Ignition key is turned off. Press button-2 on the transmitter for about 1 second and then release. (*Note that the 866F will Arm automatically 5 minutes after the Ignition is switched off.*) If Arming was successful, the siren will chirp 1 time, and the LED will flash 1 time; then 5 seconds later, the system Status LED will start flashing continuously and your "Selected Sensor" will become active.



**⚠ NOTE:** During the first 5 seconds after arming, the sensors are not yet active. Please avoid tilting or shaking the bike during this time.

### DISARMING

With the Ignition key off, press either transmitter button for about 1 second and then release. If Disarming was successful, and if the siren was not triggered in your absence, the siren will chirp 3 times and the Status LED will flash 3 times. See **Table-1** for details on the different siren chirps and LED flashes produced after Disarm.

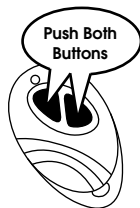


**Manual Disarming** (useful if the transmitter is lost or battery dies)

Turn the Ignition on, and the full siren blast should go off. During the 10s or 30s siren duration, turn the Ignition off. When the siren blast stops, you have 8 sec. to turn on the Ignition again. Keep your hand on the Ignition key and count the number of Status LED flashes. When the number of flashes matches your disarm code, turn Ignition off. The siren will then chirp 3 times, indicating the system is now disarmed.

**PANIC SIREN** 

With the Ignition key off, press both transmitter buttons for about 1 second. The siren will then go off for 10s or 30s. Push either button to stop the siren. The 866F will auto-arm once the full siren sequence stops by itself.

**SILENT MODE** 

This feature prevents siren triggers from being heard, but arm/disarm Confirmation chirps remain audible. Silent Mode is especially useful with the optional Pager System, which alerts you to threats without the thief knowing.



**To Activate**, first turn on the Ignition, then press transmitter button-1 for 3 seconds and release. The siren will chirp 1 time. Press button-1 again for 3 seconds to exit out of Silent Mode (siren will then chirp twice).

**SLEEP MODE** 

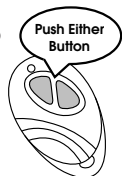
This mode allows you to conserve vehicle battery power by reducing the electric current consumption of the 866F. This feature is useful when you will not be riding the bike for extended periods. All security features are disabled by default, but you can enable the Starter Kill Immobilizer each time you turn off the Ignition Key.



**TIP:** Sleep Mode also acts like a “**Valet Mode**,” useful to disable security features when sending the bike in for maintenance.

**Activation.** With the Ignition on, press transmitter button-2 for 3 seconds and release. The siren will chirp 3 times. Sleep Mode is on.

**Enabling Starter Kill Immobilizer.** While in Sleep Mode, turn the Ignition on and off. Within 20 seconds of turning off the Ignition, press either transmitter button for about 1 second and release. The siren will chirp 1 time, and the LED will flash once. If Ignition is turned on with the Immobilizer on, the siren is silent.



**Disabling Starter Kill Immobilizer.** While in Sleep Mode, turn the Ignition on and off. Within 20 seconds of turning off the Ignition, press either transmitter button for about 1 second and release. The siren will chirp 3 times, and the LED will flash once.

**Deactivation.** With the Ignition on, press transmitter button-2 for 3 seconds and release. The siren will chirp 5 times. Sleep Mode is off.

**⚠ IMPORTANT!** The only time your transmitter will work during Sleep is the first 20 sec. after the Ignition is turned on & off. You must therefore exercise extreme caution when enabling the Immobilizer during Sleep. If you lose all your transmitters in Sleep mode while the Immobilizer is enabled, you will not be able to disable the Immobilizer. In such a case, you must have your 866F service by your CYCLONE dealer. If you are worried about this, simply do not enable the Immobilizer during Sleep.

