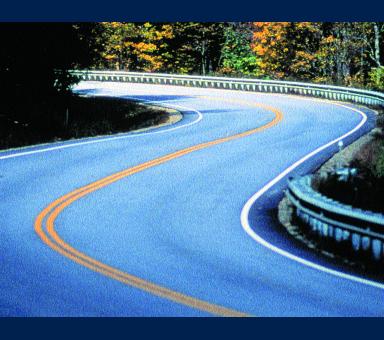
APPLICANT: MOTOROLA, INC. FCC ID: IHDT56CQ1

### **INSTRUCTION MANUAL**

A preliminary draft copy of the Users Manual follows:

Refer to exhibit 8A for specific rf exposure text for the user, and for the antenna installation guidelines.





PUTTING SAFETY, SECURITY AND CONVENIENCE AT YOUR FINGERTIPS.

### **ACTIVATING ONSTAR SERVICES**

Your OnStar account needs to be activated before OnStar can begin providing services. If this hasn't already been done by your dealership, you can easily do it yourself.

#### **ONSTAR**

With the vehicle running, press the OnStar button. Wait until an Advisor answers, who will request the information we need to get you started. This process will normally take between 10 and 15 minutes.

### PERSONAL CALLING/VIRTUAL ADVISOR

Check to see if Personal Calling has been activated by pressing the black button with the white dot. If the system says, "OnStar ready," determine your phone number by saying, "My number." If your system has **not** been activated, the system will respond with "Personal Calling Unavailable."

If not active, you can request OnStar Personal Calling and OnStar Virtual Advisor at the same time you activate your OnStar account or at any future time by pressing the OnStar button and requesting these services.

### **ONSTAR RESPONSES IN FRENCH**

OnStar can be programmed by your dealership to respond in French and to understand French commands. There may be a charge associated with this programming.

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### **ONSTAR**

Welcome to OnStar. This owner's guide gives you the information you need to get started using OnStar, with descriptions of the current OnStar services, including Personal Calling, Virtual Advisor and the OnStar subscriber website.

Please keep this guide in your vehicle for easy reference. If you need information regarding operation or features of OnStar, you'll have it readily at hand. Once you start using this guide, you'll see how easy it is to take advantage of the safety, security and convenience of OnStar. For your safety, please do not read this guide while you are driving.

OnStar is a system designed to provide you with personal communication and information services while you are in your vehicle by combining technologies of cellular phones, a Global Positioning System and the OnStar Call Center.

### THE ONSTAR CALL CENTER

The OnStar Call Center is the heart of your service – staffed 24 hours a day, 7 days a week with knowledgeable OnStar Advisors. Even on weekends and holidays, there is always someone ready to help.

When you contact OnStar, your Advisor can pinpoint your vehicle's location. This way, he or she can provide you with a range of helpful services that provide you with information and help to protect you and your vehicle. Also, for some subscribers, depending on their OnStar service plans, our Advisors can access an extensive database to assist you with directions, make reservations and other convenient services.

### YOUR ONBOARD ONSTAR PANEL



OnStar Services Button – Press this blue button, and you will be connected to an OnStar Advisor. You will hear a chime, followed by the words, "Connecting to OnStar." OnStar then generates a sequence of "tones" during the connection process. The process will normally take about 15 seconds. Your system is equipped with backup connection retry capabilities. If you do not immediately connect to OnStar, DO NOT DISCONNECT. A series of retry attempts will be made automatically. If you wish to cancel your call to the OnStar Center, simply press the OnStar Communication button (black with a white dot). The blue OnStar Services button is also used to control the "memo record" feature during a call with OnStar.



OnStar Emergency Button – In an emergency, press this button to connect with an OnStar Advisor. Your call will be given the highest priority, and you will hear a chime followed by the words, "Connecting to OnStar Emergency." The Advisor will attempt to locate your vehicle, find out what kind of assistance you require and contact a nearby emergency services provider to dispatch ambulance, fire, police or other emergency services. Please use this button only for true emergencies. If you press this button by mistake, please stay on the line and tell the Advisor that there is no emergency.



OnStar Communication Button – Press this button at the end of a call. You'll hear the words, "OnStar Request Ended." Also, press this button to answer a call from the OnStar Center or cancel a call if one of the other buttons is accidentally pressed. This button is also used to access OnStar Personal Calling and Virtual Advisor services, if those services have been activated.



### System Status Light

**Solid Green** – Indicates the OnStar system in the vehicle is powered ON and ready to make or receive calls.



**Blinking Green** – The light blinks green to indicate a call is being connected or in progress. If you notice this light blinking while you are not on a call, press the OnStar Communication (white dot) button.



Red – This signals that your OnStar system may not be functioning properly. Press the OnStar button to attempt to contact an OnStar Advisor. If the connection is made, the Advisor will assist you in making sure your OnStar system is operating properly. If you cannot contact the OnStar Center, please take your vehicle to the nearest GM dealership for diagnosis and service.

### **VOLUME CONTROL**

If your vehicle is equipped with steering wheel controls, the volume of the incoming audio is controlled with your steering wheel volume control. In vehicles without steering wheel controls, and in some other vehicles, you can control the volume with the radio volume knob

### MEMO RECORDER

Your OnStar system is equipped with a memo recorder to store information given to you during a call with an OnStar Advisor or the OnStar Virtual Advisor. You can play back the stored audio information at a later time, when you are no longer connected to OnStar.

