



WorkTunes™
Hearing
Protector
User Guide

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Doing it right means doing it safely

That means using hearing protection when you take on projects that expose you to sounds at or exceeding 85 decibels. 3M™ WorkTunes™ Hearing Protectors are the ideal combination of durable, reliable hearing protection and entertainment to help get the project done right.

Intended Use

When worn properly, WorkTunes™ Hearing Protectors help reduce exposure to loud sounds produced during recreational activities, such as concerts, snowmobiling, or sporting events, and when using power tools and equipment such as drills, hand sanders, lawn mowers, garden tractors, and gas-powered leaf blowers/trimmers. For very loud sounds, such as chain saws, circular saws, hammer drills, jack hammers, fireworks and gunfire, 3M recommends wearing earmuffs and earplugs at the same time for additional noise reduction. If you are wearing hearing protectors for noise outside of work, have your hearing tested by an audiologist, physician, or other qualified professional on a regular basis. Hearing protectors should be worn at all times in noisy surroundings to assist with noise reduction.

In addition to WorkTunes Hearing Protectors, 3M™ Safety Products includes a full assortment of reliable safety products designed to help keep you safe so you can stay focused on the task at hand, not on your safety products. Learn more at 3Msafety.com and 3Mdiy.com.



At-A-Glance

Noise Reduction Rating NRR = 24 dB

Headband/ear cushions

- Superior durability/wearability
- Increased comfort

Low two-point attachment

- Easy height adjustment

Soft padding

- For extended comfort

Buttons/knobs

- Intuitive to use
- Contemporary design

Superior radio reception

Voice Assist

- Makes programming and controlling the headset easier
- Change radio stations or MP3 tracks, without needing to remove the headset
- Indicates low battery

External wire

- By running the wires through the headband, they stay in place and out of the way

Soft-touch material on cups

- Good grip on buttons and knob
- Strong and durable

3 Bass Boost options

- 3 levels
- Controls the amount of bass for a customized listening experience

Easy-to-use auto scan

- Helps find available radio stations at the touch or turn of a button

Recessed input jack



Getting Started

Quickstart Guide

- Insert two 1.5 V AA batteries (not included)
- Turn the On/Off/Volume Knob to turn the unit ON
- To adjust the volume, turn the same knob in either direction
- Press the AM/FM button to select the frequency
- Find a radio station by turning the Tuning Knob in either direction – or press the knob to move up through the stations one by one. You will hear Vocal Assist, a verbal guidance system, tell you what mode or station you are in so you don't have to take off WorkTunes Hearing Protector to enjoy your favorite music and protect your hearing.



Getting Started

Installing Batteries

1. Open the battery cover
2. Insert two 1.5V AA batteries*
(see illustrations below)
3. Replace cover

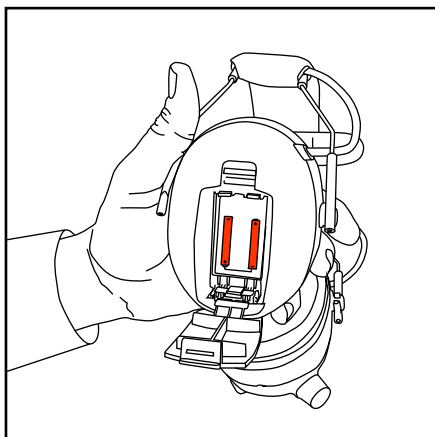
* Use only 1.5V AA batteries. Two AA batteries not included.

Low Battery Indicator

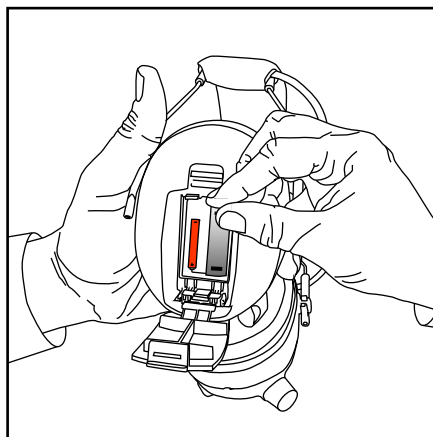
- Vocal Assist will indicate when the batteries are low and need to be replaced
- These notifications will continue (even if you shut the unit off and then turn it back on) until the batteries are replaced

Troubleshooting

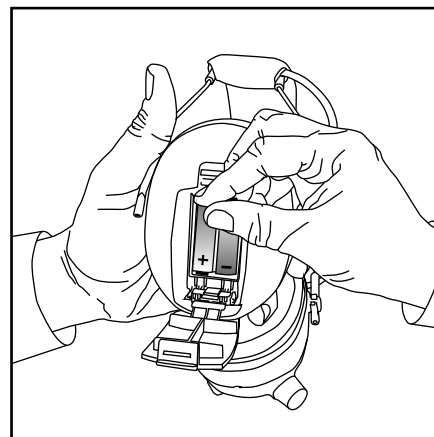
- When interference increases or the sound level becomes too weak, change batteries



Hold WorkTunes cup vertically and open battery cover.



