

G-MASK98

KENWOOD

Guerrilla

CAR

How to make
MASK talk
dirty, and
other sneaky
car stereo
tricks and
tips

Confidential | F



I'm not saying you should actually do this. I'm just saying you can if you want to.

Once again I've discovered something about a Kenwood product that the geeks would probably rather you not know.

In this case it's a feature on the new MASK units that let you make any mes-

sage you want scroll across the display.

It doesn't matter if somebody turns the thing off and then

turns it back on. Your message will pop up again and start rolling happily along, reminding everyone of your incredible prowess.

The Secret of the New Demo Mode

Take a new 1998 MASK unit out of the box and it will behave normally--until you enter the secret code that makes it go into demo mode. Here's what you do:

Turn the power on.

Hold down the DISP and AUDIO keys and then press RESET

Now you can program in your subversive message--up to 32 characters. Here's

how:



- Press the NAME SET key to begin.
- Use the arrow keys to select the segment of the display you want to program.
- Use the FM/AM keys to scroll through the characters. When you've got the one you want, use the arrow keys again to select the next segment.

You can amuse yourself by programming in things like BILL GATES IS A SKINNY DORK or BARF IF YOU LIKE THE SPICE GIRLS. However, after that gets boring, you might program in something that will sell units and put money in your pocket. Things like ASK BOB THE SALES GUY FOR A DEMO or LOOKS COOL SOUNDS EVEN BETTER or ON SALE FOR A GREAT PRICE TODAY.

Now a few things you should know about the demo mode:

- As I said, once you program it, MASK will stay in demo mode even if it gets turned off and back on again. To deactivate the demo mode, do the same thing you did to activate it: Hold down the DISP and AUDIO keys and then press RESET. Now MASK is back to normal.
- In demo mode, MASK will close when you turn it off, but then it will open again automatically after 30 seconds, which is a nice little surprise if you're demoing it in front of a customer.
- Code security is inactive in demo mode, which means you can't program in a security code.
- Aside from the stuff above, MASK will operate normally, the only other difference being that if you leave it idle for more than five seconds your message will begin to scroll.

The Kenwood Guerrilla is published by me, the Kenwood Guerrilla. I'm a Kenwood tech writer whose identity is unknown (and I plan to keep it that way). Last year I got fed up with the boring technical crap and propaganda put out by corporate so I started putting out my own technical crap and propaganda. Now I have been joined in my mission by the Strange and Beautiful Sheila (not her real name), whose staggering techno knowledge makes grown geeks weep. We publish whenever we feel like it, so don't complain to me if you don't see the KG for a while. All opinions, especially the vicious ones, are mine. Any typos, mistakes, or slanderous accusations are part of the natural beauty of this all-organic, hand-made product. Have a nice day.

Kenwood GuerrillaPublisher & Editor

The Strange and Beautiful Sheila (Not Her Real Name)TechnoBabe Extraordinaire

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Thank you for helping us out

Not amused yet? Want cute pictures?

Kenwood geeks didn't forget those of us who tire of reading after, say, two or three words. So they put in some extra display stuff for this year:

- First off, the red triangle lights up to indicate power. Not exactly a picture, but it looks good.
- You'll notice that the MASK display now has four colors instead of three. Pretty!
- While it's running, it shows a new running indicator, a sort of spinning UFO kind of thing. Pretty!
- The KDC-PS809 has a 16-dot matrix display which gives it better resolution. But that's the boring part; what's fun are the graphics. You can make a line of dancing dolphins bounce across the display. I'm not kidding. Pretty!
- Also on the KDC-PS809, you have a whole separate display area that shows different icons for CD, TAPE, TUNER or 10-band spectrum analyzer. Say it with me: Pretty!

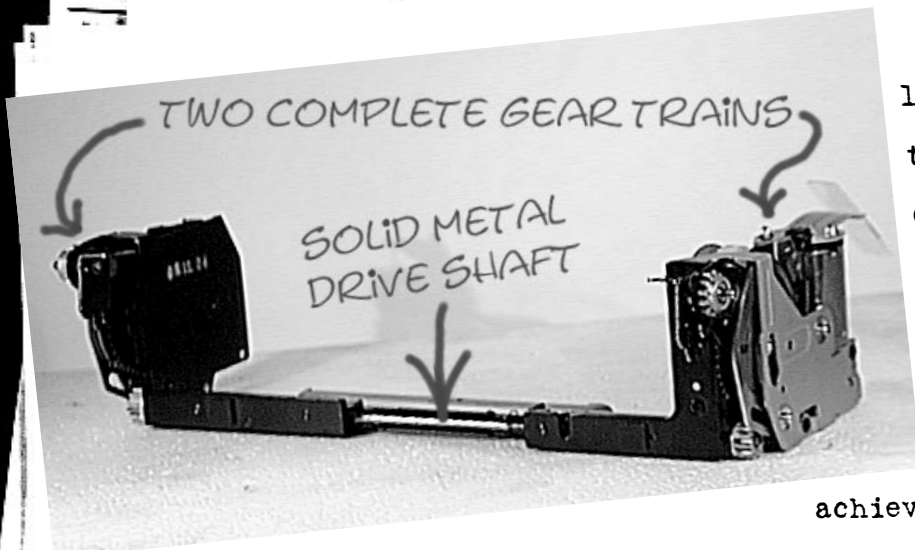
And all this pretty stuff does serve a purpose. Adjust the volume, bass, treble, or seek a radio station or track, and the display will use graphics to show you what you're doing.

