

CLIFFORD

World-Class Auto Security

XL100

Security System for Keyless Entry

Owner's Manual

CLIFFORD

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XL100 is covered by
one or more of the following Clifford Electronics patents:
4,158,874; 4,233,642; 4,327,444; 4,383,242; 4,430,685; 4,845,464;
4,887,064; 4,890,108; 4,922,224; 4,997,053; 5,081,667; 5,146,215;
5,157,375 and other patents

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31-157A/XL10M/695

Table of Contents

Standard Features of the XL100	3-5
Welcome	6
Arming/Disarming	6
How to Interpret Horn and Parking Light Flashes	6
FACT — False Alarm Control and Test	7
Duplex Piezo Sensor	7
AutoArming™	7
AutoArming Enable/Disable	
Visual Acknowledgment	
AutoArm & Lock	
Entry Delay	
Instant AutoArming Bypass	
Alarm Duration	8
Horn/Siren Confirmation Muting	8
Normal/Soft Horn/Siren Confirmation	8
Valet Mode	8
To enable Valet Mode	
To exit Valet Mode	
How to Interpret the LED Status Indicator	9
AutoLock/AutoUnlock	9
AutoTesting™	9
Automatic Malfunction Bypass	9
Prior Intrusion Attempt Alert	9
TotalRecall™	10
Normally Open/Closed Starter Interrupt	10
SmartPowerUp™ II	10
User-Selectable Features	11
Programming Table for User-Selectable Features	11

Standard Features of the XL100

- 5-Year Warranty** — Here's the one feature you may never use since Clifford systems are renowned for their reliability. For up to 5 years after your purchase, Clifford will repair or replace the control unit free of charge (see your XL100 warranty card for details).
- FACT™—False Alarm Control and Test** — One of many patented Clifford innovations, FACT *absolutely, positively ends recurring false alarms*. If a sensor causes the alarm to sound, the system will check for another activated trigger before sounding the alarm a second time. Should the alarm sound again, *you will know for sure* someone is tampering with your vehicle.
- AutoLock/AutoUnlock™** — For your safety and the safety of your passengers, this system automatically locks your car's doors when you turn on the ignition switch to start the engine. The system will also unlock the car doors once the ignition is turned off. If you prefer, you may turn off the AutoLock/AutoUnlock feature.
- Audible Arming/Disarming Confirmation** — The system will audibly confirm remote arming and disarming with "beeps" of your vehicle's horn or "chirps" if an optional siren is installed.
- Normal/Soft or Muting of Horn/Siren Confirmation** — You can select with a few flicks of a switch either full-volume arming/disarming horn confirmation beeps, a softer sound level or no beeps at all (just parking light flashes).
- Built-In Parking Light Flasher** — Confirms arming, disarming and system status.
- Smart Courtesy Lighting Capability** — With the addition of an optional relay, your vehicle's interior light(s) will turn on and stay on for 30 seconds or until you start the engine, whichever comes first.

Standard Features of the XL100 (cont.)

- ☑ **AutoArming™** — Your XL100 arms itself “passively” if you forget to arm it by remotely locking the doors. It may qualify you for an insurance discount that could pay for the system (ask your insurance company).
- **AutoArming Enable/Disable** — You may disable or re-enable AutoArming with just a few flicks of a switch.
- **Visual Indication** — Two parking light flashes signal that the 30-second countdown to AutoArming has started.
- **Entry Delay** — If you ever temporarily lose the use of your remote, you may set an entry delay of 15 seconds to allow you to enter the car and start the engine without activating the alarm.
- **Instant AutoArm Bypass** — Just two quick turns of the ignition switch will bypass AutoArming for one cycle — perfect when fueling the vehicle. AutoArming is automatically restored the next time you park your vehicle.
- ☑ **Duplex Piezo Sensor™** — The two sensor zones provide full perimeter protection. If someone bumps into your car, the system will sound a warning tone. If forced entry is detected, the full alarm will sound.
- ☑ **AutoTesting™** — Tests all triggers and sensors every time you arm the system. It also warns you if you accidentally arm the system with the door, hood or trunk open. If there is a real trigger or sensor malfunction, the system will alert you whether the problem is a trigger or a sensor.
- ☑ **Patented Malfunction AutoBypass™** — In the unlikely event of a trigger or sensor malfunction, the XL100 will automatically bypass the malfunction and arm all other points to continue relentless protection of your vehicle.
- ☑ **TotalRecall™** — The XL100's memory stores the identity of the last trigger or sensor activated. This provides an invaluable diagnostic means of visually identifying the activated trigger or sensor anytime.
- ☑ **Prior Intrusion Attempt Alert** — When you disarm your XL100 by remotely unlocking the doors, a special parking light flash sequence and horn beep acknowledgment will audibly and visually alert you from a distance if an intrusion attempt was foiled while you were away.

