



iPod Testing Station Setup

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General Information

These procedures instruct how to setup for iPod testing.

Check for updates to these procedures at: <http://service.info.apple.com/ipod-tp.html>

What's New

- Changed iTunes 8.0 to iTunes 8.1 in the "What You Need" section.
- Added iPod shuffle (3rd generation) USB cables and earphones to the "Accessories" section.

About the Procedures

Though iPod models vary, the system setup to test them is the same.

These procedures guide you through the requirements and steps to set up an iPod testing computer.

Screen shots and other graphics are for illustration purposes only and may not show current or observed dialog boxes, wordings, values, versions, models, capacities, and may be for a different model than you are testing.

When testing and iPod, a visual screen is done first to check for damage not covered by warranty. A Mac is used to restore and load software and media onto the iPod. Functional testing and diagnostics are done to confirm a hardware failure, or to determine that there is no trouble found (NTF). If the iPod is NTF and will be returned to the customer, a Mac or Windows PC is used to restore the iPod (to the customer's format if possible).



iPod Testing Setup

These procedures equip a station for testing all iPod models when using instructions on the iPod Testing Procedures web page, at: <http://service.info.apple.com/ipod-tp.html>.

iPods are tested on a Mac.

If all tests show that the issue has been resolved or that the iPod is working normally, a final restore procedure must be performed if the iPod will be returned to a customer.

This can be done either on a:

- Mac for a Mac (the default and minimum requirement for a testing setup)
- Mac for a Windows PC (using an Intel-based Mac with Boot Camp and Windows)
- Windows PC for a Windows PC

Note: If an iPod is restored for a Mac, iTunes on a Windows PC will prompt users to restore their iPod before continuing (which is explained in the latest “Windows PC Users” letter, that should be given to the customer in this situation).

Important: Run Software Update on a regular basis to keep your software updated to the latest versions.

What You Need

Mac:

- 1 GHz G4 PowerPC processor or better, or Intel-based Mac
 - Mac OS X 10.4.11 or later required
- If you have an Intel-based Mac, to use the option to restore for a Windows PC, you will need:
 - The latest firmware updates
 - Boot Camp 1.2 beta or later (<http://www.apple.com/macosx/bootcamp/>)
 - A bona fide full version of Microsoft Windows XP Home or Professional with Service Pack 3 (No upgrade or multi-disc versions).
- 256 MB RAM; 1GB or more recommended
- 16MB video RAM or more
- QuickTime 7.4.5 is required; QuickTime 7.5.5 or later is recommended (<http://www.apple.com/quicktime/download/mac.html>)
- iTunes 8.1 or later (<http://www.apple.com/itunes/download>)
- iPhoto 7.0 or later
- Disk Utility 10.5.6 or later
- USB 2.0 port
- FireWire 400 port
- Broadband Internet connection to use the iTunes Store
 - The Mac must be connected to the Internet during a software update or restore to verify the latest iPod firmware is installed..
- Two hard disk scanning utilities, available at: <http://service.info.apple.com/ipod-tp.html>:
 - iPod UserScan Updater V3 2005-11-14 (for most Non-fifth generation iPods)
 - iPod 5Gen HD Scan utility (for Fifth Generation iPods)
- iPod Updater 2006-06-28, available at: <http://service.info.apple.com/ipod-tp.html>.
Important: This must be used to restore Non-fifth generation iPods after using the iPod UserScan hard disk scanning utility (above), before iTunes 7 will recognize the iPod.
- iPod Reset Utility (for Mac) (instructions and software available at: <http://docs.info.apple.com/article.html?artnum=305204>)
- A 40 MB file (at least) on the hard drive (used for an iPod (Click Wheel) built-in diagnostics USB file transfer test) (place it somewhere other than the desktop, to avoid deleting during procedures)
- Media bundle 063-6805-B (147MB) (required), available at: <http://service.info.apple.com/ipod-tp.html> (see the Mac Computer Setup heading for installation)
 - **Important:** Use only the media in this bundle for testing iPods.

Windows PC (if using):

- 32-bit editions of Windows XP (requires Service Pack 3 or later) or Windows Vista
- iTunes 8.0 or later (for Windows) (<http://www.apple.com/itunes/download>)
- Internet access (broadband recommended)
- USB 2.0 port

Accessories:

(Some items are optional)

- iPod Dent Inspection Tool (p/n 922-8022)
 - Audio headphones with mini-jack (or Earbud Headphones) (for audio testing)
 - Earphones w/Remote (included with iPod shuffle (3rd generation)) (661-5127)
 - Earbud Headphones (for battery testing; one for each iPod under test (p/n 922-8593))
 - Earphones w/Remote and Mic, Stereo, iPod (p/n 922-8732)
 - Multimeter with a 10 Amp Direct Current setting (such as Caltek Instrument CM2400A)
 - Cable, USB, iPod shuffle (3rd generation), 45mm (661-5125) or 1m (661-5126)
 - Cable, USB Charge Current (p/n 922-7872)
 - Cable, USB to 30-pin (p/n 922-7719)
 - Cable, FireWire, 30-pin to 6-pin (p/n 922-7715)
 - Cable, USB/FW Splitter (V-cable) (p/n 922-7717) (optional, suggested)
 - Apple Component AV Cable (922-8307)
 - Apple Composite AV Cable (922-8308)
 - iPod Audio/Video 3.5mm to (3) RCA Cable (p/n 922-7718)
 - S-Video cable
 - Universal Dock and cable with all needed Dock Adapters (optional)
 - Dock, iPod shuffle (Second Generation) (p/n 922-7841)
 - Power Adapter, USB (p/n 922-7844)
 - iPod Power Adapter, FireWire (p/n 661-3123)
 - Power Adapter AC Plug (order version for your plug type)
 - Apple Remote
 - Color television (NTSC or PAL) with component, composite, and S-Video inputs
 - 4x lighted magnifying glass (to check for port and connector damage, corrosion, or debris, and to check for liquid submersion indicator activation (if otoscope unavailable)
 - Otoscope (to check liquid submersion indicator)
 - Compressed-Gas Duster with straw nozzle
- Note:** Always follow usage instructions and avoid products with undue safety risks
- Isopropyl alcohol or similar "non-ammonia" based cleaning solution
 - Lint-free cleaning cloth
 - Cotton gloves (922-1592)

