



December 2006

# Switched Digital Video CSR Guide

## Overview

### Introduction

Switched digital video (SDV) is a technology that allows cable operators to recover bandwidth from infrequently viewed channels by making these channels “on-demand.” Instead of sending all channels to the set-top boxes, lightly viewed channels are put into a *switching pool*, or queue, and only sent to the set-top boxes when viewers tune to them.

### Purpose

This guide provides flow diagrams to help Customer Service Representatives (CSRs) understand the different scenarios that a consumer may encounter when tuning to SDV channels. Use these diagrams to troubleshoot and identify which scenarios you can resolve and which scenarios you need to refer to individuals in other departments, such as the system operator, headend operator, or field technician.

### Audience

This guide is designed for cable service providers and CSRs who are responsible for operating and maintaining SDV systems.

### Document Version

This is the second release of this guide.

## In This Document

This document contains the following topics.

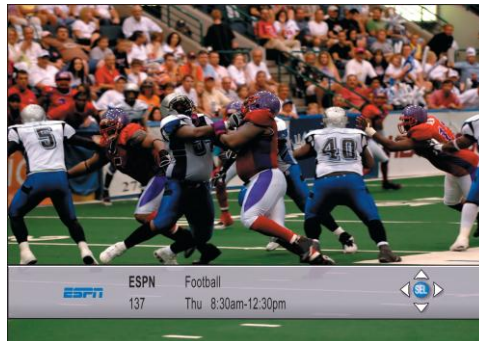
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## Scenario 1: Tune an Available SDV Channel (Normal Operation)