Standard Features of the XL100 (cont.)

- ☑ **Normally Open/Closed Starter Interrupt** — At the time of installation, you can select whether the XL100 uses its normally closed or normally open method to ensure that the engine cannot be started by a thief. Normally closed mode ensures that you will be able to start the engine even in the unlikely event of a system malfunction. Normally open mode prevents a thief from starting the engine even if he cuts all the wires or locates and removes the power to the control unit.
- ☑ **Hood/Trunk Trigger Input** — For full perimeter protection of the engine compartment and trunk contents (may require optional pin switches).
- ☑ **High-Luminescence LED Status Indicator** — Identifies the system status and provides visual deterrence.
- ☑ **Valet Mode** — Bypasses the alarm if there is a malfunction, if the remote control battery is dead or if the remote control is lost or stolen.
- ☑ **Selectable Alarm Duration** — You may select either a 30-second or 60-second alarm duration.
- ☑ **Patented Noise Abatement** — Limits alarm to no more than 5 minutes even if a door is left open in the wake of an intrusion attempt. This ensures against battery drain or towing of your vehicle due to noise pollution. The system then automatically re-arms all other points to provide the utmost possible protection.
- ☑ **Patented SmartPowerUp™ II** — When power to the system is disconnected, the system's non-volatile memory always remembers the last state (armed, disarmed or valet mode) and returns to that state when power is restored. So if a thief disconnects the power and then restores it in an attempt to start the car, the system will re-arm and instantly sound the alarm while immobilizing the vehicle.

Welcome to the world of high-technology vehicle security and convenience!

Congratulations on the purchase of your new XL100 Vehicle Security System for Keyless Entry. Now by simply activating your vehicle's keyless entry remote you can automatically protect your car with one of the world's finest microprocessor-controlled security and convenience systems. Clifford Electronics has long been recognized as the world's leading manufacturer of high-technology vehicle security systems. In fact, Clifford Electronics holds more patents than all other vehicle security manufacturers combined. That's why trusting the Clifford name has always meant trusting the best.

TO ARM
THE SYSTEM Activate the "Lock" command of your keyless entry remote as described in the vehicle's manual. You will hear **two brief horn beeps** and the parking lights will flash twice. The LED indicator will flash repeatedly and the car doors will lock.

TO DISARM
THE SYSTEM Activate the "Unlock" command of your keyless entry remote as described in the vehicle's manual. **One brief horn beep** and one parking light flash confirms disarming.

If you have the optional courtesy light relay, the interior light(s) will turn on and stay on for 30 seconds or until you start the engine, whichever comes first.

Note: With the optional siren, you will hear "chirp" confirmations instead of horn beeps.

How to Interpret the Horn Beeps and Parking Light Flashes

When you use your keyless entry system's remote, the XL100 responds with horn beeps and parking light flashes. **These beep/flash acknowledgments mean:**

Beeps and Flashes	Meaning
1	Your system is disarmed
2	Your system is armed
2 and then 4	Armed, but there is a door open or the sensor is malfunctioning (see <i>Auto Testing</i> on page 9)
3	Disarmed, but there was an intrusion attempt while you were away (see <i>Prior Intrusion Attempt</i> on page 9)
4	Armed but the hood or trunk is ajar (see <i>Auto Testing</i> on page 9)

FACT™ — False Alarm Control and Test

With FACT, you'll never experience repeated false alarms again. If the alarm goes off, DO NOT remotely disarm (unlock). Allow the system to run for the full alarm duration. Before sounding the alarm a second time, the system automatically checks for another activated trigger to verify that an intrusion is in progress. Should the alarm sound again, you will know for sure that someone is tampering with your vehicle. (To disable FACT, see *User-Selectable Features* on page 11.)

