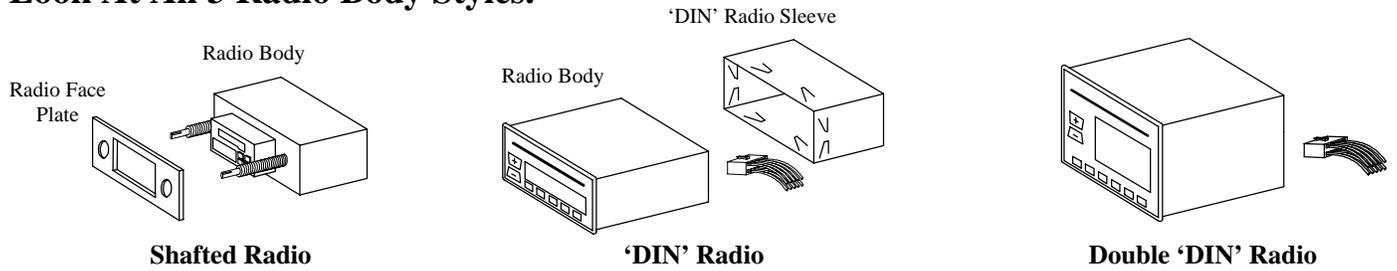




# **Radio Sizes: 'DIN' vs. Double 'DIN' vs. Shafted** **(Before You Buy, Learn The Fundamental Differences)**

Document# 999006

## A Look At All 3 Radio Body Styles.



For additional information on similar topics, please consult the following technical documents:

**999005** Why Use Radio Installation Kits (Why Do-It-Yourself Installs Look Amateur - Do It Like The Pros)

**999007** Mounting Your New Radio To An Indash Installation Kit

**999010** Radio Security (How To Stay One Step Ahead Of Thieves)

## The Auto Makers Factory Radio Is Bigger Than This Radio. What's Going On?

When shopping for a new replacement radio for your vehicle, depending upon the make and model, you may quickly notice that new radios are different in size than the radio that was installed by the auto maker at the factory. What do you do?

The car audio market has taken care of this for you. A vehicle owner shopping for a new radio will have many choices to choose from such as CD players, cassette players, cost vs. performance, detachable face, as well as brand preference. Now there are choices as well the buyer will have to make regarding the size of the new radio.

To standardize the design and manufacturing of new replacement radios, car audio or more specifically car stereo manufacturers have begun to design and produce radios around the 'DIN' radio body style. This 'DIN' radio body style is rectangular (2" high x 7" wide) which can be adapted to virtually every vehicle produced today. One offshoot of this body style called the Double 'DIN' radio body style (4" high x 7" wide) is designed to fit certain auto makers radio dash openings which use a larger radio or a combination of radio above a pocket or tray. To understand a little more about these 'DIN' radio body styles we need to take a trip to the past and look at a third body style, the original car stereo body style, the "shafted" radio.

## The Car Stereo Your Parents Listened To.

Up until the mid to late 1980's, the standard car stereo found in many vehicles was the "shafted" radio. Before the days of digital displays and digital tuning were the days of analog radios which required someone to turn a knob to tune to their favorite radio stations. The "shafted" radio is designed with a knob on the left, usually to turn the radio on and to control volume, and a knob on the right to tune the radio stations. In the middle was the radios display box where you might find an old 8-track tape or the state of the art (at that time) audio cassette tape.

The "shafted" radio has seen many changes: the addition of digital clocks, digital tuning, digital displays and other cosmetic changes. But, this body style just would not allow a CD to be inserted. This was the death of the "shafted" radio. Shafted radios also had another drawback: many times they were too hard to remove and install. Due to the design of "shafted" radios these radios required them to be installed from the rear of the dash. This also meant that they had to be removed in reverse direction, usually requiring the removal of lower dash panels, air conditioner ducting, all while trying to keep your hands from being cut and scraped by the metal and hard plastics auto makers designed their dashes with. With the advent of CD players and the public's desire to listen to CD's in their vehicle, the 'DIN' body style of radio began to claim a stake in the car audio market. As this happened, car stereo installers were forced to modify a customer's vehicle to accept this new 'DIN' body style. In order to do this, a vehicle's dash had to be cut to allow the 2" high x 7" wide 'DIN' radio to slide into the dash from the front.

Eventually, auto makers saw the need to design dashes and new radios to allow the use of CD's in their factory radios. As this began to happen, the shafted radio quickly decreased in popularity. Shafted radios are still available, but are almost exclusively sold as entry level radios.