Insert the first battery lower end first. Press in on the top of the battery.



Repeat steps for second battery.

Getting Started

Frequently Asked Questions

1. What type of batteries can I use in my new Hearing Protector?

The new WorkTunes Hearing Protector will work with the following 1.5 Volt AA batteries: Alkaline, rechargeable alkaline, rechargeable Nickle Cadium (Ni-Cd), and 1.5 Volt Lithium Ion (Li Ion).

2. I'm having a hard time getting the batteries into my Hearing Protector. Is there an easier way to inserting batteries?

Yes. Hold the WorkTunes Hearing Protector cup vertically (the batteries should be pointing in the up/down direction).

Important!

- Incorrectly inserted batteries can damage the electronics – 3.7 Volt Lithium Ion batteries could damage the WorkTunes electronics and should not be used
- Never replace batteries with the power on
- Make sure the batteries are correctly installed before switching the unit on

Battery cover



Features

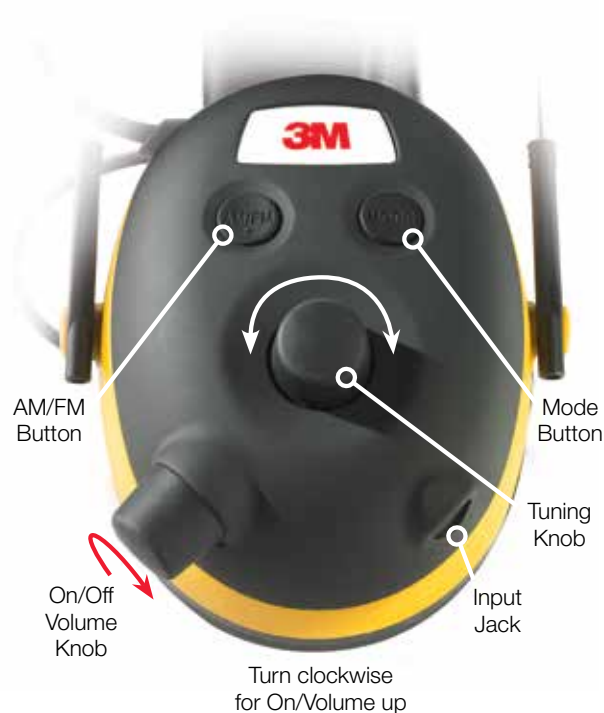
On/Off/Volume

1. Turn the knob clockwise to turn WorkTunes Hearing Protector on
2. Turn the knob counterclockwise until you hear a click, which will indicate that WorkTunes Hearing Protector is off
3. Turn the knob clockwise to increase the volume

If using an MP3 player, iPod™ or two-way radio, adjust the volume using the handheld device, not the volume knob on the WorkTunes Hearing Protector.

Important!

WorkTunes Hearing Protector comes equipped with decibel limiter. A decibel limiter limits sounds entering the ear to 82 decibels in order to help protect hearing from Self-Induced Hearing Loss (SIHL). This means that music can be listened to at a safe level and will not exceed 82 decibels.



On/off/volume knob closeup



Features

AM/FM Selector Button

The AM/FM Button makes it easy to select the right frequency.

To Use the AM/FM Selector Button

1. Press the AM/FM Button
2. Release the AM/FM Button to select AM. Vocal Assist will confirm your selection
3. Press the AM/FM Button again to select FM. Vocal Assist will confirm your selection

Auto Shutoff Feature

WorkTunes Hearing Protector is equipped with an Auto Shutoff feature that activates after 2 hours of inactivity (ie. if there has not been a change in radio stations, mode settings, etc) to turn the unit off.

- After 2 hours of inactivity, the Vocal Assist will give a verbal warning of the “Powering Off” of the unit.

- The Auto Shutoff feature can be deactivated for another 2 hours by:
 - Toggling the AM/FM Button
 - Toggling the Mode Button
 - Turning or pressing the Tuning Knob
 - Turning the unit OFF and back ON
 - NOTE: Adjusting the volume level will not deactivate the AutoShutoff feature.
- To reactivate the unit after Auto Shutoff, turn the ON/OFF/Volume knob to the OFF position for 2 seconds and then back ON.



