



To use the iPhone alarm clock as a DES beeper: iOS 17 and later

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It is best to dedicate one iPhone to be only your DES beeper and use another iPhone for your usual phone activities. See step 6.

As far as I know, there are no publicly available beepers that meet the (in my opinion) minimum features necessary for a Descriptive Experience Sampling (DES) beeper:

- *Unambiguity.* The signal must mean 'Pay attention to your awareness now!' and nothing else. For example, a telephone ring is not adequate.
- *Easy detectability.* The user must not have to struggle to discern whether the signal exists or not.
- *Rapid onset.* The object is to designate with precision exact moment under investigation. For example, that makes phone vibrating alerts not adequate.
- *Privacy.* The signal should not disrupt others in the vicinity.
- *Portability.* The signal should be able to follow the subject easily to wherever that experience takes place.

This document shows how to use an iPhone as a (klunky) substitute for a DES beeper.

There are six main steps:

1. **GET THE BEEP AUDIO FILES**
 ---If using a Windows computer
 ---If using a Macintosh computer
2. **CHECK TO MAKE SURE FILES ARE ON YOUR iPhone**
3. **CREATE SIX ALARMS ON YOUR iPhone**
4. **TELL THE iPhone ALARM TO PLAY THE BEEP AUDIO FILE THROUGH YOUR AIRPODS**
5. **SCHEDULE THE BEEPS** (you will need a confederate)
6. **PREPARE YOUR iPhone**

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1. GET THE BEEP AUDIO FILES

[Download](#) two 700Hz beeps: DES TEST BEEP SOFT 2sec.mp3 and DES TEST BEEP LOUD 2sec.mp3

If you know how to add songs to your iPhone, add those two .mp3 files to your song list and skip the [purple](#) instructions. Otherwise follow the [purple](#) instructions:

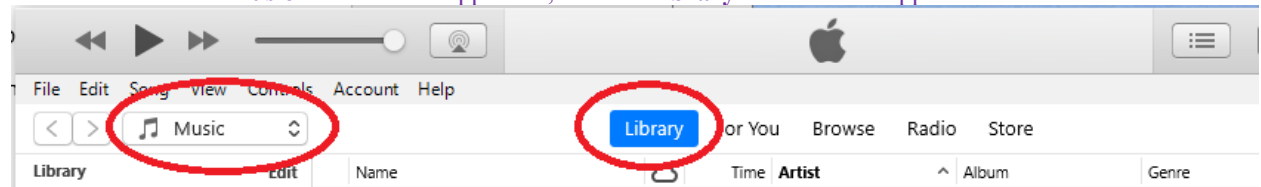
---If using a Windows computer

To add the mp3 files to your iPhone:

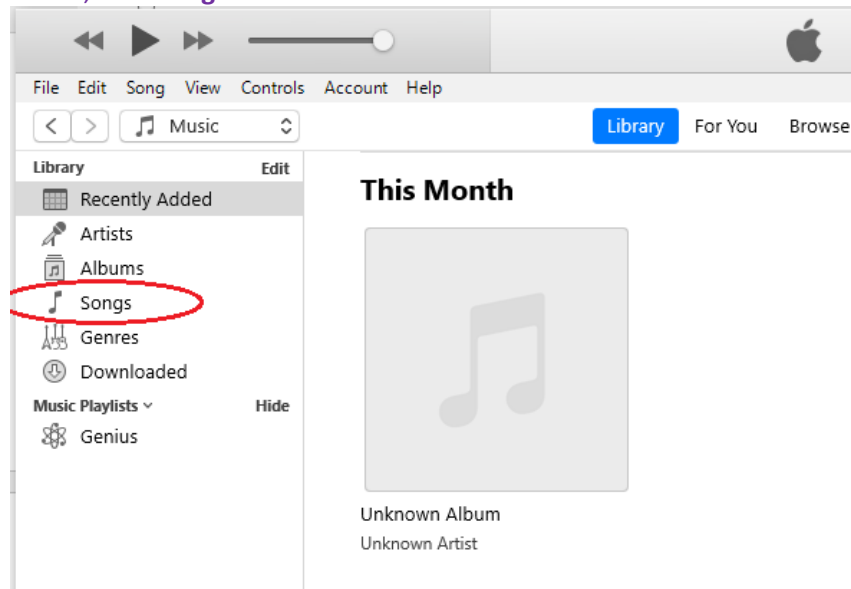
1. Download and unzip the .mp3 files to your computer—they will appear wherever downloads appear, perhaps in a file called **Downloads**

2. Open iTunes and log in

Make sure **Music** is selected at upper left, and the **Library** is selected at upper middle.

