



# NEWSLETTER

Spring / Summer

[http://the\\_copycat.tripod.com](http://the_copycat.tripod.com)

2008

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Welcome to the semi-annual newsletter. This issue is late in the season, I must apologise. Also, my old snail-mail is no longer valid. A move to save the old post office by repairing and remodeling it into a Museum has taken place.

Those of you who are new to CCMM will be receiving my new addy shortly. If you are waiting for a reply to any of the material sent, please resend all to the new address that I will provide.

You will need to resend any available data to one of my email in order for me to validate your contributions.

Sorry, but this is for the best, and it won't take long... Thank You,

cc

**NOTE:** the power circuit can be removed, and a regulated voltage can be applied in its place...so guess what....cigarette lighter or Batteries. The battery connection for this is simple, and it only requires a replacement plug or similar power-connector.

### Now for a little on the antenna stuff...

The DTV signal is in the UHF frequency range, and there is a lot of accessories already on the market for those familiar with the band and its range.

Weird as it seems; the new digital TV is limited to "line-of-sight" transmission which is to say...stupid! Anything in its way can block the signal; that's walls, buildings, trees, mountains, etc...

The \_buy & try\_ method for a new DTV antenna can be old and annoying for some. Many will probably give-up scanning and just settle for those channels that seem to come in.

For me; I can't get that damn signal tone out of my head... I keep hearing it everywhere, even in my sleep!

I can only imagine what you might be going through. I hope it's quick and painless. At first; "scanning" on the DTV; I used a standard set-top antenna.. (old fashioned rabbit-ears with the Loop).

It worked, but only half the stations came in at all, and even then you'll need to constantly rotate the antenna.

Local and special events, weather, and traffic reports are just a few things now being broadcast. Many more new stations will be up and running on or after February.

When I last watched; the DTV channels in my area did NOT welcome me to the new age, in fact none said anything about how happy they were to be there, and that they were glad I tuned-in.

Almost half of the available channels in my area have already been answered for, and now I see 3 new channels are being applied to the lineup.

At the time of this newsletter; the FCC has posted its "last chance" to sign up for the designated DTV channel lineup. Broadcasters, & wanna-be's; who did the math and filled-out their apps, are now in the final steps of getting their new transmitters on-air.

Check the FCC's website for:

DTV Channel Assignments or Allotments

If you live in the Las Vegas area, and have a very good antenna; please [e-mail me](#) with your findings.

(Text File) [Las Vegas DTV Channel List](#)



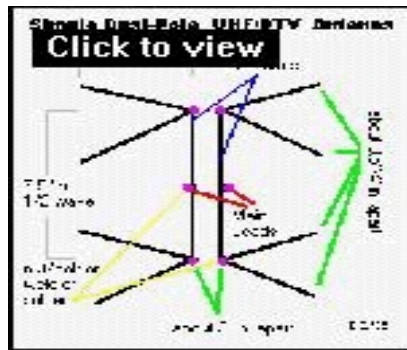
The first thing I need to cover; is the TV Converter Box Coupon Program, and the standard digital tuner box.

If you were one of the lucky ones that took the time to apply for the new TV coupon program late last year, or earlier this year; then you know what is happening in some areas.

(Click if you have not yet signed up) <https://www.dtv2009.gov/>

Its no surprise that theres NOT enough cheap boxes, and its no news to me that; the manufacturers never wanted to make them in the first place. They would rather you go out and buy a new digital TV with a tuner built-in.

I myself waited till the last minute to file. The "12 month" program started in the last week of February. You are entitled to ask for 2 coupons and you must use them within 90 days of the mailing date. To check the status of your application use the link above. The coupons are actually Federal Credit Cards, and are digitally approved. They are free and can take \$40 off the total cost of the new box.



Here is a basic (bow-tie) approach to getting UHF/DTV (400-800MHz)

First, you'll have to find some copper or metal wire. They need to be straight and cut into 15" inch pieces. Remove any enamel coating on each of the newly made rods with some light sanding.

Next, you'll need to have about 3ft or 6ft of cable/antenna wire with an RF connector on one end.

Bend 4 of the pieces of wire to make "V" shapes, and space the open ends (top of the "V") so that they are spread about 4 inches, then mount them onto the ends of each director rod.

