

## CLOCK SETTING



- When the power is off(stand-by mode) after timer is set, the color of stand-by indicator changes from green to orange.
- If on timer and off timer is set at the same time and minutes, **ON TIMER** has priority over off timer when power is off
- You can activate timer function and channel, using VOL + and CH ▲/▼ button.

### SLEEP TIMER

Select a sleep time period from 15 to 90 minutes.  
The television automatically is turned off after the set sleep time has elapsed.  
Whenever sleep button is pressed, the time period change as shown below  
OFF → 15 → 30 → 45 → 60 → 90.

### AUTOMATIC POWER -OFF OPERATION

Set is turned off automatically after 15 minutes in the absence of picture signal.

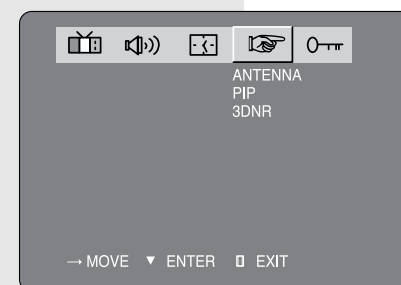
## SET UP

### ANTENNA SELECTION

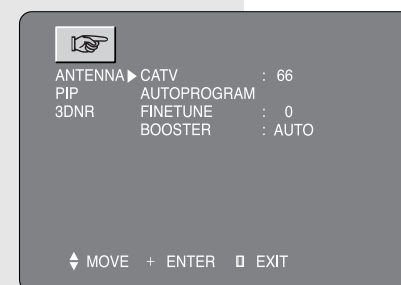
#### CATV ↔ TV

In this mode, you can change the broadcast mode between TV (For regular VHF/UHF channel) and CATV (For cable channel).

- Press menu button and select set-up icon by VOL +/- Key.



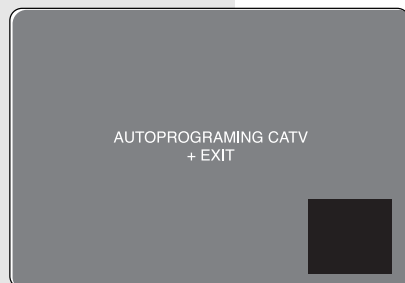
1. Press CH ▼ button.



2. Change the broadcast mode by VOL + button.

## SET UP

### AUTO-PROGRAM



- All broadcast channel in the current mode (CATV/TV) will be scanned and stored.
- After this operation, press **MENU** button to exit.
- To stop this procedure during the operation, press **VOL +** button.

### MANUAL SEARCH

#### 1. To add a channel

To add a skipped channel to the memory after the autoprogram operation, follow these steps.

- ▶ Select a channel to view by using 10 digit keys on the remote controller.
- ▶ Press **ADD/DEL** button on the remote controller.  
The color of a memorized channel number changes from red into **GREEN**.

#### 2. To delete a channel

Exclude a channel from the memory.

Follow these steps to delete a channel in TV memory.

- ▶ Press **CH ▲/▼** button or 10 digit keys to select a channel you want to delete.
- ▶ Press **ADD/DEL** button on the remote controller.

## SET UP

### MANUAL SEARCH

The channel is deleted from the memory, and the color of the channel number changes from green to red.

### FINE-TUNE

- If the reception is clear, do not fine-tune the channel. Because this is done automatically during the autoprogram operation.
- The AFT (Automatic Frequency Tuning) mode does not operate on the channels that are fine-tuned.  
▶ Press **VOL + / -** button to fine-tune a channel.

### BOOSTER EFFECTS

- In case that the incoming signal is weak, set **BOOSTER** auto or active state. However, If you are located in a strong signal area like a nearby broadcasting station and if the picture is distorted, set booster off or inactive state.  
▶ Press **VOL +** button to set booster active or inactive.