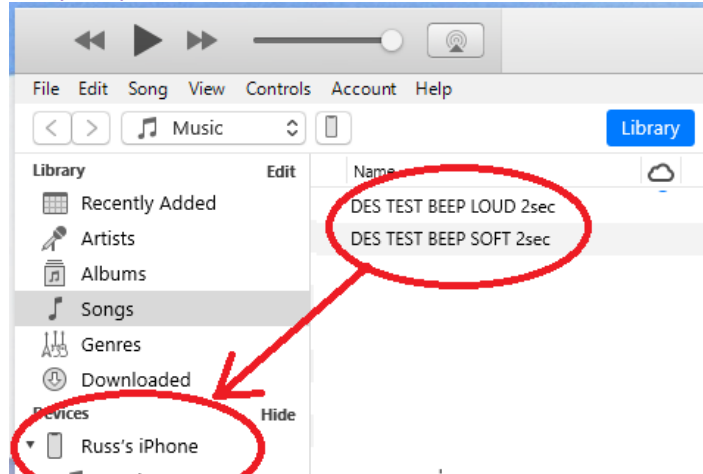


3. At left, click **Songs**.



4. Drag the two .mp3 files from **Downloads** to iTunes
5. Attach your phone to the computer with USB-Lightning cable. On your iPhone, click that you will trust the computer; on your computer, Click **Continue** when it asks whether you want to allow the computer to access information.

- When the iPhone icon appears in iTunes, drag the two .mp3 files and drop them on your phone icon.

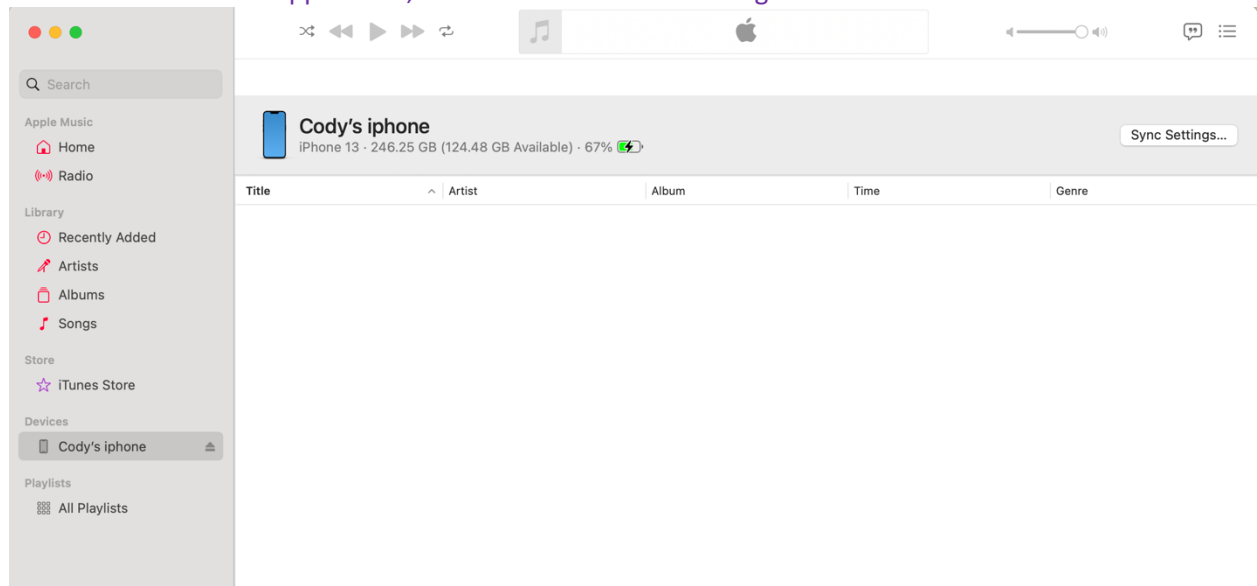


- Unplug your phone. Go to CHECK TO MAKE SURE FILES ARE ON YOUR iPhone (below).

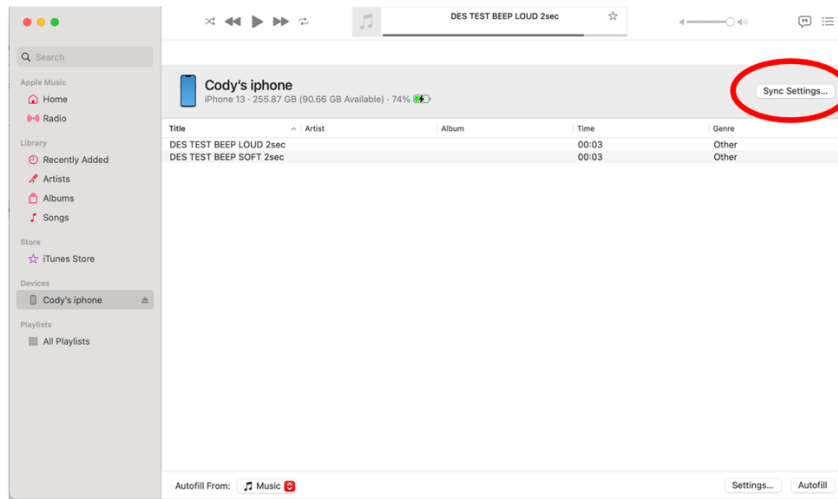
---If using a Macintosh computer

To add the mp3 files to your iPhone:

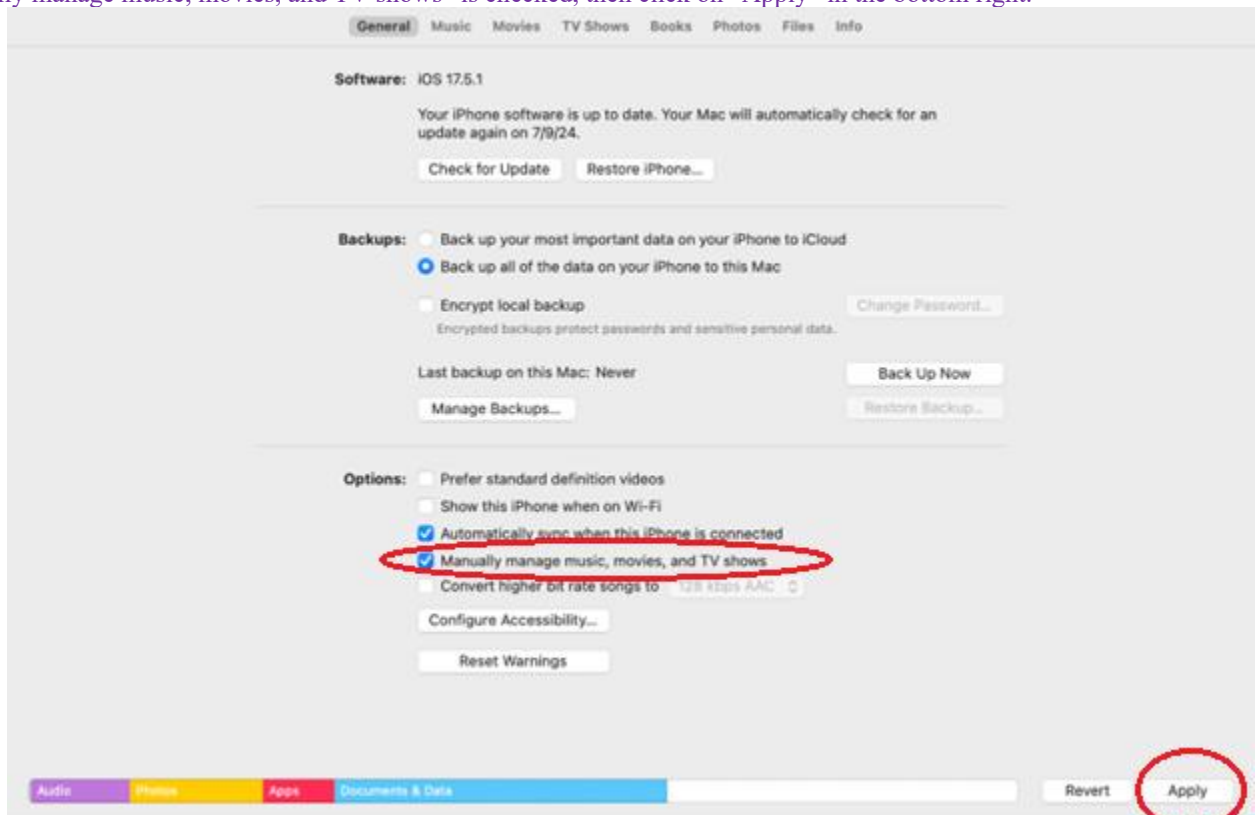
- Download and unzip the .mp3 files to your computer—it will appear wherever downloads appear, perhaps in a file called **Downloads**
- Open iTunes and log in.
- Attach your phone to the computer with USB-Lightning cable. On your iPhone, if asked, click that you will trust the computer; on your computer, Click **Continue** when it asks whether you want to allow the computer to access information.
- Launch the **Music** application, which should look something like this:



5. Drag the two .mp3 files from **Downloads** to **your phone icon**.
6. Click **Sync Settings**



Clicking Sync Settings will launch a Finder window displaying information about the iPhone. Ensure “Manually manage music, movies, and TV shows” is checked, then click on “Apply” in the bottom right.