Watch TV



Available SDV Channel

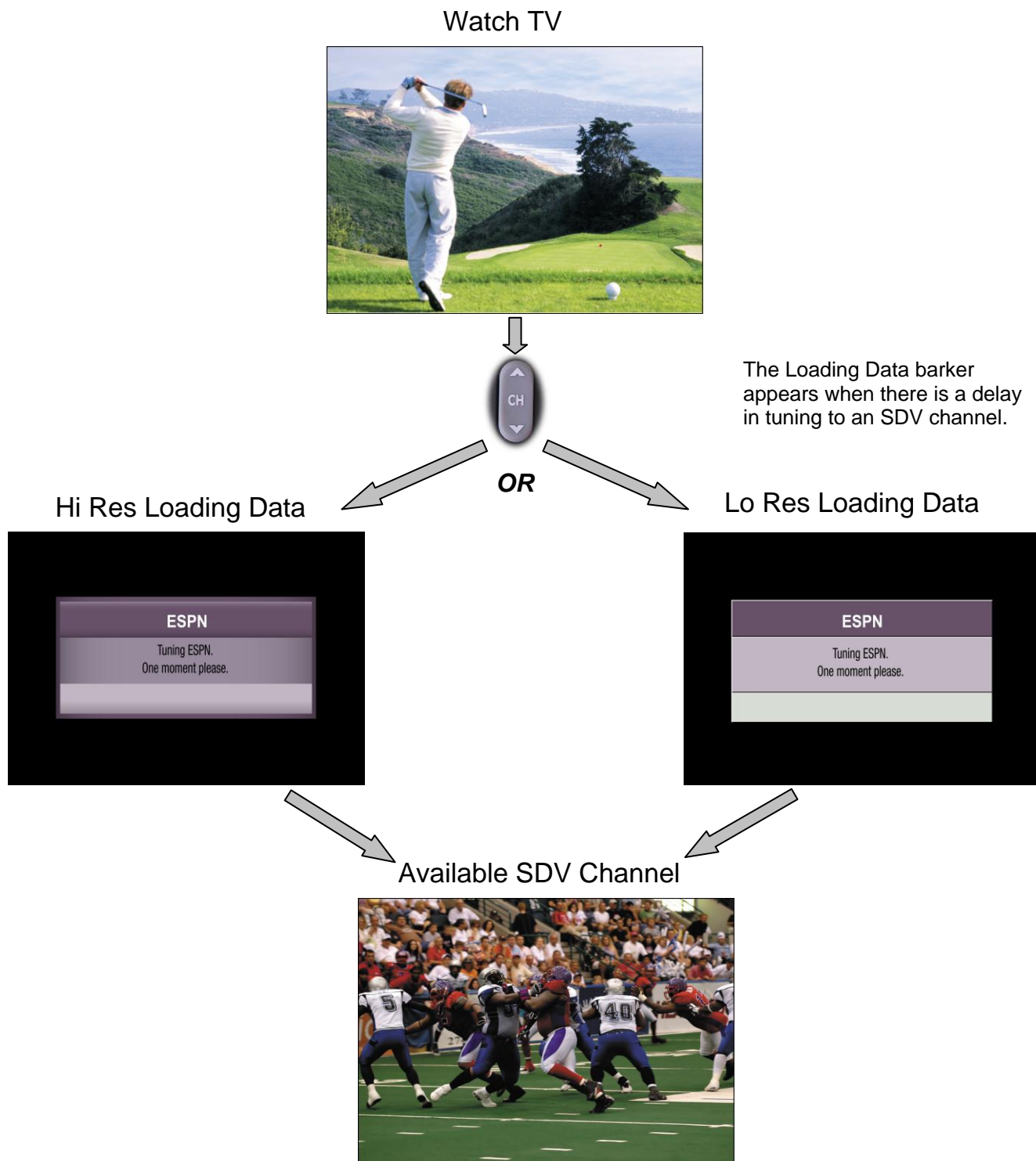


2-second wait

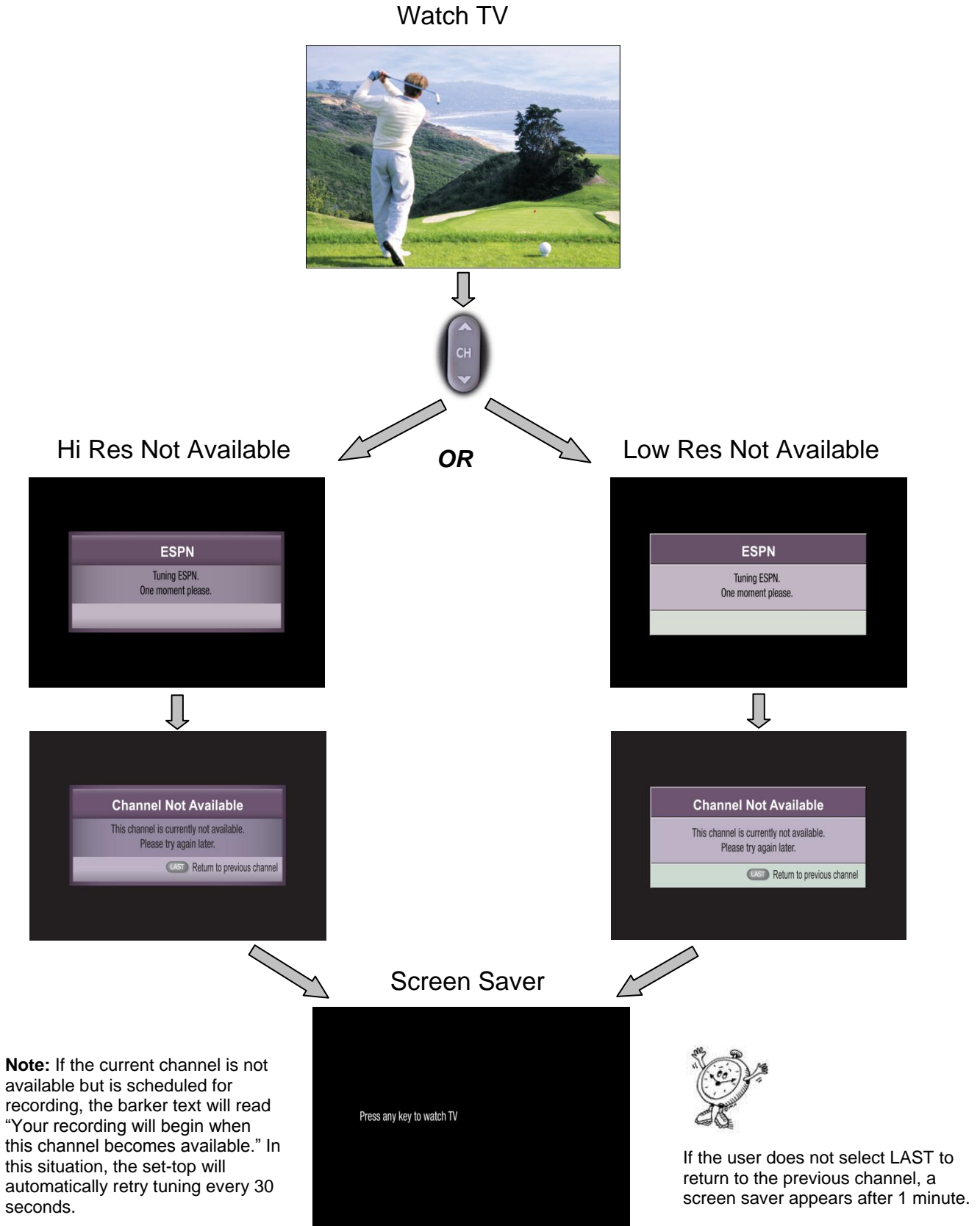
Available SDV Channel



## Scenario 2: Tune an Available SDV Channel (Operation Delay)

