

CLIFFORD

World-Class Auto Security™

Falcon

Owner's Manual

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Standard Features of the Falcon II

- ☑ ***Lifetime Warranty*** — Clifford Electronics will repair or replace the control unit and remote controls free of charge for as long as you own the vehicle (see the warranty card for full details).
- ☑ ***FACT — False Alarm Control and Test*** — One of many patented Clifford innovations, FACT ***absolutely, positively ends recurring false alarms.***
- ☑ ***A Pair of Premier 4-Button/12-Channel Remote Controls*** — For fingertip command from a distance with a 4.3 billion code universe for security.
- ☑ ***AntiScan*** — Some car thieves still use “scanners” that transmit one digital code after another until they hit the one code that disarms the alarm. AntiScan blocks scanners to prevent disarming by anyone other than you.
- ☑ ***Anti-CodeGrabbing (ACG) Capability***— A code-grabber allows a thief to record and capture off the air the digital code transmitted by a remote control when used to arm an alarm. When the vehicle owner leaves, the thief replays the remote control’s captured code to disarm the alarm and unlock the doors. When used with the optional 4-button/12-channel remote controls, Falcon II makes thieves’ “code-grabbers” useless, because each time you press the button on the remote control, a different random code is transmitted. Clifford’s optional 4-button/12-channel ACG remote controls ***never*** transmit the same code twice.
- ☑ ***Full-Time Remote Panic with Automatic Door Locking and Unlocking*** — If you feel threatened, a fingertip touch on your remote control will sound the siren, flash the indicator lights and unlock your vehicle’s power door locks for quick entry into your car without fumbling with your keys. If you press the panic button while driving, the siren will sound, the lights will flash and the doors will lock to shield you from the assailant (some vehicles require optional relays to control the power locks).
- ☑ ***Remote Door Locking/Unlocking Capability*** — ***No more fumbling with keys in the dark or bad weather!*** A press of a button on the remote simultaneously arms your system and locks your vehicle’s power locks. Another press disarms and unlocks.
 - ***User-Selectable AutoLock/AutoUnlock*** — Automatically locks the doors when you start the engine, and automatically unlocks them when you turn it off.
 - ***Deluxe Remote Keyless Entry in Valet Mode*** — You can remotely lock and unlock the doors as well as activate system accessories even while your Falcon II is in valet mode.

Standard Features of the Falcon II (cont.)

- ☑ ***Remote Controlled Valet Mode*** — A press of a button on the remote control allows you to enter or exit valet mode. Indicator light flashes visually confirm valet mode entry and exit.
- ☑ ***Remote Controlled Courtesy Lighting*** — For your safety and convenience, when you remotely disarm your Falcon II, the interior lights turn on and stay on until you start the engine or for 30 seconds, whichever occurs first.
- ☑ ***Built-In Indicator Light Flasher*** — Visually confirms lock and system status.
- ☑ ***Dual-Mode Chirp Silencing*** — Your choice of either long-term chirp silencing or remote controlled chirp muting whenever you wish.
- ☑ ***Patented AutoTesting***—Automatically tests all system triggers and sensors every time you remotely arm and warns you if you accidentally arm your Falcon II system with the bonnet or boot open.
- ☑ ***Patented Malfunction AutoBypass*** —In the unlikely event of a trigger or sensor malfunction, Falcon II will automatically bypass the malfunction and arm all other points to continue relentless protection of your vehicle.
- ☑ ***Patented Prior Intrusion Attempt Alert*** — When you return to your vehicle and remotely disarm your Falcon II, a special chirp and indicator light flash sequence will audibly and visually alert you from a distance if an intrusion attempt was foiled while you were away.
- ☑ ***High-Output Siren*** — *Loud* siren wail.
 - ***Patented Automatic Noise Abatement*** — The Falcon II limits alarm sounding to no more than 3 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 resets and re-arms all other points.
- ☑ ***Selectable Starter/Ignition Interrupt***— At the time of installation, you may choose either a fault-proof mode, which lets you start the engine even in the unlikely event of a system malfunction, or ultra-secure mode that ensures a thief won't be able to start the vehicle even if he finds the system control unit and disconnects it!
- ☑ ***Piezo Sensor***— An all-electronic, solid-state vibration/impact sensor that delivers the utmost reliability and provides more accurate discrimination between genuine intrusion attempts and non-threatening conditions (like a heavy vehicle passing by) that cause other sensors to false alarm.

