

## **Standard Features of the Tornado**

- **Lifetime Warranty**— No hidden charges, just first rate service.
- **A Pair of 2-Button/3-Channel Remote Controls** — Fingertip control from up to 100 feet away.
- **Remote Control Code Learning** — One touch interfaces your Tornado with up to two Avital remote controls.
- **Remote Control Code Deletion** — Remove the code of a lost or stolen remote so that it can no longer control your Tornado.
- **Electronic Scan Prevention (ESP)** — Blocks code scanners used by thieves.
- **Remote Door Lock/Unlock Outputs** — No more fumbling with keys in the dark (some vehicles require optional relays).
- **Channel 2 Output** — For a remote controlled trunk release or other remote controlled optional accessory.
- **Parking Light Flasher Capability** — Visually confirms system status and draws visual attention to your vehicle when the alarm sounds (requires an optional relay).
- **Siren Chirps** — Audibly confirms arming, disarming, previous intrusion alert and self-diagnostics.
- **Remote Controlled Chirp Muting** — Mute the arm/disarm chirps remotely.
- **User-Selectable Passive Arming** — Arms itself if you forget.
- **User-Selectable Passive Door Locking** — Lets you select whether the doors automatically lock when the system passively arms (some vehicles require optional relays).
- **Three Car Control**— Command three Avital systems on up to three of your vehicles with the same remote control.
- **Vibration & Impact Sensor** — For reliable detection of theft attempts.
- **Automatic Starter and Engine Disable Capability**— Immobilizes your vehicle while the Tornado is armed (requires an optional relay).
- **Previous Intrusion Alert** — Audibly warns you if the system sounded while you were away.
- **Unlimited Zone Protection** — Inputs for doors, hood, trunk, etc. (may require extra wiring and pin switches).
- **Automatic Self-Diagnostics** — Automatically checks all triggers and sensors each time you arm your Tornado.
- **Malfunction Alert** — Warns you if there is a problem, and identifies whether the malfunction is a trigger or sensor.
- **Automatic Malfunction Override** — Overrides any malfunctioning trigger or sensor, then monitors all other points.
- **Remote Panic** — For your personal safety, you can activate the siren and optional parking light flasher from a distance.
- **High-Powered Electronic Siren** — Loud, attention-getting wail.
- **High-Luminescence LED** — Indicates system status and deters thieves.

- ***Secured Valet Mode — Permits valet parking, servicing and vehicle washing.***

*Your 2-button/3-channel remote controls*

The 2-button/3-channel remote control is a miniature radio transmitter powered by a small 12-volt battery. Range is up to 100 feet. Obstructions, electrical interference, weather conditions or a weak battery will reduce the range. Your 2-button/3-channel remote is the key to your Tornado system. It's a user-friendly device that you will use to arm and disarm the system, lock and unlock the doors, activate the panic feature and control options such as a remote trunk release. Additional remote controls and remote control batteries are available from any Authorized Avital Dealer, or call Avital Technologies toll-free at (800) 253-0334.

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<i>TO ARM THE SYSTEM. . . . .</i>	Press button 1 once. You will hear <b>two chirps</b> and, optionally, the parking lights will flash twice. The dashboard LED will flash repeatedly and the vehicle doors will automatically lock (some vehicles require optional relays). Any attempt to break into the vehicle will sound the siren. With optional relays, the parking lights will flash repeatedly and the starter will be electronically disabled.
<i>TO DISARM THE SYSTEM. . . . .</i>	Press button 1 again. <b>One chirp</b> and one flash of the parking lights will confirm disarming. In addition, the vehicle doors will unlock (some vehicles require an optional relay).
<i>TO SILENTLY ARM OR DISARM . . .</i>	Simultaneously press both buttons 1+2. The system will arm or disarm with all the indications noted above <i>except</i> the chirps.
<i>TO ACTIVATE THE PANIC FEATURE. . . . .</i>	Press button 1 for 3 seconds. The siren will blare and, optionally, the parking lights will flash for 30 seconds or until you press button 1 again to turn it off.
<i>TO ACTIVATE AN OPTION . . . . .</i>	Button 2 may activate a remote controlled option, such as a remote trunk release.

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*Passive arming*

If this feature is enabled and you forget to remotely arm your Tornado, the system will arm itself automatically (*passively*) 30 seconds after the vehicle doors are closed. For your convenience, if you re-open any door(s) within the 30-second countdown, the passive arming countdown will restart from the beginning once

all doors are closed. If you prefer, you may turn this feature off. See *User-selectable features* on page 5.

**NOTE: To prevent passive arming of the system when fueling the vehicle, either enable valet mode (see next page) or leave one of the doors open.**

#### *Passive door locking*

To ensure that you can't accidentally lock your keys inside the vehicle, the system is factory-set *not* to lock the doors upon passive arming. To change this setting, see *User-selectable features* on page 5.

