

# User Manual



## LED PROJECTOR

# MINI LED LCD projector

## *User Manual*



Before use the product, please be sure to carefully read and understand the instruction manual, and properly keep the instruction manual for the future reference.

## Preface

First of all thank you for selecting the LED liquid crystal projector produced by our company. The LED liquid crystal projector produced is applicable to meetings, teaching, product demonstration, entertainment venues and home theaters. The projector is clear in projected images, has high contrast ratio, stable performances and rich functions, is convenient to operate and high in cost performance, and belongs your wise choice.

The product gets honor form our customers through excellent quality and first-class service. In order to thank the support of our customers, we will continuously provide more prefect visual enjoyment with a quality policy of guaranteeing the quality, continuously innovating and letting all the consumers be more satisfactory.

### **Safety Precautions**

Before use the projector, please carefully read and observe all the safety precautions, otherwise fire, electric shock or personal injury can be caused, and protection provided by equipment may be also damaged or weakened. Please store all documentations of safety precautions.

### **Safety Marks**



## Special Tips

1. Regulating contrast ratio, brightness and focal distance according to different SOURCE signals is the crux of clear images, or the images may be blurred.
2. High voltage is formed in the projector, so that opening the cover and touching internal components are strictly prohibited.

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## Chapter I Preparation before Use

### Section I Projector Settings

#### Setting Method

The projector has the following two projection methods, and please select an optimal display method according to projection places.

1. Projecting from the front surface: the projector is horizontally raised or the front part is slightly raised, and images are projected to the projection screen.
2. The projector is hung on a ceiling, images are projected from the front surface, and use a projector hanging bracket, so as to hang the projector on the ceiling to project images to the projection screen from the front surface.

#### Note:

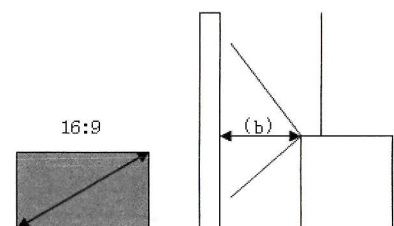
Special projection hanging bracket is required to be purchased when suspended ceiling is installed on the ceiling. If this mounting method is required, please consult the dealer.

Please refer to icons to fix projection screen size and projection distance.

- (a). Screen size, (b) distance from the projector to the screen ( $\pm 5\%$ )

Table (1)

Screen size (a) {Inch(m)}	16:9 display aspect
	Projection distance (b) m( $\pm 5\%$ )
32 inch	1.2 meter
50 inch	1.76 meter
100 inch	3.2 meter
128 inch	4.2 meter



### Section II. Connection of Signal Sources

#### Connection with Computer

- Please turn off power supplies of the projector and the signal source before connection, and connection performed when the power supplies are turned on may cause faults.
- Please confirm whether the connector of a cable is matched with the SOURCE interface of the projector, and constrainedly plugging devices with different shapes and pins may cause faults or equipment damage.
- Use the 'SOURCE' button to set the projector to be 'computer' SOURCE.
- You'd better set display resolution and frequency to be 800×480 and 60Hz when the projector is connected with a computer.

#### Connection with Audio and Video Signal Sources

- Use A / V cable (red/white/yellow randomly provided) to connect signal



sources (DVD or VCD, video tape recorder and camera) with the video SOURCE terminal of the projector.

**Note:**

- Use the 'SOURCE' button to set the menu function to be 'AV' SOURCE after connection.
- Video output and audio left and right channel output of signal sources should be connected with corresponding SOURCE interfaces of the projector.

### Section III Use of Remote Controller

#### Mounting of Batteries

Batteries were not mounted in the remote controller when the projector was bought.

**Note:**

If the remote controller becomes slow in response or can not be operated after being used for certain period, the batteries are exhausted, please change the batteries.

#### Use Method of Remote Controller

1. The luminous part of the remote controller is towards the remote control light receiving part (the right front part of the projector) of the projector during operation.
2. The distance between the remote controller and the projector can not be too far, and the angle of the remote controller departing from the right front part of the remote control receiving head of the projector is within a range of  $30 \pm 10\%$  degrees.