Standard Features of the Falcon II (cont.)

- ☑ ***User-Selectable AutoArming***— Automatically arms itself “*passively*” if you forget to arm it with the remote control.
 - ***AutoArming Enable/Disable*** — Enable or disable the AutoArming feature with just a few flicks of a switch.
 - ***AutoArm & Lock*** — If you wish, you may set the system to automatically lock the doors every time it AutoArms.
 - ***Instant AutoArm Bypass*** — Just two quick turns of the ignition switch will bypass the AutoArming feature for one cycle — perfect when fueling the vehicle. The AutoArming feature is automatically restored the next time you start the engine.
- ☑ ***Smart Remote Boot Release Capability*** — An electronic interlock assures that the optional remote boot release can be activated only when the system is disarmed. To further prevent any possibility of unintentional opening of the boot, the interlock also makes sure that the boot release cannot be remotely activated while driving.
- ☑ ***Patented Remote Control Code Learning with MultiRemote Recognition*** — Just a few flicks of a switch lets you match to the system up to 4 different 12-channel Premier or ACG Clifford remote controls. Just as easily, a lost or stolen remote control can be deleted from the system memory.
- ☑ ***Multiple-Car Control***— You can interface your Falcon II remote controls with Falcon II systems on your other vehicles.
- ☑ ***Control Unit with 4 Channels***— For remote controlled system operation and remote control of optional accessories.
- ☑ ***Bonnet/Boot Trigger Input***— For full perimeter protection of the engine compartment and boot contents (may require optional pin switches).
- ☑ ***High-Luminescence LED Status Indicator*** — Adds visual deterrence and identifies system status.
- ☑ ***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 siren while immobilising the vehicle.

Your Premier 4-Button/12-Channel Remote Controls

The Premier 4-button/12-channel remote controls are miniature radio transmitters. Obstructions, interference or a weak remote control battery will reduce the range. Your remote control is the key to your Falcon II. You will use it to arm or disarm the system, lock or unlock the doors, activate its panic feature or control options such as a remote boot release or IntelliStart remote engine starter. With the red side switch in the UP position, buttons I-IV transmit channels 1-4; in the DOWN position, they transmit channels 5-8. If you simultaneously press both buttons II and IV (regardless of the side switch position), buttons I-IV transmit channels 9-12. These additional channels can be used to control Falcon II systems and accessories on your other vehicle(s).

