

Think^{TV}

DTV Help Center

1. Scanning, rescanning and searching for channels
2. Some or all channels are missing
3. Antennas
4. No signal, weak signal, picture freezes up
5. VCR help
6. Using the converter box remote
7. Connecting converter box cables
8. Lost or expired coupons
9. How to choose a converter box
10. How to get more help

SCANNING, RESCANNING AND SEARCHING FOR CHANNELS

WHAT SCANNING IS

- When your TV or converter box is first set up, you must take steps to find the channels in your area. This is called scanning or searching for channels.
- And, when channels change frequencies, like after midnight between May 01 and June 13, you must go through the scanning process again to update your TV or converter box with the new, changed channel locations.
- If you have a converter box, you need to rescan the converter box, using your converter box remote, NOT your analog TV remote. If you have a digital TV (and no converter box), you still need to rescan the TV using your TV remote.

WHEN TO SCAN

- Every converter box and every digital TV needs to be scanned when it is new.
- Scan whenever some or all local stations turn off analog May 01, and again on June 13th.
- If you lose a digital station you previously received -- rescan!

HOW TO SCAN

- Scanning is simple. Your TV or converter box knows how to do it.
- You use your remote control and the menu function to start a scan.
- If you have a digital TV, use the remote control for the digital TV. If you have a converter box, use the remote control for the converter box.
- Look for the menu button on the remote.
- Consult your owner's manual for instructions. The up/down and left/right buttons move you through the on-screen menu.
- Once you start, don't press any buttons until the screen says the scan is complete. This could take a few minutes.

See the next page for easy scanning steps for specific boxes.

QUICK SCANNING HELP FOR THE MOST COMMON CONVERTER BOXES

- **Apex DT250 (Best Buy)**: Press Menu button, highlight and select Auto Program by pressing OK (See page 12 in the owner's manual)
- **Digital Stream 9900 or 9950 (Radio Shack)**: Press Menu. See that CH (on upper left) is selected. Highlight Auto Scan in the column headed Channel. Highlight Rescan. Press OK to begin. (See page 6, top right)
- **Dish TV Pal (Sears)**: Press Menu, highlight and select Setup, highlight and select System Setup, highlight and select Installation, highlight and select Setup Wizard and have it scan for channels. (Page 16). Also as part of the initial set with the Installation Wizard (page 4, step 14)
- **Insignia NS-DXA1 or NS-DXA1 APT (Best Buy)**: Press Menu, highlight and select Setup. Highlight and select Auto Tuning (See page 7)
- **Magnavox TB 100MG9 (Wal-mart)**: Press Setup button. Progress through the Setup Wizard to the last step, Channel Scanning. Select Channel Scanning. Alternate route: Press Setup ->Channel ->Autoscan (See page 13/14, paragraph 9)
- **Philco TB100HH9 (Fred Meyer)**: Press Setup button. Progress through the Setup Wizard to the last step, Channel Scanning. Select Channel Scanning. Alternate route: Press Setup ->Channel ->Autoscan (See page 13/14, paragraph 9)
- **RCA 800 (Walmart)**: Press Menu; then highlight and select Settings (option -5 on the Main Menu). Highlight and select 1 to begin channel scan. (See section 5 of the Menu Settings section)
- **Tivax STB-9 (No analog-pass through) (Standard Appliance)**: Press Menu, see that Auto Program is highlighted, select it by pressing OK. (See page 17)
- **Zenith 900 or 901 (Radio Shack, Bi-Mart, Standard Appliance, Circuit City)**: Press Menu, highlight and select Setup. Highlight and select Auto Tuning (See page 7)

SOME OR ALL CHANNELS ARE MISSING

TRY A RESCAN

- If your last scan was before May 1st, you need to update the tuner, in your digital TV or converter box (see section 1 above for more info).

CHECK YOUR ANTENNA

- The antenna that you had for Analog Television should work fine for Digital.
- For INDOOR ANTENNAS, your antenna is correct if:
 1. It has the two tall poles (VHF) plus a section that looks like a circle or loop or rectangle (UHF).
 2. Other indoor antennas may look completely different: flat panels, small dishes, etc. A VHF/UHF combo is still essential.
- For a ROOFTOP ANTENNA, your antenna is likely to be VHF/UHF if:
 1. It looks kind of like a fir tree – with a section of longer crossbars (VHF) and a second section of shorter crosspieces (UHF).
- An outdoor VHF-only antenna has a more simple appearance: a single long bar with crosspieces of a slightly decreasing length.

