

## REPRINT

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## PRODUCT TEST



## DENON 2200F CD PLAYER & DN-820 Mic Mixing Pre Amplifier

There is an exciting revolution going on in the Mobile Entertainment industry. Manufacturers are finally listening to DJs and KJs and using their input in new product design! This cooperation has resulted in improved mixer design, better sounding speakers and amps you can lift with a single finger. It has also defined the standard in the industry for professional dual CD players.

Since there has not been a system specifically designed for the Mobile DJ/KJ, the sheer economics of offering clients a professional karaoke presentation has made it too costly for many DJs. One could opt for a less expensive consumer line karaoke system, but the reliability of these machines on the road remains questionable. What DJs have needed is a karaoke CD+G (Compact Disc with Graphics) player that will interface with their current system and be reasonably affordable. The Denon DN-2200F, combined with the DN-820, could be what DJs who recognize the profit potential of karaoke have been looking for.

Regarding external appearance, the DN-2200F Dual CD Player is an exact twin to the popular DN-2000 (introduced less than two years ago), with a single exception. All the basic features of the DN-2000 are retained, including "Pitch," "Pitch Bend," "Search" and "Track Selection." A little orange button, positioned in the exact center of the controller, sets the new unit apart from its predecessor. Labeled "KARAOKE," it switches the unit from standard CD to karaoke mode, but to say it turns the player into a karaoke machine is an over-simplification.

The DN-820 Mic Mixing Pre-Amplifier is a versatile and well thought-out piece of electronics. Not only does it provide the typical professional karaoke functions, such as

digital echo and key control, it also allows the user to mix and superimpose video over the CD+G lyric lines. RCA inputs are provided for virtually any audio/video combination, from standard cassette tape or CD player to VCR or camcorder. In addition, a "Vocal Changer" replaces the vocals on a standard tape or CD with those of the live singer via the mic. A "Vocal Reducer" cancels vocals on stereo sources so that only the karaoke accompaniment is played. With

1/4" inputs for three microphones, the DN-820 doubles as a handy sub-mixer for your main board. In the unlikely event that your main mixer should ever fail on the road, you could get by using just the DN-820, although your mixing capabilities would be limited.

Hooking up the DN-2200F for "CD only" play is no different than with the DN-2000. Using a basic "ins-to-outs" approach, we connected all audio lines, as well as the DN-820 sub-code input, to the corresponding outs on the DN-2200F transport. The result of this method was fair, but to assure that we had in fact tied everything together properly. we compared our wiring to the manual. It became apparent that the wiring diagram shown had some serious inconsistencies. A call to Denon yielded a proper diagram (see back), which gave us much better results. Using this schematic, we found we were not only able to use the CD and karaoke modes separately and exclusively, we discovered that the three mic inputs remained live even when not in the karaoke mode. This allowed the front panel jacks to be used as DJ inputs as well as karaoke mics.

As a karaoke mixer, the DN-820 was exceptional. The placement of the three mic level controls made adjustments easy, even while trying to balance a duet or trio. The digital echo, when used with the surround sound feature, can dial up reverb in a range from "non-existent" to "that's way too much." When used in combo with the dual drawer DN-2200F CD player, this system allows superb control of live-to-background mix and the ability to segue from disc to disc. In addition, DJs can now intersperse sing-along segments as requested throughout their show with the push of a button.

## DN-2200F/DN-820 APPLICATION TIP Optimizing Hook-Up for DJ Use

Denon's DN-2200F/DN-820 combination was designed with flexibility in mind to adapt to many applications. This Application Tip is for DJs who want to maximize the DN-2200F for dance mixing and karaoke entertainment.

The only system requirement is a mixer with 3 stereo line inputs. By following the Quick Summary and diagram below, Channels 1 & 2 of the mixer will work exactly like a DN-2000F when the orange Karaoke button on the DN-2200F is off.

When the Karaoke button is switched on, Channel 3 on the mixer also becomes active. The input to Channel 3 includes all of the enhancements you will require for karaoke, including three microphone inputs with digital echo, Voice Cancel & Multi Sound Balance for special multiplexed karaoke CD+Gs, and Voice Reduction to help eliminate lead vocals from regular CDs.

To make your karaoke show unique, try superimposing a video of the singer onto the TV by connecting the output of any video camera to the V-Aux Video input on the DN-820 front panel. Then select the CD-G/V-Aux input to watch your "talent" live.

