

# ifreq™

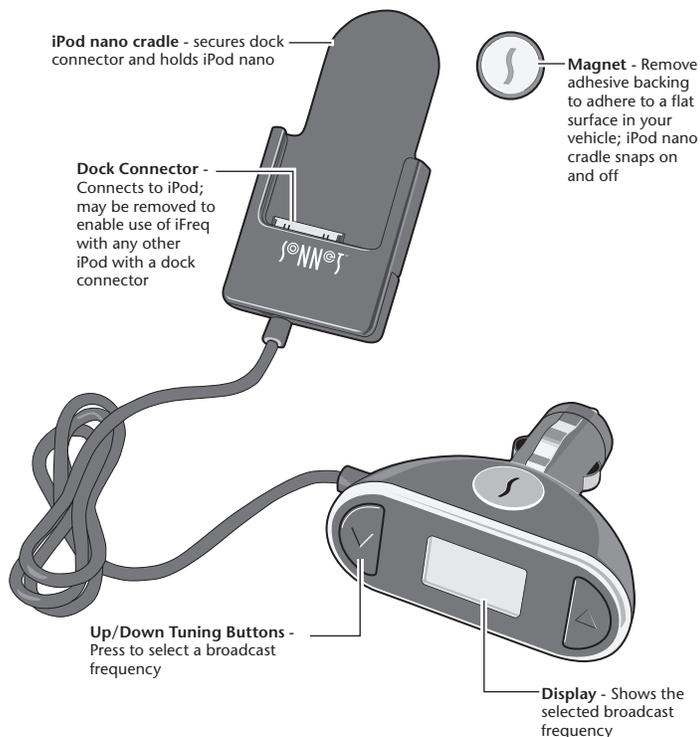
FM Transmitter + Charger +  
Cradle for iPod nano

## User's Guide



### Getting Started

This section describes the physical aspects of iFreq.



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### Introduction

This user's guide explains how to use iFreq. iFreq enables you to play your iPod's music, audiobooks, and podcasts through your vehicle's FM radio. It broadcasts on any frequency you choose (between 88.1 and 107.9 MHz) to your vehicle's FM radio tuned to the same frequency. iFreq will also charge your iPod when it is connected (does not apply to 3G iPod models).

### Requirements

iFreq's requirements are simple:

- Any iPod with dock connector
- FM tuner (analog or digital)

### Technical Specifications

Antenna	Built in to cable
Operational Voltage	+9-14.4V DC
Current Consumption	45mA maximum
Charging Current for iPod	0.4A maximum
Fuse Type for +12V in	2A glass tube, user-replaceable
Frequency Modulation	88.1 to 107.9 MHz
Tuning Type	Digital tuning, tunes in 0.1 MHz steps, last station recall
Stereo Separation	25dB typical
Auto Level Control	Built-in to prevent sound distortion
Signal-to-Noise Ratio	46dB (Stereo) 15 kHz LPF typical
Transmitter Range	Up to 33 feet (10 m), depending on FM receiver/antenna
Frequency Response	50 Hz to 15 kHz
Tuner Dimensions (WxHxD)	3.15" x 1.26" x 3.19" (8 x 3.2 x 8.1 cm)
Cradle Dimensions (WxHxD)	1.77" x 3.54" x .43" (4.5 x 9 x 1.1 cm)
Cable Length	27.5" (69.8 cm)

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### A—Mount the Cradle and Connect Your iPod nano

1. Gently slide your iPod nano into the iPod nano cradle until its dock connector is firmly seated; **if you are using a full size iPod or an iPod mini, skip to the next section.**
2. Decide on a mounting location in your vehicle for the iPod nano cradle; make sure you can plug in the iFreq into a car lighter jack and that its cable won't interfere with safe operation of your vehicle. Note where the magnet will be mounted.
3. Clean the surface that you will attach the magnet to, remove the backing paper from the magnet, and press it firmly; make sure the surface is dry and clean before you apply the magnet.
4. Snap the cradle on to the magnet.



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## B—Remove Cable from Cradle to Connect iPod

If you are using an iPod other than the iPod nano, you may still use iFreq by removing the dock connector from the cradle.

1. Remove the back cover from the cradle by sliding off the bottom door.
2. Lift up the bottom edge of the dock connector to free it from the cable retainer, and then lift the connector out of the cradle; save the cradle in case you ever need it.
3. Connect the dock connector to your iPod and find a place to lay it down; we recommend a location where the iPod is secure and won't slide around.