### Record only during a call with OnStar Call Center or Virtual Advisor:

### **USER ACTION**

### **ONSTAR RESPONSE**

Press blue OnStar button

System beeps (starts recording)

Note that start of recording may be delayed up to 5 seconds to clear an existing memo. Recording starts immediately after the last beep.

2. Press blue OnStar button again

System beeps again (ends recording)

### Playback (only when the OnStar system is not in a call):

USER ACTION

ONSTAR RESPONSE

Press white dot button
Say "Memo"

"OnStar ready"
<playback from
start of memo>

### Stop Playback (partially through):

### **USER ACTION**

### ONSTAR RESPONSE

Press white dot button

Returns control to audio system

### To Resume Playback:

### **USER ACTION**

Say "Memo"

### **ONSTAR RESPONSE**

Press white dot button "Or

"OnStar ready"
"Play or resume"

3. Say "Play"

Starts memo playback from beginning

or

Say "Resume"

Starts memo playback where it had been previously stopped

### STEERING WHEEL CONTROLS

Many OnStar functions can be activated or controlled with Steering Wheel Controls. Not all functions are available on all vehicles.

### VOLUME CONTROL BUTTONS (UP AND DOWN)

While you are using your OnStar system, the Steering Wheel Volume Controls change the audio volume of OnStar responses and the volume of the person to whom you are talking.

### **MUTE BUTTON**

On some vehicles, the mute button controls functions just like the "Talk" button below. Press and hold the MUTE steering wheel control for 3 seconds to initiate OnStar Personal Calling.

Some vehicles require that the vehicle radio be turned on before the mute button will control "Talk" button features.

## TALK BUTTON Using the Talk Button to make a call:

	USER ACTION	ONSTAR RESPONSE
1.	Press Talk button	"OnStar ready"
2.	Say "Dial"	"Number, please"
3.	Say <digit> (1,2,3, etc.)</digit>	Responds with digit or tone
4.	Say <next digit=""></next>	Responds with digit or tone
	Continue in same manner un	ntil finished.
5.	Say "Dial"	"Dialing"

### Accessing Voicemail and sending number "tones" to Automated Systems

The Voice-Activated Keypad feature of OnStar Personal Calling allows access to most voicemail systems. It also allows you to respond to number requests from computer systems, such as "press 1 for sales, press 2 for service."

Once you receive the request for a number while in a call, press the "Talk" (or mute) button on the steering wheel. Note that this feature only works DURING a call.

	USER ACTION	ONSTAR RESPONSE
	Connect call using OnStar Personal Calling	
1.	Press Talk button	Mutes call, "Number, please"
2.	Say <first digit=""></first>	Repeats digit or tone
3.	Say <second digit=""></second>	Repeats digit or tone
	Continue until done.	
4.	Say "Dial"	OnStar sends the digits requested, then returns to the call

💪 Say "Dial"

	Voicemail Example:	
	USER ACTION	ONSTAR RESPONSE
1.	Press white dot button	"OnStar ready"
2.	Say "Call"	"Nametag, please"
3.	Say "Voicemail"	
	(previously stored)	Calling "voicemail"
	Ring, "You have reached the (company). If you are a subs	
4.	Press Talk Button	"Number, please"
5.	Say "Pound"	"Pound"

OnStar sends tone

// A A •	1	//
"Mailbox	number	please
, , , , , , , , , , , , , , , , , , , ,	110111001	p.000

7. Press Talk button	"Number, please"
8. Say "Four"	"Four"
Say "Six"	"Six"
Say "Zero"	"Zero"
Say "Eight"	"Eight"
Say "Dial"	OnStar sends tone

# Voicemail response to 4608 Automated System Example:

USER ACTION	ONSTAR RESPONSE
Press white dot button	"OnStar ready"
Say "Call"	"Nametag, please"
Say "Business" (previously stored)	
"To talk to engineering, press 2, to talk to custor	
Press Talk button	"Number, please"

4	Press Talk button	"Number, please"
9	Say "One"	"One"
E	Say "Dial"	OnStar sends tone

System response to the number 1.

- The **OnStar Voice-Activated Keypad** only understands numbers, star and pound. It does not understand stored nametags.
- You can erase the last number entered by saying "Clear".

#### **END BUTTON**

Some vehicles are equipped with a steering wheel "END" button. Disconnect from an OnStar Center call, a personal call, or a connection with the OnStar Virtual Advisor by pressing the steering wheel "END" control.

You can drop an incoming call without using any units by pressing the steering wheel "END" control. This will drop the incoming personal call immediately.

The "END" functionality can be programmed into some vehicles that have programmable steering wheel controls

### CONTACTING ONSTAR

### CONTACTING ONSTAR FOR SERVICES







Talking to an OnStar Advisor is accomplished with a single touch, and is thereafter hands free. Simply press the blue OnStar button or the Emergency button. A small microphone picks up your voice and the OnStar Advisor talks to you through your stereo speakers. In addition to using the 3-button panel, there are two other ways to connect to the OnStar Center

### Toll-Free Call

To take advantage of your OnStar services from outside your vehicle (e.g., to use door unlock), call OnStar toll free at 1.888.4.ONSTAR (1.888.466.7827). Remember to have your Personal Identification Number (PIN) handy.