Still built like a Hummer on steroids

As you can see on the next page, this year's MASK is just as buff as last year's, which is why its operation is so damn smooth. Two complete gear trains, one on each side, and a solid metal shaft from one side to the other make it so both sides are evenly powered. Both sides use metal gears and solid brass spacers. There's even a spring-loaded take-up reel that keeps the ribbon cable to the faceplate out of the way. That's why it'll



The picture above is my little joke. Kenwood would never put something this idiotic on their displays. They put on dancing dolphins.



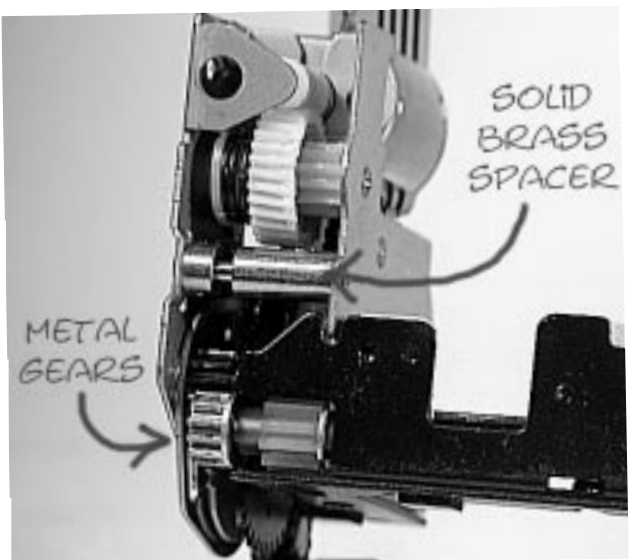
last a long time. I still give it the Guerrilla Housekeeping Seal of Approval.

One more thing. On all MASK models the LCD display is now white, which makes it easier to see. It's a bigger trick to

achieve than you might think. Check out

why in the new column "Talk Techie to Me" by the Strange and Beautiful Sheila (Not Her Real Name) in this issue.

And talking about looks, the outside also got some spiffing up: the rear panel and trim ring match the faceplate color, the rounded edges and blind sheet on the escutcheon look better when it's closed, and the trim ring fits closer to the faceplate. Plus, for Japanese cars, MASK units come with an iso-mount kit with an alternate trim ring and two mounting brackets.



And a couple of more changes: the secret switch position is now on the lower right side. (Damn! Now that I let it out, I guess it's not a secret.) And the Valet Wire has been eliminated, probably since nobody knew what it did anyway.

MASK Security: Will work for code

With the security code on, a MASK unit that's been disconnected won't work when reconnected, so thieves lose out. Entering the secret code will revive MASK if, for example, it's been disconnected to service the car. This year MASK displays "Security Code On" if it's active. To activate the security feature, users program in their code once, then again to confirm. Once MASK accepts a code, that's it. Can't change it. So tell customers to pick a memorable code. If they forget, they have to send the whole unit to Kenwood, and they've got to prove they're really the owners. Which is actually a pretty good reason all by itself to send in the registration.

How to freak out your fellow sales person with MASK's little bro: the new flip-down faceplates

On these new units, the faceplate flips down so you can put a disc or cassette in, and the faceplate is also removable. That way there's more room on the front for a bigger display, just like MASK.

Now if somebody selling in your store doesn't know about these Kenwood units yet, get one, flip down the face, and show it to them, real sudden-like, and say, "Dude! This MASK unit's broken. See? The little spinning arms fell off." Then yank out the faceplate and say, "Whoa! Now it's really messed up!"

