

**Driver Education
Classroom and In-Car
Curriculum**

Unit 10

**Reducing the Influence of
Distractions on the Driving
Task**

Driver Education Classroom and In-Car Instruction Unit 10-2

Unit Introduction

This unit is designed to help the student understand the substantial negative effects of distractions on a driver's ability to safely perform the driving task. Research and statistics demonstrate that distractions represent a significant factor in motor vehicle crashes, especially for novice drivers.

This unit will explore the definition of driving distractions, the various types of distractions, distractions' effects on the driving task, costs related to crashes due to distracted driving and prevention of driving distractions.

Goals

Time Frame: 3 hours

Students will:

- Make choices to avoid distractions while driving
- Recognize the nature of the distracted driving problem
- Define distracted driving
- Relate state's laws to distracted driving
- Understand potential driving distractions
- Understand distractions' effects on the driving task
- Develop a plan to prevent distractions before driving
- Develop a plan to minimize/eliminate distractions while driving
- Successfully address distracted driving scenarios

Driver Education Classroom and In-Car Instruction Unit 10-4

Performance Objectives	Learning Activities	Resources
<p>Students should understand the definition of distracted driving and why distracted driving should be addressed.</p>	<p>Use Slide 10.1 to introduce the subject of distracted driving.</p> <p>Lead the class in discussion with the following questions:</p> <p>Why should distractions be discussed in the context of driving?</p> <p>How should distracted driving be defined?</p>	<p>Slide 10.1 “Distracted Driving-What is it?”</p>

Driver Education Classroom and In-Car Instruction Unit 10-5

Content Outline

Novice drivers should recognize that all drivers can become distracted while driving. Evidence shows that drivers whose attention is diverted away from the driving task are at increased risk of negative events.

Distractions are important to consider when driving.

Discussions can address:

- Drivers need to focus their attention on the driving task-driving is a complex task that requires attention to perform successfully.
- Drivers whose attention becomes diverted from the driving task are more likely to experience a crash.
- There are many ways in today's driving environment for drivers to become distracted.
- What driver actions could be affected by distractions.
- There could be many effective ways to define distracted driving.

Driver Education Classroom and In-Car Instruction Unit 10-7

Content Outline

Nature of the distracted driving traffic crash problem:

- Drivers under age 20 are most likely to be involved in distracted driving crashes almost 50% more likely than the next most at risk group (age 30-49).
- Discuss possible reasons for the over-involvement of drivers under age 20 in distracted driving, including:
 - Lack of driving experience
 - Lack of experience performing tasks which could cause distraction
 - Increased risk taking
 - Lack of familiarity with particular vehicles
 - Others

While any driving distraction has the potential to cause a young driver to experience a crash, several specific distractions have been identified as particularly hazardous to young drivers (under age 20), these including:

- Adjusting radio/CD/cassette
- Outside person, object or event
- Other occupants

Potential follow up discussion topics:

- Why these distractions are high on the list for causing crashes among young drivers
- Students' experiences with these distractions
- Other distractions that students feel are likely to be a causal factor in a crash by novice drivers

Driver Education Classroom and In-Car Instruction Unit 10-8

Performance Objectives	Learning Activities	Resources
<p>Students will describe potential distractions that could occur inside the vehicle.</p>	<p>Use Slides 10.3 and 10.4 to lead a discussion about potential in-vehicle distractions.</p> <p>Worksheet 10.1 can be used in advance of class discussion.</p> <p>Fact Sheet 10.1 can be used during in class discussion</p>	<p>Slides 10.3 and 10.4 “Potential Distractions Inside the Vehicle”</p> <p>Worksheet 10.1 “Potential In-Vehicle Distractions”</p> <p>Fact Sheet 10.1 “Potential In- Vehicle Distractions”</p> <p><u>Responsible Driving</u> Ch. 3 <u>Drive Right</u> Ch. 14</p>

Driver Education Classroom and In-Car Instruction Unit 10-9

Content Outline

Today's vehicles and driving environment offer numerous ways for drivers' attention to become diverted from the driving task.