POSITION YOUR ANTENNA PROPERLY

- ROOFTOP ANTENNA: The end with the shorter crosspieces should be pointed towards the transmitter.
- INDOOR ANTENNA: Move it to a higher or better position, closer to a window or the side of the house nearer the transmitter. Try adjusting the length and angle of the two poles. Making them shorter may help.
- Find the “signal-strength meter” on your TV or converter box using the menu Consult your owner's manual for guidance.
- Use the signal-strength meter on your TV or converter box menu for feedback while adjusting your antenna. Allow 10-15 seconds for the meter to respond to a change of position.
- Re-scan for channels each time you get a higher reading on the meter.

NEXT STEPS

- In general, an antenna that produced good analog reception should do the same for digital, but...
- If adjusting the antenna and multiple re-scans have not improved things, you probably need to upgrade your antenna, or you may be outside of the digital signal area for that channel (see section 3, next page).
- If you suspect you might be outside the digital signal area:
 1. Find out what your neighbors' experiences and solutions are.
 2. Consult local TV retailers.
 3. Check antennaweb.org for its evaluation of your location.

ANTENNAS

WILL THE ANTENNA I HAVE WORK FOR DIGITAL TV?

- If your current TV antenna is a VHF (channels 2-13)/UHF (14-51) combination, it should work for digital TV.
 - Analog reception can range from excellent to awful, with many watchable levels in between. A weaker signal will just increase the amount of snow.
 - Digital reception is all-or-nothing - either a great picture and sound, or an unwatchable one. A weaker signal might produce a fine picture, but only as long as its strength remains above a minimum threshold needed.
 - There is no such thing as a digital or HDTV antenna. They are sometimes labeled that way for marketing purposes. It's VHF/UHF that counts.

SOME SIGNAL TIPS

- UHF signals are more likely to be affected by obstacles between your antenna and the transmitter. They may also require the antenna to be more accurately pointed towards the transmitter.
- Indoor antennas can be affected by things inside: computers, cordless phones, microwave ovens, fluorescent lights and even the movement of people.
- If your home is in an area of fringe reception because of distance from the transmitter... because of the surrounding terrain... or because of interference from buildings, trees or other objects... your current antenna may not produce a sufficiently strong digital signal. An upgrade may be required.

GETTING THE RIGHT ANTENNA

- Your antenna should be a combination antenna, designed for reception of both VHF (2-13) and UHF (14-51) channels. Digital broadcasts in most areas use frequencies in both ranges.
- If your home receives TV signals from different directions, you may need a multi-directional antenna (see maps to help).
- An amplified antenna (plugged in to electricity) may help, but amplifiers can also increase “noise” along with the signal. Noise is everything the antenna might pick up that's not part of the TV signal.
- An outdoor antenna is likely to be better than any indoor one.
- If your neighbors use an antenna for TV, find out what works for them.
- Basic indoor antennas start at about \$10, outdoor models at about \$50.
- Buy from a store with a good return policy, in case your first choice of antenna doesn't work.

GET HELP ONLINE

- antennaweb.org will give you the distance to and precise direction of local TV broadcasts from any address, along with a customized map and report with suggestions for the types of antennas that will work best for you.

NO SIGNAL/WEAK SIGNAL MESSAGE CHANNELS FREEZE UP

IS YOUR SET-UP COMPLETE?

- Some converter boxes, most notably the Digital Stream from Radio Shack, display a “no signal/weak signal” message as the very first image on the screen, before set-up is complete. This is a meaningless message at this stage, since an un-scanned box has no idea where to find any signal, weak or strong. You still need to continue the set up process.
- Refer to page 6 in the Digital Stream owner's manual and complete the steps for "auto-scan." If a different box is involved, be sure that it has been scanned.
- Every box must be scanned during set-up to work properly -- no exceptions.

AFTER SET UP IS COMPLETE

- If your converter box has been scanned, and the "weak signal" message appears only on some channels, your antenna needs to be adjusted, moved or upgraded.
- The best way to do this is to:
 - Tune to the weak signal channel
 - Bring up the converter box signal strength meter on the screen using your remote control and menu function. Check your manual if you need more help finding this.
- Through trial and error -- moving your antenna around and watching the response of the meter -- look for the antenna location, angle or configuration that produces the strongest signal.
- Allow 10-15 seconds for the meter to respond to a new antenna location.

IF THAT DIDN'T WORK

- In general, an antenna that produced good analog reception should do the same for digital, but...
- If adjusting the antenna and multiple re-scans have not improved things, you probably need to upgrade your antenna, or you may be outside of the digital signal area for that channel (see section 3, previous page).
- If you suspect you might be outside the digital signal area:
 1. Find out what your neighbors' experiences and solutions are.
 2. Consult local TV retailers.
 3. Check antennaweb.org for its evaluation of your location

VCR HELP *** REFER THEM TO AN ENGINEER 5

WILL MY VCR STILL WORK?