Duplex Piezo Sensor

This sensor detects intrusion related vibrations and impacts. If someone taps your car door while exiting his vehicle, the system will sound a rapid warning tone. But, if there's any genuine tampering with your car, the sensor will sound the full alarm.

AutoArming™

When enabled, this feature will automatically arm the system 30 seconds after the ignition is turned off and all the vehicle doors are closed. So even if you forget to arm the system, the XL100 won't. Additional features include:

- **AutoArming Enable/Disable:** If you prefer, you may deactivate or reactivate the AutoArming feature. See *User-Selectable Features* on page 11.
- **Visual Acknowledgment:** Five seconds after you exit your vehicle and close all the doors, the parking lights will flash twice to confirm that the AutoArming countdown has begun. Then, 25 seconds later, the system will AutoArm.
- **AutoArm & Lock:** To ensure you can't accidentally lock your keys inside the car, the system is factory set NOT to lock the doors upon AutoArming. To change this setting, see *User-Selectable Features* on page 11.
- **Entry Delay:** Even if you lose the use of your keyless entry remote you can still easily access your car. While in AutoArm mode, Entry Delay gives you a 15 second window after you open your door to enter your car and start the engine without activating the alarm, see *User-Selectable Features* on page 11.
- **Instant AutoArming Bypass:** Prevents AutoArming when fueling and other times when you wish to temporarily bypass AutoArming. To activate Instant AutoArming Bypass, rapidly turn the ignition switch to "ON" then "OFF" twice. You'll hear a horn beep to confirm that the system will not AutoArm. Your XL100 will revert to normal operating mode when you start the engine.

Alarm Duration

You can choose from an alarm duration of 30 seconds or 60 seconds depending on your security needs. See *User-Selectable Features* on Page 11.

Horn/Siren Confirmation Muting

When parking in a quiet residential area, you may mute the arm/disarm confirmation beeps/chirps. The parking lights will still visually confirm your commands. See *User-Selectable Features* on Page 11.

Normal/Soft Horn/Siren Confirmation

You can choose from two confirmation volume levels to best suit your personal preference. See *User-Selectable Features* on Page 11.

Valet Mode

Whenever the system is put in Valet Mode, all of the system's security features are switched off. At various times, you will need to turn the system off. For instance, when having your car serviced, washed or parked by a valet. You'll still have keyless entry even in Valet Mode.

NOTE: If you temporarily lose the use of your keyless entry remote, you can disarm the system by enabling valet mode.

To enable valet mode

1. Disarm the system.
2. Turn the ignition switch to its "ON" position or start the engine.
3. Flip the valet switch. The system's high-luminescence LED status indicator will glow continually to confirm the system is in Valet Mode.

To exit valet mode

1. Turn the ignition switch to its "ON" position or start the engine.
2. Flip the valet switch. The system's high-luminescence LED status indicator will turn off to confirm that the system is in its normal operating mode.

How to Interpret the LED Status Indicator

The high-luminescence LED status indicator on your car's dashboard or console will visually inform you of the system status.

LED Condition	Meaning
Off	System is disarmed and in normal operating mode (i.e., valet mode is off)
On	Valet mode is on, the vehicle can be driven or serviced without having to disarm
Flashing	System is armed and protecting your vehicle

AutoLock/AutoUnLock

For your safety and the safety of your passengers, this system automatically locks your car's doors when you turn on the ignition switch to start the engine. The system will also unlock the car doors once the ignition is turned off. If you prefer, you may turn off the AutoLock/AutoUnLock feature. See *User-Selectable Features* on page 11.

AutoTesting™

Each time you remotely arm your XL100, it automatically tests all system triggers and sensors. If the *hood, trunk or a door* is open when you remotely arm, the system will *immediately* alert you of the problem by sounding *4 brief horn beeps* and *4 parking light flashes* instead of the usual 2 and 2. To reset, simply disarm the system, shut the hood, door or trunk and then re-arm. Please note that the door ajar warning will not work on vehicles with delayed courtesy lights.