Some distractions could include:

- Interactive communication devices-cell phones
- Grooming
- Adjusting the audio system-changing the channel, changing CDs, satellite radio
- Pagers
- Occupants-infants, children, adults
- Eating
- Moving objects
- Adjusting vehicle controls-air conditioning system, tilt of steering wheel, mirrors, seat position, dash light brightness
- Navigation systems
- Reading
- Drinking
- Foreign objects in car-insect, trash
- Personal digital assistants (PDAs)
- High radio volume
- Smoking
- Pets
- Reaching for objects
- Sneezing

Driver Education Classroom and In-Car Instruction Unit 10-11

Content Outline

Demonstration: simulated driving distraction

Instructors can use any of the worksheets listed to the left, to concretely demonstrate how the addition of multiple tasks can affect a driver's ability to maintain adequate attention to the primary task: driving. These exercises demonstrate how distractions can affect performance of a task that, like driving, requires focus and concentration.

An important point to make during this segment is that the driver is completely and solely responsible for operating his or her vehicle in a safe manner. This includes the responsibility for controlling everything that occurs inside the vehicle as well. If a distracted driver experiences a crash, the responsibility falls upon the driver, not the distraction.

A selection of specific discussion points are provided here for several in-vehicle distractions. The instructor should feel free to add discussion about any other relevant in-vehicle distractions to enhance the lesson.

Cell phones

The prevalence of cell phones has grown rapidly since their inception, and the number of subscribers is projected to continue to grow substantially. The issue of using cell phones while driving has been a source of controversy for some time.

The primary responsibility of the driver is to operate a motor vehicle safely. To do this, a driver must focus his/her full attention on the driving task. Cell phones may distract drivers from this task. The safest option for a driver would be to refrain from cell phone use while driving.

Driver Education Classroom and In-Car Instruction Unit 10-12

Performance Objectives	Learning Activities	Resources
<p>Students will describe potential distractions that could occur inside the vehicle.</p> <ul style="list-style-type: none">• Cell Phones	<p>Use Worksheet 10.5 to develop a discussion about the danger and benefits of using a cell phone while driving.</p>	<p>Worksheet 10.5 “Potential Dangers and Benefits of Cell Phones in Vehicles”</p>

Driver Education Classroom and In-Car Instruction Unit 10-13

Content Outline

Develop a discussion about the potential dangers of using a cell phone while driving. Instructors can have students list potential dangers, then discuss as appropriate. Worksheet 5 can be used in advance of class discussion.

Some possible discussion points include:

- Diverting attention away from the driving task
- Looking away from the road in order to dial
- Effect on maintaining proper lane position
- Impact on ability to perceive potential problems
- Ability to make quick decisions
- Reduced situational awareness
- Ability to execute emergency maneuvers

The issue of distracted driving has been researched. Some studies indicate that using cell phones while driving may negatively affect drivers' performance because the device may cause cognitive distractions that are significant enough to degrade a driver's performance.

Note that hands-free devices are no less likely than hand-held cell phones to cause a driver to become distracted. Attention is diverted from the driving task while using either device.

Driver Education Classroom and In-Car Instruction Unit 10-15

Content Outline

Instructors can have students list potential benefits, then discuss as appropriate by using Worksheet 10.5. Some possible discussion points include:

- Ability to summon roadside assistance quickly in the event of a mechanical problem
- Ability to contact law enforcement rapidly in the event of a personal or national security concern
- Ability to contact emergency services quickly in response to a crash or emergency or medical situations

Note that in all of the above situations, the driver would be the person initiating a phone call. None of the above situations would require that a cell phone be turned on until the situation warranted action. Thus, a driver could take full advantage of all safety benefits related to having a cell phone, without having the cell phone turned on while driving. Drivers should make efforts to move to a safe place, off the road, to make such calls. Depending on the urgency of the situation, drivers must use their best judgment.

Audio Systems

Almost every vehicle sold in the US today contains an audio system. Components of such systems could include:

- AM/FM receivers
- Satellite receivers
- Cassette players
- CD players
- Supplementary speakers

Driver Education Classroom and In-Car Instruction Unit 10-16

Performance Objectives	Learning Activities	Resources
<p>Students will describe potential distractions that could occur inside the vehicle.</p> <ul style="list-style-type: none">• Audio Systems	<p>Discuss the benefits and dangers of audio systems by using Slide 10. 6.</p>	<p>Slide 10.6 “Audio Systems”</p>

Driver Education Classroom and In-Car Instruction Unit 10-17

Content Outline

There can be several benefits to having an audio system aboard a vehicle.