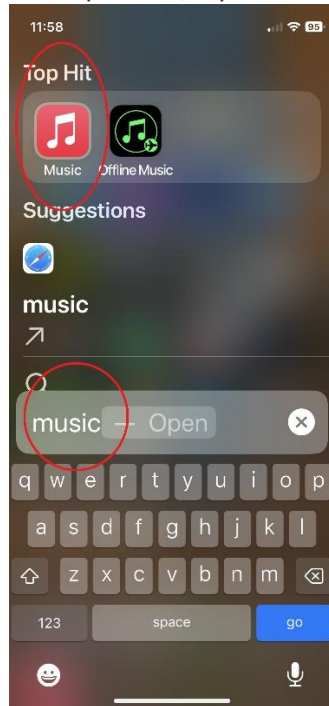


7. Unplug your phone. Go to CHECK TO MAKE SURE FILES ARE ON YOUR iPhone (Step 2 below).

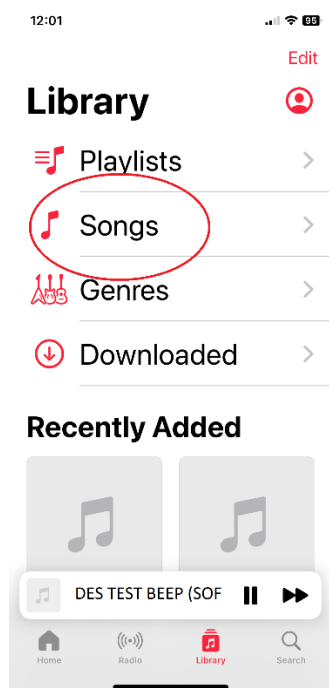
2. CHECK TO MAKE SURE FILES ARE ON YOUR iPhone

On your iPhone

1. Tap **Music**; if you don't see it, Search for music



2. Navigate to **Library > Songs**



3. Tap the **DES TEST BEEP SOFT 2sec** song to verify it plays.
4. Tap the **DES TEST BEEP LOUD 2sec** song to verify it plays.

You now have two new DES TEST BEEP songs on your iPhone. Now determine which one to use:

Put on your AirPods (plug in and put on your earbuds).

Tap **Music**; if you don't see it, Search for music

Navigate to **Library > Songs**

Tap the **DES TEST BEEP SOFT 2sec** song to verify it plays. Explore the volume using the iPhone volume control. You want a wide range of volumes, from soft to loud, loud enough that there is no question that it is the beep, but not so loud that it startles you.

Now do the same with **DES TEST BEEP LOUD 2sec**. Use the one give you the most control when you change the Volume control.

For the remainder of these instructions, I will assume that you have decided to use the SOFT beep, but either one is okay.

3. CREATE SIX ALARMS ON YOUR iPhone

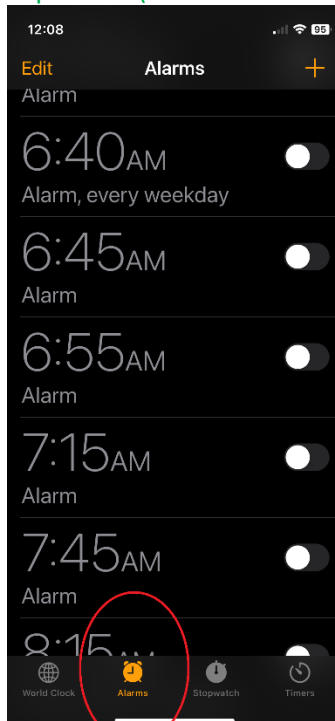
First you must make six alarms that you will set later.

On your iPhone:

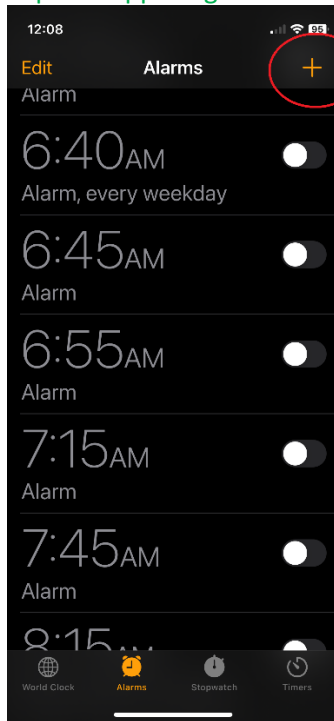
1. Tap the **Clock**



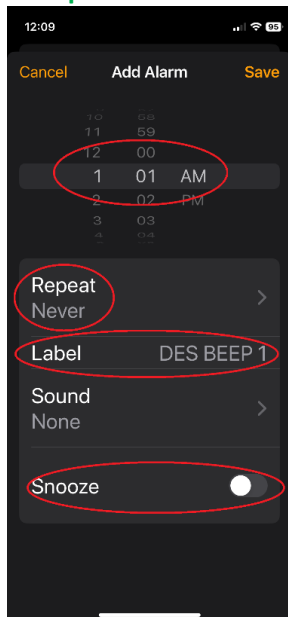
2. Tap **Alarm** (second from left at the bottom)



