



broadcastvision entertainment

## CAB – PRECOR P80, P82

The Precor P80 and P82 consoles with the media adapter kit can now control ANY cable, satellite or IPTV set top box using the CAB from Broadcastvision Entertainment.



Online Service Manuals available at: [www.broadcastvision.com](http://www.broadcastvision.com)

### Requirements:

- ✓ Precor P80 or P82 console **with media adapter kit.**
- ✓ Set top box w/HDMI output.
- ✓ CAB (Console Adapter Box).

### Benefits:

- Eliminates the hand-held battery operated remote control.
- Members can control the TV using cardioequipment console controls.
- An expensive head-end system is not required.
- Club operators can choose ANY cable, satellite or IPTV provider.
- TV channels are not restricted.
- Members can access all the channels available per your subscription.
- No troublesome wireless devices to manage.
- Proven Technology - Broadcastvision first offered a solution for set top box control in 2011 and is the clear-cut market leader in this technology.

BroadcastVision Entertainment Technical Support  
Telephone: 1(888) 330-4283 ext.3 Email: [support@broadcastvision.com](mailto:support@broadcastvision.com)



broadcastvision entertainment

## **Your CAB is enabled for an application as follows:**

Proposal Number: \_\_\_\_\_

Set Top Box: \_\_\_\_\_

Console Description: Precor P80 or P82 with Media Adapter

If your equipment differs from the information above, please call **BVE technical support at 1(888)330-4283 ext.3** for instructions on how to reprogram the CAB onsite.

## **CAB CONFIGURATION**

There are no special configuration requirements for CAB operation with your Precor console. With correct cabling the CAB is able to automatically detect the communication signal from the console.

The CAB ships pre-configured by BVE for the target STB at customer facility. Normally no additional configuration steps are required. **If the CAB does not work for any reason please call technical support at 1(888)330-4283 ext.3 before leaving the facility.** BVE's technical support staff is happy to help troubleshoot your problems and get the CAB working properly.

The CAB contains 8 dip-switches internally. Normally these should all be in the OFF position. To help solve specific deployment compatibility challenges, BVE Technical Support may instruct that some of the switch positions be changed – customers should not make any changes without guidance from BVE support.

**Note:** The Broadcastvision CAB should always be installed after the cable/satellite service has already been installed, and you have a picture on the screen. If the Set Top Box (STB) is not available at the time of installation you can still run all of the wires and hook up the CAB, but you will not be able to test the CAB to make sure that it is changing channels on the STB.



broadcastvision entertainment

**INSTALLATION** – The P80/82 CAB is pictured below. The left side is the IR connection to the cable/satellite box, the right side is the C-Safe power connection and IR input from the Precor console.



- The first picture below shows the location of the HDMI connection, C-Safe port for power and IR cable from the Precor P80 and P82 consoles.

### CAB – P80/82

For maximum durability and future options, when storing CAB at console we recommend running the included 12' 3.5mm patch cable through base unit rather than the black and white emitter cable.

**Note:** Use extreme caution to avoid damaging board, connectors, or cables when installing CAB on P82. Damage caused by improper CAB installation will not be covered under warranty. Most P82 components are not field-replaceable – damage to components may require console replacement.



broadcastvision entertainment

- Once the CAB is hooked up you will need to run the IR emitter cable down the machine to the base of the cardio. There it will connect to either the set top box or a cat5/6 cable for sending the signal to an AV closet. **Tip:** since the IR wire is very thin and easily damaged it is better to run the emitter wire through the machine.
- After the IR cable has been run through the machine the IR emitter should be placed over the infrared eye on the front of the set top box. If you cannot see where the IR eye is on the front of the STB, shining a flashlight at the front of the box will usually help you to see the IR eye. Please see the IR eye locations of some of the most common STB's below:



- If the set top boxes are located in another room, the supplied cat5 adapters (pictured below) will allow you to use a standard cat5/6 wire to pass the IR signal back to the AV closet. The included IR emitter covers will hold the emitter in place and prevent cross communication between set top boxes.





broadcastvision entertainment

## **HOW IT WORKS**

The Precor console can be configured to tune antenna signals directly, or it can be configured to operate directly with either of these Set Top Boxes (no CAB required):

- DirecTV
- Enseo

The Precor Media Adapter console sends IR control signals to these STBs via an IR Emitter connected to a cable from the console.

