

# INSTALLATION AND OPERATION OF THE SIGNAL DYNAMICS APARTMENT CONVERTER



Signal Dynamics  
15 Sophia Drive \* Cranston, Rhode Island 02921  
*sigdyn@cox.net*  
(401)523 3275

## Introduction

No compromises were accepted in the design of the Signal Dynamics converter.

- It was designed to work with nearly all television equipment, in nearly every configuration.
- It can be deployed virtually anywhere cable television coaxial is installed, without affecting existing services, yet does not require the resident to be a cable subscriber and is unaffected by outages or maintenance in the cable distribution.
- It provides excellent video and audio quality..
- The remote control has only a single large button, for ease of use and understanding.
- It uses coded-RF, rather than infrared transmission – removing any line-of-sight limitation and allowing it to be placed conveniently out of sight behind furniture, televisions, or entertainment centers. There is no need for additional unsightly cabling.

## CONGRATULATIONS ON YOUR NEW SIGNAL DYNAMICS CONVERTER!

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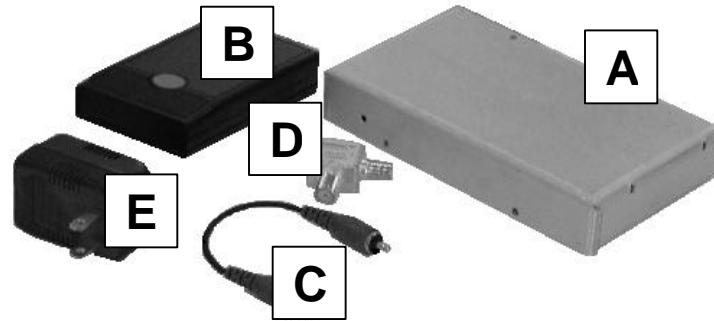
# Set up and Installation

## Step 1: Inventory

*\*\* Supplied units may differ in color or form than those depicted*

Unpack and inventory all parts. You should have:

- A. Apartment converter
- B. Remote control, batteries installed
- C. Video Jumper Cable
- D. Directional coupler or 2-way splitter
- E. DC wall adapter



You will also need:

- a. Two or three 75-Ohm, 18 or 20 gauge (RG59 or RG6) coaxial jumpers, cut to the proper length and connected with male, "F" type connectors.
- b. In some configurations, video and audio RCA cables, may be necessary.

## Step 2: Setting the TV output channel

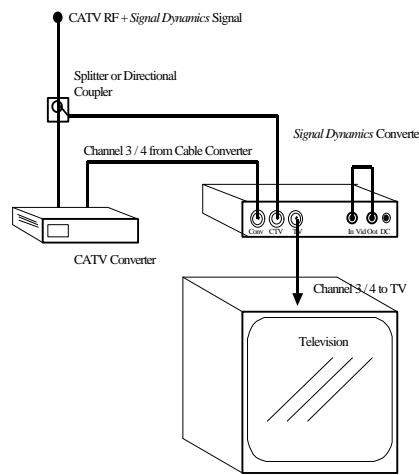
The converter is factory set to output on TV channel 3. If your cable TV system requires your television to be tuned to channel 4, then select channel 4 on the apartment converter. Using a small screwdriver, push the recessed slide switch on the back of the converter to the channel 4 position.



## Step 3: Connecting the converter

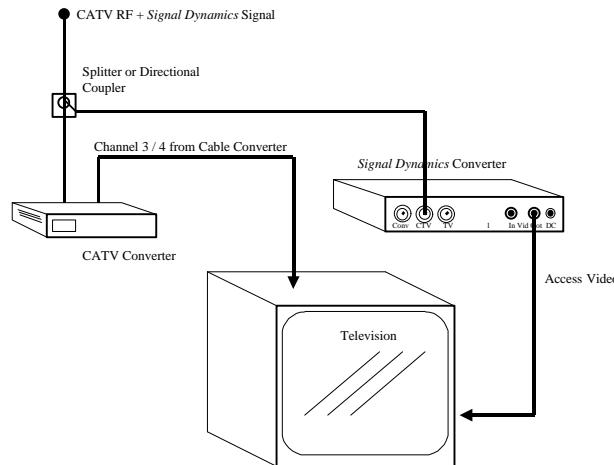
How you connect your Signal Dynamics converter depends on how you intend to use it, what audio/video equipment you already have hooked-up to the television, (cable converters, DVD players, video games, etc.), and whether or not there are video ports available. The converter provides baseband video and audio, or television channel 3 or 4 outputs. The below diagrams depict some of the ways to connect the converter.