### 3DNR FUNCTION



- Motion adaptive spatial and temporal noise reduction (3D-NR) reduces a lot of noise in the picture!  
▶ Press **CH ▼** button to select 3D-NR (3 Dimension Noise Reduction).  
▶ Press **VOL +** button to change 3D-NR mode and then the mode changes as shown below.  
**2 MODE → 3 MODE → 1 MODE**

## PIP OPERATION

### PIP OPERATION

- In this mode, enjoy **watching and listening to two picture sources at the same time.**

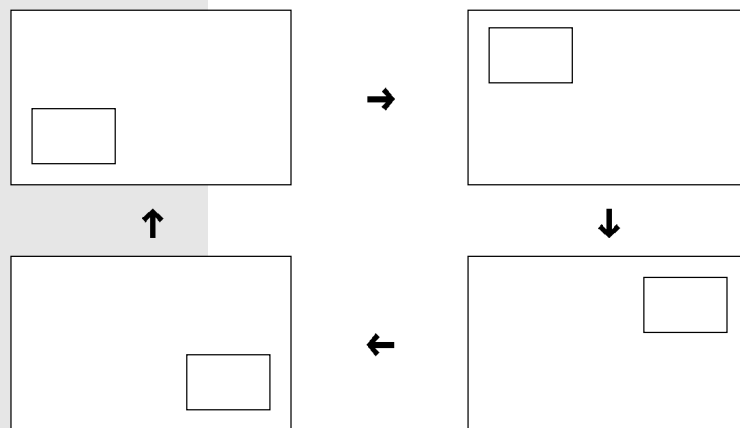
#### 1. PIP ON / OFF

► Press VOL + button to activate PIP operation or press the PIP button on the remote controller.



#### 2. PIP Position

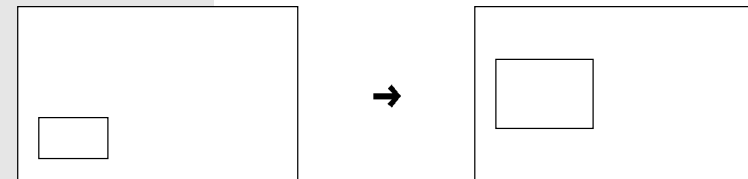
Press **CH ▼** and **VOL +** button to change a direction or press **position** button on the panel PIP.



## PIP OPERATION

### PIP OPERATION

#### 3. PIP Size



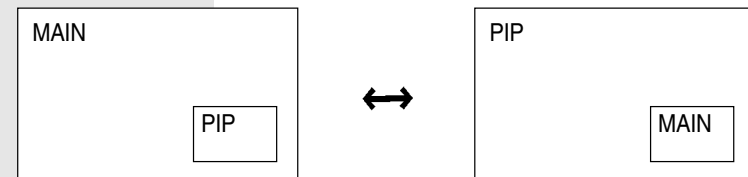
#### 4. PIP TV/VIDEO

Press TV/VIDEO button on the PIP panel and then PIP picture mode will be toggled as shown below.

**TV → VIDEO1 → VIDEO2(S-VHS 2) → VIDEO3(S-VHS 3) → YUV → RGB**

#### 5. PIP Swap

Press swap button to swap main window with sub window.



#### 6. PIP Still

Press still button and then PIP will freeze.

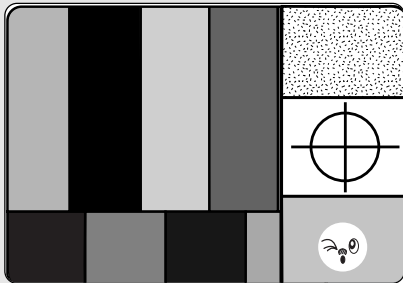
## PIP OPERATION

### PIP OPERATION

#### 7. Channel index function

- You can check other broadcast pictures in sequence while watching main picture!
- Press index button in sequence.

#### Press index button once



#### Press index button thrice times



- Press index button again or CH ▲/▼ button to exit.

## PIP OPERATION

### PIP OPERATION



#### 8. PIP Strobe operation

- You can view sports game action frame by frame in still quickshots.
- Press strobe button once more to exit.