The CAB allows the console to control a wider variety of STBs by intercepting the console's IR control signal, interpreting it, and then retransmitting in any of the IR STB protocols supported by CAB. The custom cable connects the CAB to both the console's CSAFE connector and also to the console's IR emitter cable in order to receive the STB control output signal.

***The CAB knows how to receive and interpret the control signals for the Enseo STB only.*** Therefore, the console must be configured as if it was being used with an Enseo STB (see details in next section). The correct signal will go to the CAB and it will translate into any of its other supported STB signal formats.

## **CONSOLE CONFIGURATION**

The information in this section is critical to successful deployment – please read carefully!

The information in this section is a brief summary, please reference these Precor documents for additional information and details:

**rev A Installing the P80 Console Media Adapter 100213 EN.pdf**

**303073-101 rev A Using the Precor Channel Editor 093013 EN.pdf**



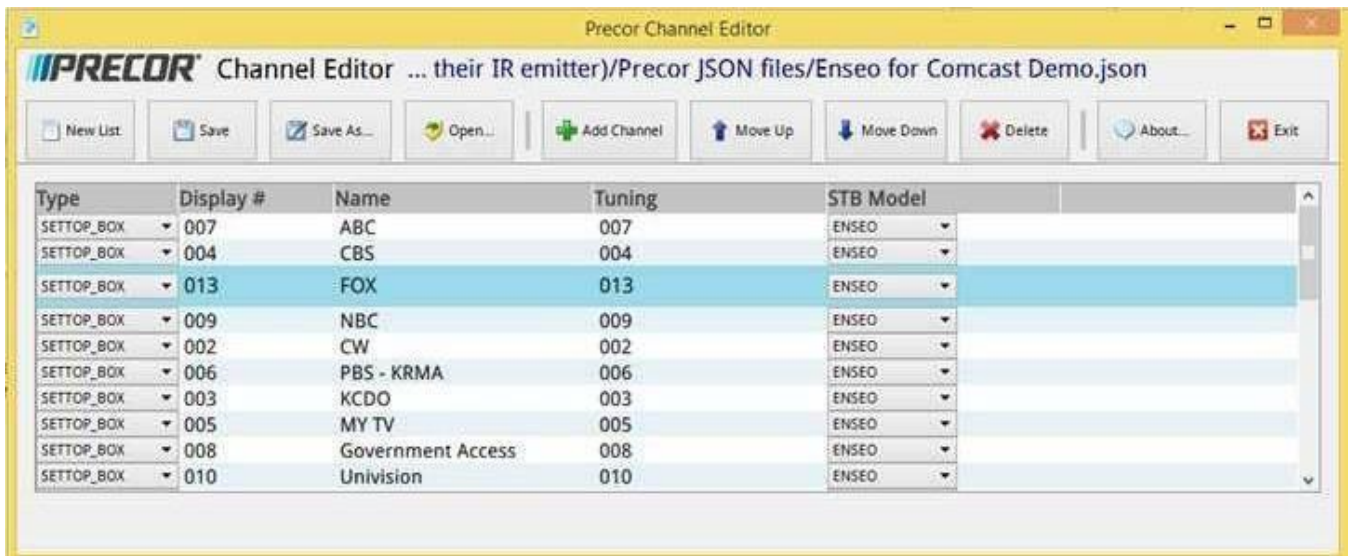
## broadcastvision entertainment

The console must be set up for the correct mapping of channel names to channel numbers, for whatever cable/sat service being used at its location. This setup is pretty much the same in a CAB application as it is in an application where the console directly controls an Enseo or DirecTV STB, the one exception is that the CAB requires all channels be mapped to the Enseo STB model in the Precor setup. So for the most part, the above-mentioned Precor documentation can be followed to accomplish the setup, but an executive summary is presented here.

