



## DATA DOUBLER

Apple Mac mini (2009)



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# INTRODUCTION

## 1.1 Hardware Compatibility

### 1.1.1 Host Computer Compatibility

- Apple Mac mini 2009, model identifier Macmini3,1
- Mac mini must have an optical drive ('Server' model not supported)

### 1.1.2 Drive Compatibility

- Any 2.5 inch SATA drive (including SSDs) up to 12.5 mm tall
- SATA 3.0Gb/s ('3G') drives recommended for best performance (see **Section 3.1**)

## 1.2 Package Contents



OWC Data Doubler kit  
(includes mounting screws)



Five-piece toolkit

## 1.3 About This Manual

Images and descriptions may vary slightly between this manual and the unit shipped. Functions and features may be different from those stated in this manual. Please visit the product web page for the most recent product specifications.



These are static-sensitive devices and are susceptible to invisible damage if not protected during installation. We recommend proper grounding by using a grounding strap. Make sure to work in a clean and static-free area, and avoid wearing clothing that retains static charges. For more information, please visit: [www.owcdigital.com/support/anti-static/](http://www.owcdigital.com/support/anti-static/)

## 2.1 Tools Used During Installation

- Phillips screwdriver (included in this kit)
- Nylon pry tool (included in this kit)
- Thin-blade putty knife (not included in this kit)

## 2.2 Disassembling the Mac mini

1. Place the Mac mini upside down, as shown in the picture to the right. Use a soft surface such as a towel or a mouse pad in order to protect the Mac mini from scratches.



2. Insert a thin-blade putty knife between the aluminum housing and the white plastic inner chassis of the Mac mini at one corner, as shown at left. If your putty knife will not fit in the gap, you can use the nylon pry tool from the included tool kit to help widen the gap, then insert the putty knife.

3. Pull the handle of the putty knife away from the housing to loosen the plastic clips that hold the housing to the inner chassis (shown at right). You will hear cracking noises during the process; this is normal. Move the putty knife along the edge of the Mac mini and continue prying the clips until you get to the corner, then remove the putty knife and start again on the next side. Do this on all sides except the rear of the Mac mini.



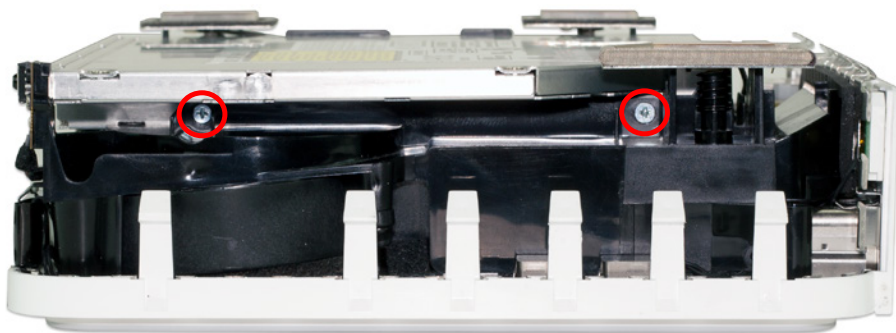


4. Once all of the plastic clips have been released, the inner chassis should start to separate from the aluminum housing, as shown at left. Turn the Mac mini over and remove the housing from the inner chassis. You may have to wiggle the housing slightly, but as long as all of the plastic clips were removed in Step 3, the housing will lift off.

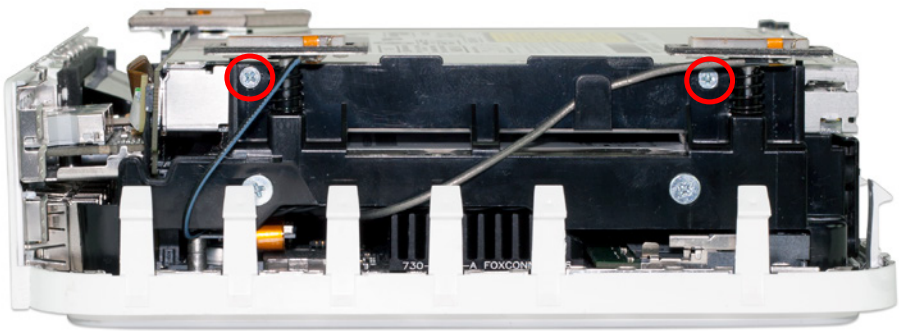
5. When the housing is removed, the Mac mini appears as in the picture at right. The next step is to remove the optical drive.