NOTE: Since this is a warning indication, you will still hear the 4 horn beeps or siren chirps even if you "silently" arm.

Automatic Malfunction Bypass

To provide protection even if a component malfunctions, the system automatically bypasses any faulty point and arms all *other* triggers and sensors until you can have the system serviced by your local Authorized Clifford Dealer.

Prior Intrusion Attempt Alert

If you hear three beeps/chirps and see three parking light flashes when you remotely disarm, it means that a trigger or sensor was activated in your absence.

The system's memory records the identity of the last activated or malfunctioning trigger or sensor, which allows your installer to instantly track down a malfunction. To identify the trigger or sensor held in the system's memory, use the following procedure:

1. With the ignition OFF, flip the valet switch.
2. Arm the system from your keyless entry remote and then disarm the system.
3. The LED will blink 1-3 times to indicate the most recently activated trigger or sensor. For your convenience, the blink cycle will repeat a total of 5 times.
4. Write down the number of blinks between pauses and refer to the chart below.
5. Flip the valet switch back to its normal position.

Number of LED blinks between pauses	Trigger/sensor indication
1 blink	Duplex Piezo Sensor
2 blinks	Door trigger*
3 blinks	Hood or trunk trigger

*If vehicle has factory delayed courtesy lights, door diagnostics are not possible.

Normally Open/Closed Starter Interrupt

At the time of installation, you can select whether the XL100 uses its normally closed or normally open method to ensure that the engine cannot be started by a thief. Normally closed mode ensures that you will be able to start the engine even in the unlikely event of a system malfunction. Normally open mode prevents a thief from starting the engine even if he cuts all the wires or locates and removes the power to the control unit.

SmartPowerUp™ II

If power to the system is ever removed, SmartPowerUp II ensures the system will automatically restore itself to its previous state when power is restored. So if a thief disconnects power and then restores it in an attempt to start the car, the system will re-arm and instantly sound the alarm. If your vehicle is to be serviced by a mechanic, just put the system in valet mode. If the mechanic needs to interrupt power, your system will automatically return to its valet mode state when power is restored. There will be no alarm activation.

User-Selectable Features

You can easily toggle as many as eight selectable features to your own personal preferences. To change any of the original factory settings (or return them to their original setting), use the following steps:

1. Select the feature you wish from the table below. Note the number of flicks.
2. Turn your vehicle's ignition switch to its "ON" position.
3. Immediately flip the valet switch back and forth the number of times noted for the feature you wish to program (to help you count, you will hear a brief horn beep or siren chirp to confirm each flick).
4. Wait for the "Program completion confirmation."
5. Turn the ignition off. Repeat steps 1-4 for any other feature you wish to program.

Feature	Factory setting	# of flicks	Program completion confirmation	Result
AutoArm	ON	4	1 chirp = OFF 2 chirps = ON	Change state from ON to OFF or vice-versa
Beep/Chirp Muting	OFF	5	1 chirp = OFF 2 chirps = ON	Change state from ON to OFF or vice-versa
Horn/Siren Volume	SOFT	6	1 chirp = NORMAL 2 chirps = SOFT	Change state from NORMAL to SOFT or vice-versa
AutoLock/AutoUnLock	ON	7	1 chirp = OFF 2 chirps = ON	Change state from ON to OFF or vice-versa
AutoArm and Lock	OFF	8	1 chirp = OFF 2 chirps = ON	Change state from ON to OFF or vice-versa
FACT	ON	9	1 chirp = OFF 2 chirps = ON	Change state from OFF to ON or vice-versa
AutoArming Entry Delay	OFF	10	1 chirp = OFF 2 chirps = ON	Change state from ON to OFF or vice-versa
Alarm Duration	30 SEC	11	1 chirp = 60 SEC 2 chirps = 30 SEC	Change state from 60 seconds to 30 seconds or vice-versa

VERY IMPORTANT: To ensure critical installation parameters are not changed, be sure NOT to flip the valet switch more than 11 times.