## C—Plug in iFreq

Plug in iFreq to an available car lighter jack so that the “S” logo is face up. iFreq will operate any time power is supplied to the jack.

## D—Find an “Empty” Station on the FM Band

Find an FM frequency between 88.1 and 107.9 on your vehicle's radio that has no radio station broadcasting on it, or when that's not possible, find the one with the weakest radio station broadcast.

## E—Set Up iFreq to Broadcast

Using the Up and Down tuning buttons, tune iFreq to the same frequency you chose on your radio. If the radio you are using has digital tuning, be sure to select the exact same number. Otherwise, the sound quality will be affected. For instance, the sound quality may be poor if you select 93.2 on iFreq when your radio is tuned to 93.3.

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## F—Play Your Music

Select your music as you would when you listen to your iPod nano through headphones, and then press play; you will hear the music through the radio. Because iFreq uses the line level output signal from your iPod, its volume control will have no effect on the radio's volume; adjust the volume on the radio.



**Support Note:** Unlike many other products, the iPod's line level output signal is affected by its EQ settings. You may want to experiment with various EQ settings to achieve the best sound quality, as some settings which increase bass may introduce distortion; Sonnet recommends that the iPod's EQ be set to Off.

Please note that when iFreq does not detect an audio signal from your iPod for 5 minutes (for example, after an album has finished playing and iPod shuts off) iFreq stops broadcasting. If your radio is still on and tuned to the empty station you used to listen to your iPod, you will hear static. When you operate your iPod again, iFreq will also start broadcasting again.

## G—Charge Your iPod

Your iPod's battery will be charged while iFreq is powered (the display is on); this does not apply to 3rd generation iPod models (with four buttons above the scroll wheel).

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## Troubleshooting

Problem	What to Check
Weak reception	<ul style="list-style-type: none"><li>• <b>Antenna</b> - If your vehicle has a rod antenna, verify it is fully extended.</li><li>• <b>Cable</b> - iFreq's antenna is located in its cable. For best results, make sure the cable is not wound up or bundled.</li><li>• <b>Radio station on the same frequency</b> - If there is a radio station broadcasting on the frequency you chose, reception will be affected; this is especially important to remember when you use iFreq in a moving vehicle.</li><li>• <b>Strong adjacent radio station(s)</b> - The presence of a strong radio station on a frequency near the one you've chosen (problematic in and near larger cities) may cause interference; try selecting another frequency.</li></ul>
Distorted sound	<ul style="list-style-type: none"><li>• <b>Different tuning frequencies</b> - Verify that iFreq's broadcast frequency is the same as the one you chose on the FM tuner. If you are using an analog tuner, try fine-tuning the dial to hear clearer sound.</li><li>• <b>iPod EQ is on</b> - When any EQ setting other than Off is selected on iPod, especially any setting that increases the bass, the sound from iPod may be distorted. Unfortunately, this is normal, as the distortion may also be heard through the headphones; <i>this is an iPod design issue</i>. Choose the EQ Off setting for the best sound quality.</li></ul>

## FCC Compliance

iFreq complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: This device may not cause harmful interference, AND this device must accept any interference received, including interference that may cause undesired operation.

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## Limited Warranty

Sonnet Technologies, Inc. warrants that this product shall be free from defects in materials and workmanship for a period of one year following the date of original purchase. For complete warranty information, go to [www.sonnettech.com](http://www.sonnettech.com).

## Contacting Customer Service

The Sonnet web site located at [www.sonnettech.com](http://www.sonnettech.com) has the most current support information and technical updates.

Before you call Sonnet Customer Service, please check our web site for the latest updates and online support files, and check this user's guide for helpful information. When you call Sonnet Customer Service, have the following information available so our customer service staff can better assist you:

- Product name
- Date and place of purchase
- iPod model

If further assistance is needed, please contact us at:

**Sonnet Customer Service:**

**Tel:** 1-949-472-2772

(Monday–Friday, 7 a.m.–5 p.m. Pacific Time)

**Fax:** 1-949-457-6350

**E-mail:** [support@sonnettech.com](mailto:support@sonnettech.com)

**Online Service Form:** <http://serviceform.sonnettech.com>

## Visit Our Web Site

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