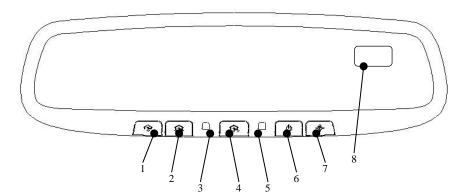
# Automatic-Dimming Mirror with Z-Nav™ Electronic Compass Display and HomeLink®

Your new vehicle comes with a Gentex Automatic-Dimming Mirror with a Z-Nav™ Electronic Compass Display and an Integrated HomeLink® Wireless Control System. During nighttime driving, this safety feature will automatically detect and eliminate dangerous rearview mirror glare while the compass indicates the direction the vehicle is pointed. The HomeLink® Universal Transceiver allows you to activate your garage door(s), estate gate, home lighting, etc.



- 1. Channel 1 Button
- 2. Channel 2 Button
- 3. Status Indicator LED
- 4. Channel 3 Button
- 5. Rear Light Sensor
- 6. Dimming On/Off Button
- 7. Compass Control Button
- 8. Display Window

# Automatic-Dimming Night Vision Safety™ (NVS®) Mirror

The NVS® Mirror in your vehicle is the most advanced way to eliminate dangerous and annoying glare in the rearview mirror during any driving situation. For more information regarding NVS® mirrors and other applications, please refer to the Gentex website: <a href="https://www.gentex.com">www.gentex.com</a>.

#### **Precautions**

The NVS® Mirror automatically reduces glare during driving conditions based upon light levels monitored in front of the vehicle and from the rear of the vehicle. These light sensors are visible through openings in the front and rear of the mirror case. Any object that would obstruct either light sensor will degrade the automatic dimming control feature.

## **Automatic-Dimming Function**

To protect your vision during nighttime driving, your mirror will automatically dim upon detecting glare from the vehicles traveling behind you. The auto-dimming function can be controlled by the Dimming ON/OFF Button:

- 1. Pressing the  $\clubsuit$  button turns the auto-dimming function OFF which is indicated by the green Status Indicator LED turning off.
- 2. Pressing the  $\diamondsuit$  button again turns the auto-dimming function ON which is indicated by the green Status Indicator LED turning on.

#### Note:

The mirror defaults to the "ON" position each time the vehicle is started.

## **Z-Nav™ Compass Display**

The NVS™ Mirror in your vehicle is also equipped with a Z-Nav™ Compass that shows the vehicle Compass heading in the Display Window using the 8 basic cardinal headings (N, NE, E, SE, etc.).

## **Compass Function**

The Compass can be turned ON and OFF and will remember the last state when the ignition is cycled. To turn the display feature ON/OFF:

- 1. Press and release the \*button to turn the display feature OFF.
- 2. Press and release the \*button again to turn the display back ON.

  Additional options can be set with press and hold sequences of the \*button and are detailed below.

There is a difference between magnetic north and true north. The compass in the mirror can compensate for this difference when it knows the Magnetic Zone in which it is

operating. This is set either by the dealer or by the user. The operating Zone Numbers for North America are shown in the figure to the right.

To adjust the Zone setting:

- 1. Determine the desired Zone Number based upon your current location on the Zone Map.
- 2. Press and hold the "" button for more than 3 but less than 6 seconds, the current Zone Number will appear on the display.
- 3. Pressing and holding the "N" button again will cause the numbers to increment (Note: they will repeat ...13, 14, 15, 1, 2, ...). Releasing the button when the desired Zone Number appears on the display will set the new Zone.
- 4. Within about 5 seconds the compass will start displaying a compass heading again.



There are some conditions that can cause changes to the vehicle magnets. Items such as installing a ski rack or a CB antenna or even some body repair work on the vehicle can cause changes to the vehicle's magnetic field. In these situations, the compass will need to be re-calibrated to quickly correct for these changes. To re-calibrate the compass:

- 1. Press and hold the "N" button for more than 6 seconds. When the compass memory is cleared a "C" will appear in the display.
- 2. To calibrate the compass, drive the vehicle is 2 complete circles at less than 5 MPH.

# Integrated HomeLink® Wireless Control System

The HomeLink<sup>®</sup> Wireless Control System provides a convenient way to replace up to three hand-held radio-frequency (RF) transmitters with a single built-in device. This innovative feature will learn the radio frequency codes of most current transmitters to operate devices such as gate operators, garage door openers, entry door locks, security systems, even home lighting. Both standard and rolling code-equipped transmitters can be programmed by following the outlined procedures. Additional HomeLink<sup>®</sup> information can be found at: <a href="https://www.homelink.com">www.homelink.com</a> or by calling 1-800-355-3515.

#### **Precautions**

Before programming HomeLink<sup>®</sup> to a garage door opener or gate operator, make sure that people and objects are out of the way of the device to prevent potential harm or damage. Do not use HomeLink<sup>®</sup> with any garage door opener that lacks the safety stop and reverse features as required by U.S. federal safety standards (this includes any garage door opener model manufactured before April 1, 1982). A garage door that cannot detect an object - signaling the door to stop and reverse - does not meet current U.S. federal safety standards. Using a garage door opener without these features increases the risk of serious injury or death.

Retain the original transmitter of the RF device you are programming for use in other vehicles as well as for future HomeLink<sup>®</sup> programming. It is also suggested that upon the sale of the vehicle, the programmed HomeLink<sup>®</sup> buttons be erased for security purposes.