TO ARM THE SYSTEM	Press button I once. You will hear <i>two chirps</i> and the indicator lights will flash twice. The dashboard LED will flash repeatedly and the car doors will automatically lock.
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TO DISARM THE SYSTEM	Press button I again. <i>One chirp</i> and one indicator light flash confirms disarming. In addition, the doors will automatically unlock and the interior lights will turn on and stay on for 30 seconds or until you start the engine, whichever occurs first.
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TO SILENTLY ARM OR DISARM THE SYSTEM	Press button III. Your Falcon II system will arm or disarm with all the indications noted above <i>except</i> for the chirp acknowledgments.
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TO ACTIVATE THE PANIC FEATURE	Press button I for 3 seconds. The indicator lights will flash repeatedly and the siren will blare for 30 seconds or until you press button I again. If the ignition is on (indicating you are in the car), the doors will automatically lock to prevent an assailant from entering. If the ignition is off, the doors unlock, letting you enter immediately without fumbling with your keys.
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TO REMOTELY OPEN THE BOOT. . . .	Button II can control an optional remote boot release if the system is disarmed. This ensures that you can't accidentally false-alarm the system while it's armed.
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TO ACTIVATE OTHER OPTIONS. . . .	Button IV (channel 4) can activate another accessory such as the IntelliStart remote engine starter, etc.
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TO CONTROL OTHER VEHICLES	Channels 6–12 can operate Falcon II systems and accessories on your other vehicles.
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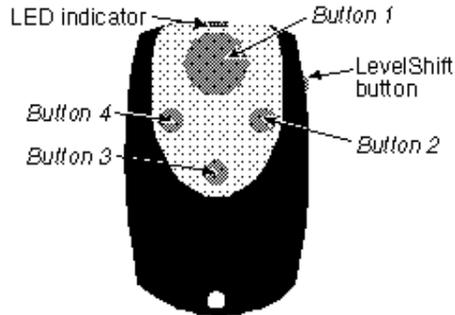
WHAT ABOUT CHANNEL 5 Channels 5 of the optional 4-button/12-channel ACG remote control is used to remotely engage or disengage the system's valet mode. See pages 9 and 10 for details.

Optional 4-button/12-channel ACG remote controls

The optional 4-button/12-channel remote control incorporates Anti-CodeGrabbing (ACG) technology for the ultimate protection against "code-grabbing" devices (see page 13). The optional ACG remote control can individually command up to 12 different system functions and options. It's like having a TV with 12 channels. You change channels (functions) with your keychain remote. But instead of putting 12 buttons on the remote, we made it easy: First, the button you use the most — button 1 to arm, disarm, lock and unlock — is larger than the others. Buttons 2, 3 and 4 are the smaller buttons to the right, below and left of button 1. The *LevelShift* button on the side of the remote control allows you to select channels 5–12:

- **To transmit either channel 1, 2, 3 or 4:** Just press either button 1, 2, 3 or 4. For instance, to transmit channel 3, press button 3. While you transmit, the LED indicator will flash once every second: this indicates **level 1**.

- **To transmit either channel 5, 6, 7 or 8:** Press the LevelShift button once. This shifts buttons 1–4 to level 2 (channels 5–8). Then press the desired button within the next 7 seconds. For instance, to transmit channel 5, press the LevelShift button once, then press button 1. While you transmit, you'll notice that the LED indicator flashes twice, pauses, flashes twice, etc.: this indicates **level 2**.



- **To transmit channel 9, 10, 11 or 12:** Press the LevelShift button twice. This shifts buttons 1–4 to level 3 (channels 9–12). Then press the corresponding button within the next 7 seconds. For instance, to transmit channel 10, press the LevelShift button twice, then press button 2. While you transmit, you'll notice that the LED flashes three times, pauses, flashes three times, etc.: this indicates **level 3**.

NOTE: One second after you stop transmitting level 2 or level 3 (channels 5–12), the remote control automatically returns to level 1 (channels 1–4).

Anti-CodeGrabbing (ACG) Capability

Clifford Electronics' optional 4-button/12-channel Anti-CodeGrabbing (ACG) remote controls protect you and your automobile from the most effective and onerous car stealing device ever used by car thieves — a code-grabber. Code-grabbers literally record, from hundreds of meters away, the code sent by your car alarm remote control. Then the thief simply plays back the code when you're gone, instantly disarming the alarm and unlocking the doors. Your Falcon II has Clifford Electronics' proprietary ACG technology built into its control unit. Our ACG technology uses complex proprietary digital signal processing and unbreachable encryption to randomly change the digital code every time you use the optional 4-button/12-channel Anti-CodeGrabbing (ACG) remote control. Your optional ACG remote control will *never* transmit the same code twice, and the control unit will *never* accept the same code twice.