### **Automatic Notification**

A priority signal will be sent to the OnStar Center with your exact location if your air bag deploys. (Vehicle electrical system and cellular service must be operable.)

### CONTACTING ONSTAR CUSTOMER CARE OR BILLING/FINANCIAL

You can contact these OnStar departments by calling 1.888.4.ONSTAR (1.888.466.7827).

## PERSONAL IDENTIFICATION NUMBER (PIN)

When you signed up with OnStar, you were asked to provide a personal identification number (PIN). You'll need your PIN to access some of the OnStar services. If, for example, you're locked out of your vehicle or it has been stolen, an Advisor will ask for your PIN in order to provide assistance.

This PIN can also be used for access to the OnStar subscriber website, and for access to the OnStar Virtual Advisor. (See descriptions of these services later in this manual.)

Changing your OnStar PIN is easy. Call the OnStar Center and provide the Advisor with your current number, and he or she will assist you in setting up a new number. If you have forgotten your PIN, just call the OnStar Center. For security reasons, we will send your PIN to you in the mail.

In addition to your OnStar PIN, you have another four-digit PIN that is used to secure OnStar Personal Calling and OnStar Virtual Advisor from unauthorized use. (See page 26.)

### **ONSTAR SUBSCRIPTION PLANS\***

### SAFE & SOUND PLAN

Choose this plan for excellent protection, 24/7, 365 days a year. It includes valuable services, such as Automatic Notification of Air Bag Deployment, Remote Door Unlock\*\* and Online Concierge, to name just a few!

### **DIRECTIONS & CONNECTIONS PLAN**

This plan features all of the Safe & Sound Plan services plus Route Support, RideAssist and Information and Convenience Services.

### LUXURY & LEISURE PLAN

This plan includes all of the Directions & Connections Plan features, plus fee-free OnStar MED-NET and the luxury of Personal Concierge.

<sup>\*</sup> One of these plans is normally included for a specific duration with each vehicle at time of purchase. Check with your dealership or with your OnStar Advisor to determine which plan is included with your vehicle. Services within the plans are subject to change. Please check our website at www.onstar.com for the services provided in each plan.

<sup>\*\*</sup>Remote door unlock capabilities vary by vehicle.

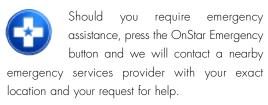
### **ONSTAR SERVICES**

## The following services are currently available from OnStar:

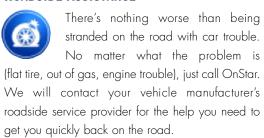
## AUTOMATIC NOTIFICATION OF AIR BAG DEPLOYMENT

Should your air bag deploy, a priority signal will be sent to the OnStar Center with your vehicle's location (as long as cellular service and the vehicle's electrical system are operable). An Advisor will attempt to contact you to assess the nature of your emergency and then notify the necessary emergency services provider.

### **EMERGENCY SERVICES**



#### ROADSIDE ASSISTANCE\*



<sup>\*</sup>There will be no charge for Roadside Assistance as long as your vehicle is under warranty.

### STOLEN VEHICLE LOCATION



OnStar doesn't just protect you, it protects your vehicle, too. If your vehicle is ever stolen, just contact

OnStar. We will put you in touch with the authorities and aid them in locating your vehicle. Ask your insurance carrier about possible premium discounts.

### **ACCIDENTASSIST**



AccidentAssist provides step-by-step guidance about what to do in case of an accident. Working with leading

insurance companies, we have developed a "best practices" list to assist you through most accident situations. OnStar AccidentAssist can make the process of completing a police report and/or insurance claim less stressful.

### **REMOTE DOOR UNLOCK**



If you've locked your keys in your vehicle, just call OnStar at 1.888.4.ONSTAR (1.888.466.7827)

and an Advisor will send a signal to attempt to unlock your door. If you're having trouble locating your vehicle, OnStar can flash your lights and sound your horn for you. This feature is disabled 48 hours after the vehicle is parked in order to maintain battery charge.

### **REMOTE DIAGNOSTICS\*\***



You're on the road, far from home and your favorite garage, and you have car trouble. What do you do?

Just call OnStar. Our remote service diagnostics covers vital vehicle systems. If your "Check engine light" illuminates, an OnStar Advisor can provide you with information about the problem, and then suggest your next step.

### **ONSTAR MED-NET\*\*\***



OnStar MED-NET securely stores your personal medical information (e.g., physician's name, emergency

contacts, medications, chronic conditions) and in an emergency can quickly send it to a medical facility. This important information can help assist with diagnosis and treatment.

#### ROUTE SUPPORT



With OnStar Route Support, an Advisor can help you find your way, no matter how far off course you are.

You can get exact street directions, or guidance to nearby gas stations, restaurants, hotels or ATMs.

<sup>\*\*</sup> Diagnostics capabilities vary by vehicle.

<sup>\*\*\*</sup>Requires activation and additional fee for Safe & Sound and Directions & Connections Plan subscribers. To enroll or for more OnStar MED-NET information, call 1-800-320-3991.

### RIDEASSIST



If you need a lift, anytime of the day or night, just call OnStar. We'll contact a transportation provider and

send help right to you.

### INFORMATION AND CONVENIENCE SERVICES



Our Advisors have access to over five million service listings including hotels, restaurants, gas stations, dealerships,

hospitals, ATMs and airports – more than 250 service categories in all. Our Advisors can even assist you with hotel and restaurant reservations.

