



## *Application Note*

### *Program Blocking using eZVision 300 Series TV Controllers with OSD*

AN005100-TVC1299



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**Application Note**  
**Program Blocking using eZVison 300 TV Controllers**



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## *Program Blocking using eZVision 300 Series TV Controllers with OSD*

### *Overview*

ZiLOG's eZVision 300 series of high performance television controllers with On-Screen Display (OSD) incorporates a powerful 16-bit DSP processor. With widely-used CCD, XDS, V-Chip decoding software API routines, the eZVision 300 series can decode line 21 data including program rating information easily and reliably. The following method is recommended to block TV programming using the eZVision 300 series.

### *Program Blocking (Parental Control) Demo*

Television programming can be blocked using a Parental Control Menu. To access this menu, select the **Main Menu** of the television screen display, then select the **Setup Menu**. From the Setup Menu, select the **Parental Control Menu**.

If it is the first time that the Parental Control Menu is used, a screen appears requesting a four-digit PIN number. See Figure 1.



Figure 1 PIN Number Screen

After entering a PIN number, a number verification screen appears. Re-enter the PIN number. See Figure 2.

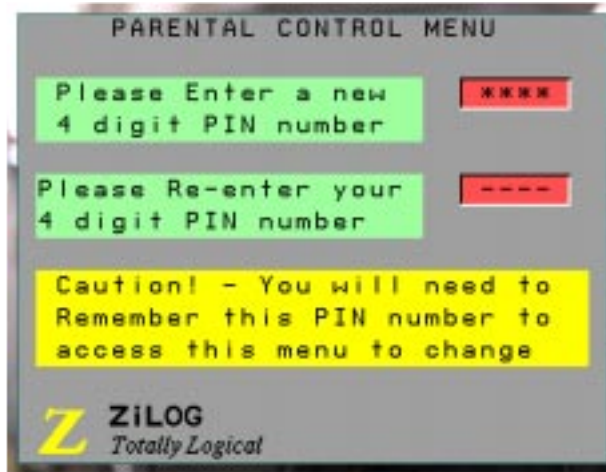


Figure 2 PIN Number Verification Screen

After a valid PIN has been established, the following screen appears asking for the PIN number to prevent unauthorized access. This screen is the first screen to come up if a PIN number has been previously established. See Figure 3.



Figure 3 Authorized Access Screen

Once a valid PIN has been entered, the Parental Control Setup Menu appears. This screen sets the required program blocking category and activates blocking. See Figure 4.



**Figure 4 Parental Control Setup Menu**

The Parental Control Menu Setup Menu lists settings for three types of guidelines:

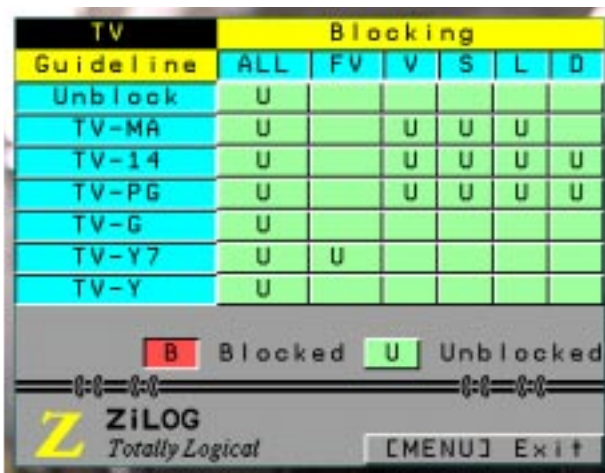
- Television Guidelines
- Motion Picture Guidelines
- Canadian Guidelines (English and French)

The Parental Control ON/OFF button that enables or disables parental control.

The Change PIN code window provides a means for changing a PIN number. If this window is selected, the PIN Number Screen and Verification Screen are displayed again.

## Television Guideline Menu

The Television Guideline menu setup is illustrated in Figure 5.



TV	Blocking					
Guideline	ALL	FV	V	S	L	D
Unblock	U					
TV-MA	U		U	U	U	
TV-14	U		U	U	U	U
TV-PG	U		U	U	U	U
TV-G	U					
TV-Y7	U	U				
TV-Y	U					

B Blocked U Unblocked


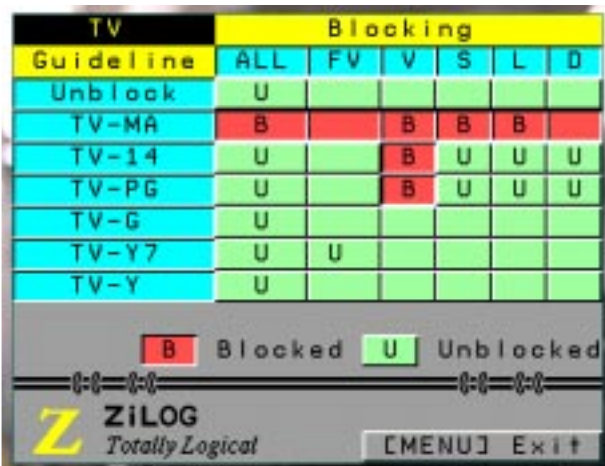

[MENU] Exit

Figure 5 Television Guideline Menu Setup Screen

Set the required blocking levels by using the TV remote control's UP, DOWN, LEFT and RIGHT direction keys. Use the direction keys to navigate to the proper cells. Pressing the enter key changes the label from **U** to **B** and enables program blocking. Pressing the enter key again toggles the **B** back to a **U**. Figure 6 is an example of selected program blocking. Cells labeled **B** indicate blocked programming and cells labeled **U** indicated unblocked programming.