Features

Bass Boost

The Bass Boost acts like a mini subwoofer letting you control how much bass you hear. It is important to note that the Bass Boost is programmed to “Bass Boost 1” when you take it out of the package.

To Use Bass Boost

- Press and hold the AM/FM Button until you hear “Bass Boost 2”
- Press and hold the AM/FM Button until you hear “Bass Boost Off”
- Press and hold the AM/FM Button again until you hear “Bass Boost 1”

Important!

Bass Boost cannot be engaged using an external device connected to the input jack.



Features

Input Jack

WorkTunes Hearing Protector is compatible with any MP3 player, iPod™ device or two-way radio. Use the Input Jack to connect your MP3 Player, iPod,™ or two-way radio to WorkTunes Hearing Protector.

To Use the Input Jack

1. Plug the MP3 player, iPod,™ or two-way radio into the input jack with patch cord provided
2. Turn off WorkTunes Hearing Protector
3. Turn on the MP3 player or two-way radio
4. Adjust the volume and music selection using your MP3 player or two-way radio

Important!

Bass Boost cannot be engaged using an external device connected to the input jack.



Features

Vocal Assist

Vocal Assist is automatically enabled when you take your WorkTunes Hearing Protector out of the package. You can turn Vocal Assist “OFF” at any point.

To Disable Vocal Assist

1. Turn WorkTunes Hearing Protector “OFF”
2. Press and hold the Mode Button while turning the unit on
3. Release the Mode Button. Vocal Assist will confirm that you are in Setting Mode
4. Turn the Tuning Knob until Vocal Assist says “voice off”
5. Press down on the Tuning Knob once. A beep and Vocal Assist will confirm that Vocal Assist is “OFF”
6. Turn the Tuning Knob to go to next feature or press the Mode Button to exit Settings Mode

To Enable Vocal Assist

1. Turn WorkTunes Hearing Protector “OFF”
2. Release the Mode Button. Vocal Assist will confirm that you are in Setting Mode
3. Press down on the Tuning Knob once. A beep and Vocal Assist will confirm that Vocal Assist is “ON”
4. Turn the Tuning Knob to go to next feature or press the Mode Button to exit Settings Mode



Features

Frequency Spacing

WorkTunes Hearing Protector is preprogrammed using North American frequency spacing between radio stations. North America frequency spacing between radio stations differs from frequency spacing in Europe and Australia which is why WorkTunes Hearing Protector comes equipped with the option to choose the frequency spacing you need based on where you are located.

To Select Europe and Australia Frequency Spacing

1. Turn WorkTunes Hearing Protector “Off”
2. Press and hold the Mode Button while turning the unit “On”. Vocal Assist will say “Settings Mode”
3. Turn the Tuning Knob until Vocal Assist says “9 kilohertz”
4. Press the Tuning Knob. A beep will confirm the selection
5. Turn the Tuning Knob to go to next feature or press the Mode Button to exit Settings Mode



To Select North America Frequency Spacing

1. Turn WorkTunes Hearing Protector “Off”
2. Press and hold the Mode Button while turning the unit “On”. Vocal Assist will say “Settings Mode”
3. Turn the Tuning Knob until Vocal Assist says “10 kilohertz”
4. Press the Tuning Knob. A beep will confirm the selection
5. Turn the Tuning Knob to go to next feature or press the Mode Button to exit Settings Mode

Modes

Mode Overview

The Mode Button controls two different modes:

1. Frequency Tuning Mode
2. Recall Mode

Within Frequency Tuning Mode, you can

- Tune to Stations
- Seek Stations
- Program Stations

Within Recall Mode, you can

- Program Stations
- Find and Listen to Programmed Stations
- Delete Programmed Stations



Programming

Programming Basics

To TUNE to a radio station:

- Press the AM/FM Button one time. Vocal Assist will confirm the current frequency (AM or FM)
- Turn the Tuning Knob clockwise to select the frequency. Vocal Assist will confirm the selection and, after a slight delay, will state the station

To PROGRAM favorite stations:

- Press the Mode Button one time until you hear “Frequency Mode”
- Find a radio station you like, press and hold in the Mode Button until you hear “Station Stored”

To RECALL favorite stations:

- Press the Mode Button one time until you hear “Recall Mode” – in this mode you can only listen to stored stations
- Turn the Tuning Knob to find stored stations – press it to move through stored stations

To AUTO PROGRAM local stations:

- Press the Mode Button one time until you hear “Frequency Mode”
- Press and hold the Tuning Knob in for 3 seconds – you’ll hear “Auto Seeking” and beeps as stations are programmed

To RECALL local stations:

- Press the Mode Button one time until you hear “Recall Mode”
- Turn the Tuning Knob to move through the radio stations – press it to move through stations one by one

To DELETE stored stations:

- Press the Mode Button one time until you hear “Recall Mode”
- Press and hold the Mode Button in until you hear “Station Deleted”

Fit

Fitting Instructions

Improper fit of this device will reduce its effectiveness. Fit your earmuff before entering a hazardous noise area.