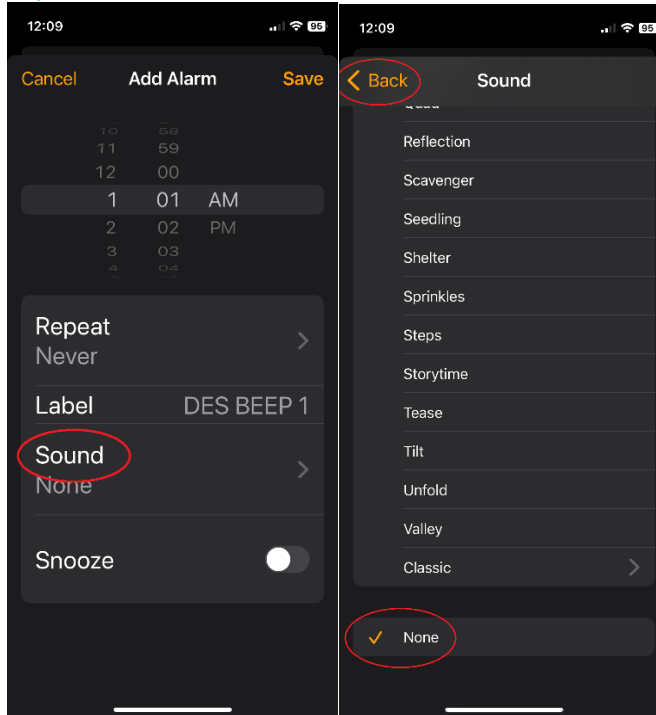
3. Tap + at upper right



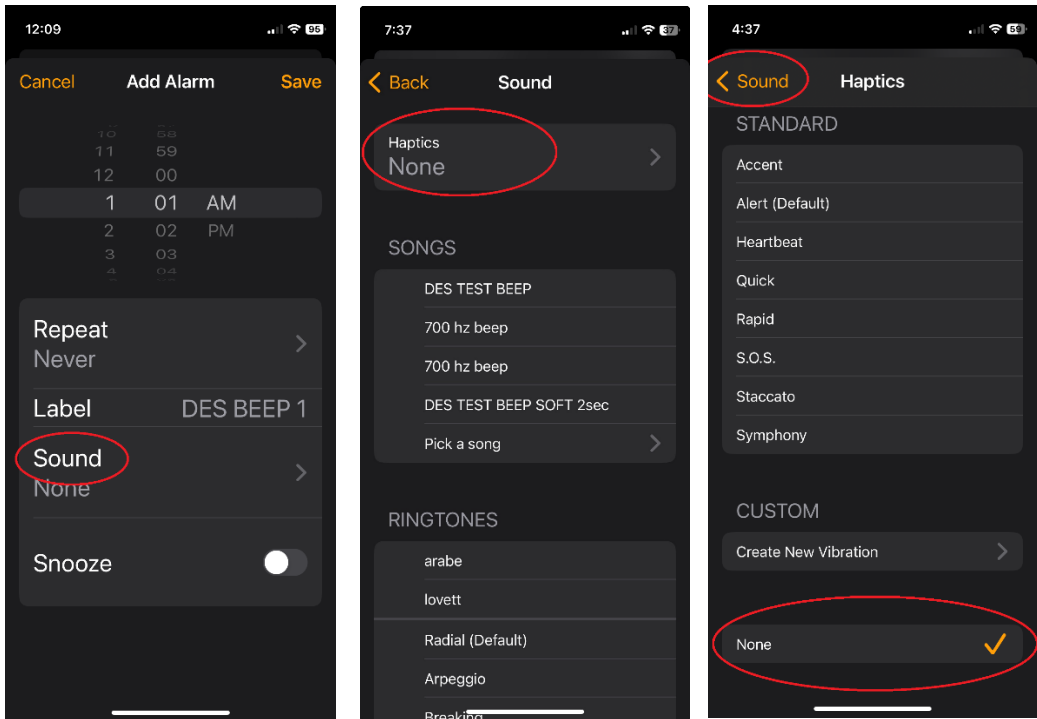
- 4. Set the time to 1:01AM; and
- 5. In **Label** enter DES BEEP 1; and
- 6. Turn off **Snooze**; and
- 7. In **Repeat** select **Never**



8. Tap **Sound**; Scroll to the bottom and select **None**; and then to the top and tap < **Back**.

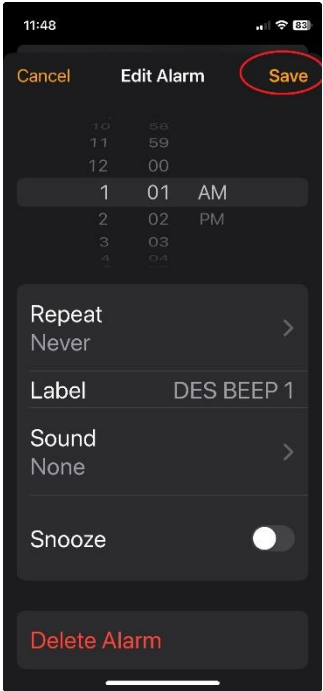


9. Tap **Sound** (again); Scroll to the top and select **Haptics**. Scroll to the bottom and select **None**. At upper left tap **< Sound** and then **< Back**.