TV	Blocking					
Guideline	ALL	FV	V	S	L	D
Unblock	U					
TV-MA	B		B	B	B	
TV-14	U		B	U	U	U
TV-PG	U		B	U	U	U
TV-G	U					
TV-Y7	U	U				
TV-Y	U					

B Blocked U Unblocked



[MENU] Exit

Figure 6 Example of Selected Program Blocking

### Movie Guideline Menu

The Movie Guideline Menu is illustrated in Figure 7. Cells labeled **B** indicate blocked programming and cells labeled **U** indicated unblocked programming.

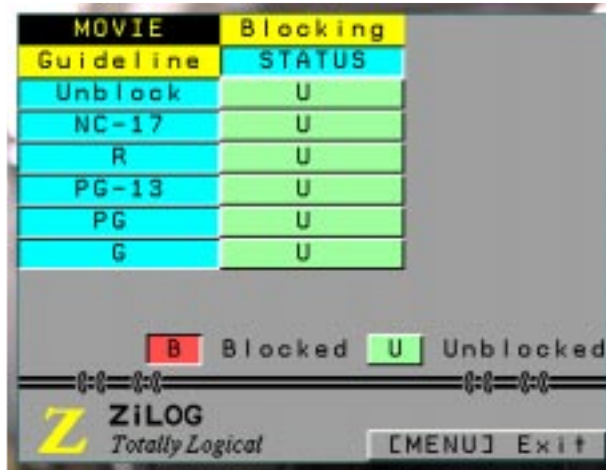


Figure 7 Movie Guideline Setup Screen

Program blocking occurs when a television program that exceeds the programmed blocking rating is broadcast. The TV screen goes from a viewable screen to a blocked screen. See Figure 8.

### Viewable Screen



### Blocked Screen



Figure 8 Example of Program Blocking on Screen



## *TV Rating Definitions*

**Audience:** In *italics*, indicates the audience for which a television program is appropriate.

**Content Label:** Indicates programs containing higher levels of violence, sex, adult language, or suggestive dialog.

## **TV Parental Guidelines Symbols and Definitions**

### **Content Labels**

TV Parental Guidelines may have one or more letters added to the basic rating to let parents know when a show contains high levels of violence, sex, adult language or suggestive dialogue.

V	Violence
S	Sexual situations
L	Coarse or crude indecent language
D	Suggestive dialogue (usually means talk about sex)
FV	Fantasy violence

The following categories apply to programs designed solely for children.



### **TV-Y All Children.**

*This program is designed to be appropriate for all children.*

Whether animated or live-action, the themes and elements in this program are specifically designed for a very young audience, including children from ages 2 through 6. This program is not expected to frighten younger children.



### **TV-Y7 Directed to Older Children.**

*This program is designed for children age 7 and above.*

It might be more appropriate for children who have acquired the developmental skills needed to distinguish between make-believe and reality. Themes and elements in this program can include mild fantasy violence or comedic violence, or might frighten children under the age of 7. Therefore, parents might wish to consider the suitability of this program for very young children.



**Note:** For those programs where fantasy violence can be more intense or more combative than other programs in this category, such programs might be designated TV-Y7-FV.

The following categories apply to programs designed for the entire audience.



**TV-G General Audience.**

*Most parents would find this program suitable for all ages.*

Although this rating does not signify a program designed specifically for children, most parents might let younger children watch this program unattended. It contains little or no violence, no strong language and little or no sexual dialogue or situations.



**TV-PG Parental Guidance Suggested.**

*This program contains material that parents may find unsuitable for younger children.*

Many parents might want to watch this program with younger children. The theme itself may call for parental guidance or the program contains one or more of the following: Moderate violence (V), some sexual situations (S), infrequent coarse language (L), or some suggestive dialogue (D).



**TV-14 Parents Strongly Cautioned.**

*This program contains some material that many parents would find unsuitable for children under 14 years of age.*

Parents are strongly urged to exercise greater care in monitoring this program and are cautioned against letting children under the age of 14 watch unattended. This program contains one or more of the following: intense violence (V), intense sexual situations (S), strong coarse language (L), or intensely suggestive dialogue (D).



**TV-MA Mature Audience Only.**

*This program is specifically designed to be viewed by adults and therefore may be unsuitable for children under 17.*

This program contains one or more of the following: graphic violence (V), explicit sexual activity (S), or crude indecent language (L)

## Movie Rating Definitions

When watching a movie on cable TV that has not been edited for television, the original movie rating by the Motion Picture Association of America (MPAA) is used instead of a TV rating. The eZSelect program blocking chip can be set to block



MPAA-rated movies on premium cable channels, such as HBO, Showtime or Cinemax. Movie ratings are as listed below.

- G            General Audiences. All ages admitted.
- PG          Parental Guidance Suggested. Some material may not be suitable for children.
- PG-13      Parents Strongly Cautioned. Some material may be inappropriate for children under 13.
- R            Restricted. Under 17 requires accompanying parent or guardian.
- NC-17      No One 17 and Under Admitted.