- Place the earmuff on the head with the band at the crown (top) of the head
- Pull out the cups and place the hearing protector over your ears so that the ear cushions fit snugly
- It is important that the cups fully enclose the ears and that the cushions exert equal pressure around the ears
- Adjust the height of both cups for comfort and a good seal – do this by sliding the cup up or down while holding the headband in place
- Do not store the hearing protector at temperatures above 131°F or 55°C (for example, behind a windshield or in a window)



Important!

For proper fit, ear cushions should seal firmly against the head. Anything that interferes with the seal such as long hair (pull back to the extent possible), thick or poorly fitting eyeglass temples, pencils or caps will lessen the earmuff's effectiveness. Do not bend and reshape the headband as this will cause a loose fit and sound leakage.

Care and Cleaning

Care

- Do not store WorkTunes Hearing Protector with the batteries installed. A leaking battery may cause bodily injury or damage to the hearing protector
- The ear cushion and headband material can deteriorate over time. Examine it regularly. Replace cracked or worn parts as needed. The typical life for foam cushions is 6 months
- Wipe down the headband and ear cushions using warm, soapy water after being exposed to moisture or sweat. Do not use a disinfecting wipe as these contain alcohol and may dry out the material
- Do not immerse in water

Cleaning

- WorkTunes Hearing Protector may be disassembled for cleaning
- Sponge clean with warm soapy water, and rinse thoroughly
- Do not use solvents
- Let the foam liner dry before re-inserting into ear cups
- Earmuffs must be regularly inspected for cracked or worn parts, and replaced as needed
- Typical life for foam cushions is 6 months

Contact 3M Customer Service at
1-888-3M HELPS (1-888-364-3577)
for additional information.

Hearing Conservation

Noise Reduction Rating (NRR)

The EPA (Environmental Protection Agency) has selected the NRR (Noise Reduction Rating) as the measure of a hearing protector's noise-reducing capabilities. 3M makes no warranties as the suitability of NRR as a measure of actual protection from any noise level since such protection depends on the sound level (loudness), how long you listen to the loud sound, and how well you fit the earmuff over your ears. Although hearing protectors can be recommended for protection against harmful effects of impulsive noise, the Noise Reduction Rating (NRR) is based on the attenuation of continuous noise and may not be an accurate indicator of the protection attainable against impulse noises such as gunfire.

Research suggests that many users will receive less noise reduction than indicated by the NRR due to variation in earmuff fit and wearing time. 3M recommends reducing the NRR by 50% for estimating the average amount of noise reduction provided. The NRR for WorkTunes Hearing Protector is 24 decibels. Improper fit of this device will reduce its effectiveness in attenuating noise. Consult the enclosed instructions for proper



fit. The level of noise entering a person's ear when a hearing protector is worn as directed is closely approximated by the difference between the A-weighted environmental noise level and the NRR.

Hearing Conservation

Attenuation (ANSI S3.19 – 1974)

Test Frequencies in (Hz)	125	250	500	1000	2000	3150	4000	6300	8000	NRR
Mean Attenuation (dB)	16.0	21.4	25.7	35.7	32.0	39.9	40.7	36.0	34.0	24
Standard Deviation (dB)	3.5	3.5	2.4	3.7	3.0	3.0	3.3	4.4	6.1	

Example

- 1. The environmental noise level as measure at the ear is 92 decibels
- 2. The NRR is 24 decibels
- 3. The level of noise entering the ear is approximately equal to 68 decibels

How else can you tell if you are being exposed to noises 85 decibels or greater? Here’s a quick test: If you have to raise your voice to talk to someone who is an arm’s length away, you are likely in an environment with a sound level of 85 decibels or more.

Output Sound Pressure Levels (SPL)

The Sound Pressure Level (SPL) of the WorkTunes Hearing Protector is limited to 82dB using ordinary music material when connected to a Personal Music Player (PMP). If the WorkTunes Hearing Protector are connected to a PMP or other device with a very high output level, it is the users responsibility to set the Sound Pressure Level to a safe level.