Precor documentation describes how to copy existing setups from one console and redeploy it to other consoles. This summary assumes one is creating a new setup from scratch, using Precor’s “Channel Editor” software:

1. Obtain Precor “Channel Editor” software from Precor
  - a. See Precor documentation referenced above for detailed use instructions
2. Use the software to enter channel names and channel numbers into a list
  - a. In other words, create a “channel lineup” for the service provider being used
3. **For all channels, the STB Model must be selected as “ENSEO”**
4. Save the channel lineup into a file on a USB stick
  - a. File name **must be:** channel-guide.json
  - b. File location **must be:** in a folder named “precor” located in root directory of USB stick
5. Enter the console’s configuration menu and import the channel lineup
  - a. See Precor documents for detailed use instructions

### The software looks like this:



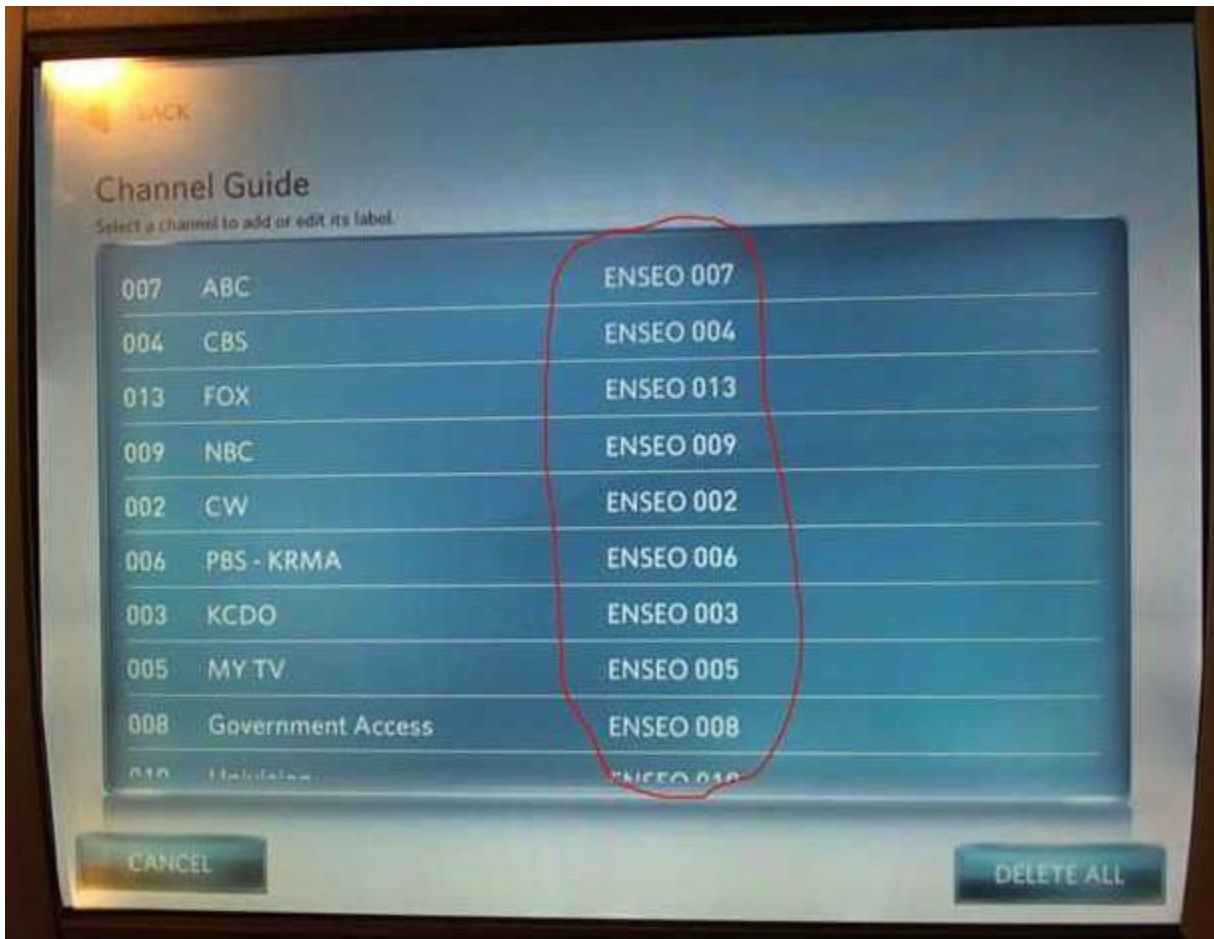


broadcastvision entertainment

It's kind of like a spreadsheet – one simply needs to enter appropriate info into each of the cells to create a channel lineup. ENSEO must always be selected as the STB Model because CAB can understand/interpret only the ENSEO commands coming out of the console's IR Blaster cable.

It's tedious to enter all the information, and the software doesn't allow for good keyboard shortcuts to quickly move to and select the contents of the next cell for modification. The good news is however that this software can open an existing file and modify it, so templates can be created for all the major providers one time and then installers can modify for just the local differences.

Channel lineups can also be programmed directly into the console via the configuration menu, but this is even more tedious. See the Precor documentation for details. Here's a photo of an example channel lineup displayed in the console configuration. Note that ENSEO is specified for all entries:





broadcastvision entertainment