The remote controller can not be operated when the operation distance or angle exceeds normal the operation range.

images;



: switch; : mute

FLIP: image upside down  
FREEZE: image suspended;  
P.MODE: image mode;  
AUDIO: sound mode;  
ZOOM: magnifying or reducing

FAV: favorite channel;  
CH.LIST: channel list;  
ENTER: confirm button  
MEMU: menu button;  
16:9/4:3: 16:9/4:3 mode switching;

: up, down, left and

right buttons on menu;

source: signal source selection button;



: volume adjusting;



: channel adjusting

RETURN: escape button; 0—9: channels 0-9

-/--: channel selection button; INFO: screen display;

DISP: when USB plays video, you can press 'skip to' button to set the playing time you want, for example setting 00:30:00 means video is begun to play in a 30-minute position.

EPG: repeat play button; STOP: stop playing;



: play or suspended; FF: fast reverse; FB: fast forward;

PREV: the previous program (composite yellow button); NEXT: the next program (composite blue button);

EXIT: escape button under DTV channel

DTV: digital TV menu button, press DTV button to enter DTV menu;

**Note:**

1. Do not allow other light sources to directly illuminate the remote control light receiving part of the projector, otherwise signals from the remote controller may not be received.
2. Do not let the remote controller fall down or let the remote controller be strongly collided.
3. Do not let water or other liquid be splashed on the remote controller.
4. When the remote controller is not used for a long time, please take out the batteries, so as to prevent battery fluid leakage.

## Chapter II Basic Operation

### Section I Switching on Power of Projector

#### Operation:

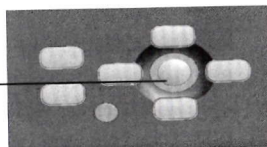
1. Please ensure that power supplies of the projector and equipment connected with the projector are turned off.
2. Connect a computer or a signal source with the projector.
3. Take down the lens cap.
4. Connect the projector with a power socket through a power cable attached to the projector.
5. Turn on all power supplies connected to the projector.  
If the signal source can be normally operated only through operation, please set the signal source to be normal operation mode.
6. Switch on the power supply of the projector, and now the power indicating lamp is red.  
Press the **【POWER】** button on the projector operation panel or the **【POWER / OFF】** button on the remote controller, and then the power lamp becomes blue. At this moment the projector has been normally operated.
7. If the SOURCE port arranged inside the projector is inconsonant with external equipment, then a button or the menu function of the remote controller is required to select the terminal of equipment to be connected.

- ※ If no signals exist all the time, please confirm again whether the connection mode and signal output of the external equipment are normal.

## Section II. Turning off Power Supply of Projector

The steps are as follows:

POWER button



### Operation:

1. Turn off the power supply of the signal source connected with the projector.
2. Press the **【POWER】** button on the projector operation panel or the **【POWER / OFF】** button on the remote controller, the lamp of the projector is turned off, switch off the power supply of the projector, and at this moment the projector is completely turned off.
3. Unplug the power plug from the power socket.
4. Install the lens cap.

## Section III. Regulating of Projected Images

### Regulating of Image Size

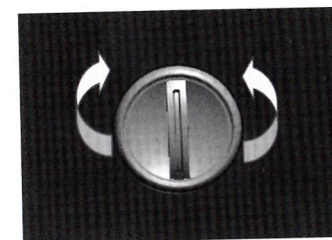
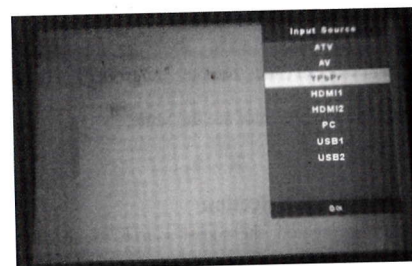
The image size is determined by the distance between the position of the projector and the projection screen, the image size should be regulated to proper state by changing the distance between the projector and the projection screen, and the projection image is required to be regulated, so that the project is in optimal projection state.  
Please refer to diagram (1).