## FUNCTIONS

### WIDE FUNCTION

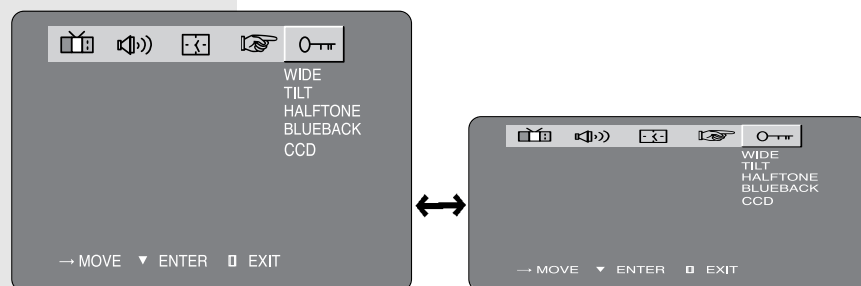
This function lets you select one between wide and normal screen.

WIDE ON : 16:9 SCREEN

WIDE OFF: 4:3 SCREEN

- Press menu button and then select **FUNCTION** icon by VOL +/- key.

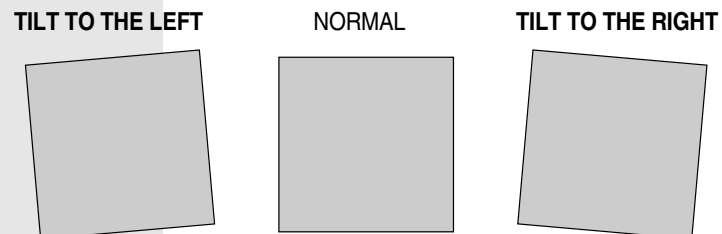
1. Press CH ▼ button



2. Press VOL + button to activate wide mode or press wide button on the remote controller.

### TILT FUNCTION

It compensates the picture display for tilting to the left or right because of the geomagnetic effects.

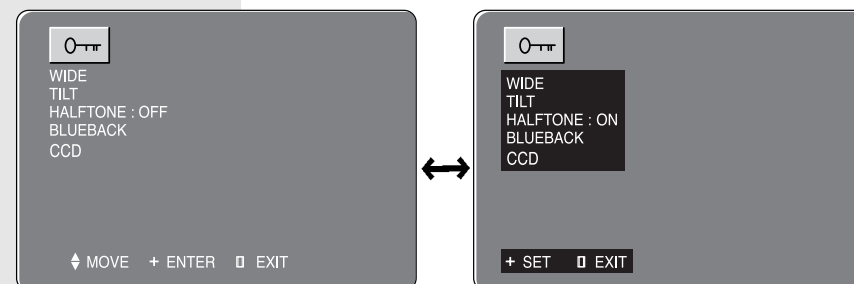


- Adjust the tilt of the picture using VOL + / - button.

## FUNCTIONS

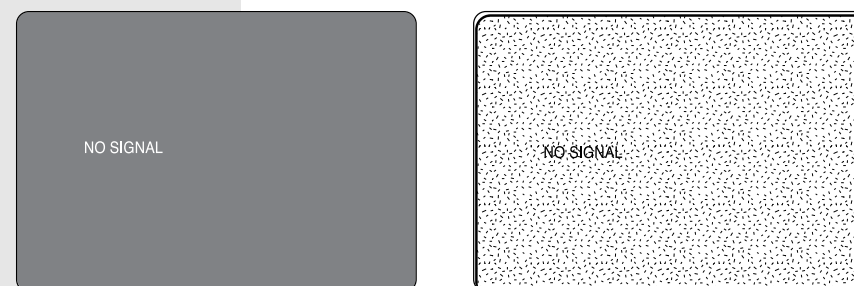
### HALFTONE MODE

- See guide characters on a slight black background.
- Press VOL + button to activate the halftone mode.