#### ONLINE CONCIERGE



Safe & Sound, Directions & Connections and Luxury & Leisure Plan subscribers can access self-serve Online Concierge

services for event tickets, dining reservations, gift recommendations and more at www.onstar.com.

#### PERSONAL CONCIERGE



Luxury & Leisure Plan subscribers have access to Personal Concierge services. A Concierge Advisor can help you with

virtually any type of request via email, live chat, phone (1.888.4.ONSTAR) or the blue button in your vehicle. Just ask!

### **ONSTAR PERSONAL CALLING**

As an OnStar subscriber, you have access to OnStar Personal Calling (if available in your market). OnStar Personal Calling provides you with a nationwide wireless phone service that is completely integrated into your vehicle. OnStar Personal Calling operates with the touch of a button and a few simple voice commands. All it takes to get started is a package of OPC minutes.

With OnStar Personal Calling, you can enjoy the simplicity of a one-touch wireless connection. Whether you are placing or receiving a call, once you press the white dot button, you don't have to take your hands off the wheel or your eyes off the road. The ease of the hands-free wireless communication service allows you to enjoy an even greater level of safety, security and convenience while driving.

## ACTIVATING ONSTAR PERSONAL CALLING

As an OnStar subscriber, you have the Personal Calling capability already built into your vehicle's OnStar hardware. In order for you to use this service, an OnStar Advisor must set up the cellular account and upgrade the software in your vehicle from their computer. You must also provide a credit card in order to establish your prepaid cellular account. Usage charges will be deducted from this prepaid account of "units" (there is no monthly charge for this service). Units are easily replenished using the credit card on file at OnStar. Once you sign up for OnStar Personal Calling, you will be given your own personal phone number that you can provide to others so they can call into your vehicle.

## TO SIGN UP FOR ONSTAR PERSONAL CALLING, SIMPLY

- Press the OnStar button in your vehicle
- Inform the Advisor that you would like to activate Personal Calling
- The Advisor will set up your account.
   You will need to provide account and payment information.

We recommend that you contact us while the vehicle is stationary. Credit card information is secure, protected and used only for unit replenishment or other services you request.

### PERSONAL CALLING UNIVERSAL COMMANDS

- **Help –** The system will provide a list of available commands.
- **Clear –** When you are entering digits, this command will erase the last digit entered.
- Cancel This command takes you from the current function to the "OnStar Ready" prompt.

  If the last response from the system was "OnStar Ready," this command will exit OnStar.

### PLACING A CALL

There are three ways to place a call:

- 1. By using a particular number, say "Dial"
- 2. By using a stored nametag, say "Call"
- 3. By dialing the last number, say "Redial"

## To dial a number: USER ACTION

### **ONSTAR RESPONSE**

1. Press the white dot button

"OnStar ready"

2. Say "Dial"

"Number, please"

Say the 1st digit

OnStar will repeat the number

4 Say the 2nd digit

OnStar will repeat

Continue saying numbers in this manner until finished.

5. Say "Dial"

"Dialing <number>,"
then your call will be
connected

Or wait, and the system will ask if you want to dial.

- If the system responds with a wrong number, say "Clear," to remove the wrong number, then try again. The system will not respond with that wrong number on your next try. You can continue clearing numbers in this way until the correct number is recognized.
- If you have trouble getting numbers correctly into the system, store your frequently called numbers in the directory, so the system will remember them. After you have stored a number with a nametag, then simply say "Call" and the nametag, in order to call the number.
- If the system cannot understand your numbers, ask a friend to help you enter your frequently called numbers.
   Your friend can speak the numbers, then you can speak the nametag.

## To dial using a "Nametag:"

### USER ACTION ONSTAR RESPONSE

- 1. Press the "OnStar ready" white dot button
- 2 Say "Call" "Nametag, please"
- 3. Say "<stored nametag>" "Calling <nametag>," then your call will be connected

### To redial the last number dialed:

### USER ACTION ONSTAR RESPONSE

- 1. Press the "OnStar ready" white dot button
  - 2 Say "Redial" "Calling <nametag>,"
    then your call will be
    connected

### RECEIVING A CALL

If someone calls your wireless phone number, the entertainment system in your vehicle will mute (if it is on), and you will hear a phone ringing sound. To answer the call, simply press the white dot button.

### **ENDING A CALL**

When your call is finished, press the white dot button to end the call. It is not possible to end a call using voice commands.

## STORING/DELETING NUMBERS IN MEMORY (NAMETAGS)

### STORING A NUMBER

Your OnStar system can store up to 20 numbers (up to 32 digits each) in a memory. These numbers can then be dialed by simply repeating the "nametag."

### **Tips for Creating Nametags**

- Short nametags that are similar may be confused easily by the system. You may get better recognition of your nametags if you make them longer, for example, "George Washington" (no pause), instead of "George" only.
- If you want to use nametags while driving, it is best to store the nametag with some vehicle noise in the background. If you are in park while you are storing nametags, you can turn the fan on low or open windows in order to create some background noise.
- When you have finished speaking your phone number, you do not need to say "Store" or "Dial" to indicate that you are done. If you pause and say nothing, the system will ask you if you want to store or dial. Say "Yes".