### Regulating of Projection Angle

By regulating the supporting legs of the projector or the hanging bracket of the projector, the projection angle of the projector can be regulated to a proper position. When the position of the projector is required to be set, in order to reduce the image distortion, please ensure that the projector is close to the central perpendicular line position of the projection screen as far as possible. If the deviation angle of the projector from the central perpendicular line position of the projection screen exceeds 20 degrees, image distortion may be caused.

### Image Correction

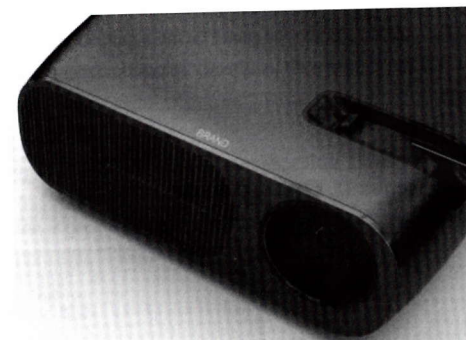
- When the projector is installed, as the projection axis is not perpendicular to the projection screen, the projection image can be in a trapezoid shape on the projection screen, and then turn the keystone correction knob on the projector till the image becomes a normal rectangle.



## Section IV. Regulating of Image Quality

### Projected Image Focusing

Turn the focusing ring on the lens of the projector till the projected image is correctly focused and the image is clear.



Focusing handle

- ※ When the lens is dirty or affected with damp and dewed, focusing can not be realized, please remove dirt or dew.
- ※ When the projection distance is not within the normal range, focusing can not be realized. If the normal focal distance is difficult to achieve, please confirm whether the projection distance is proper.

## Chapter III. Advanced Operations

The following describes how to use menu functions to perform the following advanced operations

### Note:

- ※ If the menu is not opened, press SOURCE on the projector operation panel or the signal source button on the remote controller to perform selection



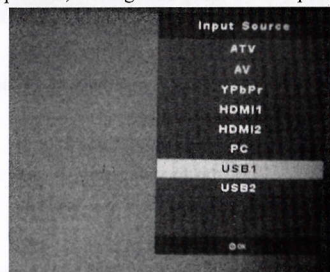
The present signal SOURCE mode: one of AV and VGA

※ Operation methods of the remote controller and the operation panel on the projector are the same.

### Section I SOURCE Selection

Projection signal source: when 'SOURCE' button is pressed, the signal source' menu option appears.

TV	TV SOURCE
AV	video SOURCE
.....	
PC	computer SOURCE
.....	



#### Operation:

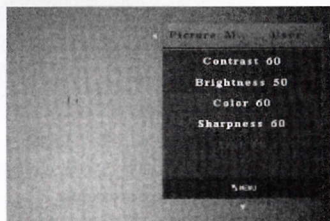
By pressing SOURCE on the on the projector operation panel or the signal source button on the remote controller, required signal SOURCE mode can be directly selected; signal channels of TV, video, computer and high definition

### Section II. Contrast Ratio

This function is used for regulating the contrast ratio of displayed images

#### Operation:

Enter to picture mode to  
adjust contrast



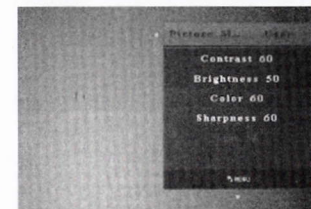
1. By pressing the 【MENU】 button on the operation panel or the 【MENU】 button on the remote controller, a 'function menu' window can appear on the screen,
2. By pressing 【←】 and 【→】 buttons, the window is switched to 'image', and by pressing 【↑】 or 【↓】 button, the cursor moves to the 'image mode' position.
3. By pressing 【SOURCE↑】 button, the screen enter an 'image mode' function menu.
4. Pressing 【←】 and 【→】, the screen enters 'user' of the 'image mode'.
5. By pressing 【↑】 or 【↓】 button, the cursor moves to 'contrast ratio' option.
6. By pressing 【←】 or 【→】 button, the image contrast ratio is regulated.
7. Press the 【MENU】 button on the operation panel or the 【MENU】 button on the remote controller to quit the menu.