Once the joke's over, take advantage of their lingering bafflement to show off what you know:

- First off, this guy doesn't drop his face with a clunk like other drop-downs. It lowers smoothly because of its damped suspension.
- The source key is a lit blue triangle, which makes it supereasy to use. And when you push the AM, FM, fast forward, or reverse keys, a graphic of the key lights up on the display, confirming your choice.
- You put a disc or cassette in the same way you do with MASK.
- To take the faceplate off, you just slide it a little to the left or right. Putting it on is way easier than most removable faceplates: you just put the faceplate against the unit and slam it in place.
- If you don't want to remove it, you can lock the faceplate on the unit with two screws. That locks it to the flipdown mechanism; it still opens, but the faceplate can't be removed without taking out the screws.





Editor's Note: On a recent spying expedition I met a girl in the engineering department, some secretary I figured. Turns out she's an engineer who can kick my butt up one side of a schematic and down the other. I present to you my new partner, The Strange and Beautiful Sheila (Not Her Real Name).

I see the light

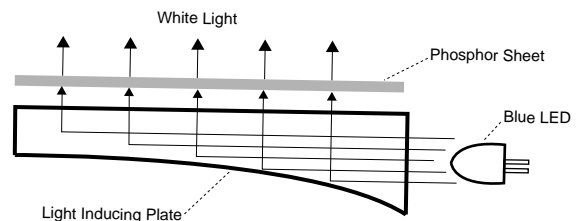
One thing about me is I'm forever taking things apart, which my mom always thought was weird for a girl. Especially that day when I was ten when I rewired the TV's sound to go through my brother's Marshall amp. My version of home theater. Caught heck for that.

So I wanted to tear into the new Kenwood car head units with white LEDs to see how they worked, and I got a chance to the other day. Also got curious about how other companies did it, so I tore apart some Brand C and Brand P units, too.

You guys probably know that the light source of a LED is normally a color. To get a white display on a radio's face, you have to use phosphor, which glows white. But just like the phosphor that coats the inside of a TV picture tube, you have to excite phosphor to get it to glow. Each company building head units with white displays does it differently. What's cool is I really feel like we did it best.

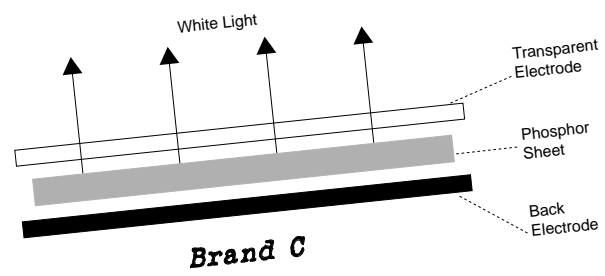
Check out the pictures here while you read my descriptions and you'll see what's going on. Brand C uses an LED like Kenwood, but they deflect the light to hit a phosphor sheet. The problem is that it's not all that bright and you have to be looking right at it to see it well, since there's just that little bit of phosphor glowing on the surface. Plus, a sheet of phosphor fades after a while.

Brand P skipped an LED altogether. They made a sandwich with a sheet of phosphor in between two electrodes which excite the phosphor. But that

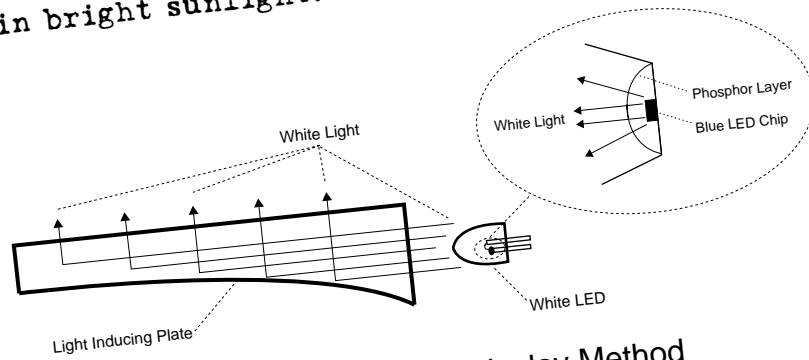


Brand C

has the same problems of fading that Brand C does, plus, since the electrodes are right there where they can get damaged, the whole thing's subject to fail easily and soon.



Now look at how we did it. We put the phosphor inside the LED itself, so the light that's deflected is already bright white. In fact, this year's model is 50% brighter than last year's. You can see it easily from lots of angles. Even in bright sunlight. Works for me because half the time I'm driving I'm looking in the mirror (I'm not vain, but if you're a girl you have to put on make-up somewhere). Don't want to be squinting at my radio to see what it says. As far as durability goes, I'd guess



Kenwood White LED Display Method

Kenwood's method will last about three times longer than Brand C and probably about twenty-five times longer than Brand P. So you can learn a lot by tearing something apart. Not officially part of my job as an engineer at Kenwood, but the Guerrilla sort of encouraged me. He's like that.