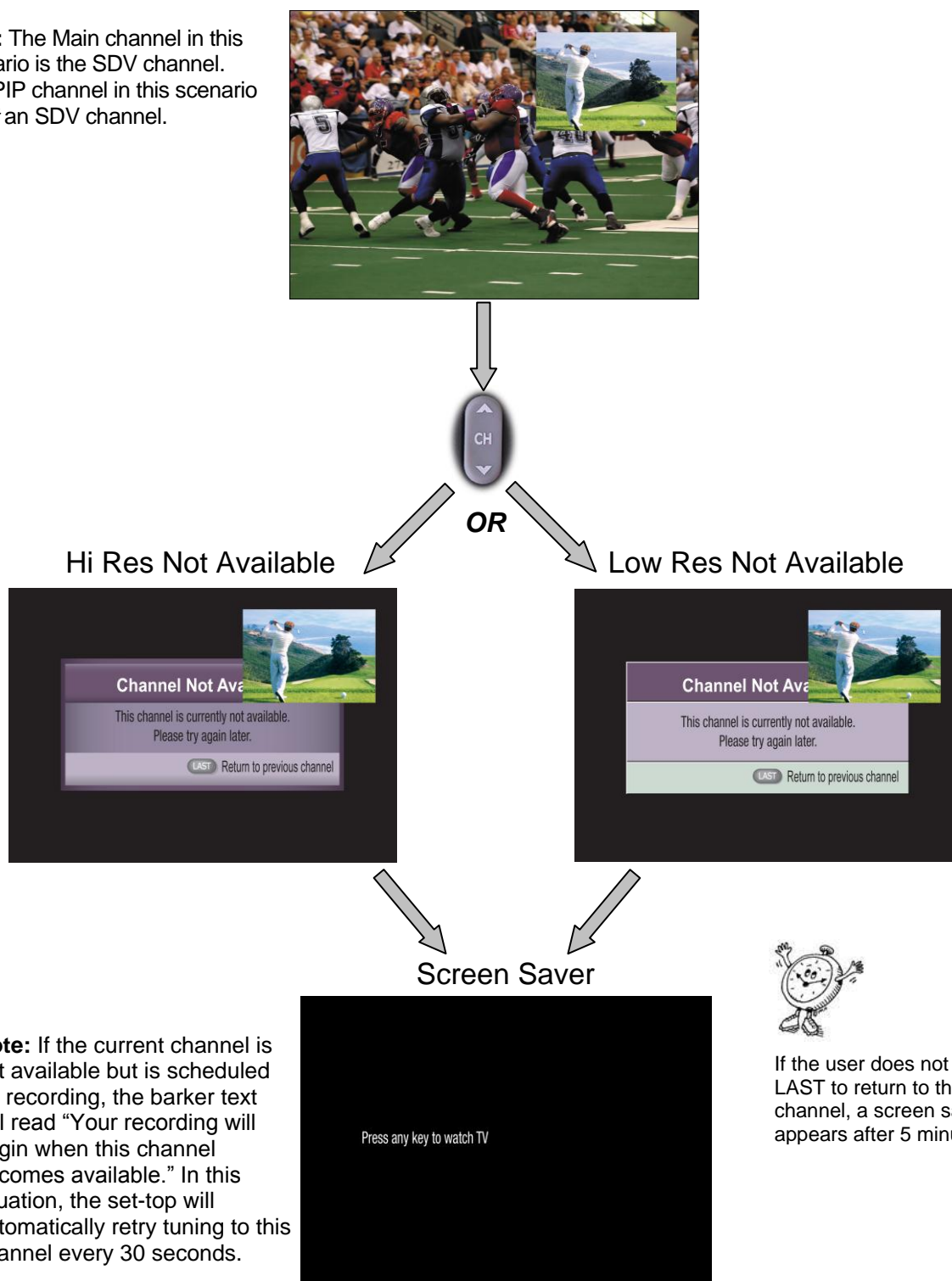


## Scenario 3: Tune an Unavailable SDV Channel in Main Screen



## Scenario 4: Tune an Unavailable SDV Channel in Main Screen with PIP Displayed

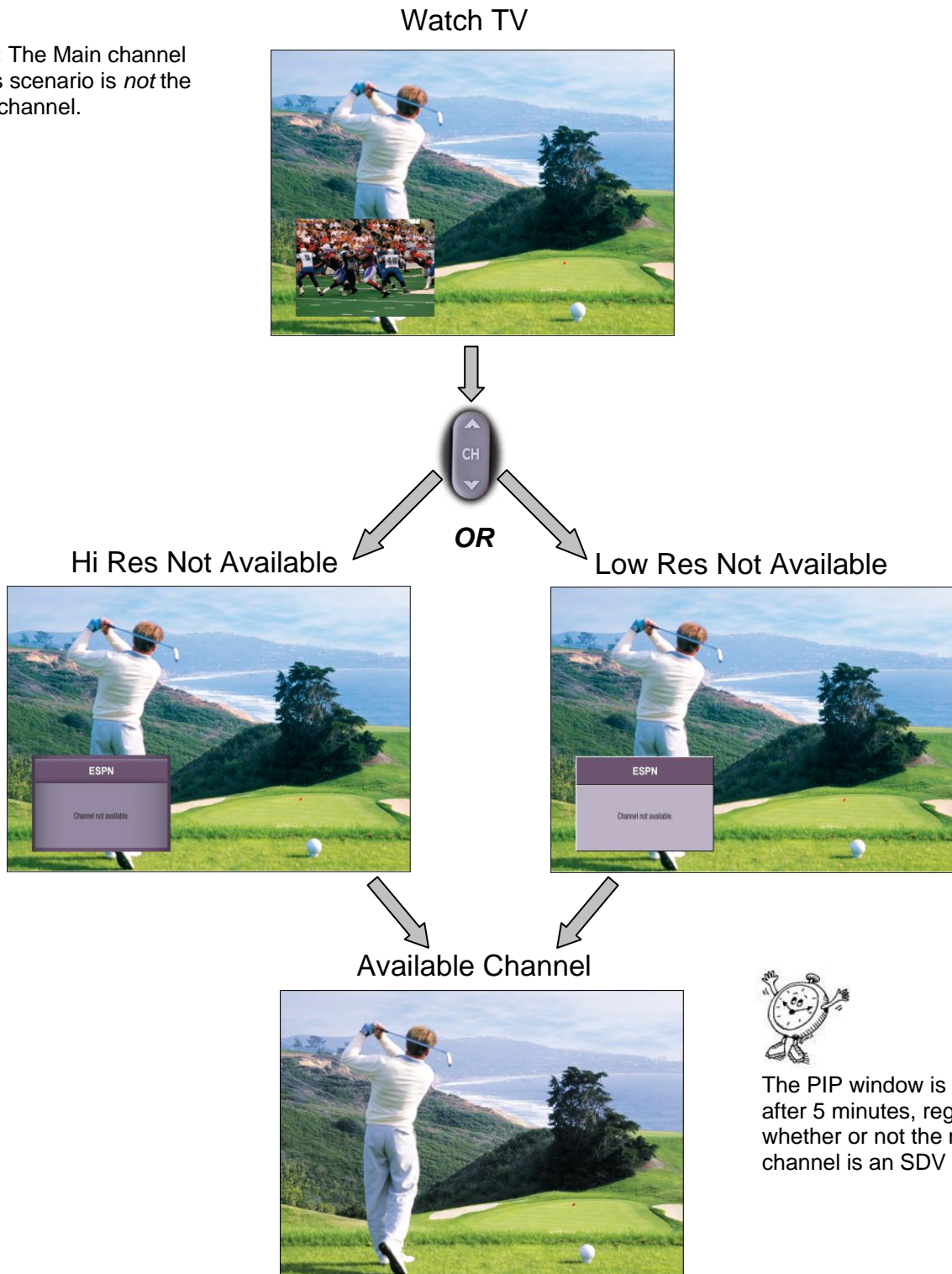