Clifford Electronics also offers an optional ACG interface (#64-128/ACG) to your electric garage door/gate opener that not only allows you to command your garage door and/or gate opener(s) via your optional Clifford ACG remote control, but also protects your garage and home from burglars with code-grabbers.

AutoArming

If this feature is enabled and you forget to remotely arm, the system will automatically arm itself 30 seconds after the vehicle doors are closed. For your convenience, if you re-open any door(s) within the 30-second countdown, AutoArming will restart from the beginning once all doors are closed. Falcon II has these additional AutoArming features:

- ***AutoArming enable/disable:*** If you prefer, you may deactivate or reactivate the AutoArming feature. See *User-selectable features* on pages 13-14.
- ***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 pages 13-14.
- ***Visual acknowledgment:*** Five seconds after you exit the vehicle and close all the doors, the indicator lights will flash twice to confirm that the AutoArming countdown is progressing. Then, 25 seconds later, the system will AutoArm itself.
- ***Instant AutoArming bypass:*** Prevents AutoArming when fueling the vehicle and other times when you wish to temporarily bypass the AutoArming feature. To activate Instant AutoArming Bypass, rapidly turn the ignition switch to "ON" then "OFF" twice. You will hear a single siren chirp to confirm that the system will not AutoArm. Your Falcon II will revert to its normal operating mode when you next start the engine.

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.

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

To enable valet mode

1. Turn the ignition switch to its "ON" position or start the engine.
2. Flip the valet switch. The system's LED will glow continually for on-going visual confirmation of 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 LED will turn off to confirm that the system is in its normal operating mode.

Remote controlled valet mode entry and exit

You can even enable or exit valet mode via your remote control. All you need to do is transmit channel 5 (red side-switch down, then press button I or, on the optional ACG remote control, one press of the side LevelShift button, then press button 1). In addition to the previously noted indications, two indicator light flashes will confirm that you have remotely enabled valet mode, while a single flash confirms exiting of valet mode.

Keyless entry in valet mode

Even if valet mode is enabled, you can still remotely control the convenience features. For instance, simply press button I as if you were disarming and the doors will unlock (confirmed by one indicator light flash) and the interior lights will turn on. Press button 1 again and the doors lock (confirmed by two flashes). You can also use the other channels to activate options such as an optional remote boot release or optional remote engine starting.

Piezo Sensor

The Piezo Sensor detects intrusion-related vibrations and impacts. For an even greater level of security, consider an optional Clifford Glass Tampering Sensor, which detects any attempts to break any of the vehicle windows and/or a Proximity Sensor, which uses radar to detect movement within the passenger compartment (particularly recommended for convertibles).

How to interpret the LED status indicator

The LED on your car's dashboard or console will 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

High-output siren

Your Falcon II siren sounds whenever the system detects an intrusion attempt. It also provides these features:

- ***Long-term chirp silencing:*** You may silence the arm/disarm chirps until you decide to restore them. Indicator light flashes will provide visual confirmation of remote arming and disarming. See *User-selectable features* below.
- ***Remote controlled chirp muting:*** This is especially valuable when parking late at night in a quiet residential area or any other time when you want to arm or disarm silently. To do so, simply press remote control button III instead of the usual button I.

How to interpret the chirps and indicator light flashes

When you use the remote control, the system responds with chirps (unless the chirp muting feature is turned on) and indicator light flashes:

Chirps and flashes	Meaning
1	Your system is disarmed <i>or</i> you have remotely exited valet mode (see page 9)
2	Your system is armed <i>or</i> you have remotely engaged valet mode (see page 9)
2 and then 4	Armed but there is a door open the sensor is malfunctioning (see <i>Smart AutoTesting</i> below)
3	Disarmed but there was an intrusion attempt while you were away (see <i>Smart prior intrusion attempt</i> below)
4	Armed but the bonnet or boot is ajar (see <i>Smart AutoTesting</i> below)

FACT — False Alarm Control and Test

With FACT, you'll never experience repeated false alarms. If the siren goes off, DO NOT remotely disarm the system; allow it to run for the full 30-second siren duration. Before sounding the siren a second time, the system automatically checks for another activated trigger to verify that an intrusion is in progress. Should the siren sound again, you will know for sure that someone is tampering with your vehicle. (To disable FACT, see *User-selectable features* on pages 13-14.)