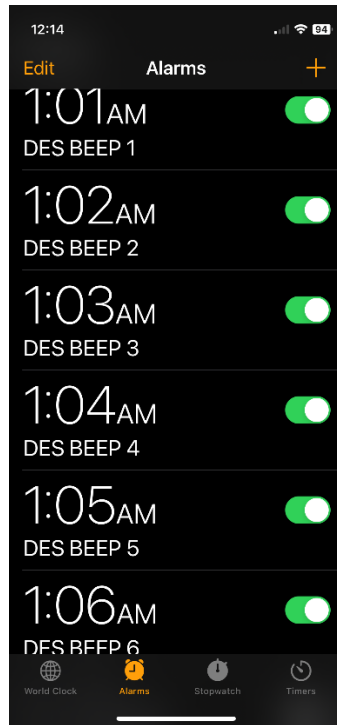


10. That should

produce a screen like this. If so, at upper right tap **Save**.



- 11. Repeat steps 3 through 10 five more times *except*:** each time in step 4 increment the time (1:02, 1:03, 1:04, 1:05, 1:06); each time in step 5 increment the label (DES BEEP 2, 3, 4, 5, 6). That should produce six alarms like this.



- 12. Turn off all the alarms for now**

4.TELL THE iPhone ALARM TO PLAY THE BEEP AUDIO FILE THROUGH YOUR AIRPODS

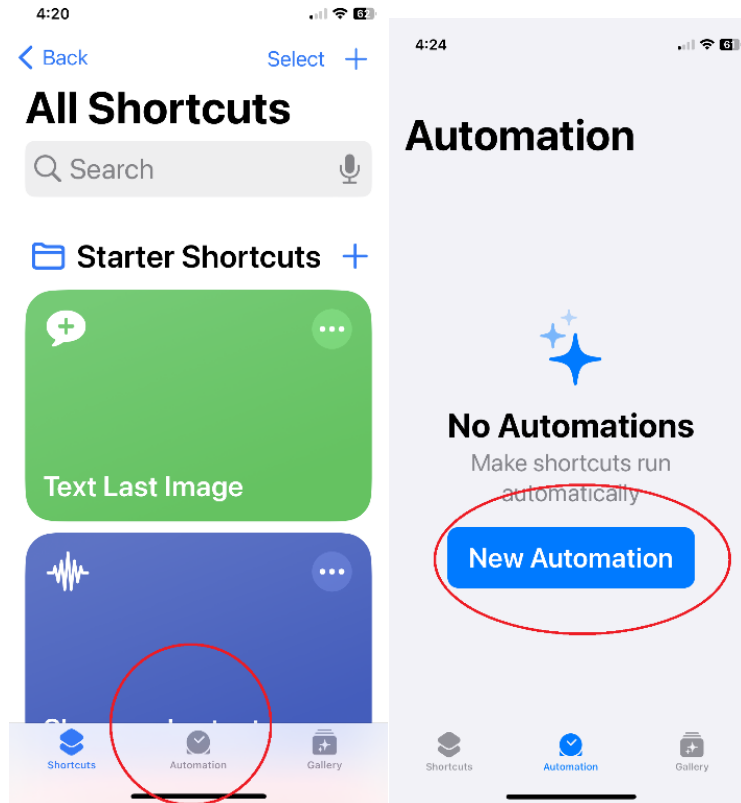
A DES beep must come through your AirPods (or earphone/earbud). Just having the phone use its onboard speaker is *not* good enough. The object is to play the beep .mp3 file rather than the alarm signal. Tell your phone to do so by setting up this automation:

1. Download Apple's **Shortcuts** app if necessary. It may already be on your phone. To find out, tap the **Search** key at the bottom of your home screen and type "Shortcuts"

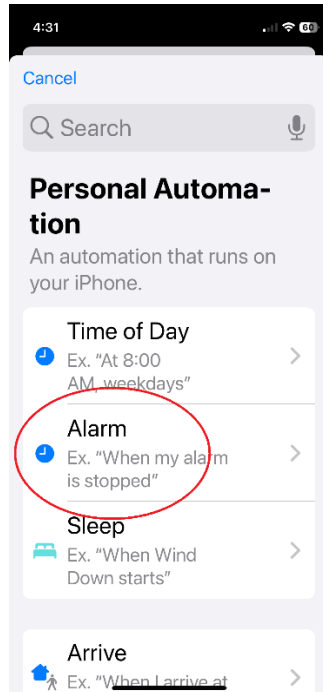


2. Open the **Shortcuts** app

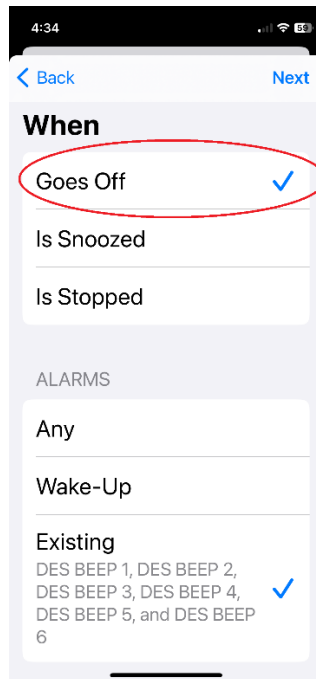
3. Tap the **Automation** tab, located at the bottom of the screen, and tap **New Automation**.