	To store a number: USER ACTION	ONSTAR RESPONSE
1	Press the white dot button	"OnStar ready"
2.	Say "Store"	"Number, please"
3.	Say the 1st digit	OnStar will repeat the digit
4.	Say the 2nd digit	OnStar will repeat the digit
	Continue saying numbers i	n this manner until finished.
5.	Say "Store" again	"Nametag, please"
	Or wait, and the system w to store.	ill ask you if you want
6.	Say " <new nametag="">"</new>	"Again"
7.	Say " <new nametag="">"</new>	"Once more"
8.	Say " <new nametag="">"</new>	"Storing <new nametag="">"</new>
	To delete a nametag from	memory:
	USER ACTION	ONSTAR RESPONSE
1	Press the white dot button	"OnStar ready"
2.	Say "Delete"	"Nametag, please"
3.	Say " <nametag>"</nametag>	"Delete <nametag>, Yes or No"</nametag>

"Deleting <nametag>"

4 Say "Yes"

### Units (Minutes) -Verify or ADD

### UNITS REMAINING

OnStar keeps track of the amount of calling time you have purchased and used in units. The number of total remaining units is stored within the OnStar system, and can be accessed easily.

	USER ACTION	ONSTAR RESPONSE
1.	Press the white dot button	"OnStar ready"
2.	Say "Units"	"Verify or add"
3.	Say "Verify"	"You have # units remaining"

### ADDING MORE CALLING MINUTES / UNITS

You can charge additional calling units by contacting OnStar.

	USER ACTION	ONSTAR RESPONSE
1.	Press the white dot button	"OnStar ready"
2.	Say "Units"	"Verify or add"
3	Say "Add"	"You have # units

## AUTOMATIC CONTACT TO ONSTAR FOR REPLENISHMENT

If you run out of units during a call, your call will be terminated and you will be connected to OnStar for approval to replenish. You will be warned at the beginning of a call when you have 10 or fewer calling units remaining.

### SETTING VOICE OR TONE RESPONSE

Your system comes from the factory with voice responses to your commands to confirm that the system got the command or number you intended. For example, when you are entering a number, OnStar repeats the number back to you. You may change the system to respond with a tone response, if you prefer. A digit tone will respond instead of the voice. All other responses will still be by voice.

#### **USER ACTION**

**ONSTAR RESPONSE** 

Press the white dot button

"OnStar ready"

Say "Voice Feedback"

"Voice feedback is now on/off"

### SECURITY / LOCKING YOUR SYSTEM

You can set up a four-digit Personal Security Code to ensure that unauthorized people do not use the calling capability of your system. With security set to ON, the system will not allow any personal or OnStar Virtual Advisor calls. You must turn security OFF before calls can be made or received. If security is ON, only calls from the OnStar Center will be presented.

	USER ACTION	ONSTAR RESPONSE
1.	Press the white dot button	"OnStar ready"
2.	Say "Security"	"Enter four-digit security code"
3.	Say the 1st digit	OnStar will repeat the digit
4.	Say the 2nd digit	OnStar will repeat the digit
5.	Say the 3rd digit	OnStar will repeat the digit
6.	Say the 4th digit	"Security (code ####) is now on/off"

### ONSTAR VIRTUAL ADVISOR

### (Available with OnStar Personal Calling)

OnStar Virtual Advisor uses minutes from the amount you have purchased for OnStar Personal Calling.

As an OnStar Personal Calling subscriber, you can make your driving time more enjoyable and productive with OnStar Virtual Advisor. With OnStar Virtual Advisor, you can now listen to financial information, news, entertainment and information topics, such as stock quotes, weather reports and sports scores. You can hear, reply to and manage email without taking your hands off the wheel or your eyes off the road.

With the press of the white dot button and a few simple voice commands, you can browse the pre-selected topics from your profile, which you established on the MyOnStar website, or you can skip to the subjects that interest you.

To find out more about Virtual Advisor or to set up your Virtual Advisor personal profile, visit www.MyOnStar.com.

If you do not have Internet access to set up your personal profile, you can still take advantage of OnStar Virtual Advisor services using the existing default profile that has been set up for you.

### **ACCESSING VIRTUAL ADVISOR**

### HEARING VIRTUAL ADVISOR USER ACTION ONSTAR RESPONSE

1. Press the white dot button

"OnStar ready"

"Connecting to Virtual Advisor"

2. Say "Virtual Advisor"

You will be connected to your Virtual Advisor (default or personal profile)

Provide your PIN when requested. (You can disable this security feature at www.onstar.com if you wish.)

For Virtual Advisor, say your four-digit PIN in a natural way, without pausing between digits.

### GETTING INFORMATION FROM VIRTUAL ADVISOR

OnStar Virtual Advisor has a few simple commands to help you request the information you desire. If you are unsure of what to ask for when using Virtual Advisor, you can say:

- "Play the tutorial" or
- "What are my choices?" or
- "Help"

For a complete up-to-date list of Virtual Advisor voice commands, go to www.onstar.com and click on the "Subscribers Log In (MyOnStar)" section of the site.

### INFORMATION SITES

OnStar will be continuously improved, updated and expanded to meet the needs of our subscribers. The following general categories will give you an overview of the types of information available to you. For complete up-to-date information, go to the OnStar website at www.MyOnstar.com. Click on the link to the subscriber website. Here, you can configure your personal profile with all available content.