Documents/References:

- The iPod Testing Procedures, available from <http://service.info.apple.com/ipod-tp.html>
- Refer to the latest version of the document "How to identify counterfeit and modified iPods, and what to do" from <http://service.info.apple.com/ipod-tp.html>

Mac Computer Setup

It is highly recommended to use a computer setup with **iTunes and iPhoto dedicated to iPod testing**. This can also be accomplished by creating a separate iPod Testing user account. A dedicated testing setup makes for a faster and simplified process, and avoids issues with mixing media.

Follow the steps below on the User account being used for iPod testing (refer to the Tools needed section, above):

1. One at a time, double-click the "iPod UserScan Updater V3 2005-11-14.zip," the "iPod Updater 2006-06-28.zip" and "iPod 5Gen HD Scan.zip" files downloaded from <http://service.info.apple.com/ipod-tp.html> to un-archive them.

Important: Do NOT uncompress the files with a utility (such as StuffIt Expander).

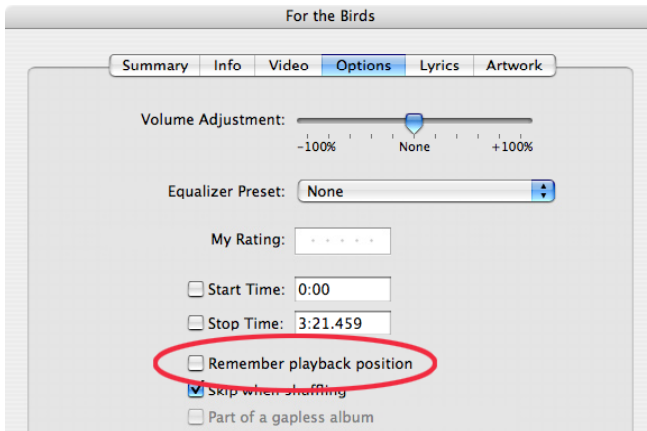
These "utilities" are used to perform hard disk scans (**Note:** Only the iPod (with Dock Connector) uses its built-in diagnostics hard disk scan. For other iPods, do NOT use the iPod built-in diagnostics hard disk scan tests):

- iPod UserScan Updater V3 2005-11-14 and iPod Updater 2006-06-28 are for NON-fifth generation iPods. **Important:** After using the iPod UserScan to perform a hard disk scan, the iPod Updater 2006-06-28 must be used to restore the iPod so that it will be recognized by iTunes 7.
- iPod 5Gen HD Scan is for Fifth Generation iPods

2. Install or update iTunes to the latest version.
3. Open iTunes and create three playlists. Name them something like the following examples: (**Tip:** Adding a bullet or other symbol can sort the lists near the top)
 - iPod ChannelCheck
 - iPod Music testing
 - iPod Video testing
4. Download the Media Bundle disk image 063-6805.dmg from <http://service.info.apple.com/ipod-tp.html>, and double-click to mount it.
 - Locate ipod_ChannelCheck and drag it to the iPod ChannelCheck playlist.
 - Locate the music test files and drag them to the iPod Music testing playlist.
 - Locate the video test files and drag them to the iPod Video testing playlist.

Note: The testing videos must be placed in a playlist, so they can be repeat-played.

5. Select the iPod Video testing playlist in the source list, select a video and then Get Info, from the File menu. Under the Options tab, make sure the “Remember playback position” is unchecked. Do this for each test video.



6. Open iPhoto and create three albums. Name them something like the following:
 - iPod Slideshow Testing
 - Four Gray Blocks
 - LCD Screen Test
7. Import the photos to be used for slideshow testing, the Four Gray Blocks graphic, and the LCD screen test graphics into iPhoto, from the media bundle.
 - Place the test photos into the iPod Slideshow testing album.
 - Place the Four Gray Blocks into the Four Gray Blocks album.
 - Place the LCD Screen Test graphics into the LCD Screen Test album.

Windows PC Computer or Intel-based Mac (with Windows) Setup

Note: If used, a Windows PC is only used to restore an iPod to the Windows PC format.

Install or update iTunes to the latest version (for Windows).

iTunes Setting Prior to Testing

Important: To avoid syncing the customer's iPod when connecting to the test computer, verify the “Disable automatic syncing for all iPhones and iPods” under the Devices tab in iTunes Preferences is selected.