### Section III. Brightness

This function is used for regulating the display brightness of images

#### Operation:

Enter picture mode to adjust  
brightness



1. By pressing the 【MENU】 button on the operation panel or the 【MENU】 button on the remote controller, the 'function menu' window can appear on the screen.
2. By pressing 【←】 and 【→】 buttons, the window is switched to 'image', and by pressing 【↑】 or 【↓】 button, the cursor moves to the 'image mode' position.
3. By pressing 【SOURCE】 button, the screen enter an 'image mode' function menu.
4. Pressing 【←】 and 【→】, the screen enters 'user' of the 'image mode'.
5. By pressing 【↑】 or 【↓】 button, the cursor moves to 'brightness' option.
6. By pressing 【←】 or 【→】 button, the image brightness is regulated.
7. Press the 【MENU】 button on the operation panel or the 【MENU】 button on the remote controller to quit the menu.

### Section IV Color

This function is used for regulating the display color of images

#### Operation:

Enter picture mode to adjust color



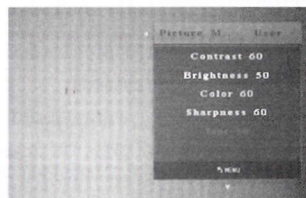
1. By pressing the 【MENU】 button on the operation panel or the 【MENU】 button on the remote controller, the 'function menu' window can appear on the screen.
2. By pressing 【←】 and 【→】 buttons, the window is switched to 'image', and by pressing 【↑】 or 【↓】 button, the cursor moves to the 'image mode' position.
3. By pressing 【SOURCE↑】 button, the screen enter an 'image mode' function menu.
4. Pressing 【←】 and 【→】, the screen enters 'user' of the 'image mode'.
5. By pressing 【↑】 or 【↓】 button, the cursor moves to 'color option'.
6. By pressing 【←】 or 【→】 button, the image color is regulated.
7. Press the 【MENU】 button on the operation panel or the 【MENU】 button on the remote controller to quit the menu.

### Section V. Sharpness

This function is used for regulating the display sharpness of images

#### Operation:

Enter to picture mode to adjust sharpness



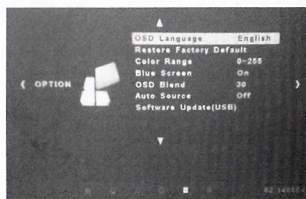
1. By pressing the **【MENU】** button on the operation panel or the **【MENU】** button on the remote controller, the 'function menu' window can appear on the screen.
2. By pressing **【←】** and **【→】** buttons, the window is switched to 'image', and by pressing **【↑】** or **【↓】** button, the cursor moves to the 'image mode' position.
3. By pressing **【SOURCE↑】** button, the screen enter an 'image mode' function menu.
4. Pressing **【←】** and **【→】**, the screen enters 'user' of the 'image mode'.
5. By pressing **【↑】** or **【↓】** button, the cursor moves to 'sharpness' option.
6. By pressing **【←】** or **【→】** button, the image sharpness is regulated.
7. Press the **【MENU】** button on the operation panel or the **【MENU】** button on the remote controller to quit the menu.

### Section VI. Language

This function is used for regulating the display language of menu

#### Operation:

Enter to OSD menu to choose language

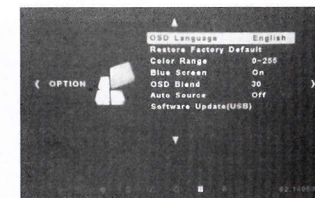


1. By pressing the **【MENU】** button on the operation panel, the 'function menu' window can appear on the screen.
2. By pressing **【←】** and **【→】** buttons, the window is switched to 'set', and y pressing **【↑】** or **【↓】** button, the cursor moves to the 'menu language' position.
3. By pressing **【SOURCE↑】** button, the screen enter an 'menu language' function menu.
4. By pressing **【←】** or **【→】** button, the menu language is regulated.
5. Press the **【MENU】** button on the operation panel or the **【MENU】** button on the remote controller to quit the menu.