**Note:** The Main channel in this scenario is the SDV channel. The PIP channel in this scenario is *not* an SDV channel.





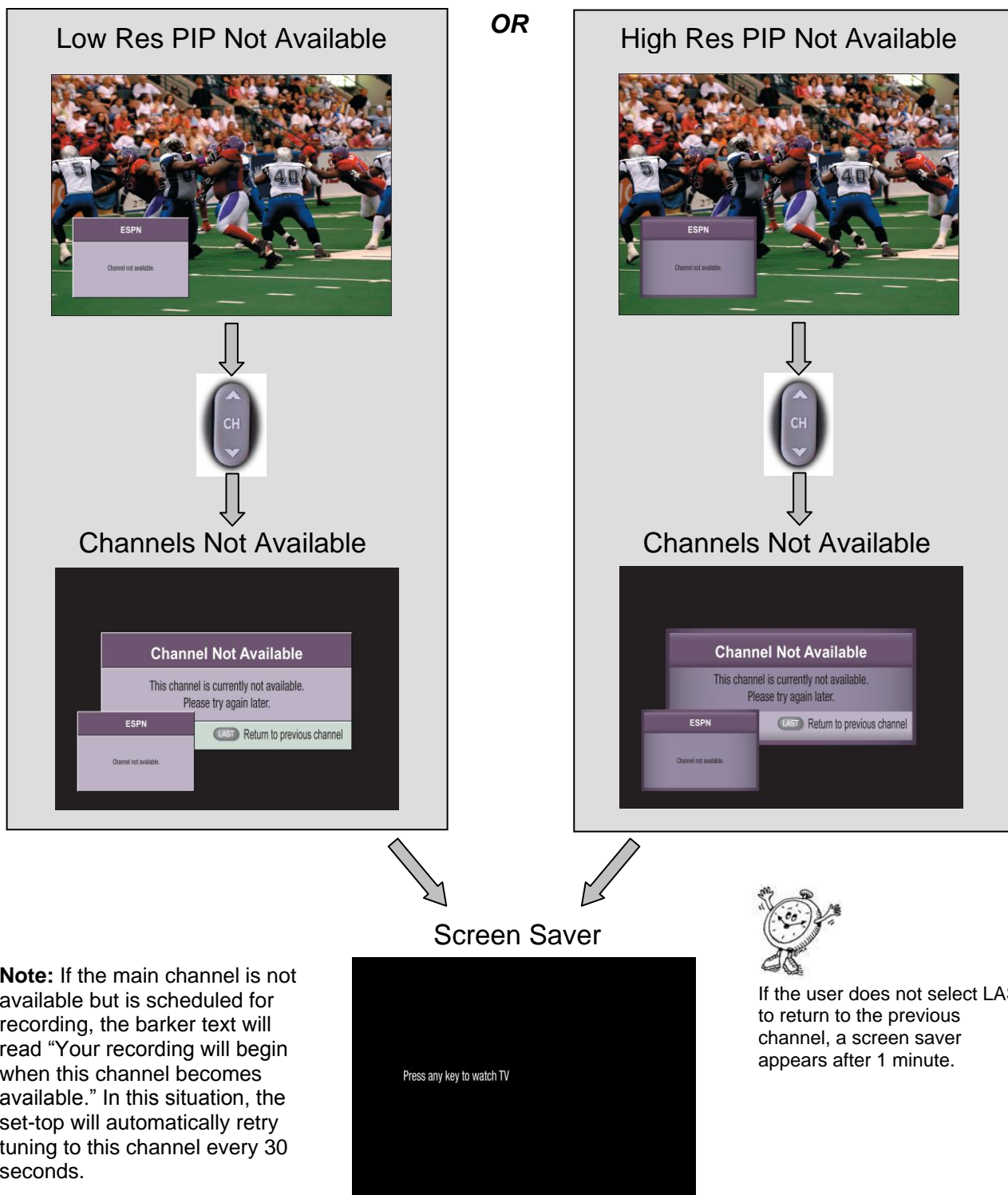
## Scenario 5: Tune an Unavailable SDV Channel in PIP Screen