Using the diagrams beginning on the following page as guidelines, (Figures 1 – 5), connect the converter.

**Figure 1****Standard Setup –**

In this example, the cable converter's channel 3 or 4 output is routed through the Signal Dynamics converter. Regardless of what channel you might be viewing, a single button press on the Signal Dynamics remote control will replace television programming with Signal Dynamics video. Pressing the button a second time returns the television to the previously viewed program.

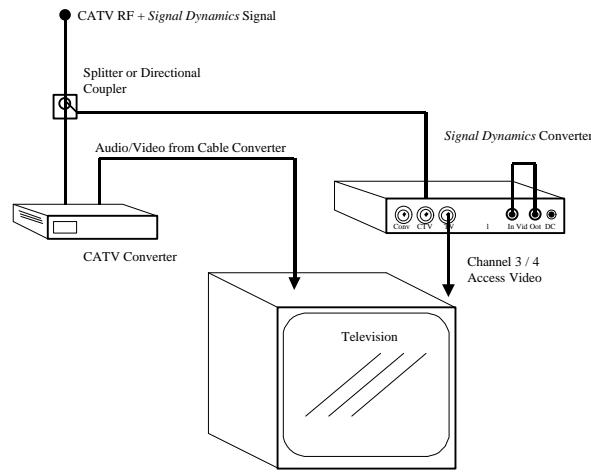
1. The Signal Dynamics Converter receives signal from the CATV drop via a splitter or directional coupler placed before the Cable Converter.
2. The cable converter's RF output is connected to the Signal Dynamics Converter's "Conv" input port.
3. The Signal Dynamics Converter's "Vid In" and "Vid Out" ports are jumpered.
4. The Signal Dynamics Converter's "TV" output is connected to the Television's antenna or cable input port.
5. All unused ports are terminated.

**Figure 2****TV Remote Control Setup 1 – uses existing cable / television remote control.**

This configuration allows Signal Dynamics video to be selected from the existing television remote control by switching between video and antenna or cable inputs. There is no need for the Signal Dynamics remote control. This example requires the television to have a video input.

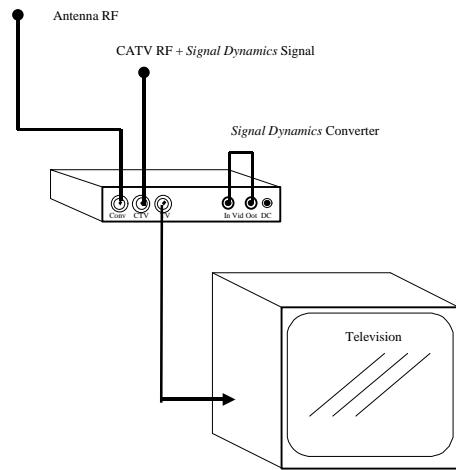
May also be used with, "Picture in Picture" Televisions for dual displays.

1. The Signal Dynamics Converter receives signal from the CATV drop via a splitter or directional coupler placed before the Cable Converter.
2. The cable converter's RF output is connected to the television's antenna or cable input port.
3. The Signal Dynamics Converter's Video output is connected to the television's video input port.
4. Terminate all unused ports

**Figure 3****TV Remote Control Setup 2 – uses existing cable / television remote control.**

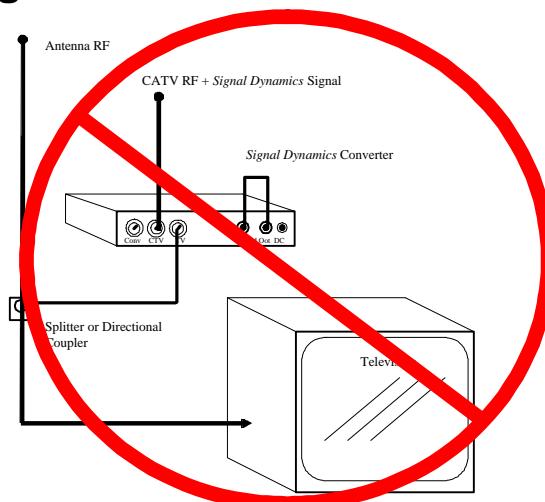
Similar to the previous example, but with outputs reversed.

1. The Signal Dynamics Converter receives signal from the CATV drop via a splitter or directional coupler placed before the Cable Converter.
2. The cable converter's video output is connected to the Television's video input port.
3. The Signal Dynamics Converter's "Vid In" and "Vid Out" ports are jumpered.
4. The Signal Dynamics Converter's "TV" output is connected to the Television's antenna or cable input port.
5. Terminate all unused ports

**Figure 4****Master Antenna or "Rabbit Ears" Setup –**

This configuration should only be used if there is no cable converter and the television lacks an available video input. It requires two steps to select Signal Dynamics video. First, using the TV remote control, tune the television to channel 3 – then press the large button on the Signal Dynamics remote. You can return to normal television programming by pressing the button again on the Signal Dynamics remote, then selecting the desired channel on the television remote control.