### Section VII. Transparency

This function is used for regulating the display language of menu images

Enter to OSD blend to set the transparency class



#### Operation:

1. By pressing the **【MENU】** button on the operation panel, the 'function menu' window can appear on the screen.
2. By pressing **【←】** and **【→】** buttons, the window is switched to 'set', and y pressing **【↑】** or **【↓】** button, the cursor moves to the 'menu transparency' position.
3. By pressing **【SOURCE↑】** button, the screen enter an 'menu transparency' function menu.
4. By pressing **【←】** or **【→】** button, the menu transparency is regulated.
5. Press the **【MENU】** button on the operation panel or the **【MENU】** button on the remote controller to quit the menu.

### Section VII. Image Conversion Function

This function is used for regulating the upward and downward or leftward and rightward rolling of images and the switching of 4: 3 and 16:9 display modes

#### Operation:

1. Press **【image rolling】** button to perform image rolling and press **【4: 3 and 16:9】** button to switch the display mode.

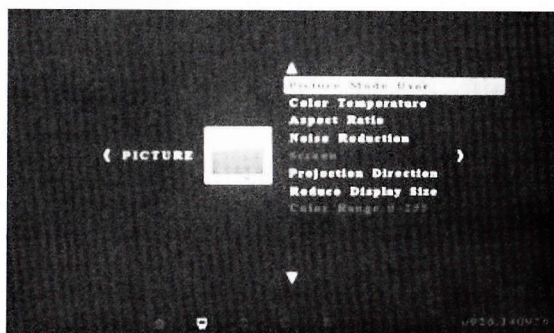


**【4: 3 and 16:9】** button

**【image rolling】** button

By pressing the **【MENU】** button on the operation panel, the 'function menu' window can appear on the screen. By pressing **【←】** and **【→】** buttons, the window is switched to 'image', and the cursor moves to the scaling mode and rolling, confirming is performed through the **【SOURCE】** button on the operation panel, and by pressing **【←】** and **【→】** buttons, **【↑】** or **【↓】** button, image rolling and 4: 3 and 16:9 display mode switching can also be realized.



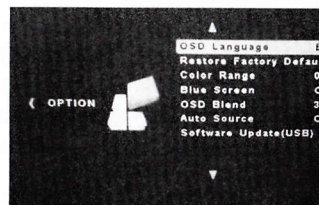


## Section IX. Factory Reset

This function is used for resetting all parameters to the set state before manufacture.

### Operation:

Enter restore factory default to set factory reset



1. By pressing the **【MENU】** button on the operation panel, the 'function menu' window can appear on the screen.
2. By pressing **【←】** and **【→】** buttons, the window is switched to 'set', and by pressing **【↑】** or **【↓】** button, the cursor moves to the 'factory reset' position.
3. By pressing **【SOURCE↑】** button, the screen enters a 'factory reset' function menu.
4. Press **【←】** or **【→】** button to select 'yes' or 'no'.
5. Press the **【MENU】** button on the operation panel or the **【MENU】** button on the remote controller to quit the menu.

## Section X. VGA SOURCE Regulation

After VGA connection is confirmed to be normal, VGA signal mode is accessed, and then the following operations can be performed.

### I. Image and Set Options

※ Regulating modes of brightness, contrast ratio, color, language and display mode are the same with that under video signal source.

※ Please refer to Section I to Section IX of this chapter

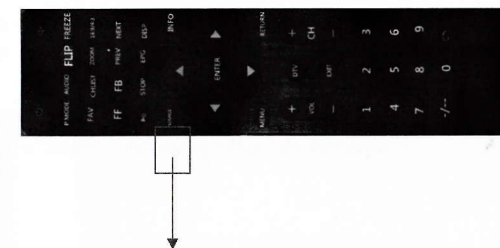
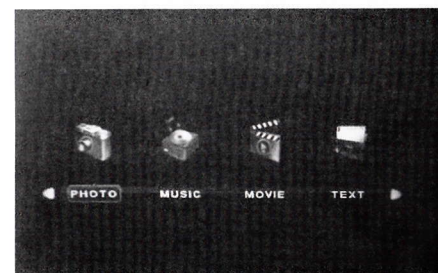
2. IF the projector is connected to a desktop computer, the resolution ratio is regulated to 800×480 and 60Hz.
2. If the projector is connected with a notebook computer, when the VGA interface is connected