### **Financial Services**

OnStar Virtual Advisor can provide you with stock quotes for any stocks listed on the NYSE or NASDAQ, with only a 15-minute delay. You can personalize your Virtual Advisor Portfolio and preset the stocks you want to track and have them listed for you when you request them. Or, you can simply ask for a quote for any NYSE or NASDAQ stock by the name of the company.

### Weather

The OnStar Virtual Advisor will deliver a weather forecast for the current location of the vehicle by asking Virtual Advisor to "Get my local weather." The forecast includes current temperature, daily high/low, tomorrow's predicted high/low, precipitation forecast and unusual conditions. Virtual Advisor can also provide weather information for other cities you have designated in your profile, which you can establish or modify at www.MyOnStar.com.

### Traffic (Available in Select Markets)

OnStar Traffic service can provide local traffic conditions for the metro area where your vehicle is located, as well as other designated cities.

OnStar Virtual Advisor can also provide you with personalized traffic reports. Know about construction, accidents, road obstructions and other delays when you want, personalized to the highways that you drive.

### **Sports Scores**

OnStar Virtual Advisor can provide you with scores and highlights for your favorite college or professional team and sporting events, even if they are being broadcast on a local station. Preset your personal favorites at www.MyOnStar.com.

### **News Headlines**

OnStar Virtual Advisor will provide current headlines from many of the major trusted news sources and include such categories as:

- Headline News
- National News
- World News
- Business News
- Sports News

### **Email**

OnStar Virtual Advisor allows you to access your email without a screen or keyboard any time you are driving with voice commands.

You can also respond/reply to your email just by saying, "Reply," and then recording your response. Your reply will be delivered to the originator of the message.

Every Virtual Advisor enrollee receives an email account, so visit www.onstar.com today to set up your personal email account.

### **Entertainment**

OnStar Virtual Advisor allows you to access a variety of entertainment information. You can get updates on television series, soaps, lottery results, horoscopes, children's entertainment and more. You can access Virtual Advisor and ask for the category of your interest, or preset your favorites at www.onstar.com.

### MYONSTAR — YOUR PERSONALIZED WEBSITE

The MyOnStar subscriber website is designed to help you set up and manage the information selections for your Virtual Advisor sessions in the vehicle. You can also plan your travel, receive location-based or personal weather information and interact with OnStar Advisors and customer care groups.

Your MyOnStar subscriber website can be accessed from any Internet-connected computer. Just be sure to have your account number and PIN (Personal Identification Number) to access the Virtual World of OnStar. If you do not know your account number or PIN, contact OnStar at 1.888.4.ONSTAR (1.888.466.7827). For security reasons, your PIN information can only be mailed to your address on record.

### VOICE COMMANDS/ SPEECH RECOGNITION

## OPERATION OF THE ONSTAR SPEECH RECOGNITION SYSTEMS:

Speech recognition allows the user to speak to a computer. The computer tries to understand the user's command, and responds by speaking back or by taking the appropriate action (e.g., dialing the phone).

## ONSTAR USERS COMMUNICATE WITH TWO SPEECH RECOGNITION SYSTEMS:

- OnStar Personal Calling uses a speech recognition system that resides in the vehicle. When the user presses the white dot button, the system says "OnStar ready" and listens for the user's command. The user can speak commands to control the hands-free wireless phone.
- 2. OnStar Virtual Advisor uses a remote speech recognition system that you access through an automated phone call. The user connects to Virtual Advisor by requesting it through a Personal Calling command. The user is then transferred to the Virtual Advisor computer and talks to it through the wireless connection.

#### PERFORMANCE OF SPEECH RECOGNITION

The OnStar speech recognition systems use speech technology that is designed to understand a wide range of speakers of American English. However, the technology does not work equally well across all regional and ethnic accents. The OnStar voice recognition system may not work with all voices

Although there is no one "right" way to speak English, the system will work best when users try to modify their pronunciations in response to system errors. Users who do not obtain good results are advised to try the tips and workarounds found in this document.

#### **VOICE COMMAND ERROR MESSAGES**

Pardon – The system has not been able to match your command with a word that it knows. Repeating the command distinctly should fix the problem. After three "pardon" responses, the system will try to guess the command you are requesting. If correct, say "Yes," if not, say "No," and the system will prompt you with its next best guess.

Slower please – Repeat the command after a short pause. This response normally happens if you say a command before the system is ready for it, or if there is substantial background noise.

## GENERAL TIPS FOR BETTER SPEECH RECOGNITION

#### **Noise**

Noise may confuse the speech recognition system. You usually get better performance from the system in quieter conditions:

The air conditioner/heater fan creates noise.
 Turn it down or off for better speech system performance.

- Driving at high speeds creates louder engine noise and wind noise. You may get better results at lower speeds.
- An open window or an open sunroof allows more noise to enter the vehicle. Close all windows for better results.
- Noisy rainstorms can also reduce performance.
- If passengers are talking while you use the speech system, it may be confused by their speech. You will get better results if all occupants of the vehicle are quiet while the system is listening for commands.

### When to speak

OnStar Personal Calling – the system is only listening for about 5 seconds after it prompts you to speak. If the system does not hear a response, it will prompt you again, or cancel the transaction. If you begin to speak too soon, it will tell you "Slower, please." Try pausing for a half-second before speaking.