1. The Signal Dynamics Converter receives signal from the CATV drop.
2. The Antenna is connected to the Signal Dynamics Converter's "Conv" port.
3. The Signal Dynamics Converter's "TV" output is connected to the television's antenna or cable input port.
4. Terminate all unused ports.

**Figure 5**

The Signal Dynamics Converter's TV Output is a double side-band signal that will interfere with any lower adjacent television channel.

While no damage will result in the above configuration, combining the Signal Dynamics converter's TV output with CATV or Off-Air signals is not recommended.





## Operation

### Using the Remote Control

Signal Dynamics video is selected using either your existing TV remote control, or the converter remote supplied. If you've connected the video output of the converter to your television, then you'll likely use your TV remote control to view entrance or lobby video and can disregard this section.

The Signal Dynamics remote control does not need to be pointed at the converter to work, and can be expected to function for a considerable distance, even through furniture, walls, and floors. There is only a single large button on the remote control, which when pressed causes the converter to replace the television's normal input with the Signal Dynamics modulated video (on standard channel 3 or 4). Pressing the button a second time returns normal programming. If you do not subscribe to cable television and have an older model TV, it may be necessary to first tune your television to channel 3 or 4 prior to activating the converter

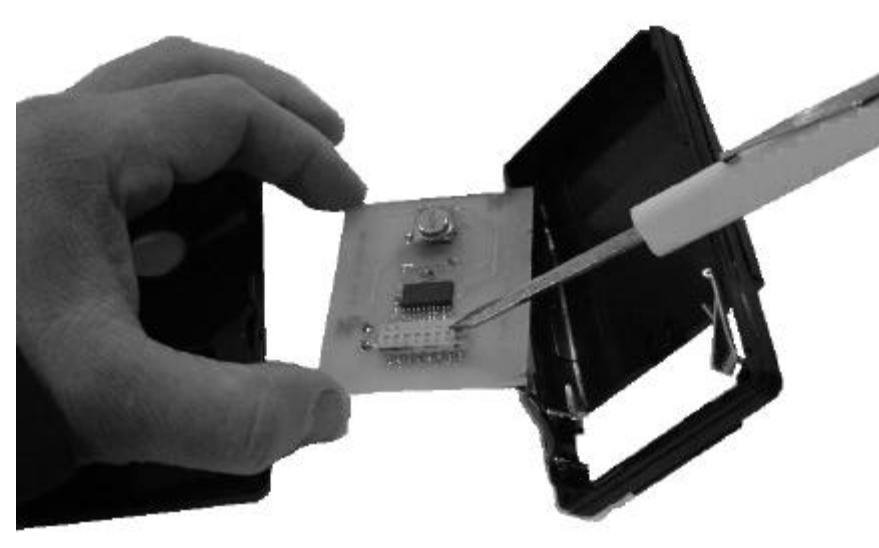
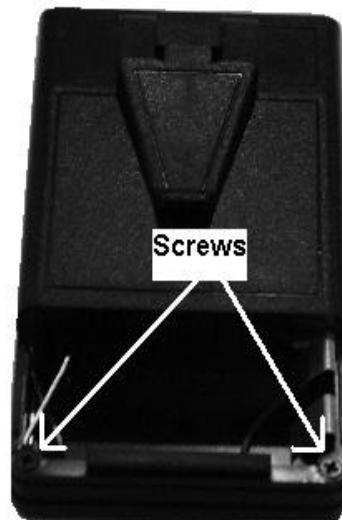
### Programming the remote control

The remote control is factory programmed to work with your converter, but can be easily reprogrammed in the field if you need to replace either the converter or remote control. There are 256 unique binary addresses available, programmable from a single 8-

switch assembly within the remote control. The correct address is listed on a label on the underside of the converter. To access the switch assembly:

1. Open the battery compartment and remove the two "AA" batteries
2. Remove the two Philips-head screws on the left and right of the battery compartment
3. While pressing down firmly, slide the bottom of the case back (in the direction of the battery compartment).

Refer to Table 1 for a complete listing of switch positions for each binary address.



### **FCC STATEMENT for RF Remote**

NOTE: This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

### **FCC STATEMENT for Converter**

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by Signal Dynamics LLC could void the user's authority to operate the equipment.

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