**Note:** The Main channel in this scenario is *not* the SDV channel.



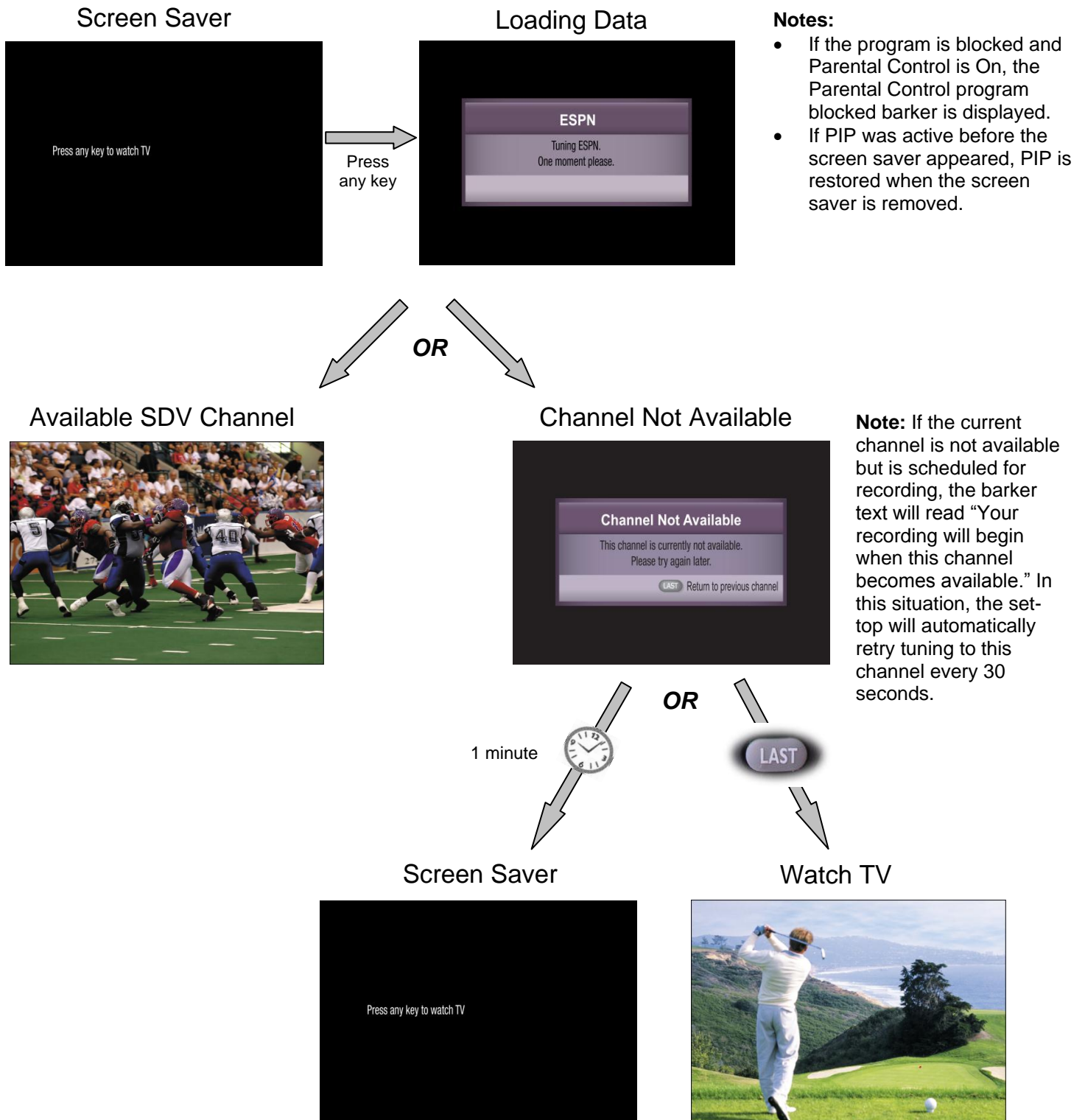
## Scenario 6: Tune Unavailable SDV Channels in PIP and Main Screens