OnStar Virtual Advisor – the system is listening for commands for about 5 seconds between information/entertainment segments.

## How to speak

- Speak forcefully, and clearly. The noisier the environment, the louder you need to speak. If you are in the driver's seat, speak facing the front of the car. If you are a passenger, speak facing the rearview mirror.

- Speak calmly, and naturally. The system may sometimes fail your repeated attempts to give a command. If your speech is distorted by shouting or frustration, this may cause more errors.
- Women with high-pitched voices may have better results by speaking in deeper, lower-pitched voices. However, do not lower the volume of the voice.
- Avoid speaking with a rising intonation, like asking a question. Use a flat or falling intonation, like giving an answer.

## What to say

### Personal Calling: one-word commands

- The Personal Calling system listens for only one word at a time. (There are some exceptions two-word phrases that are spoken and understood as a single word, e.g., "virtual advisor," "voice feedback," and "my number.") You can enter phone numbers only one digit at a time, and the system repeats each digit as it hears it.
- Say, "Help" at the "OnStar Ready" prompt to hear the list of Personal Calling commands.

### Virtual Advisor: whole sentences

- Virtual Advisor can understand sentences with more than one word. It also expects to hear a four-digit number all at once when it asks for your PIN.
- Say, "What are my choices?" to hear a list of commands that the Virtual Advisor understands.

# HOW TO SAY SPECIFIC WORDS Personal Calling Commands

"add" Emphasize the 'd' at the end of

the word.

"call" Emphasize the 'l' at the end of

the word.

"cancel" Emphasize the 'l' at the end of

the word. If you are speaking the 'can' syllable very quickly,

try to lengthen it a little.

"clear" Emphasize the 'r' at the end of

the word.

"delete" Emphasize the 't' at the end of

the word. Do not swallow the 'd' at the start of the word.

"dial" Emphasize the 'l' at the end of

the word.

"directory" Speak all four syllables clearly.

Do not swallow the last part of

the word.

"emergency" Speak all four syllables clearly.

Do not swallow the last part of

the word.

"help" Emphasize the 'h' sound at the

start of the word. Emphasize the 'p' sound at the end of

the word.

"memo" Emphasize both syllables.

"my number" Emphasize all three syllables.

"no" Speak loudly and slowly.

Emphasize the 'n' sound at the start of the word. Draw out the 'o' sound at the end of the word.

"OnStar" Emphasize the r at the end of

the word.

"play" Emphasize the p at the

beginning of the word.

"redial" Try to emphasize and lengthen

the first syllable: reee-dial

"resume" Try to emphasize and lengthen

the first syllable: reee-zoom.

"security" Speak four syllables clearly.

Do not swallow the 'i' sound in

the middle of the word.

"store" Emphasize the 'o' sound in the

middle of the word in order to

distinguish from 'star.'

Emphasize the 'st' sound at the start of the word in order to distinguish from 'four.'

"units" Speak loudly and clearly.

"verify" Speak three syllables clearly.

Do not swallow the 'i' sound in

the middle of the word.

"Virtual

Advisor" Emphasize both words.

"voice

feedback" Emphasize both words.

"yes" Emphasize the 'y' sound at the

start of the word. Emphasize the 's' sound at the end of the

word.

## **Personal Calling Digits**

"zero" / "oh" If the system does not understand 'oh,' try 'zero,' or vice versa.

"one" Emphasize the 'n' at the end of the word.

"two" Round your lips for the 'ooo' part of the word. If you are clipping the 'ooo' very short, try to lengthen it, but do not draw it out excessively. Speak in a low pitch. Do not use a rising tone like asking a question; a falling tone like giving an answer is better.

"three" End the word 'three' in a smile, to draw back your lips. Lengthen the 'eee' sound if you are clipping it very short.

"four" Emphasize the 'r' at the end of the word.

"five" Emphasize the 'v' sound.

"six" Emphasize the 'ks' at the end of the word.

"seven" Emphasize the 'n' at the end of the word. Lengthen the 'sev' syllable.

"eight" Emphasize the 't' at the end of the word. Lengthen the 'eee' sound at the start of the word.

"nine" Emphasize the 'n' sounds to distinguish from 'five'.

"star" Emphasize the 'r' at the end of the word. Emphasize the 'ah' sound in order to distinguish from 'store.'

"pound" Emphasize the 'p' at the start of the word. Emphasize the 'd' at the end of the word.

### **ONSTAR INFORMATION**

An OnStar Subscription Agreement is required in order to receive OnStar services. For more information, call OnStar at 1.888.ONSTAR.7 (1.888.667.8277).

OnStar services require vehicle electrical system and wireless service to be available and operating for features to function properly. OnStar uses existing emergency service providers as well as wireless and satellite technologies.

This manual contains the latest information at the time it was printed. We reserve the right to make changes to the products and services without prior notification.

In order to provide you with excellent service, any call to the OnStar Call Center may be monitored or recorded.

### **GPS** Issues

#### GLOBAL POSITIONING SYSTEM

Vehicle positioning information is relayed to the OnStar Center during OnStar button, air bag deployments or Emergency Service button requests from the vehicle. Information about you, your vehicle or your vehicle's location may be used to administer OnStar services and respond to legal requirements or legal process.