Some of these could include:

- Having access to music and other programming to help pass the miles
- Gaining the latest information on local, national and international events
- Obtaining road travel reports on weather, construction, road closures and crashes
- Used wisely, audio systems can help keep drivers' minds engaged

Potential distractions regarding audio systems:

- Adjusting the vehicle's audio controls

Research shows that young drivers are especially susceptible to becoming distracted while attempting to adjust their vehicle's audio controls. Adjusting any vehicle's audio controls almost always involves the driver reaching for a knob or button. Often, this action requires that the driver's eyes be diverted from the driving scene for some period of time. Moving one's eyes and having to refocus on the shorter distance between the eyes and the dash or steering wheel, even for a short time, can result in a complete discontinuation of visual feedback from the driving scene.

- Setting the audio system volume too loud
- A driver could miss out on important information that is obtained through the ears, including: emergency vehicle's sirens, horns or screeching tires.

Driver Education Classroom and In-Car Instruction Unit 10-18

Performance Objectives	Learning Activities	Resources
<p>Students will describe potential distractions that could occur inside the vehicle.</p> <ul style="list-style-type: none">• Vehicle Occupants	<p>Use Slide 10.7 and discuss how vehicle occupants can distract a driver.</p>	<p>Slide 10.7 “Vehicle Occupants”</p>

Driver Education Classroom and In-Car Instruction Unit 10-19

Content Outline

Vehicle Occupants

Having other occupants in the vehicle could become distraction as well.

Occupants could distract the driver by:

- Talking to or yelling at the driver
- Throwing objects inside or outside the vehicle
- Partially hanging out of the vehicle
- Yelling at persons outside the vehicle
- Unexpectedly adjusting audio system controls
- Unexpectedly adjusting vehicle controls
- Much more...

Research indicates that, for young drivers, the greater number of similarly-aged occupants aboard, the more likely a crash is to occur. This is a major reason why many states' graduated driver licensing systems restrict the number of similarly-aged passengers that can be in a vehicle with a novice driver.

Driver Education Classroom and In-Car Instruction Unit 10-20

Performance Objectives	Learning Activities	Resources
<p>Students will describe potential distractions that could occur outside the vehicle.</p>	<p>Use Slide 10.8 to address distractions outside the vehicle.</p> <p>Worksheet 10.6 can be used in support of a discussion about distractions that could occur outside the vehicle.</p> <p>Fact Sheet 10.2 is also provided in support of these discussions.</p>	<p>Slide 10.8 “Potential Distractions Outside the Vehicle”</p> <p>Worksheet 10.6 “Potential Distractions Outside the Vehicle”</p> <p>Fact Sheet 10.2 “Distractions Occurring Outside the Vehicle: Research Results”</p>

Driver Education Classroom and In-Car Instruction Unit 10-21

Content Outline

Not all potentially distracting events occur within the vehicle. Many possible events and situations could occur outside a vehicle that could capture a driver's attention.

1. Crash scenes/rubbernecking
2. Animal in or near roadway
3. Dawn/Dusk
4. Road construction
5. Objects in roadway
6. Other vehicles
7. Police

Certainly a crash scene would have the ability to grab a driver's attention. However, it has been found that crash scenes also tend to hold a driver's attention, keeping him or her from focusing on the driving task. Thus, some drivers tend to maintain eye contact with a crash scene, even beyond the point that they pass the scene. This phenomena, sometimes referred to as "rubbernecking," can be quite dangerous, increasing the chance of experiencing a collision.

Attention-grabbing events occurring outside the vehicle will likely be surprising and/or rare, such as a crash or sighting a hot air balloon. While these may be interesting events, drivers must remember that safe driving remains the priority.