with the notebook computer, the projector is regulated to VGA (PC), the notebook computer also requires using keyboard or image properties, the image output destination is set, FN button is pressed, at the same time **"CRT/LCD"** or **"CRT/LCD"** button in F1 to F12 is pressed, and common combination buttons are as follows: Toshiba, Sharp and Acer (fn+f5), IBM, Hitachi and Benq (fn+f7), HP and NEC (fn+f4), Lenovo, Founder, Samsung and Samsung (fn+f3), Apple and Dell (fn+f8), and Asus (fn+f9).



## Section XI USB Function Use

Please plug a U disc in proper position of the function interface, and select the type and mode of file required to be played.



select the type and mode of file required to be played

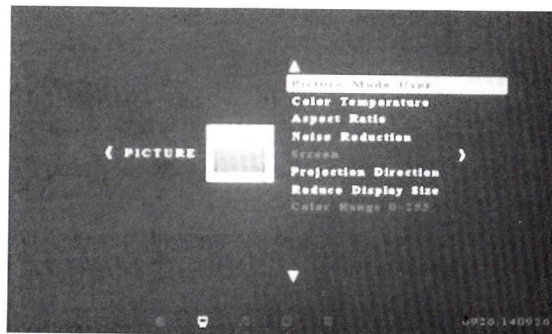
Press this button to play USB video file

## Section XII Electronic Scaling Function

This function is used for the optimal matching effect between the projected image and the projection curtain.

'Scaling' menu comprises a plurality of levels, and the user can select corresponding level to realize the optimal matching effect between the projected image and the projection curtain.





#### Operation:

1. By pressing the **【MENU】** button on the operation panel, the 'function menu' window can appear on the screen.
2. By pressing **【←】** and **【→】** buttons, the window is switched to 'image', and the cursor moves to the 'scaling display', confirming is performed through the **【SOURCE】** button on the operation panel, and by pressing **【↑】** or **【↓】** button, suitable 'scaling' level is selected; press the **【MENU】** button on the operation panel or the **【MENU】** button on the remote controller to quit the menu.

### Section XIII TV SOURCE Regulation

After TV signal connection is guaranteed to be normal, press 'the first section of SOURCE selection' to select entering TV mode, and then the following operations can be performed.

#### I. Image and Set Options

Regulating modes of brightness, contrast ratio, color, language and display mode are the same with that under video signal source, and please refer to Section I to Section IX of this chapter.

#### II. Channel Searching Operation

##### Operation:

1. By pressing the **【MENU】** button on the operation panel, the 'function menu' window can appear on the screen.
2. By pressing **【←】** and **【→】** buttons, the window is switched to 'channel', by pressing **【↑】** or **【↓】** button, the cursor moves to 'automatic channel searching' or 'manual channel searching'. (for 'automatic channel searching', channel can be searched by directly pressing the **【MENU】** button on the remote controller or the **【SOURCE】** button on operation panel, by pressing the **【MENU】** button, the program can be saved and quit, and for 'manual channel searching', the cursor is required to be shifted to 'manual channel searching', then the searching is accessed by pressing the **【MENU】** button on the remote controller or the **【SOURCE】** button on operation panel, program is searched through channel searching or fine adjustment in the menu, and the operation is shown as Fig. II)