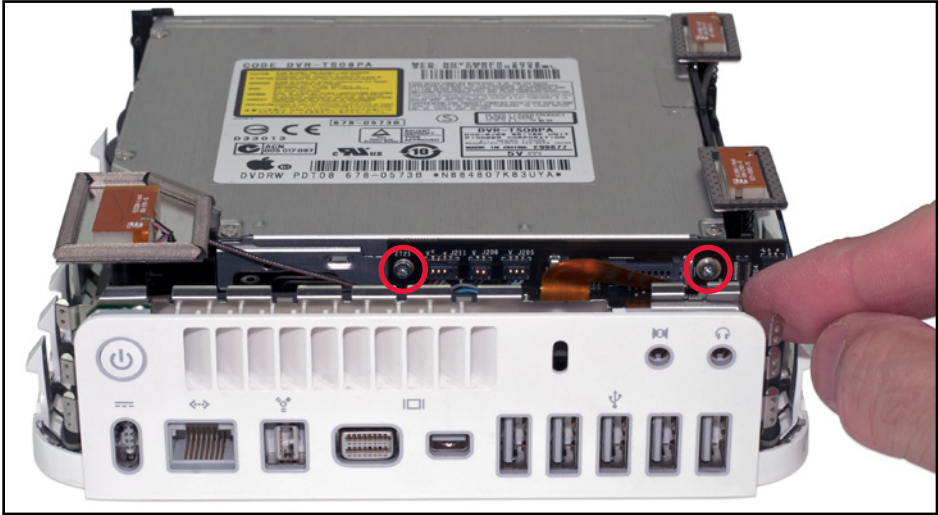
6. Turn the Mac mini so that the rear ports are to your right, as shown in the picture below. Use a Phillips screwdriver to remove the two screws circled in red.



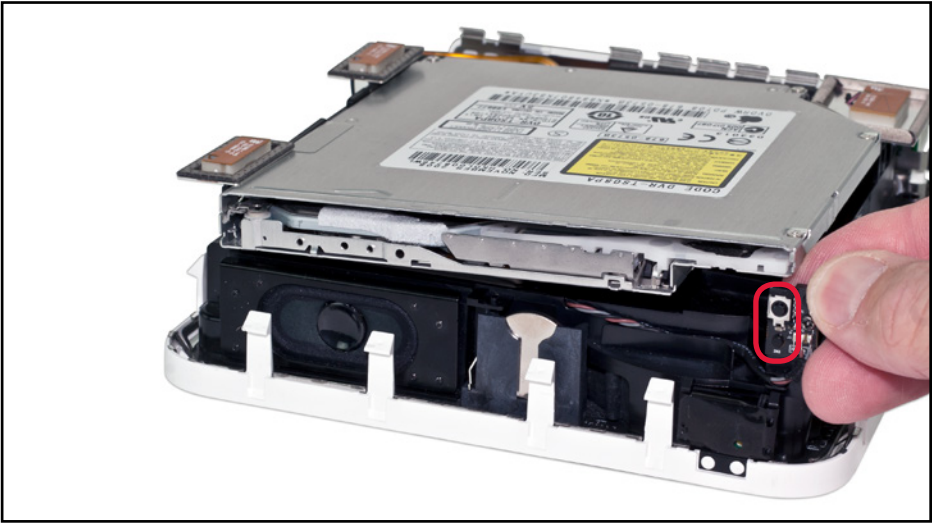
7. Turn the Mac mini around so that the rear ports are to your left, as shown in the picture below. Use a Phillips screwdriver to remove the two screws circled in red.



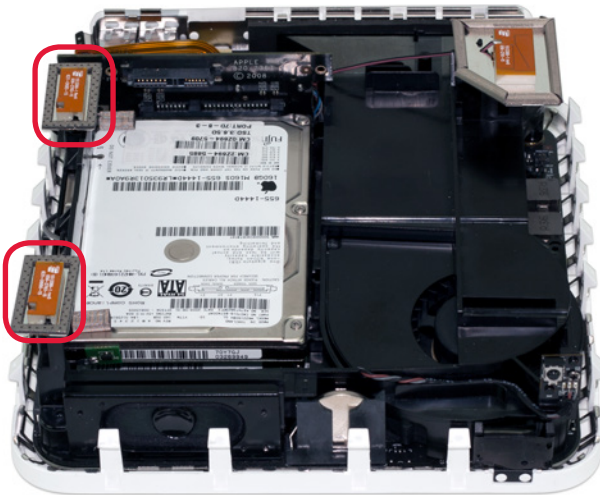
8. Turn the Mac mini so that the rear ports are facing you, as shown in the picture below. Use the Phillips driver to remove the screw circled at left. The screw on the right is hidden by a copper-colored ribbon cable. Disconnect this ribbon cable from the connector that sits directly to the right of the screw, using either your fingernail, as shown, or the nylon pry tool. Once the cable is out of the way, remove the Phillips screw.