Driver Education Classroom and In-Car Instruction Unit 10-22

Performance Objectives	Learning Activities	Resources
<p>Students will develop a plan to prevent distractions before getting behind the wheel.</p>	<p>Use Slide 10.9 in support of a discussion on preventing distractions.</p>	<p>Slide 10.9 “Preventing and Addressing Distractions”</p> <p><u>Responsible Driving Ch. 3</u></p>

Driver Education Classroom and In-Car Instruction Unit 10-23

Content Outline

A driver's goal should be to eliminate all in-vehicle distractions before driving begins. Accomplishing this goal can be done by:

- Assess all potential in-vehicle distractions before driving
- Develop a preventative plan to reduce/eliminate possible distractions
- Expect distractions to occur
- Discuss possible scenarios before getting behind the wheel

Driver Education Classroom and In-Car Instruction Unit 10-25

Content Outline

Develop a preventive plan to reduce/eliminate possible distractions.

Based on the assessment of potential distractions, drivers can formulate a plan to prevent these sources from resulting in distraction. Instructors can refer to Responsible Driving, Ch. 3 in support of this discussion.

This could include:

- Powering down all communication devices
- Securing commitment from other occupants to behave responsibly and to support the driver in reducing distractions
- Securing all loose items in the vehicle-pets, handbags, containers, safety kits, umbrellas, flashlights, other personal items
- Adjusting all vehicle controls to the driver's preferences
- Determining exact travel routes
- Adjusting to any personal conditions that could become distracting

Just a little preparation in advance by drivers could go a long way toward preventing distractions from occurring. Efforts to prevent distractions before driving pay off. It is much better to not deal with distractions at all than to have to address distractions in a moving vehicle.

Driver Education Classroom and In-Car Instruction Unit 10-27

Content Outline

By giving advanced thought toward addressing in-vehicle distractions, new drivers can be better prepared to actually deal with these distractions.

Cell phones

The best practice would be to refrain from talking on a cell phone while driving. Utilize voice mail or other passengers for help with taking cell phone calls. In emergency situations, it is the responsibility of the driver to use his/her best discretion.

Audio systems

- To reduce risk, responsible drivers will minimize any adjustment to the audio system.
- Non-drivers can be assigned audio system responsibility, thereby resulting in maximum audio flexibility, with minimal impact on the driver's attention.
- The audio system's volume should be put at a level that always permits the driver to be fully aware of any warning sounds in the traffic environment.

Vehicle occupants

In the unlikely event of an extreme situation, the driver, who is responsible for and in control of his or her vehicle, must decide whether an occupant or occupants should be removed from the vehicle.

Driver Education Classroom and In-Car Instruction Unit 10-28

Performance Objectives	Learning Activities	Resources
Students will demonstrate a summary knowledge of the dangers of distracted driving.	Conduct a summary discussion.	
Students will complete the Unit 10 Test.	Distribute, collect and grade the Unit 10 Test.	Test included

Driver Education Classroom and In-Car Instruction Unit 10-29

Content Outline

In Summary:

- Distractions can occur while driving.
- Young drivers are especially susceptible to distraction while driving.
- Distracted driving can cause collisions, resulting in injuries, deaths and property damage. Costs associated with such crashes, including those resulting from criminal and civil proceedings, can be extremely high.
- With some forethought and pre-drive planning, drivers can prevent many potential distractions from taking place while driving.
- By developing a plan to deal with distractions that might occur while driving, drivers can become that much better prepared and equipped to deal with those that do occur.
- The potential for drivers to become distracted is expected only to increase over time.

Instructors may wish to conclude with a section that emphasizes drivers' responsibilities while driving, noting:

- Many drivers currently engage in many distraction-causing activities, without giving any consideration to how their driving might be negatively affected. The responsible driver will be aware of potential distractions and minimize both the chance of his/her occurrence and the negative impact should they occur.
- Of most importance, a driver must maintain his or her attention to the driving task. While a distracting event could be considered a negative event, the results of a crash caused by the event could be far worse.

The driver is completely and solely responsible for operating his or her vehicle in a safe manner. This includes the responsibility for controlling everything that occurs within the vehicle as well. If a distracted driver experiences a crash, the responsibility falls upon the driver, not the distraction.

Driver Education Classroom and In-Car Instruction Unit 10-30

Fact Sheet

10.1

Potential In-Vehicle Distractions

There are many possible distractions that could occur inside a moving vehicle.