## **Troubleshooting Guide:**

1. **Double button presses** – Some set top boxes respond to more than one of the IR codes that we send out. If you notice that pressing a channel button on the console results in multiple presses, simply remove the 2 screws that hold the lid on the CAB and turn on dip switch 2 and 4. If this does not solve the problem, call (888)330-4283 ext.3 for further assistance.

2. **No control over set top box**

- a. **Check if CAB is getting power and channel commands from the console** – CAB contains internal LED power lights. Two indicator LEDs are located on either side of the console-side connector inside the enclosure.
  - **GREEN** - Power LED, on whenever the CAB is powered
  - **RED** - Activity LED, flashes whenever the CAB receives and processes commands

The location of the LEDs is such that they should be visible through the enclosure around the CAB connector to the console.

- b. **Incorrect IR emitter placement** – If the IR emitter is not in the correct location on the front of the box you may need to move it around until you find the location that works.

**Tip:** Try initially holding the IR emitter away from the front of the STB initially then continue pressing the channel button while “zeroing in” on the correct IR emitter placement.

- c. **Set top box is in RF mode – change to IR mode** – Many set top boxes can operate with a hand-held remote in RF or IR mode. For the CAB to function, it is critical that the STB accepts IR channel commands. To test if the STB is in RF mode, place your hand over the hand-held remote control IR transmitter and see if the STB receives channel change commands. If the answer is yes, the STB is in RF mode. Check online for instructions to change the STB remote control mode from RF to IR.
- d. **IR signal strength issue** – In rare circumstances, the CAB may output too strong of an IR signal for the set top box IR receiver. To test if the IR emitter is over-driving the set top box receiver, pull the emitter away from the front of the set top box, and press the channel button to see if the set top box now receives the channel command. Opening up the CAB and turning on dip switch #8 will reduce the IR current by 50% and solve this issue.