Solder, weld, or use small screws to connect all V's to each director. the directors are 1/2 wave (7.5" in.)

Each bow-tie should be at the ends on each director. Keep at least 2" in. apart, then mount securely to a non-conductive material.



I made this antenna out of 12-14 gauge copper, and mounted it inside a colorful school-type folder. (beer not included). You might use coat-hangers or aluminum, instead of copper wire.

OK, Here it is...



After an hour of cutting and soldering, my mobile DTV receiver is finally finished. I can now go to the park and; reach up and grab the channels, that I so desperately need to "store".

With help from mother nature; and those that remind to; "go fly a kite"... I can say;.. " I will!"



I'll fly it to an altitude of 300 feet, and then...I'll hit the the scan button!

Using a Coby PMP 4320, I can watch and record my shows quickly and easily. All the files are automatically encoded as MPEG-4.video.

This is the RCA-DTA800/B found at Walmart for about \$49 and it comes w/Remote and (1) RF cable (A/V cables not included)

Click below for RCA support information <http://www.1800customersupport.com/rca>

Magnavox is also sold, but its about \$10-20 more and slightly better, it maynot be the model compatible to the TV Coupon Program. To see a list of compatible set-top boxes; click below:

<https://www.dtv2009.gov/Boxes.aspx>

Once you have a DTV converter, the next step is to "scan" for DTV stations broadcasting test signals or normal programs. You will have move the antenna ALOT, in order to find the best signal(s).

There can be several different signals from several different directions. If you have an outdoor antenna already, and it includes a "yagi" or other type of UHF antenna, then your likely to get the best signals from rotating that.

If you live in an apartment and cant erect an outdoor antenna, then try and shop for a model designed just for indoors and can recieve HD with at least a 20db gain, but more on that stuff in just a sec...

Now here is the inside of the RCA converter box. It uses a Broadcom BCM-3543KPB5G GPU, and is powered by a dual 12vdc circuit board.



[Click here to view image](#)

there is only one set of RCA audio/video outputs and 1 RF connector that goes to your TV. (your tv needs to be on channel 3 or 4), a VHF channel switch, a RF Antenna input and a \*Smart Antenna input.

(\* the Smart Antenna is an automatic powered unit that can scan a 360' degree direction indoors or even out.)

Mount and attach the antenna cable's "main-leads" to a standard TV filter...Done!

NOTE: do not paint antenna, if you intend on mounting this outside, use a light coat of WD40 or similar protectant.

This antenna can also have a mesh wire "reflector" that can produce even better directional reception. You could even go further with this; just (double) the director's length to 15" inches, and mount 2 more "V"s at 7.5" intervals

Keep doubling everything; just as long the divisble wave length equals the original size.  $15" \text{in.} / 2 = 7.5"$

A basic knowledge of engineering and mechanics is needed in order to fully get the best antenna and signal. If you need help on getting the right antenna and cant wait till my next newsletter, checkout some of these links:

<http://www.warrenelectronics.com/antennas/4220.htm>

**And here is one of the best!**

<http://www.arrl.org/>



or more on the DTV Kite, wait till my next issue.... For more on the COBY PMP, (discontinued) check the web or get my next eBook. You can also see some of the other devices like a PMP at

<http://www.youtube.com/thecopycat2>

CC-

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**FALL NEWS UPDATE**  
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The Fall'08 Newsletter is going to be carried to the Spring'09 issue, all new members will be added as usual to the April mailout.

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Mobile DTV & DTV Kite

Special Note: the "on/off switch" added to the RCA 800; it mearly puts it in a "lockout" state by turning off the power to the front panel (IR receiver); thus fixing the IR problems and accidently turning the unit on or off.

The DTV Kite has to have a wingspan of 6ft. and winds not to exceed 30mph. It needs to lift 300ft of wire lead PLUS a safety-teather and harness line. I use Mason Polyline (it works best) for a lite and flexible safe-line.

As for the PMP; Coby has droped supprt. I am looking at new portable video devices. I have a few places to visit and will post what I found in the new e-Book (#29) and online at:

<http://www.youtube.com/thecopycat2>

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