#### *Valet mode*

Whenever your Tornado 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 vehicle 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. Flick 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. Flick the valet switch. The LED will turn off to confirm that the system is now in its normal operating mode.

#### *Vibration & Impact Sensor*

The Vibration & Impact Sensor detects intrusion-related vibrations and impacts. For an even greater level of security, consider Avital's optional sensors: the Glass Tampering Sensor (detects attempts to break any of your vehicle's windows) and/or the Radar Sensor (a passenger compartment sensor, particularly important for convertible and other open-top vehicles).

#### *Self-diagnostics*

Each time you remotely arm your Tornado, it will automatically perform an extensive series of tests on all the system's triggers and sensors. If a **trigger** malfunction is found, you will be visually and audibly alerted **immediately** with **4 chirps and, optionally, 4 flashes** of the parking lights instead of the usual 2 and 2. If a **sensor** is malfunctioning, you will receive the usual 2 chirps and 2 flashes, then, **a few seconds later**, there will be **4 chirps and 4 flashes**.

#### *Automatic malfunction bypass*

To provide the utmost protection even if a system component malfunctions, your Tornado will automatically bypass the faulty point and arm all *other* triggers and sensors to provide the utmost possible protection until you can have the system serviced by your local Authorized Avital Dealer.

#### *Previous intrusion alert*

When you remotely disarm, if you hear 3 chirps instead of the usual one chirp it means that an intrusion attempt occurred while you were away.

#### *Electronic Scan Prevention (ESP)*

Car thieves use digital code scanners to rapidly transmit one remote control code after another to defeat ordinary alarms. ESP prevents scanners from disarming your Tornado.

#### *How to interpret the chirps*

When you use the remote control, the system will respond with chirps and, optionally, flashes the parking lights to confirm system status. ***The meaning of these chirp acknowledgments is as follows:***

Chirps	Meaning
1	Alarm is disarmed, you may enter the vehicle
2	Alarm is armed and protecting your vehicle
2 and then 4	Alarm is armed, but there is a sensor malfunction (see <i>Self-diagnostics</i> on page 3)
3	Alarm is disarmed, but there was an intrusion attempt (see <i>Previous intrusion alert</i> above)
4	Alarm is armed, but there is a trigger malfunction (see <i>Self-diagnostics</i> on page 3)

#### *Optional automatic starter disable*

Your Tornado, if equipped with an optional relay, will automatically prevent the engine from being started while the system is armed.

#### *How to interpret the LED status indicator*

The LED status indicator on your vehicle's dashboard or console is used to 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
Pause between flashes	Either an intrusion was attempted or a malfunction was detected (see page 3 and above)

### High-output siren

Provides these additional features:

- **Automatic noise abatement:** 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 excessive battery drain and towing of the vehicle due to noise pollution.
- **Remote controlled chirp muting:** Especially valuable when parking late at night in a quiet residential area. To arm or disarm silently, simultaneously press *both* buttons 1+2 on your remote control.

### User-selectable features

Tornado lets you set many of its features to your own preferences. The system comes from the factory with all of its features pre-programmed as noted in the table below. To change any of the settings, use the procedure noted. To restore the feature to its factory setting, just repeat the procedure:

1. Select the feature you wish to program from the table below. Note the number of flicks and chirps associated with that feature.
2. Turn your vehicle's ignition switch to its "ON" position.
3. Immediately flick the valet switch back and forth, counting the number of chirps you hear. Stop when you reach the number associated with the feature you selected.
4. If noted, perform the "secondary action."
5. After a 3-second pause, you will hear 1 chirp to confirm that you have changed the setting of the feature. Turn the ignition off.
6. Repeat steps 1-5 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
Passive Arming	ON	4	—	1 chirp 3 seconds after last step	Change state from ON to OFF or vice-versa
Passive Locking	OFF	5	—	1 chirp 3 seconds after last step	Change state from OFF to ON or vice-versa
Add a New Remote to Channel 1 (arm/disarm)	—	13	Press remote control button 1	1 chirp	Button 1/channel 1 code of the new remote control has been memorized
Add a New Remote to Channel 2 (remote accessory)	—	14	Press remote control button 2	2 chirps	Button 2/channel 2 code of the new remote control has been memorized

Add a New Remote to Channel 3 (silent arm/disarm)	—	15	Simultaneously press remote control buttons 1+2	3 chirps	Buttons 1+2/channel 3 code of the new remote control has been memorized
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***Adding new remote controls***

**Tornado will respond to 2 remote controls. You may purchase remotes from any Avital dealer (or call 800-253-0334) and program them into the system as noted above.**

***How to erase the codes of lost or stolen remote controls***

**If one of your remote controls is ever lost or stolen, you can push its codes out of system memory to make sure that it can never be used to disarm your system. Just use the *Add a New Remote to Channel 1, 2 and 3* procedures above for a total of two times (if you have only one remote control, program it twice).**