BroadcastVision Entertainment Technical Support

Telephone: 1(888) 330-4283 ext.3 Email: support@broadcastvision.com



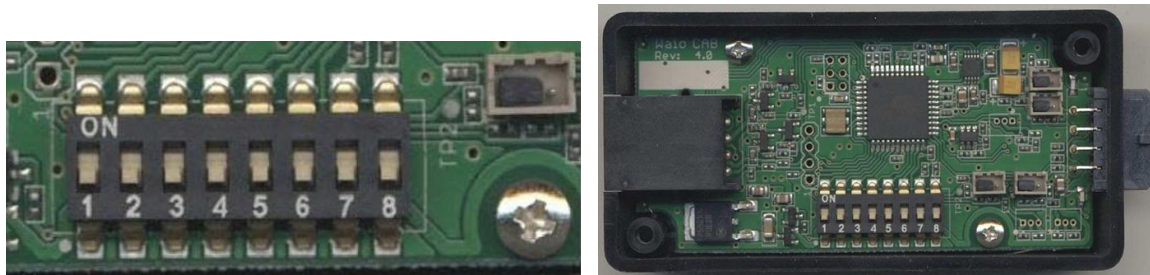


broadcastvision entertainment

- e. **No Continuity between CAB and IR emitter** – In some circumstances utilizing the “Far” set top box scenario, the CAT5/6 cable between the set top box and the CAB may not provide full continuity through wall plates etc. It may be helpful to re-locate the STB at the base of the cardio and re-test. Or, it may be helpful to temporarily run an alternate CAT5/6 cable from the CAB to the set top box then re-test.
  
- f. **CAB not programed for the correct set top box** - Your CAB is defaulted for Broadcastvision’s popular “Unicode” setting which provides control of the most popular cable and IPTV set top boxes including, but not limited to:
  - AT&T Uverse, Brighthouse, Comcast, Time Warner, and Verizon

The CAB can be quickly configured on site to operate other popular set top boxes by flipping dip switches inside the CAB enclosure as pictured below. CAB operates with many other set top boxes not included in the list below. Please call BroadcastVision support at 8883304283 x3 to determine the dip switch settings for your cable, satellite, or IPTV provider.

1 2 3 4 5 = Dip Switch settings for the following set top boxes:  
0 0 0 1 1 - CAB will output commands for Amino set top boxes  
1 1 1 0 1 - CAB will output commands for Enseo set top boxes  
0 0 1 0 1 - CAB will output commands for LG set top boxes  
0 1 0 0 1 - CAB will output commands for Rogers set top boxes  
1 0 0 0 1 - CAB will output commands for Cox set top boxes  
0 1 0 1 0 - CAB will output commands for Charter set top boxes  
1 0 0 1 0 - CAB will output commands for Unicode-Satellite for DirecTV and Dish set top boxes





broadcastvision entertainment

## **Broadcastvision Entertainment Terms and Conditions**

### BVE Stock Items Returned for Credit

BVE manufactured products may only be returned for credit with written authorization from BVE within 30 days of the original invoice date. A 25% restocking fee will be charged for all returns. All products being returned to BVE require a Return Authorization number. Products must be returned in original condition with the original packaging, components and support material. Credit is contingent upon inspection of returned items.

### Return Authorizations

A Return Authorization number must be issued from BVE prior to any item being returned for credit, repair or exchange. Items returned without approval will be refused and returned to the sender. Requests for a Return Authorization number may be made to our Customer Service Department at 1-888-330-4283.

### Repairs and Replacements

A warranty repair of BVE manufactured product includes parts, labor and the return GROUND shipping to the customer. Repairs made while under warranty are covered for the duration of the valid warranty period. Non-Warranty repairs receive a "Repair Warranty" of 90 days parts and labor only. Warranties do not include on-site service. Advance Replacements of items in question may be arranged if the product is within 30 days of invoice date and is subject to product availability. Advance Replacements must be secured by the customer with a valid Credit Card or Net30 terms of an account in good standing.

### Shipping

Shipping dates are estimates only. Products will be shipped per the designated Shipping Method. Paying for an accelerated Shipping Method only indicates the product will ship by that method when the product or repair is available. BVE will not be held responsible to accelerate shipping, discount invoices or compensate customers for loss of profits, business or goodwill due to back orders, shortages, shipping complications, damages, product malfunction, labor, construction, nature or delays.

### Warranties

All products sold by BVE carry the original manufacturers' warranty. Warranty begins on the invoice date of purchase from BVE or an authorized BVE Dealer / Distributor. Warranty may alternately begin on the date of installation with a valid Installation Completion Form from an authorized BVE Dealer, Distributor or Installer. Warranties do not cover damage due to abuse, misuse, modification or the result of any third party. Warranties are not transferable and cover only the original purchaser with a valid invoice. Manufacturers will, at their option repair or replace equipment, as they deem necessary. Warranties do not include "on-site" service.

BroadcastVision Entertainment Technical Support

Telephone: 1(888) 330-4283 ext.3 Email: support@broadcastvision.com