## Selecting Then Installing A New Radio. What You Need To Know.

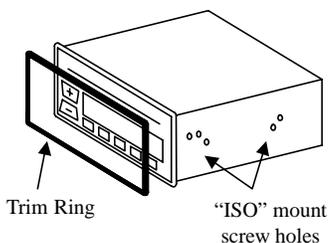
**Shafted Radios:** Shafted radios purchased for vehicles made after the mid to late 1980's will most likely need an indash radio installation kit. Unless that vehicle originally had a shafted radio installed by the auto maker the shafted radio will not fit into the vehicles dash unless it has something to mount to. Shafted radios are designed to mount to a dash by securing the shafts of the radio itself. Most modern vehicles will leave a square or rectangular opening in the dash preventing a shafted radio from being installed. An indash installation kit can be purchased that will adapt that particular vehicles dash to accept a shafted radio. The shafted radio will mount to the kit, and the kit can then be mounted to the dash of the vehicle.

**Note:** when selecting a shafted radio, make sure that you understand the cost of adding an indash radio installation kit. If the cost of the radio is an issue, many times the cost of adding the installation kit will allow the buyer to upgrade to a 'DIN' radio which may not require the use of an installation kit (depending upon the vehicle).

**'DIN' Radios:** This radio style can be installed relatively easily in the majority of vehicles produced today. For some vehicles, 'DIN' radios are direct replacements for the auto makers factory radio requiring no indash installation kit in order to mount it to the dash of the vehicle.

Other automobiles which use a larger size radio from the auto maker will require an indash installation kit in order to mount a 'DIN' radio to the vehicle. Hundreds of kits are available for virtually every vehicle made. Since every vehicle is different, each kit will vary from every other kit. When selecting a new replacement radio, for vehicles with larger radios installed from the auto maker, make sure to factor in the cost of an installation kit.

For vehicles where the auto maker used a 'DIN' sized radio, an indash installation kit may or may not be needed. There are some auto makers that combine a 'DIN' style radio to a pocket or tray located below the radio. These vehicles pose an interesting decision for the owner of the vehicle. Some auto makers (Nissan, Toyota, and others) attach the their factory 'DIN' radios to the pocket below the radio by using side brackets which simply unscrew from the side of the radio. For these vehicles, a new replacement 'DIN' radio, if designed with this option (see **NOTE** below), can accept the bracket and pocket. This is called "ISO" mounting the radio. In other words, the new replacement radio is truly a direct replacement for the auto makers factory radio. The auto makers original radio simply unscrews from the side brackets and pocket below the radio, and the new replacement 'DIN' radio slides in and even uses the same screws. A decision? The vehicles owner will have a decision to "ISO" mount the radio, or use an indash installation kit. When removing the factory radio and attached pocket or tray, the owner or installer may decide to use an installation kit to mount the radio to the dash of the vehicle instead of the "ISO" mounting method. The Install Doctor recommend using the "ISO" mounting method when possible. This "ISO" method is a more secure method to mount the new replacement radio, plus it allow the vehicles owner to keep the pocket or tray below the radio as well as having to add on the cost of the installation kit. An installation kit, unless designed with a pocket, will cover the space with plastic.



**Note:** not all 'DIN' style radios can be "ISO" mounted. In order for a new 'DIN' radio to be "ISO" mounted, the trim ring which surrounds the face of the radio must be able to be removed. When "ISO" mounting a radio, the trim ring is removed and the radio is installed without the trim ring. "ISO" mounting a radio mounts the radio and bracket to the dash BEHIND the dash panel which covers the radio opening. If the trim ring of the new "DIN" radio is left on, the dash panel will hit the trim ring and not reinstall properly to the dash. To prevent this, some but NOT ALL stereo makers design their "DIN" radios with the trim ring removable. When selecting a new replacement 'DIN' style radio, make sure the trim ring removes from the radio.

**Double 'DIN' Radios:** This body style is usually only available for certain auto makers factory radios. These double 'DIN' sized radios are designed as a replacement to auto makers radios that are oversized or used a 'DIN' radio attached to a pocket or tray. Before selecting a double 'DIN' radio, you might want to check with an installer in your area to verify it will fit your particular vehicle. The Install Doctor views double 'DIN' radios as more gimmick than anything else. Most double 'DIN' radios simply add fancy graphics displays without adding any real value to the radios performance. The Install Doctor recommends using a standard 'DIN' sized radio installed with an installation kit or installed using the "ISO" mounting method described above.