Fig. I

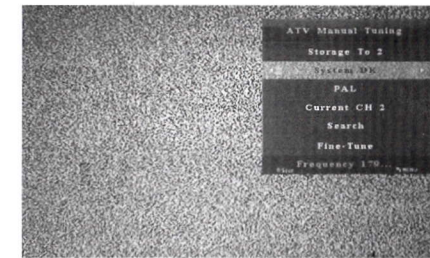


Fig. II

### III. System Conversion

#### Operation:

1. By pressing the **【MENU】** button on the operation panel, the 'function menu' window can appear on the screen.
2. By pressing **【←】** and **【→】** buttons, the window is switched to 'channel', by pressing **【↑】** or **【↓】** button, the cursor moves to 'color system', press the **【确认】** button on the remote controller to enter 'color system', by pressing **【←】** or **【→】** button, 'PAL-NTSC-SECAM-AUTO' is selected, the operation is shown as Fig. III.
3. By pressing **【←】** and **【→】** buttons, the window is switched to 'channel', by pressing **【↑】** or **【↓】** button, the cursor moves to 'sound system', press the **【确认】** button on the remote controller to enter 'sound system', by pressing **【←】** or **【→】** button, 'sound system' required by 'channel system' is selected, pressing the **【MENU】** button on the operation or the **【MENU】** button on the remote controller to quit the menu, the operation is show as Fig. IV.

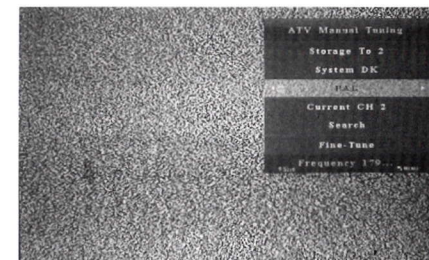


Fig. III

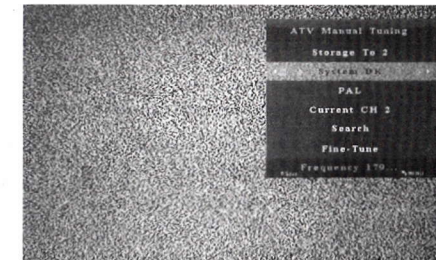


Fig. IV

### IV. Chanel Switching

#### Operation:

1. By pressing the **【△】** or **【▽】** button on the operation panel or the remote controller, or directly SOURCing a number, channel can be switched.

### Chapter IV. Appendix Section I. Trouble Removal

The projector belongs to a high-tech product comprising optical components, mechanical

components and electronic components. A CPU and protection circuits are arranged in the projector. The protection circuit are started to be operated in case of violation of operational program or improper setting. If abnormal conditions occur, as long as you correct the settings or carry out the following operations, the faults can be removed.

Faults	Solutions
After the power supplied is turned on, the lamp is out.	Find whether the power line connection is correct. Find whether the plug is plugged. Find whether the power supply is frequently turned on and off. Detect the use time of the lamp. Find whether the bulb is required to be replaced.
No images	Find whether the lens cap is taken down. Find whether the connection is correct. Find whether all the signal lines are properly connected. Find whether the contrast ratio and the brightness are set to be the lowest.
remote controller is not worked.	Find whether the batteries of the remote controller are used up. Find whether the batteries are correctly installed. Find whether a barrier is formed between the remote controller and the projector. Find whether the distance exceeds the effective use range of the remote controller.
Image blurring	Slightly turn the lens and regulate the focal distance to a proper position. Regulate analog quantity of the bright, the contrast ration and the color. Find whether the lens is clean.
Abnormal sound	Find whether audio cables are properly connected. Find whether the SOURCE mode of TV signal audio cables is correct. Find whether the volume is turned off or set to be the lowest.

## Section II. Maintenance Method

※ The projector is required to be maintained

You should keep the lens clean, because dust, dirt and stain can be protected to the screen, and the image quality can be reduced, if any parts of the projector are required to be replaced, please contact with the dealer or qualified service personal.

※ Lens cleaning

Use standard lens cloth or lens paper to clean the lens, because the surface of the lens is fragile, only recommended non-abrasive material can be used, and do not use fingers to touch the lens.

※ Projector casing cleaning

Gently wipe the projector casing through soft cloth, if dirt and stain is uneasy to clean, ensure that the soft cloth dips in water or neutral detergent to clean the projector casing or use water to clean the projector casing, and then use a soft dry cloth to wipe the projector casing.