**Note:** The Main and PIP channels are both SDV channels in this scenario.





## Scenario 7: Screen Saver Retries Tuning to SDV Channel



## Scenario 8: Server Needs Bandwidth (Main Screen)

Available SDV Channel



When the server needs bandwidth, it sends an Attention banner message to the set-top to see if the user is still interested in watching the SDV channel.

If the user does not respond to this message, then the server may shut down the SDV channel and reclaim the channel bandwidth (see Scenario 10).

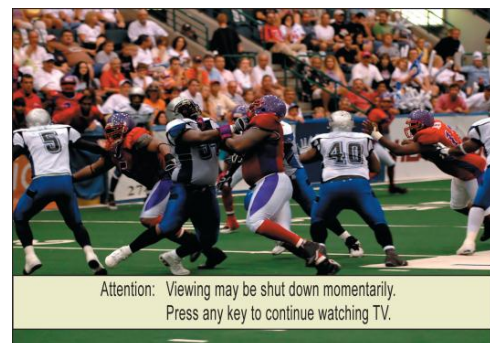


OR

Hi Res Warning Banner



Lo Res Warning Banner



## Scenario 9: Server Needs Bandwidth (PIP Screen)

### Available SDV Channel



When the server needs bandwidth, it sends an Attention banner message to the set-top to see if the user is still interested in watching the SDV channel.

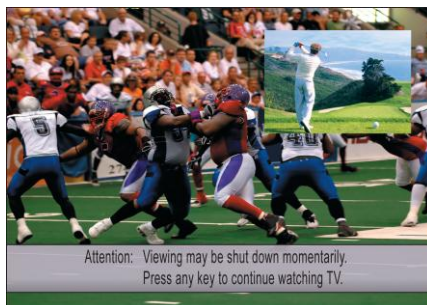
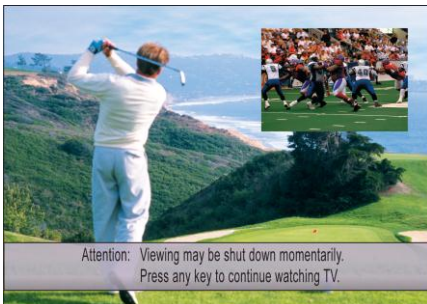
The Attention banner is shown if the SDV channel is tuned in PIP, the Main screen, or both.

If the user does not respond to this message, then the server may shut down the SDV channel(s) and reclaim the channel bandwidth (see Scenario 10).

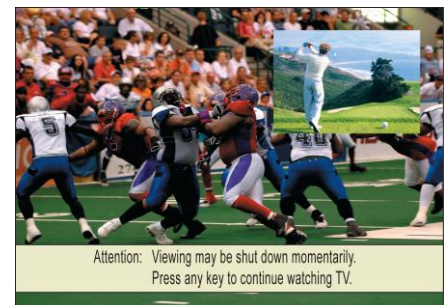
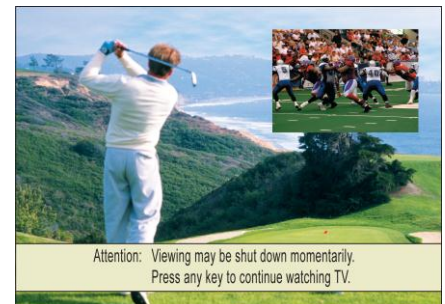