Smart boot release option

If this option was installed, you may use button II to remotely pop the boot. Your system has a built-in electronic interlock to prevent unintentional activation of the remote boot release when you drive or when the system is armed.

Smart prior intrusion attempt alert

When you remotely disarm, if you hear 3 chirps instead of the usual one chirp it means that a trigger or sensor was activated in your absence. When you turn on the ignition, the LED will flash 1-3 times, pause, then repeat the flash cycle four more times. Refer to the chart below to identify the trigger or sensor activated.

Number of LED flashes per cycle	Trigger/sensor indicated
1 flash	Piezo Sensor
2 flashes	Door trigger
3 flashes	Boot or bonnet trigger

Smart AutoTesting

Your Falcon II automatically tests all triggers and sensors every time you remotely arm. If a **trigger** is malfunctioning, you will be alerted **immediately** with **4 chirps** and **4 indicator light flashes** instead of the usual 2 and 2. If a **door*** is ajar or the **sensor** is malfunctioning, you will receive the usual 2 chirps and flashes, then, **5 second later**, there will be **4 chirps and 4 flashes**. If you then remotely disarm and turn on the ignition, the LED will flash 1-3 times, pause, then repeat the flash cycle four more times. Refer to the chart above.

Automatic malfunction bypass

To provide protection even if there is a malfunction, Falcon II automatically bypasses any faulty point and arms all other points to provide the utmost possible protection until you can have the system serviced by your Authorised Clifford Dealer.

TotalRecall

The system's non-volatile memory records the identity of the last activated or malfunctioning trigger or sensor, which allows your installer to instantly track down a malfunction and save you servicing costs. To identify the trigger or sensor:

1. With the ignition OFF, flick the valet switch to one side.
2. Press button I to "arm" the system, then again to "disarm."
3. The LED will flash several times, pause, then repeat the flash cycle 4 times.
4. Count the number of flashes in one cycle and refer to the chart above.

** If your vehicle has a factory-installed feature that turns off or dims the interior courtesy lights several seconds after you exit the vehicle, the system cannot provide this feature.*

Selectable starter/ignition interrupt

At the time of installation, you can select whether Falcon II interrupts the starter or ignition line. In addition, the interrupt will be set in either Fault-Proof mode, which lets you start the engine even in the unlikely event of a complete system failure, or Super-Security mode that ensures a thief won't be able to start the engine even if he cuts all the wires or finds the system control unit and disconnects it. Changing the mode requires a minor relay wiring change and installer-only programming. Your local Authorised Clifford Dealer can make the changes for you.

AutoLock/AutoUnLock

For your safety and that of your passengers, all the vehicle doors will automatically lock the instant you turn on the ignition to start the engine. When you switch off the ignition to shut down the engine, the AutoUnLock feature automatically unlocks the doors. To suit your preferences, the AutoLock/AutoUnLock feature can be disabled or re-enabled (see *User-selectable features* on pages 13-14).

SmartPowerUp II

If power to your Falcon II 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 the power and then restores it in an attempt to start the car, the system will re-arm and instantly sound the siren while immobilising the vehicle. If your vehicle is to be serviced by a mechanic, just put the system in valet mode via the remote control (see *Remote controlled valet mode entry and exit* on page 10). 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 and no need to provide your mechanic with your remote control and instructions on how to use it.