Some of these include:

- Interactive communication devices-cell phones
- Grooming
- Adjusting the radio system-changing the channel, changing CDs, satellite radio
- Pagers
- Occupants-infants, children, adults
- Eating
- Moving objects
- Adjusting vehicle controls–air conditioning system, tilt of steering wheel, mirrors, seat position, dash light brightness
- Navigation systems
- Reading
- Drinking
- Foreign object in car-insect, trash,
- Personal digital assistants (PDAs)
- High radio volume
- Smoking
- Pets
- Reaching for objects
- Sneezing

Driver Education Classroom and In-Car Instruction Unit 10-31

Fact Sheet

10.2

Distractions Occurring Outside the Vehicle: Research Results

A study by the AAA Foundation for Traffic Safety examined the frequency of distracting events occurring outside vehicles that caused crashes. This list was compiled from the 1997 and 1998 Crashworthiness Data System data.

- Outside traffic/vehicle-vehicle swerved, turned in front of, changed lanes, slowed or stopped, encroached on lane, emergency vehicle, bright vehicle lights, etc.
- Police-being chased by police, officer directing traffic, thought saw police, etc.
- Animal in roadway-deer, dog, elk, other animal
- Dawn/Dusk
- People/objects in roadway-child in road, basketball game, crowd, broken glass, garbage can, etc.
- Crash scene/leaving scene of crash
- Road construction
- Other-waved ahead by driver, another person or driver, parachutes in sky, bicycle, toll booth, brush obstructing vision, tire blowout, etc.

Driver Education Classroom and In-Car Instruction Unit 10-32

Worksheet

10.1

Name:

Date:

Potential In-Vehicle Distractions

List any potential distractions that could occur inside a vehicle while driving.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____

Discuss items as a class.

Driver Education Classroom and In-Car Instruction Unit 10-33

Worksheet

10.2

Name:

Date:

Demonstration of Distraction - Card Sorting Exercise

Resources Needed:

- 1 deck of cards
- 1 stopwatch

Directions:

1. Select one student to perform the exercise.
2. Have the student sort the cards by suit (hearts, diamonds, clubs and spades). Use the stopwatch to time how long it takes.
3. Share the elapsed time with the class.
4. Have the student again sort the cards by suit, this time as the instructor verbally reads out the addition problems on this worksheet. Ask the student to answer as many problems correctly as possible (whether the answers are correct or not is not relevant. The addition task is to provide a distractor). Use the stopwatch to time how long it takes.
5. Share the second elapsed time with the class.
6. Use the following formula to calculate the percentage increase in time to sort the cards by suit the second time:

$$\% \text{ Change} = \frac{\text{2nd time} - \text{1st time}}{\text{1st time}}$$

Addition Problems

14+7	16+6	19+8	9+2	11+6	6+17	17+7	15+8
8+17	12+9	6+11	4+11	4+13	11+12	9+7	4+7
15+14	18+7	8+13	16+17	7+10	12+17	12+7	9+14
9+3	16+5	17+3	5+19	5+16	5+18	6+13	7+17
9+7	14+14	16+15	10+7	8+13	15+8	8+11	9+13
5+18	13+8	3+16	18+7	11+14	13+7	5+13	6+17

Driver Education Classroom and In-Car Instruction Unit 10-34

Worksheet

10.3

Name:

Date:

Demonstration of Distraction - Number Location Exercise

Directions:

1. Select one student to perform the exercise.
2. Time how long it takes a student to check off each number, in ascending order, appearing in the matrix on the next page. Begin with 01 and end with 36.
3. Share the elapsed time with the class.
4. Repeat the exercise, this time as the instructor verbally reads out the addition problems on this worksheet.
5. Share the second elapsed time with the class.
6. Use the following formula to calculate the percentage increase in time to check off each number:

$$\% \text{ Change} = \frac{2\text{nd time} - 1\text{st time}}$$

1st time

Addition Problems

14+7	14+14	16+17	6+17	8+11
8+17	13+8	5+9	11+12	5+13
15+14	19+8	10+7	12+17	14+4
9+13	6+11	18+7	5+8	15+8
9+7	8+13	11+6	15+18	4+7
5+18	17+3	4+13	13+7	9+14
16+6	16+15	7+10	17+7	7+17
12+9	3+16	5+16	9+7	9+13
18+7	9+12	8+13	12+7	6+17
16+5	4+11	11+14	6+13	