**OR**

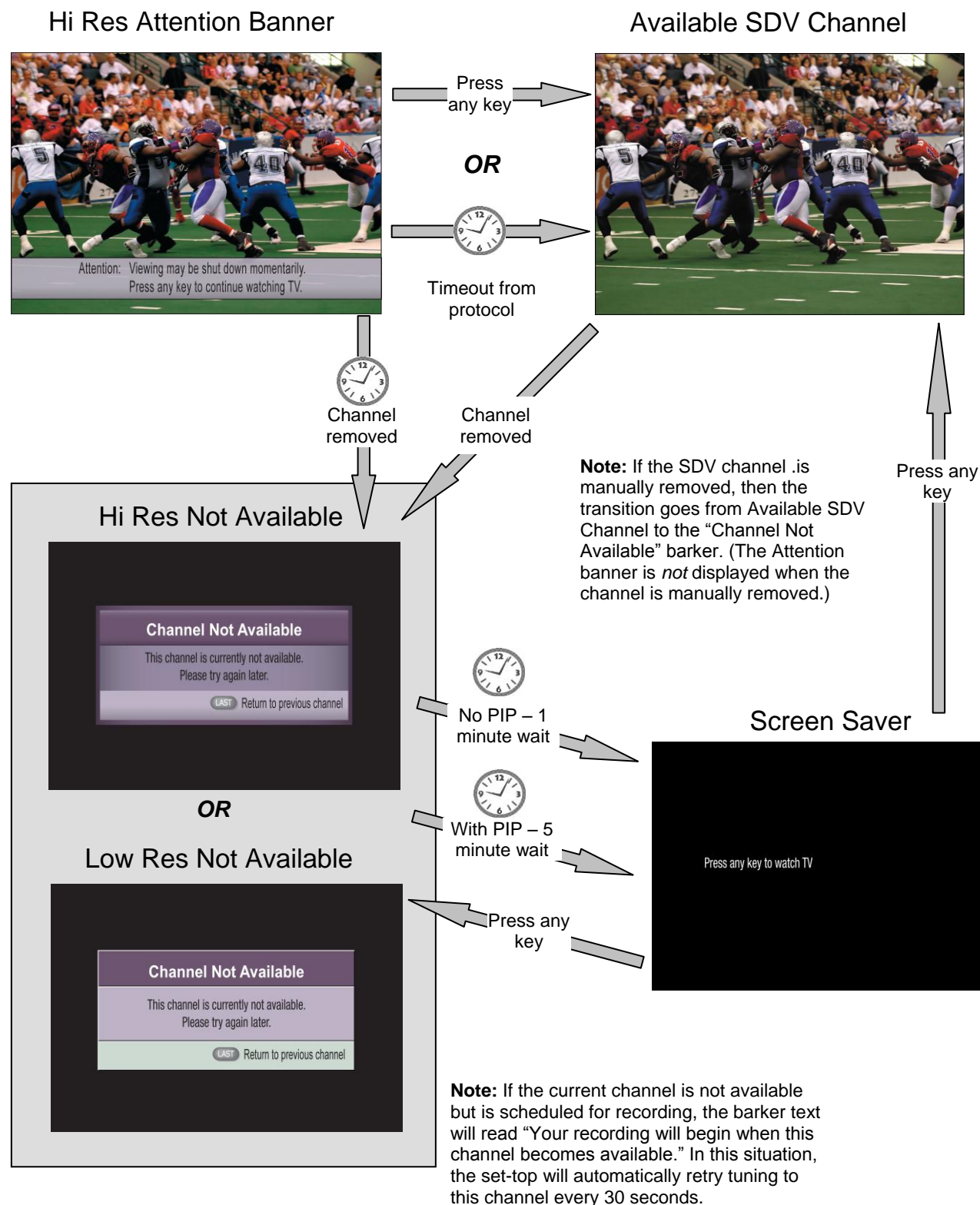
### Hi Res Attention Banners



### Lo Res Attention Banners



## Scenario 10: SDV Channel Removed to Reclaim Bandwidth





# Scenario 11: Incomplete Recording of SDV Channel

Available SDV Channel



Recording Ended Early

Recorded List

"Football"

Save: Until I Erase

Ended Early -- Channel not available

Recorded Programs	Date	Time	Length	Format
Finding Nemo	1/18	4:00pm	1:45	DVD
Calendar Girls	1/18	8:30pm	1:50	DVD
Football	1/19	8:30am	2:00	HDV/DVD
The Sopranos	1/20	10:00pm	0:55	
The Sopranos	1/21	10:00pm	0:55	

Options/Play

Scheduled Recordings

Preferences

Recording Started Late

Recorded List

"Football"

Save: Until I Erase

Started Late -- Channel not available

Recorded Programs	Date	Time	Length	Format
Finding Nemo	1/18	4:00pm	1:45	DVD
Calendar Girls	1/18	8:30pm	1:50	DVD
Football	1/19	8:30am	2:00	HDV/DVD
The Sopranos	1/20	10:00pm	0:55	
The Sopranos	1/21	10:00pm	0:55	

Options/Play

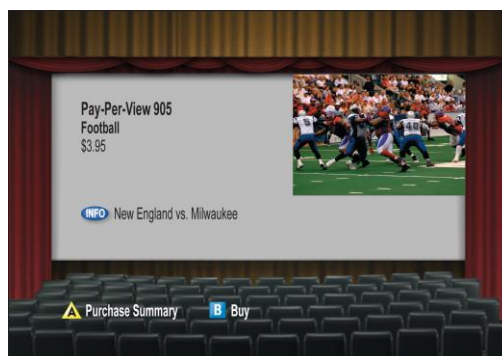
Scheduled Recordings

Preferences

## Scenario 12: Purchase SDV Service from PPV Channel

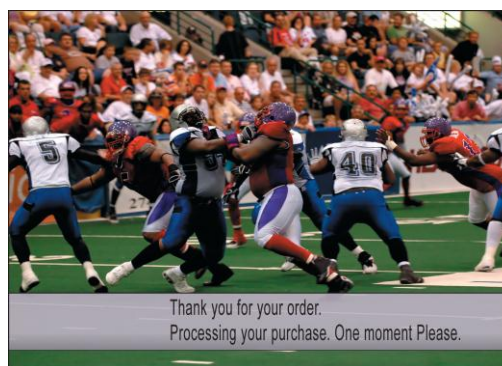
The screen varies based on the PPV state.