The electrical input level for which the mean plus one standard deviation A-weighted diffuse-field related to sound pressure level for the sixteen ears is equal to 82 dBA is 83 mV.

Caution!

For noisy environments dominated by frequencies below 500 Hz, the C-weighted environmental noise level should be used. The NRR used in the above example was achieved under laboratory conditions.

Warning!

These hearing protectors help reduce exposure to hazardous noise and other loud sounds. Misuse or failure to wear hearing protectors at all times that you are exposed to noise may result in hearing loss or injury. If there is any drainage from your ear or if you have a hole in your eardrum, consult with your physician before wearing hearing protection. Failure to do so may result in hearing loss or injury. For proper use, call 3M Technical Service toll free at 1-800-243-4630.

Technical Assistance and Product Information

Technical Assistance

In United States:
1-800-494-3552
651-737-6501

3M Safety Products

3Msafety.com
3Mdiy.com



Frequently Asked Questions

Who should worry about noise?

No matter how old or young you are, too much exposure to loud noise can permanently damage your hearing. Whether it's the screech of a chain saw, the sudden blast of a hunting rifle, or the roar of a lawn mower, exposure to loud sounds can cause noise-induced hearing loss or NIHL.

NIHL is serious. Some 30 million people are at risk in the workplace, in recreational settings, and at home. In fact, it is the second most *self reported* work-related illness or injury. Already, 22 million American adults ages 20 to 69 have permanently damaged their hearing from exposure to loud sounds.

Source: National Institute on Deafness and Other Communication Disorders, National Institutes of Health, June 2010.

What is Noise Reduction Rating (NRR)?

The Environmental Protection Agency (EPA) has selected the Noise Reduction Rating (NRR) as the measure of a hearing protector's noise-reducing capabilities.

Here is an example of how NRR is calculated:

1. A riding lawnmower operates at 95 decibels – not a safe level of sound to exposure your ears to without hearing protection
2. WorkTunes Hearing Protectors Noise Reduction Rating (NRR) is 24 decibels
3. When you put on WorkTunes Hearing Protectors your ears are only exposed to sounds at 71 decibels (95 decibels – NRR 24 = 71 decibels) – a much safer decibel level for your ears

Keep in mind that an improper fit of this device will reduce its effectiveness. See “Fitting WorkTunes Hearing Protection” to learn how to get a good fit and seal.

Frequently Asked Questions

Why can't I tune to different radio stations when using my WorkTunes Hearing Protector?

The user must be in the "Frequency" mode to tune different radio stations. Press the "Mode" button until you hear "Frequency Mode." Turn or press the Tuning knob to select a radio station.

Can Hearing Protector be used in wet conditions?

The WorkTunes Hearing Protector units are not waterproof, meaning that they are not meant to be submerged in water. However, we realize that it may not be possible to keep the unit dry at all times. Thus, the Hearing Protector were designed to tolerate moisture that you might encounter with outside lawn and gardening work (ie. perspiration, a light rain, etc.)

What is a decibel?

A "Decibel" is measurement term used to describe the intensity or strength of a sound wave. Continuous exposure to sounds over 85 decibels can cause permanent hearing loss. By understanding decibel level of a sound we can choose the right hearing protection for the project.

Visit 3Msafety.com to learn more about what you can do to protect your hearing.

Important Information

Important information about WorkTunes

While hearing protectors help reduce exposure to hazardous noise and other loud sounds, misuse or failure to wear hearing protectors at all times that you are exposed to noise may result in hearing loss or injury. If there is any drainage from your ear or if you have a hole in your eardrum, consult with your physician before wearing hearing protection. Failure to do so may result in hearing loss or injury. For proper use, see user instructions or call 3M Technical Service toll free at 1-800-243-4630.

Specifications and approvals

The new Hearing Protector is certified to ANSI 3.19 for its hearing protection rating (24 dB NRR). It is also compliant with FCC Part 15B for electronic emissions.

North American specifications:
ANSI 3.19 & FCC Part 15B

Canadian ICES-003

Limited Warranty

This warranty covers defects in material and workmanship for a period of one (1) year from the date of original purchase. This warranty does not cover damage caused by misuse, abuse or unauthorized modifications. 3M will, at its option, repair or replace without charge, except for transportation costs. This warranty gives you specific legal rights, and you may have other rights that vary from state to state.

For more information

About this product, and all 3M Safety Products, visit 3Msafety.com

For technical assistance please call 1-800-494-3552



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