Driver Education Classroom and In-Car Instruction Unit 10-35

Worksheet

10.3

Name:

Date:

06	17	23	14	01	20
26	31	04	28	33	25
13	19	35	08	12	07
24	10	02	32	36	16
05	29	18	21	34	03
22	09	15	11	30	27

Driver Education Classroom and In-Car Instruction Unit 10-36

Worksheet

10.4

Name:

Date:

Demonstration of Distraction - Letter Location Exercise

Directions:

1. Select one student to perform the exercise.
2. Time how long it takes a student to check off each letter, in order, appearing in the matrix on the next page. Begin with A and end with Y
3. Share the elapsed time with the class.
4. Repeat the exercise, this time as the instructor verbally reads out the addition problems on this worksheet.
5. Share the second elapsed time with the class.
6. Use the following formula to calculate the percentage increase in time to check off each letter:

$$\% \text{ Change} = \frac{\text{2nd time} - \text{1st time}}{\text{1st time}}$$

Addition Problems

14+7	14+14	16+17	6+17	8+11
8+17	13+8	5+9	11+12	5+13
15+14	19+8	10+7	12+17	14+4
9+13	6+11	18+7	5+8	15+8
9+7	8+13	11+6	15+18	4+7
5+18	17+3	4+13	13+7	9+14
16+6	16+15	7+10	17+7	7+17
12+9	3+16	5+16	9+7	9+13
18+7	9+12	8+13	12+7	6+17
16+5	4+11	11+14	6+13	

Driver Education Classroom and In-Car Instruction Unit 10-37

Worksheet

10.4

Name:

Date:

R	D	N	H	B
L	G	S	X	P
C	W	J	K	V
U	A	M	E	T
I	F	Y	O	Q

Driver Education Classroom and In-Car Instruction Unit 10-38

Worksheet

10.5

Name:

Date:

Potential Dangers and Benefits of Cell Phones in Vehicles

List any potential dangers of having an active cell phone in a moving vehicle.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

List any potential benefits of having an active cell phone in a moving vehicle.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

Driver Education Classroom and In-Car Instruction Unit 10-39

Worksheet

10.6

Name:

Date:

Potential Distractions Outside the Vehicle

List any potential distractions that could occur outside a vehicle while driving.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____

Discuss items as a class.

Driver Education Classroom and In-Car Instruction Unit 10-40

Worksheet

10.7

Name:

Date:

Handling Distractions While Driving

What steps would you take to address the following distractions, should one or more occur while driving?

1. A distracting occupant, who is approximately your own age

2. A distracting infant?

3. Vehicle controls requiring adjustment? (mirrors, seat position, steering wheel position, etc.)

4. Getting lost or having to make a route change caused by road construction

5. A loose object, rolling around on the rear floorboard

6. A ringing cell phone?

Driver Education Classroom and In-Car Instruction Unit 10-41

Worksheet

10.8

Name:

Date:

Role Playing: Addressing Driving Distractions

The instructor will read one of the following scenarios, then select a student to respond.

You are driving along at a safe speed and:

1. You wish to change CDs. There is a passenger in the front seat next to you.
2. Your cell phone rings. You are the only person in the vehicle.
3. Your cell phone rings. There is a passenger in the front seat next to you.
4. You approach a crash scene at which EMS has arrived, so that your assistance is not required. One car is overturned.
5. Your large beverage spills onto the center console. There is a passenger in the front seat next to you.
6. You wish to change the tilt level of the steering wheel.
7. You turn into the sun, which is low on the horizon. This makes it much more difficult to look far ahead.
8. Your dog, riding in the back seat, tries to force itself into the front seat area.
9. You notice four large, colorful hot air balloons in the sky off to your right.
10. You become hungry and must eat a sandwich that you brought along for the trip.
11. You enter an unfamiliar area where you are trying to locate an address. Your map is on the passenger-side floorboard, out of easy reach.
12. You need to input new destination information into your on-board navigation system.
13. You notice several deer along the roadside ahead. They appear to be about to cross the roadway.
14. You enter a busy construction zone that includes flag personnel. Your radio volume is at a high level.