### PPV SDV Channel



Available

### PPV Thank You Banner



Not Available



OR



Available

### PPV Not Available



### PPV SDV Channel



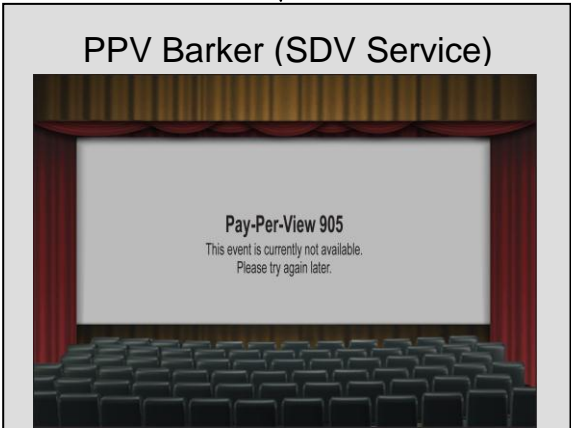
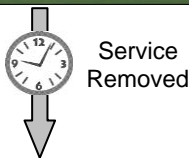
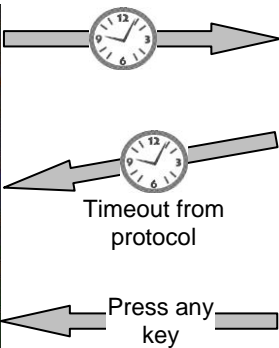
#### Notes:

- If there is a delay before video is presented for the PPV channel, a "Please wait" barker is displayed until video can be shown or until the "PPV Not Available" barker is displayed.
- If the "PPV Not Available" barker is displayed and the PPV cancel window has not expired for the purchased PPV event, the PPV purchase is automatically cancelled. If the "PPV Not Available" barker is displayed *after* the cancel window expires, then the user must call the cable operator to cancel the purchase.
- The "PPV Not Available" barker does not stay on the screen indefinitely. The barker eventually transitions to the "PPV events are shown on this channel" barker or the SDV interstitial service for the remaining duration of the current PPV event; then, the barker transitions to the "PPV preview" or "PPV purchase" barker for the next event when the advertising window or purchase window starts, respectively.

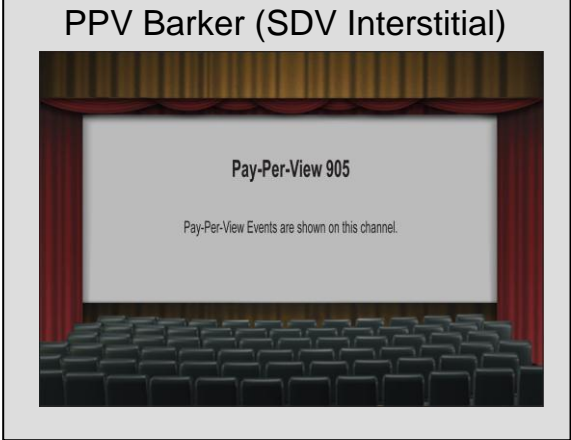
**Note:** If the current PPV event is not available but is scheduled for recording, the PPV Not Available barker text will read "Your recording will begin when this event becomes available."



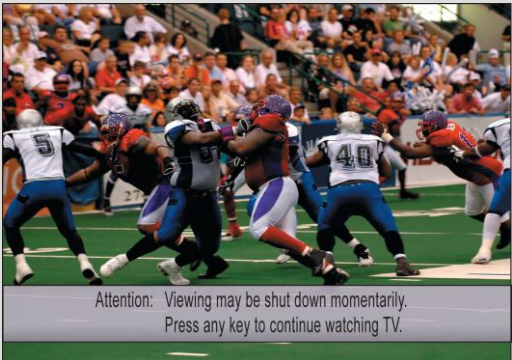
# Scenario 13: PPV Channel SDV Service or SDV Interstitial



**OR**

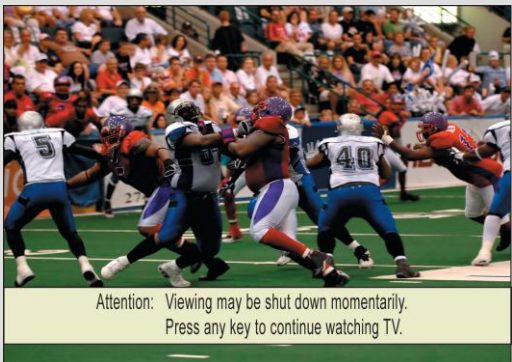


## Hi Res Attention Banner



**OR**

## Low Res Attention Banner



**Note:** If the current PPV event is not available but is scheduled for recording, the PPV Not Available barker text will read "Your recording will begin when this event becomes available."

# For Information

## If You Have Questions

If you have technical questions, call Cisco Services for assistance. Follow the menu options to speak with a service engineer.



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