**TABLE-1** Siren & Status LED Response to Changes in System State

ACTION or STATE	SIREN	STATUS LED
Arming	1 chirp	2 flash
Disarming (nothing triggered)	3 chirps	3 flashes
Disarming (Shock triggered)	3 + 1 chirps	1 flash
Disarming (Tilt triggered)	3 + 2 chirps	2 flashes
Disarming (Ignition triggered)	3 + 3 chirps	3 flashes
Armed	—	1 flash every 2s
Warn Trigger	2 chirps	2 flashes
Full Trigger	10s or 30s	Flashes for 10/30s
Panic Siren	10s or 30s	Flashes for 10/30s
IGN on with Immobilizer on in Sleep	no sound	1 flash every 2s

## Feature Programming

- 1) Arm and then Disarm Cyclone.
- 2) Turn on the Ignition within 20 seconds of disarming Cyclone.
- 3) Within 5 seconds of turning on the Ignition, press both transmitter buttons *until* the Status LED lights solid (press for about 5 sec.).
- 4) Press button-1 the same “No.” of times as the feature you want to select in Table-2. The LED will then flash repeatedly the same number of times as the feature number you chose. Now press button-2 to change the “Selection.”

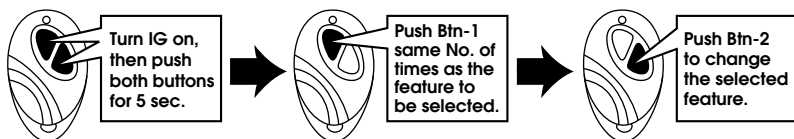


TABLE-2		Feature Selection Menu	
No.	Feature Description	Selection	Siren Chirps
1	AutoArm Sensor Enable (see No. 3)	<b>Both Sensors</b>	<b>2</b>
		“Selected Sensor”	1
2	Shock Sensor “Full Trigger”	<b>ON</b>	<b>2</b>
		OFF	1
3	Transmitter Button-2 Arm/AutoArm with “Selected Sensor”	<b>Tilt</b>	<b>2</b>
		Shock	1
4	Duration of Full Siren Blast	<b>10 sec.</b>	<b>2</b>
		30 sec.	1
5	Sensor Bypass System (SBS)	<b>ON</b>	<b>2</b>
		OFF	1
6	Manual Disarm Code	<b>6</b>	<b>6</b>
7	Rest Settings to Factory Default		7
<b>FACTORY DEFAULT SETTINGS SHOWN IN BOLD TEXT ABOVE</b>			

## Description of Programmable Features

**NOTE:** *When you select any of the 7 programmable features, the siren will chirp the same number of times as the feature you just selected, and the Status LED will also flash the same number of times. When exiting the Feature Selection Menu, the Status LED will flash the same number of times as the Manual Disarm Code and then the siren will chirp 3 times.*

- 1. AutoArm Sensor Enable.** Allows you to select either one sensor or both sensors to be active when the 866F automatically arms. The “Selected Sensor” is chosen in Feature No. 3 (*see below*).
- 2. Shock Sensor “Full Trigger.”** You can easily turn OFF the shock sensor Full Trigger (which sounds the siren for 10/30s) simply by turning the sensitivity POT all the way to the left (*see pages 9-10*). However, this feature allows you to disable the Full Trigger while still keep your desired Full Trigger level set on the POT. This is useful if you sometimes wish to disable the Full Trigger and then later re-enable it. You don’t have to worry about setting the POT to what it was before.
- 3. Transmitter Button-2 Arm/AutoArm with “Selected Sensor.”** This feature allows you to select either the Tilt or the Shock sensor to become active during these two conditions: (1) AutoArm and (2) Arming by pressing button-2 on the transmitter. (*Related to No. 1 above.*)
- 4. Duration of Full Siren Blast.** You can program the siren to go off for either 10s or 30s. The Full Siren Blast goes off during a Shock Sensor Full Trigger, Ignition Switch Trigger, Digital Tilt Trigger, Panic Siren mode, and when the power is cut to the system (siren sounds via backup battery).
- 5. Sensor Bypass System (SBS).** SBS is a feature that prevents the 866F from becoming a public nuisance. With SBS on, the system will automatically bypass the Tilt sensor, Shock sensor, or the Ignition sensor whenever the individual sensors trigger 5 times. For example, if the Tilt sensor triggers 5 times, SBS will disable it but the Shock and Ignition sensors remain active (until they too individually trigger 5 times). If noise pollution is not an issue for you, SBS can be turned off.
- 6. Manual Disarm Code.** Manual disarming is useful if your transmitter is lost or the battery dies. The factory default code is set to: **6**. This feature allows you to set your own code.