- VCR's will still work with converter boxes, but you'll need to make some changes in how you record programs.
- There are also some limitations on how recordings can be made.
- For playback only of both VHS tapes and DVDs, everything will work just as before.

HOOKING YOUR CONVERTER BOX TO YOUR VCR

- Leave the VCR/DVD connected to the TV just as it was.
- Disconnect the antenna cable from the VCR/DVD.
- Connect the converter box cable from "Out to TV" in its place.
- Plug the antenna into "Antenna In" on the back of the converter box.

WATCHING TV AND RECORDING AT THE SAME TIME

- Unless you have a very new VCR or pretty new DVD recorder with its own digital (called ATSC) tuner built in, you can't watch one program while recording another at the same time with just one converter box.
 - The converter box chooses the incoming channel, so one converter box can only tune to one channel at a time.
- To tune to two channels at a time (which is what you do when you watch one channel and record another), two converter boxes are needed or one converter box and one digital VCR/DVD recorder with its own ATSC tuner built in.

CONNECTING TWO CONVERTER BOXES

- Would you like me to send you a diagram, or explain it over the phone?
- Buy a splitter (at a TV or electronics store like Radio Shack). This will split the single line coming from the antenna into two lines.
- Connect one line to each converter box. Connect one box directly to the TV. Connect the second box to the VCR.
- The VCR's box will control the channel you record. The TV's box will control the channel you watch.
- You'll want to physically separate the two boxes as much as possible, so the remote only controls the box you want to use.

RECORDING TIPS

- To record something overnight or when no one is there:
 - Program the VCR/DVD recorder to always record on the output channel of the converter box (usually 3).
 - Program the time into the VCR/DVD recorder just as you've always done.
 - Tune the converter box to the channel you want to record. Leave it turned on.
 - Be sure that the converter box default power saver setting of four hours has been disabled; otherwise the box will turn itself off after four hours of no activity. Use your menu function and check your manual for more info.

USING THE CONVERTER BOX REMOTE

WHAT YOUR REMOTE CAN DO

- Your converter box remote control comes completely programmed to control everything in your converter box.
- Some converter box remotes can also be set up to turn the TV on and off.
 - This feature is for convenience only -- it has nothing to do with actual reception or any function of the box.
 - In all cases, your TV remote will function as before.
 - Some manuals confuse people into thinking that programming the remote is necessary. It is not. It simply allows a single remote to turn both the TV and converter box on and off.
- Many other converter box features, like PIN numbers and other options, are incidental to actually watching digital TV channels. Some manuals sidetrack viewers into trying to set up features they'll never use.

HOW TO SET UP YOUR REMOTE TO TURN TV ON AND OFF

- Note: not all boxes have this feature: Apex, Magnavox, Philco, among others. Check your manual for this function.
- In order to be able to turn your TV on and off, the converter box remote needs to know the code number which identifies your particular TV model.
- Different boxes have different methods for the procedure. You'll need to check your manual.
 - This may involve a trial-and-error process, until the correct code number is hit upon.
 - You may hold down one button continuously while pressing another every few seconds until the TV responds.
 - It can require up to 150 random guesses by the remote, and therefore, some patience by the person. It's like waiting for your name to be called randomly in a group of 150 people.
 - Consult your owner's manual for the steps for your particular box.

CONNECTING CONVERTER BOX CABLES

CHOOSE THE CABLE TO USE

- All converter boxes have connections for two kinds of cables.
 - RCA Audio/Visual cables are three thin cables color-coded red, white and yellow with identical plugs at each end.
 - These cables give the best signal quality. Only some converter boxes will include them. And, you can only use them if your TV has RCA inputs (a set of similarly-colored circular plugs on the front, back or side of your TV, usually marked "Audio/Video In.")
 - A coaxial cable is round and has identical round fittings on each end with a small sharp point inside. This provides the simplest set-up.
- Older TVs may be limited to coaxial connections only.
- To use the analog pass-through feature to watch channels that are still analog, you must use the RF/coaxial cable connection.