9. Turn the Mac mini so that you can see the front of the optical drive, as shown below. Lift up on the right corner of the optical drive so that it clears the IR receiver (highlighted in red), then pull the optical drive towards you to remove it from the Mac mini. The optical drive is attached to a SATA connector at the rear; if the drive does not come out when you pull, you can disconnect it with a nylon pry tool or your fingernail.

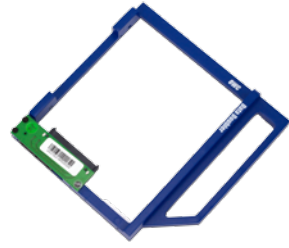


10. Remove the two antennas highlighted in the picture below. These sit on spring posts (see the picture in Step 7 for a side view); you can gently lift straight up to dislodge them. Note: the antenna cables can break if too much force is applied. Move the antennas out of the way, but keep them connected to their cables.



## 2.3 Installing the Data Doubler

1. Remove the Data Doubler from the box and plastic bag. Note that there is a clear plastic shield on the bottom of the Data Doubler. **DO NOT** remove this plastic shield. It is a part of the Data Doubler.



2. Install the 2.5 inch SATA drive into the Data Doubler. Start by sliding the SATA connector on the drive into the black SATA connector attached to the green circuit board on the Data Doubler, as shown at left.



3. Insert the two included Phillips screws into the drive through the screw holes in the Data Doubler, as shown at right.



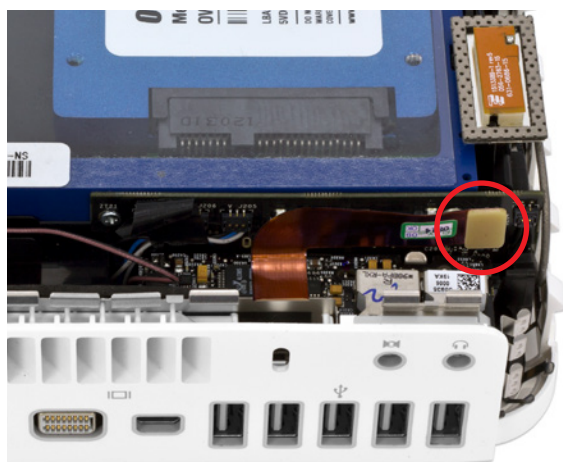
4. Connect the Data Doubler to the SATA connector in the Mac mini, highlighted at left. When installing the Data Doubler, be careful not to hit the AirPort® antenna (top left in this picture) or the IR receiver (top right in this picture).





5. When the Data Doubler is fully seated in the SATA connector, lower the corner of the Data Doubler to sit just behind the IR receiver, as shown at left. Re-attach the two antennas to their spring posts, as shown.

6. Turn the Mac mini so that the ports are facing you. Insert two Phillips screws into the holes shown at right. Be careful not to damage the ribbon cable when installing the screw on the right side.

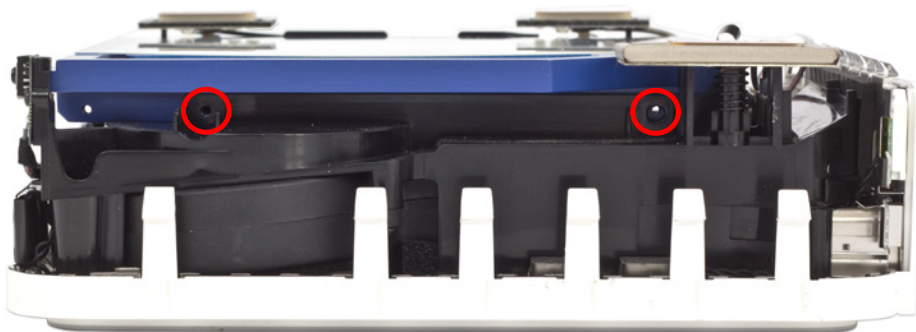


7. After the screws are installed, connect the ribbon cable, as shown at left. Simply press the cable into the connector with your thumb.