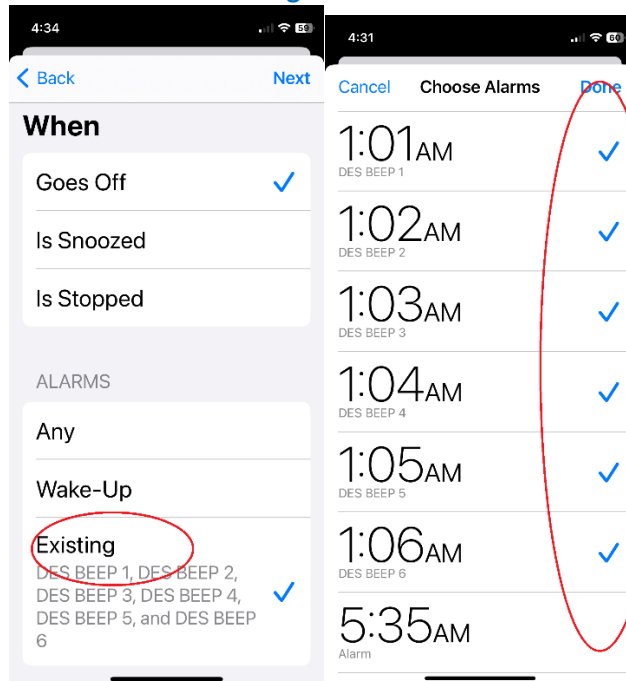
4. In **Personal Automation** tap **Alarm**