HOW TO CONNECT THE CABLES

- Unplug your TV and other devices from electrical outlets.
- Disconnect your existing antenna cable from the TV or VCR/DVD.
- Make note of where it was connected.
- Plug this antenna cable into "Antenna In" (or similar wording) in the back of your converter box.
- For coaxial cable
 1. Plug one end of the coaxial cable into the TV connection you made note of (where the antenna was previously connected to the TV or VCR/DVD).
 2. Plug the other end into "Out to TV" or "Antenna Out" (or similar wording) on the back of the converter box.
- For RCA Audio/Visual cables
 1. Match colors at each end (going from "Out" on the box to "In" on the TV or VCR).
- Complete the connection by selecting the input on the TV:
 1. For coaxial cable, tune your TV to channel 3, using its own remote, just as if you were going to watch channel 3. (Many TVs will require this to be entered as "0-3.")
 1. The box output also needs to be set to channel 3.
 2. This is done either via a switch on the back of the box, or via the on-screen menu.
 2. For RCA A/V, use the "line" or "input" buttons on the TV remote to cycle through the available choices until the menu from the converter box (or a channel) appears on the screen.

CONNECTING VERY OLD TVS

- A very old antenna or TV may require the purchase of a "balun" (a small device that converts a two wire connection to a coaxial fitting) if the TV/antenna connections are not coaxial cable. (Try Radio Shack or electronics store)
- If your set has separate VHF and UHF antenna connections, connect the converter box to the connections labeled VHF (where the two antenna poles would have been connected).

LOST OR EXPIRED COUPONS

- Congress has added new funding for coupons. It will also allow expired, unused coupons to be reapplied for.
- If you need coupons, you should apply now. They will be shipped to you within one week.
- If your coupon expired before you used it, you should be able to reapply now.
- Think^{TV} doesn't have any control or influence over the coupon program. Its rules were established by an act of Congress. All we can do is help people to apply and to check the status of applications.
- Applications:
 - Web: www.dtv2009.gov (the easiest way)
 - Phone: 1-888.DTV.2009
 - Hearing impaired: TTY number 1-877-530-2634 in English; Spanish, call TTY number 1-866-495-1161.
- Each US household is eligible for two coupons. Eligibility is not based on number of TVs or number of people, or even their source of TV reception.
- You can only use one coupon per box; they can't be combined.
- Coupons expire less than 90 days after they arrive. Check the date on the card when you receive it.
- Coupons take approximately one week (maybe more) to arrive.
- The status of a coupon order can be checked online or by phone (see above). Use the order reference number or the exact name and address
- Coupons can be given away. A household with cable or satellite or digital TVs can still apply and give coupons to a friend or neighbor or Think^{TV}. Coupons cannot be sold or traded for value, though.

HOW TO CHOOSE A CONVERTER BOX

WHERE TO GET A BOX

- Converter boxes can be purchased at most stores where TVs and electronics are sold. They can also be purchased from many online vendors.

BEST BOXES

- Based on viewer feedback and ThinkTV's experience, some of the better boxes are:
 - **Zenith 901** (Radio Shack and K-Mart)
 - **Insignia DXA1-APT** (same as the Zenith 901) (Best Buy's house brand)
 - **Digital Stream 9950** (Radio Shack) (if the first two aren't available)
 - **DTV Pal** (K-Mart or Sears)
- These boxes all have "analog pass-through," a feature which ThinkTV recommends that everyone get.
 - Analog pass-through allows you to watch channels that are analog as well as channels that are digital.
 - A box without this feature will block ALL analog channels, and those channels will be lost.
 - This is particularly important if you watch ThinkTV on one of our translators, or if there are other translators or analog low-power stations in your area.
 - Having a box with analog pass-through means that you'll be ready for any broadcast situation that arises in your area: all digital, or a mix of analog and digital.

HOW TO GET MORE HELP

ThinkTV : In-Person Assistance at the ThinkTV Help Center

- When phone or mail support is not enough, ThinkTV can offer in-person help to callers who come to the station.
- Address: 110 South Jefferson Street, Dayton OH 45402
- Drop-in hours are from 8am -12noon and 1pm-5pm Monday thru Friday.

Retailers Who May Help

- Best Buy's in-home tech support is The Geek Squad: 1.800.433.5778
- Some Radio Shack stores may have referrals
- Try local TV repair shops, antenna retailers, or independent TV retailers.

Manufacturer Support Numbers

- Access HD 1.800.393.1246
- Digital Stream: 1.866.706.4367
- Insignia: 1.888.229.3889
- Magnavox: 1.800.605.8610
- Philco: 1.800.317.6062
- RCA: 1.866.444.5746 or 1.800.252.6123
- Sansonic: 1.626.433.1333
- Venturer: 1.800.252.6123
- Zenith: 1.877.993.6484

FCC Help Line

1.888.CALL.FCC or 1.888.225-5322

TTY for the hearing impaired: 1.888.835.5322

Other Resources

- Antenna placement and information: antennaweb.org
- Consumer Reports: consumerreports.org or hearusnow.org
- General DTV info: ezdigitaltv.org