When you select this feature, the siren will chirp 6 times and the Status LED will flash 6 times. The Status LED will then light solid for 10 sec. and then flash up to 30 times. You must program your code during the time that the LED flashes 30 times.

When the LED flashes the same number of times as the code you wish to set, immediately turn of the ignition. The Status LED will then blink the same number of times as the code you just programmed, and the siren will chirp 3 times, and this will auto-exit the Feature Selection Menu.

**For example**, let's say you wish to set your secret code to "1." In this case, you would enter the Feature Selection Menu, select feature No. 6, watch as the LED blinks 6 times and then glows solid for 10 sec, then wait until the LED goes off and then blinks once, then turn off the Ignition. The LED will then blink once (the same number of times as you code) and the siren will chirp 3 times.

- 7. Reset Settings to Factory Default.** If you have altered the settings in the Feature Selection Menu, this feature will allow you to restore all settings to their factory default, as shown in **Table-2** on page 14.

When you choose Feature No. 7, the siren will chirp 7 times and the Status LED will flash 7 times. After the 7 chirps finish, press and hold transmitter button-2 until you hear a single siren chirp. All settings are now reset. The siren will then chirp 3 times to indicate you have exited from the Feature Selection Menu.

**Transmitter Learning**

**⚠ IMPORTANT!** *Take great care of your transmitters whenever you choose to enable the Starter Kill Immobilizer while in Sleep mode. If you lose all your transmitters with the Immobilizer on in Sleep mode, you will be unable to deactivate the system or start your bike; and you cannot learn new transmitters while in Sleep mode! In such a case, you will be forced to remove the 866F and send it to your dealer for servicing. If you are worried about this, simply do not enable the Immobilizer while in Sleep mode. (The Immobilizer is disabled by default in Sleep mode.)*

The transmitter learn feature is useful if you wish to purchase an optional remote for your 866F system, or if you lose your existing remote and require a replacement. The 866F can store up to 3 transmitters total in memory. Note that when you learn new transmitters, all previously learned transmitters will be deleted from memory for security. Therefore, each time you initiate the learn process, you must re-learn all your transmitters. The learn procedure is given as follows:

- 1. Make sure the 866F is not in Sleep mode, then Arm and Disarm the system.**
- 2. Within 20 sec. of Disarming, turn the Ignition key on and off 10 times.** *The Status LED will blink 10 times and then light solid on for 20 seconds. (If the Ignition is turned on at this stage, you will exit out of transmitter learn, and the previously learned transmitters will remain in memory.)*
- 3. When you see the Status LED light solid, press and release button-1 on the first transmitter you wish to learn.** *Previously learned transmitters will now be deleted, and the siren will chirp 1 time, and the Status LED will dim 1 time. **REPEAT** this step for all other transmitters you wish to learn. You have 20 sec. of time to learn each transmitter.*
- 4. After all transmitters are learned, turn Ignition on and off.** *(Or you can simply wait 20 sec. for the system to auto-exit the routine.) The Status LED should then blink the same number of times as your Manual Disarm Code, and the siren should chirp 3 times.*

# TROUBLESHOOTING

## ENGINE WON'T START

- Be sure the 866F is *disarmed* or that you don't have the immobilizer turned on in Sleep mode. You should not see the Status LED flashing.
- Check the battery voltage.

## WORRIED TRANSMITTER BATTERY MAY DIE

- See the bottom of page 11 under “**Manual Disarming.**”
- The CR1616 batteries used can be purchased at any convenience store.