### BLUEBACK MODE

- When there is no picture signal or the signal is weak, the screen will revert to a solid blue color.
- We recommend to disable this function in watching very weak signals.



**NOTE :** Even if there is no signal in the main window, blue back function will not activate when PIP is on!

## FUNCTIONS

### CLOSED CAPTION DECODER MODE

- A built-in closed caption decoder(CCD)  
Detects broadcasts with encoded closed caption signals and displays their content on the screen.
- While the closed caption and text modes are respectively capable of receiving either of 2 channels of information (CCD 1&2, text 1&2), few TV stations broadcast more than 1 channel of CCD information, and fewer still broadcast any text information at all.
- CCD and TEXT information can be displayed nly when there are being broadcast by the TV station, or contained in a videotape or DISC.

1. Press MENU button and then select function icon by VOL +/- key.
2. Press CH ▼ button to select CCD.
3. Each time you press VOL + button, the CCD mode will be toggled like this;  
OFF → CCD1 → CCD2 → TEXT1 → TEXT2 → OFF
4. Press MENU button sequentially to exit.

#### NOTE

- Caption characters disappear when the On-Screen display is on the screen.  
They appear again when the On-Screen display goes off.
- Caption display errors will occur when the broadcast signal is weak, a video tape has been poorly recorded, or a videotape has been recorded over numerous times.

## PRACTICAL APPLICATION

### DOUBLE WINDOW FUNCTION

Watch main and sub picture of the same size simultaneously!  
Listen to the main sound or sub sound by a headphone with it's independent volume control.



1. Conversion from normal window to double window.

► Press double button on the remote controller.

**MAIN PICTURE** : Press CH ▲/▼ button or 10 digit keys to change the channel you want to watch.

**SUB PICTURE** : Press CH ▲/▼ button on the panel PIP to change the channel you want to watch.



2. Wide mode in double window.

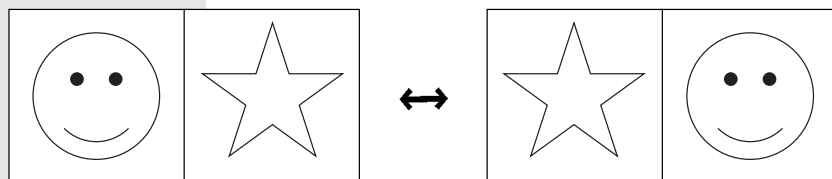
► In double window mode, you can watch TV at wide display state by wide button.

## PRACTICAL APPLICATION

### DOUBLE WINDOW FUNCTION

3. Swap function in double window.

Press swap button on the panel PIP to swap main picture with sub picture.



4. Multiple input selection in double window

TV(2 CH)	TV(13CH)	TV	VIDEO 1
TV	VIDEO2 (S-VHS 2)	TV	VIDEO3 (S-VHS 3)
TV	YUV	TV	RGB
VIDEO 1	VIDEO1	VIDEO 1	VIDEO 2 (S-VHS 2)
VIDEO 1	VIDEO 3 (S-VHS 3)	VIDEO 1	YUV

## PRACTICAL APPLICATION

### DOUBLE WINDOW FUNCTION

VIDEO 1	RGB	VIDEO1	TV
VIDEO 2 (S-VHS 2)	VIDEO 1	VIDEO 2 (S-VHS 2)	VIDEO 2 (S-VHS 2)
VIDEO 2 (S-VHS 2)	VIDEO 3 (S-VHS 3)	VIDEO 2 (S-VHS 2)	YUV
VIDEO 2 (S-VHS 2)	RGB	VIDEO 2 (S-VHS 2)	TV
VIDEO 3 (S-VHS 3)	TV	VIDEO 3 (S-VHS 3)	VIDEO 1
VIDEO 3 (S-VHS 3)	VIDEO 2 (S-VHS 2)	VIDEO 3 (S-VHS 3)	VIDEO 3 (S-VHS 3)
VIDEO 3 (S-VHS 3)	YUV	VIDEO 3 (S-VHS 3)	RGB