5. In **When** select **Goes Off**

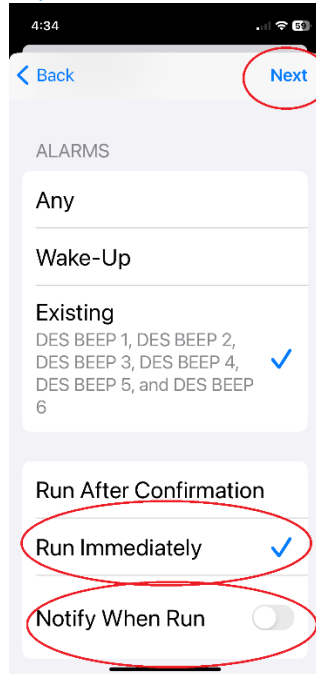


6. In **Alarms** select **Existing** and then check the six alarms you created in **Step 3**.

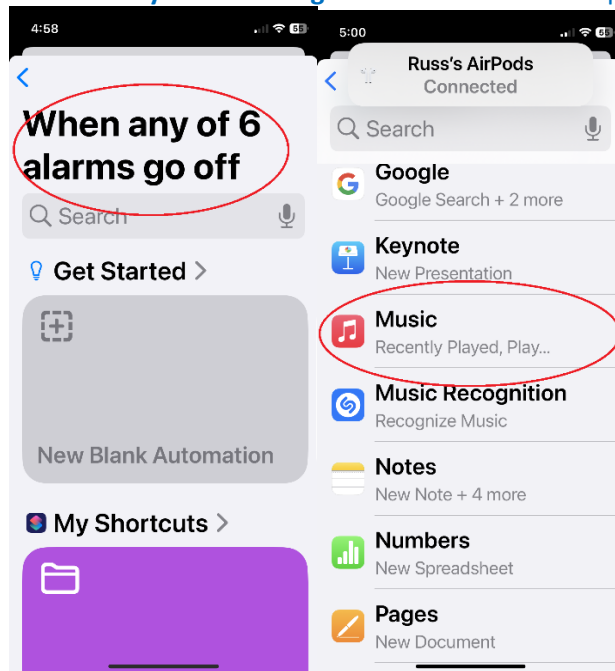


7. At bottom select **Run Immediately**; and
8. At bottom turn **Notify When Run** to **Off**; and

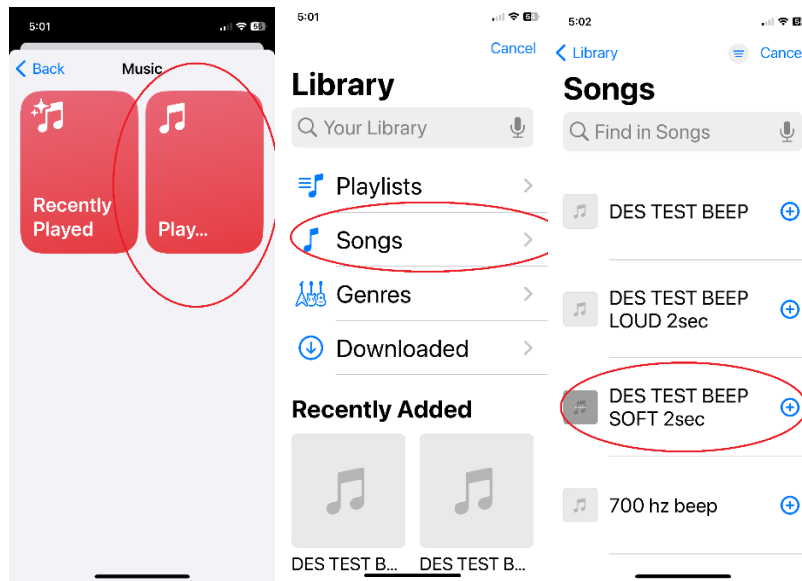
9. Tap Next



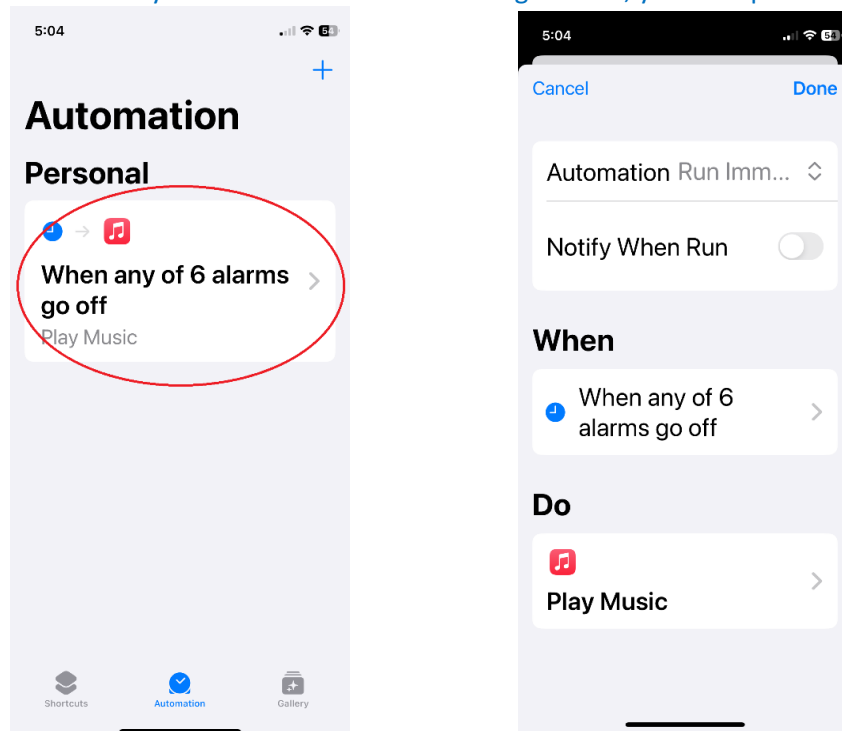
10. In When any of 6 alarms go off scroll down and tap Music



11. Tap **Play**; tap **Songs**; select **DES TEST BEEP SOFT 2sec**



12. That should take you to the **Automation Personal** screen. Tap **When any of 6 alarms go off** and you should see the screen at right. If so, your setup should be complete.



13. **Check your setup** by putting on the AirPods (earphones/earpods) and setting the time for **DES BEEP 1** for a minute from now. When that time arrives, the beep should sound through your AirPods (earphone), there should be **no** sound through the onboard speaker, and there should be **no** vibration. If that's what happens, Good!

5. SCHEDULE THE BEEPS

Choose a start time to wear the beeper and get a confederate to help you set the iPhone alarms. Have the confederate click [here](#) to get the times to set the alarms. Then have the confederate set the times for the six alarms that you created in Step 3 and modified in Step 4.

When the start time comes, put on the AirPods (or plug the earphone into the iPhone), make sure that Mute is *not* on, and then go about your everyday activities. You can always go to the Music app and play **DES TEST BEEP SOFT 2sec** to check the volume.

6. PREPARE YOUR iPhone

If (as is recommended) you are going to use the iPhone as a beeper only—that is, you are not going to do anything else (email, text, etc.) on this device—then you are finished.

If you must use the device for other actions (email, text, etc.) then you will need to cover the top portion of the screen. The problem is that the iPhone will display the “Clock now” alert a second or so before the beep sound, and seeing that will provide a warning that the beep is about to sound, defeating the purpose of the taking-by-surprise beep. For example, if you happen to be on the Ticketmaster site, the “Clock now” alert at right will overlay the top of the Ticketmaster site.

The workaround is to use a piece of masking tape to overlay the top inch of your phone screen, thus hiding the alert when it appears. That will make the usual use of the iPhone somewhat inconvenient—that’s why it is better to dedicate one iPhone to be the beeper.