User-selectable features

Your Falcon II vehicle security system allows you to set many of its features to your own personal preferences. We have made the programming procedures very simple: to make a change, you just flick the valet switch a few times. The system comes from the factory with all of its features pre-programmed as noted in the table below and on the next page. To change any of the settings, use the following procedure. To restore the feature to its factory setting, just repeat the procedure:

1. **Select** the feature you wish to program from the table below and on page 14.
Note the number of “flicks and chirps” associated with that feature.
2. Turn the **ignition on**, then immediately flick the valet switch back and forth, counting the number of chirps you hear. Stop when you reach the number of flicks and chirps associated with that feature.
3. If noted, immediately perform the **“secondary action.”**
4. **Wait** for the program completion confirmation (1-5 chirps), then turn the **ignition off**.
5. Repeat steps 1-4 for any other features you wish to program.

Programming table for user-selectable features

Feature	Factory setting	# of flicks and chirps	Secondary action	Program completion confirmation	Result
AutoArming	ON	4	—	1 chirp = OFF 2 chirps = ON	Change state from ON to OFF or vice-versa
AutoArm & Lock	OFF	5	—	1 chirp = OFF 2 chirps = ON	Change state from OFF to ON or vice-versa
Arm/disarm chirps	ON	6	—	1 chirp = OFF 2 chirps = ON	Change state from ON to OFF or vice-versa
AutoLock/ AutoUnLock	ON	9	—	1 chirp = OFF 2 chirps = ON	Change state from ON to OFF or vice-versa
False Alarm Control and Test	ON	12	—	1 chirp = OFF 2 chirps = ON	Change state from ON to OFF or vice-versa
Add a New Remote to Channel 1 (arm/disarm)	—	13	Press remote control button I	1 chirp	Button I/channel 1 code of the new remote control has been memorised
Add a New Remote to Channel 2 (optional smart boot release)	—	14	Press remote control button II	2 chirps	Button II/channel 2 code of the new remote control has been memorised

continued . . .

Feature	Factory setting	# of flicks and chirps	Secondary action	Program completion confirmation	Result
Add a New Remote to Channel 3 (silent arm/disarm)	—	15	Press remote control button III	3 chirps	Buttons III/channel 3 code of the new remote control has been memorised
Add a New Remote to Channel 4 (optional remote accessory)	—	16	Press remote control button IV	4 chirps	Button IV/channel 4 code of the new remote control has been memorised
Add a New Remote to Channel 5 (remote controlled valet mode)	1sec.	17	With the red side switch in the DOWN position, press button I	5 chirps	Channel 5/remote valet code of the new remote control has been memorised
Erase all channels	—	19	—	2 chirps	All channels have been erased, program in new remote control(s)

Programming Example

To change the AutoArming feature from its factory setting of “on” to “off,” you would do the following:

- Turn the ignition key to the ON position.
- Flick the valet switch back and forth 4 times (stop when you hear the 4th chirp).
- Wait 3 seconds. You will hear one more chirp to confirm that the AutoArming setting is now off.
- Turn the ignition off. That’s all there is to it!

Adding new remote controls

For other drivers in your family, or if you wish to control Falcon II systems on your other cars with the same remote control, you can buy additional remote controls from any Authorised Clifford Dealer and program them into the system yourself. Each Falcon II will respond to as many as four 4-button/12-channel Premier and/or ACG remote controls. To add a new remote control to the system, use the procedures noted in the *User-selectable features* section on pages 13-14.

How to erase the codes of lost or stolen remote controls

If one of your remote controls is ever lost or stolen, you can erase its digital codes from the system memory to make sure that the missing remote control can never be used to disarm your system. To do so, use the "Erase all channels" feature (see *User-selectable features* on pages 13-14). This will clear all remote control codes from the system memory. Then simply program each remaining and/or replacement remote control as noted in the *Adding new remote controls* section above.

CLIFFORD

World-Class Auto Security™

Falcon II is covered by

*one or more of the following Clifford Electronics USA 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, 5,467,070 and other patents pending*