8. Turn the Mac mini so that the ports face your left, as shown below. Install two Phillips screws into the holes circled in red. If the screw holes are not aligned with the Data Doubler, press down slightly on the front of the Data Doubler (the right edge in this picture), then install the screws.



9. Turn the Mac mini so that the ports face your right, as shown in the picture below. Install the final two Phillips screws into the holes circled in red.



10. Align the cutout in the aluminum housing with the rear ports on the Mac mini, as shown below-left. Press down firmly on the housing to connect all of the clips on the inner-chassis to the housing. When the Mac mini is fully assembled there will be no visible gaps between the aluminum housing and the inner-chassis, as shown below-right.



## 3.1 Mac mini (2009) Drive Compatibility

The SATA controller used in the Mac mini 2009 (model identifier Macmini3,1) has a known limitation when using SATA 6.0Gb/s hard drives and solid state drives (SSDs). If a SATA 6.0Gb/s drive is installed, the computer will limit the drive to 1.5Gb/s. Therefore it is recommended that only SATA 3.0Gb/s drives be used in this computer.

## 3.2 Troubleshooting

Begin your troubleshooting by verifying that the power cable is connected to the Mac mini and to a power source. If the power cable is connected to a power strip, make sure that the power switch on the strip is turned on. If the Mac mini will not turn on, or if it is experiencing other problems such as no sound or no wireless connectivity, it is possible that one or more of the internal components were not correctly connected or were damaged during the assembly process. Go back through the assembly instructions and compare what you see with the pictures to identify what is different.

If the drive in the Data Doubler is not seen on the desktop on a Mac, check in the sidebar in a Finder window. Some versions of Mac OS X do not show hard drives on the desktop by default. If the drive in the Data Doubler is not seen in Finder, check Disk Utility to see if the drive is recognized by the computer. In Windows, check in Disk Management. If the drive is seen there, it may need to be formatted. [www.owcdigital.com/format](http://www.owcdigital.com/format)

If the drive in the Data Doubler is not seen in Disk Utility or Disk Management, remove the aluminum housing of the Mac mini and compare what you see with the pictures in the assembly section of this manual. Specifically check to make sure that the drive is connected correctly to the Data Doubler and that the Data Doubler is connected correctly to the SATA connector in the Mac mini. If problems persist, please contact technical support (Section 3.4).

## 3.3 About Data Backup

To ensure that your files are protected and to prevent data loss, we strongly suggest that you keep two copies of your data: one copy on your Data Doubler drive and a second copy on either your primary internal drive or another storage medium, such as an optical backup, or on another external storage unit. Any data loss or corruption while using the Data Doubler is the sole responsibility of the user, and under no circumstances may OWC, its parents, partners, and affiliates be held liable for loss of the use of data including compensation of any kind or recovery of the data.

## 3.4 Contacting Technical Support

8am - 5pm (CT) Monday - Friday

(866) 692-7100 (North America only)  
+1 (815) 338-4751 (International)

Live chat is available during normal business hours: [www.owcdigital.com/support](http://www.owcdigital.com/support)  
You can also email us at: [support@owcdigital.com](mailto:support@owcdigital.com)

## Changes:

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## FCC Statement:

**Warning! Modifications not authorized by the manufacturer may void the user's authority to operate this device.**

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference with radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference with radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.

## Health And Safety Precautions:

Read this guide carefully and follow the correct procedures when setting up the device.

Use proper anti-static precautions while performing the installation for this product. Failure to do so can cause damage to the product, drives, or the computer.

Do not attempt to disassemble or modify the device. To avoid any risk of electrical shock, fire, short-circuiting or dangerous emissions, never insert any metallic object into the device. If it appears to be malfunctioning, contact OWC technical support.

Never expose your device to rain, or use it near water or in damp or wet conditions. Never place objects containing liquids on the drive, as they may spill into its openings. Doing so increases the risk of electrical shock, short-circuiting, fire or personal injury.

## General Use Precautions:

To avoid damage, do not expose the device to temperatures outside the range of 5° C to 40° C (41° F to 104° F).

Do not place heavy objects on top of the device.

Protect your device from excessive exposure to dust during use or storage. Dust can build up inside the device, increasing the risk of damage or malfunction.

For up-to-date product and warranty information, please visit the product web page.

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