## SIREN SOUND NOT LOUD ENOUGH

This could be due to the mounting location. Some bikes offer more insulation inside the under-seat compartment than others, which may attenuate the sound level. In such a case, we recommend installing the optional battery backup siren. This optional product is fully waterproof and mounts outside the seat where you can hear the full 120dB siren blast! Backup battery keeps the siren going even if wires are cut.

## WHAT FUNCTIONS WORK IN WHAT MODE? (See *Table-3* below.)

TABLE-3		866F FUNCTIONS VS. MODE		
Function	Normal Mode	Silent Mode	Sleep Mode	
Immobilizer	✓	✓	manual	
Panic Siren	✓		✓	
Tilt Sensor	✓	✓	✓	
Shock Sensor	✓	✓	✓	
Ignition Sensor	✓	✓	✓	
Transmitter Operation	✓	✓	IG on → 20s	
Status LED	✓	✓	✓	
Warning Chirps	✓		✓	
Full Siren Blast	✓		✓	
Confirmation Chirps	✓	✓	IG on → 20s	
Sleep Mode ON/OFF	✓	✓	✓	
Silent Mode ON/OFF	✓	✓		
Transmitter Learning	✓	✓	✓	

# QUICK REFERENCE GUIDE

## CYCLONE 866F TRANSMITTER FUNCTIONS

- (S) stands for a **short** press — anything press *less than 2 sec.*
- (L) means a **long** press of *at least 3 sec.*
- **TRANSMITTER NOTE:** There is no need to press excessively hard on the buttons. If there is no response on your first press, try again with a slightly longer press.

### ARMING, with Tilt & Shock Enabled



With **IGN off**, push button 1. (S)

*Note that the 866 will auto-arm 5 min. after the IGN key is turned off, unless in SLEEP mode.*



1 CHIRP

### ARMING, with Tilt or Shock Enabled



With **IGN off**, push button 2. (S)

*Your selected sensor will be enabled. The 866 will auto-arm 5 min. after the IGN key is turned off, unless in SLEEP mode.*



1 CHIRP

### DISARMING



Push either button (1 or 2). (S)

*Security system will disarm.*



3 CHIRPs

### PANIC SIREN



Push both buttons (1 & 2) at same time. (S)

*Panic siren will sound, except when in SLEEP mode.*



Full Siren Blast  
(10s or 30s)

### SILENT Mode



Turn on **IGN & press button 1.** (L)

*Repeat to exit Silent Mode. Warning chirps and full siren blast will be muted, but Arm & Disarm chirps remain audible.*



1 CHIRP (On)  
2 CHIRPs (Off)

### SLEEP Mode



Turn on **IGN & press button 2.** (L)

*Repeat to exit Sleep Mode. Security & RF receiver deactivated to conserve power. Must turn on IGN to use transmitter.*



3 CHIRPs (On)  
5 CHIRPs (Off)

### IMMOBILIZER (Starter Kill) in SLEEP Mode



**ON:** Turn IGN On & Off. Within 20 sec., press btn. 1 or 2. (S)

**OFF:** Turn IGN Off & On. Within 20 sec., press btn. 1 or 2. (S)

*This feature provides a means for added security in Sleep mode.*



1 CHIRP (On)  
3 CHIRPs (Off)

### MANUAL DISARMING (useful when transmitter is lost or battery dies)



**Siren must go off for full 10/30 sec.** While siren sounds, turn off IGN. When siren stops, you have **8 sec.** to turn IGN on. Keep your hand on the IGN key and count LED flashes until the number equals your Manual Disarm Code, then immediately turn IGN off.



3 CHIRPs

**⚠ WARNING!** You cannot manually disarm in Sleep mode!

### **FCC Statement**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications

Any changes or modification not expressly approved by the party responsible could void the user's authority to operate the device.

All CYCLONE 866F products are engineered in Japan,  
manufactured and tested in strict accordance with  
Japanese QC standards.

[www.wcc-tech.com](http://www.wcc-tech.com)

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