## POSITIONING CAPABILITY DEGRADED IF SATELLITE SIGNALS ARE OBSTRUCTED

Vehicle position is determined by receiving and interpreting signals transmitted by satellites. If the signals are obstructed, positioning capability could be degraded or lost. This situation would be most prevalent in urban areas where tall buildings are located. Tunnels, underpasses, parking garages, trees and similar structures could also adversely affect positioning performance. Under these conditions, the system will operate, but the OnStar Center could have difficulty identifying your current location. The last valid position obtained before the obstruction is retained, however, and can be sent. The OnStar Advisor may depend on you to provide verbal information regarding your vehicle's location if such an obstruction of the satellites occurs.

#### **COMMUNICATIONS ISSUES**

#### PRIVACY

Users of wireless communications are cautioned that the privacy of any information sent via wireless cellular communications can not be assured. Third parties may unlawfully intercept or access transmissions and private communications without your consent.

## INOPERATIVE IF CELLULAR SIGNAL IS MARGINAL OR UNAVAILABLE

Since OnStar uses the cellular technology for communication with the OnStar Center, it can only be operated in geographic areas where cellular coverage is available. Although nearly all of the North American population lives and works in cellular coverage areas, there are various rural and mountainous areas where coverage is marginal or does not exist. Cellular service is also subject to transmission limitations caused by atmospheric conditions. OnStar service is only

available in the 48 United States, Hawaii, Alaska and Canada. If a request for service occurs outside of these areas, communications may not be available, and the OnStar Advisor may not be able to help you.

## INOPERATIVE IF COMMUNICATIONS SERVICE IS INACTIVE OR INOPERATIVE

OnStar uses a dedicated cellular communications service and will not operate if, for some reason, a cellular carrier has deactivated cellular service.

#### INOPERATIVE IF CELLULAR SYSTEM IS BUSY

In any area, the local cellular system can only handle a limited number of cellular calls at a given time. Once volume has reached the maximum limit, additional callers are denied access. If this situation occurs when there is an OnStar request for services, the OnStar system will automatically redial (a few times for an OnStar service or indefinitely for an Emergency button press).

#### RADIO FREQUENCY INTERFERENCE

The OnStar system is a radio communications system. The proximity to other radio signals created by other electrical devices may adversely affect the performance of the OnStar system.

#### VEHICLE AND POWER ISSUES

## INOPERATIVE IF BATTERY IS DISCHARGED OR DISCONNECTED

OnStar is powered by your vehicle's battery and will not operate if the battery is discharged or disconnected.

## POTENTIALLY INOPERATIVE IF VEHICLE IS IN ACCIDENT

If your vehicle is in an accident, some components could be damaged or disconnected, potentially rendering OnStar inoperative.

#### **ADD-ON ELECTRICAL EQUIPMENT**

The OnStar system is integrated into the electrical architecture of the vehicle. Do not add any electrical equipment (e.g., 2-way mobile radio, CB radio, etc.) to your vehicle unless you check with your dealer first. Added electrical equipment may interfere with the operation of the OnStar system. Any damage would not be covered by your warranty.

## SOME ONSTAR SERVICES DISABLED AFTER 48 HOURS

OnStar is powered by your vehicle's battery. In order to preserve the battery for starting the vehicle, OnStar cannot perform door unlocks, alerts or vehicle theft location after the vehicle has been off for 48 hours.

#### PERSONAL CALLING

Existing OnStar Subscriber Service Agreement and prepaid calling minutes required. Personal Calling is available in select markets. For system information, visit www.onstar.com.

### VIRTUAL ADVISOR

Existing OnStar Subscriber Service Agreement and prepaid calling minutes required. Personal Calling is available in select markets. For system information and details, visit www.onstar.com.

### **ADDITIONAL INFORMATION**

#### WARRANTY

OnStar hardware is warranted as part of the new-vehicle limited warranty. The manufacturer of the vehicle furnishes detailed warranty information.

#### **ENHANCED EXTENDED COVERAGE**

When you elect to purchase the GM Protection Plan "Major Guard," OnStar components are covered under the terms and conditions of General Motors' most comprehensive premium vehicle service contract.

#### A NOTE ABOUT PRIVACY

At OnStar, we know you want to protect your privacy, and we take subscriber privacy very seriously. We never provide your personal information to another company or person unless you authorize it, or we are required to by the legal process or in such cases where you have provided it for billing purposes. Having credit card information on file with OnStar is a real advantage and helps you avoid repeating personal information over a cellular connection. Your trust is what we value most.

The complete OnStar privacy policy can be found at www.onstar.com.

#### TRANSFERRING ONSTAR

Because your OnStar system is an integral part of your vehicle, it cannot be transferred to another vehicle. Each OnStar system stays with the original car or truck in which it was installed.

The one-year OnStar prepaid subscription included with your new vehicle cannot be transferred to another vehicle. If you've purchased additional years or upgraded your OnStar service, when you dispose of the vehicle, you have two choices: (1) You may transfer the remaining service to the new owner of the vehicle or (2) you may transfer the service to your new OnStar-equipped vehicle or another vehicle on your OnStar account.

#### **ONSTAR SUBSCRIPTION INFORMATION**

To renew your service or upgrade your plan, just push the OnStar button, or call the OnStar Account Services department at 1.888.4.ONSTAR (1.888.466.7827) between 8 am and 6 pm EST. For your convenience, you can also renew your subscription at www.onstar.com.



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