# **Programming HomeLink®**

#### Notes:

- When programming a garage door opener, it is advised to park the vehicle outside of the garage.
- It is recommended that a new battery be placed in the hand-held transmitter of the device being programmed to HomeLink<sup>®</sup> for quicker training and accurate transmission of the radio-frequency signal.
- Some vehicles may require the ignition switch to be turned to the second (or "accessories") position for programming and/or operation of HomeLink.
- In the event that there are still programming difficulties or questions after following the programming steps listed below, contact HomeLink<sup>®</sup> at: <a href="www.homelink.com">www.homelink.com</a> or 1–800–355–3515.

## **Standard Programming**

To train most devices, follow these instructions:

- 1. For first-time programming, press and hold the two outside buttons, HomeLink<sup>®</sup> Channel 1 and Channel 3 Buttons, until the indicator light begins to flash (after 20 seconds). Release both buttons. Do not hold the buttons for longer than 30 seconds.
- 2. Position the end of your hand-held transmitter 1–3 inches (5–14 cm) away from the HomeLink<sup>®</sup> buttons while keeping the indicator light in view.
- 3. Simultaneously press and hold both the HomeLink® and hand-held transmitter button. DO NOT release the buttons until step 4 has been completed.

- 4. While continuing to hold the buttons the red Indicator Status LED will flash slowly and then rapidly after HomeLink® successfully trains to the frequency signal from the hand-held transmitter. Release both buttons.
- 5. Press and hold the just-trained HomeLink<sup>®</sup> button and observe the red Status Indicator LED. If the indicator light stays on constantly, programming is complete and your device should activate when the HomeLink<sup>®</sup> button is pressed and released.
- 6. To program the remaining two HomeLink® buttons, follow steps 2 through 5.

## **Rolling Code Programming**

Rolling code devices which are "code-protected" and manufactured after 1996 may be determined by the following:

- Reference the device owner's manual for verification.
- The handheld transmitter appears to program the HomeLink Universal Transceiver but does not activate the device.
- Press and hold the trained HomeLink button. The device has the rolling code feature if the indicator light flashes rapidly and then turns solid after 2 seconds.

To train rolling code devices, follow these instructions:

- At the garage door opener receiver (motor-head unit) in the garage, locate the "learn" or "smart" button. This can usually be found where the hanging antenna wire is attached to the motor-head unit. Exact location and color of the button may vary by garage door opener brand. If there is difficulty locating the training button, reference the device owner's manual or please visit our Web site at www.homelink.com.
- 2. Firmly press and release the "learn" or "smart" button (which activates the "training light"). **Note:** There are 30 seconds in which to initiate step3.
- 3. Return to the vehicle and firmly press, hold for two seconds and then release the desired HomeLink<sup>®</sup> button. Repeat the "press/hold/release" sequence a second time to complete the programming. (Some devices may require you to repeat this sequence a third time to complete the programming.)
- 4. Press and hold the just-trained HomeLink® button and observe the red Status Indicator LED. If the indicator light stays on constantly, programming is complete and your device should activate.
- 5. To program the remaining two HomeLink® buttons, follow either steps 1 through 4 above for other Rolling Code devices or steps 2 through 5 in Standard Programming for standard devices.

## **Gate Operator & Canadian Programming**

During programming, your handheld transmitter may automatically stop transmitting. Continue to press the Integrated HomeLink® Wireless Control System button (note steps 2 through 4 in the Standard Programming portion of this document) while you press and re-press ("cycle") your handheld transmitter every two seconds until the frequency signal has been learned. The indicator light will flash slowly and then rapidly after several seconds upon successful training.

## Operating HomeLink®

To operate, simply press and release the programmed HomeLink® button. Activation will now occur for the trained device (i.e. garage door opener, gate operator, security system, entry door lock, home/office lighting, etc.). For convenience, the hand-held transmitter of the device may also be used at any time.

## Reprogramming a Single HomeLink® Button

To program a new device to a previously trained HomeLink® button, follow these steps:

- 1. Press and hold the desired HomeLink<sup>®</sup> button. Do NOT release until step 4 has been completed.
- 2. When the indicator light begins to flash slowly (after 20 seconds), position the handheld transmitter 1 to 3 inches away from the HomeLink® surface.
- 3. Press and hold the handheld transmitter button. The HomeLink<sup>®</sup> indicator light will flash, first slowly and then rapidly.
- 4. When the indicator light begins to flash rapidly, release both buttons.
- 5. Press and hold the just-trained HomeLink® button and observe the red Status Indicator LED. If the indicator light stays on constantly, programming is complete and your new device should activate.

## **Erasing HomeLink® Buttons**

Individual buttons cannot be erased. However, to erase all three programmed buttons:

- 1. Press and hold the two outer HomeLink® buttons until the indicator light begins to flash-after 20 seconds.
- 2. Release both buttons. Do not hold for longer than 30 seconds.

The Integrated HomeLink<sup>®</sup> Wireless Control System is now in the training (learn) mode and can be programmed at any time following the appropriate steps in the Programming sections above.

#### FCC ID: NZLZTVHL3 IC: 4112A-ZTVHL3

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

## Warning

The transceiver has been tested and complies with FCC and Industry Canada rules. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.

 $NVS^{@}$  is a registered trademark and Z- $Nav^{TM}$  is a trademark of the Gentex Corporation, Zeeland, Michigan. HomeLink<sup>®</sup> is a registered trademark owned by Johnson Controls, Incorporated, Milwaukee, Wisconsin.