

VERSION 3  
USER MANUAL

# TV Lifting System

# Contents

|  |          |
|--|----------|
| <b>Contents</b> .....  | <b>2</b> |
| <b>1. Overview</b> .....   | <b>3</b> |
| <b>2. System Introduction</b> .....                                  | <b>4</b> |
| 2.1 Package Contents.....  | 4        |
| 2.2 Appearance.....  | 5        |
| 2.3 Specifications.....  | 6        |
| 2.3.1 2D drawing of the FA-TVL-170 lifting column.....               | 6        |
| 2.4 Installation guide.....  | 11       |
| 2.5 Getting started.....   | 13       |
| 2.5.1 Concealed Switch Box : Setting the desired maximum height..... | 13       |
| 2.5.1 IR Control: Setting the lift height.....                       | 15       |
| 2.5.2 RF Control: Setting the lift height.....                       | 16       |
| 2.5.3 Operation.....   | 18       |
| 2.6 Safety (for end users).....                                      | 18       |

# 1. Overview

- ◆ Column: FA-TVL-170
- ◆ Control Box: FA-CB-170
- ◆ Controls: RF and IR Control
- ◆ Accessories: TJB2 Junction Box, TSS Safety Switch ([optional](#)), and Concealed Switch Box

The FA-TVL-170 series columns are primarily designed for use as TV lifts, but can be used in other applications that require vertical movement using a remote control. Our steel constructed is available in three sizes depending on the requirements of the application. An extended height position can be programmed using our remote control.

## 2. System Introduction

### 2.1 Package Contents

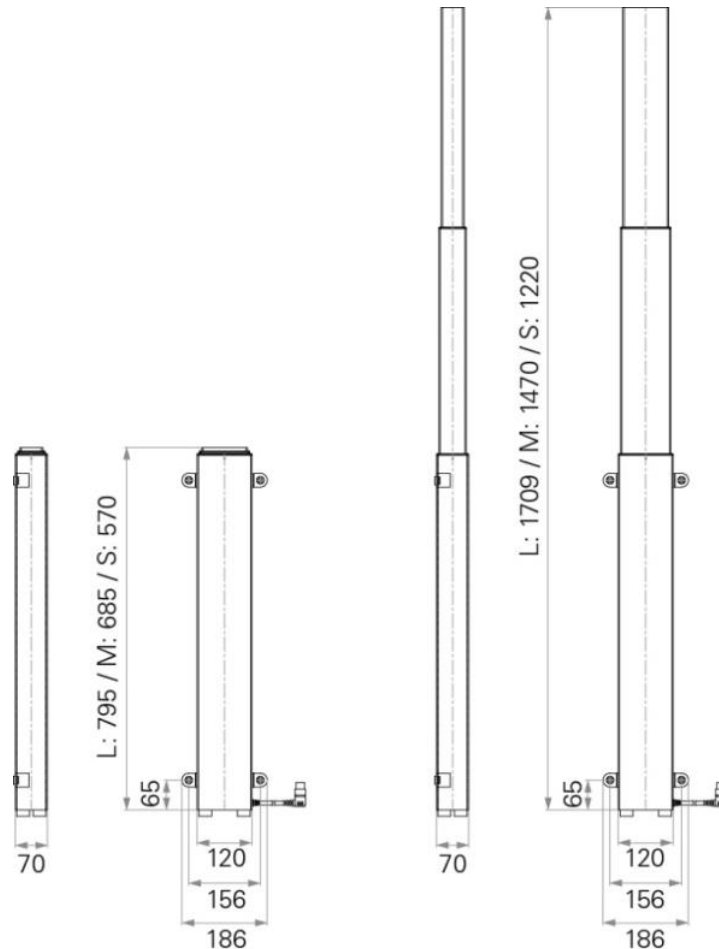
| No. | Description          | Model Name   | Qty   |
|-----|----------------------|--|-------|
| 1   | Lift Column          | FA-TVL-170-24-X  | 1pc   |
| 2   | Control Box          | FA-CB-170  | 1 pc  |
| 3   | Control              | RF Control   | 1 pc  |
| 4   | Control              | IR Control   | 1 pc  |
| 5   | Accessory            | TJB2   | 1 pc  |
| 6   | Accessory            | Concealed switch box   | 1 pc  |
| 7   | Accessory            | Power cord   | 1 pc  |
| 8   | Accessory (optional) | TSS  |       |
| 9   | Component Package    | Refer to the following chart for more details<br>(page 9~10) | 1 set |

## 2.2 Appearance



## 2.3 Specifications

### 2.3.1 2D drawing of the FA-TVL-170 lifting column


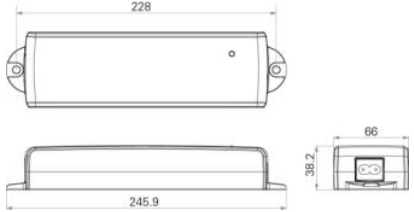

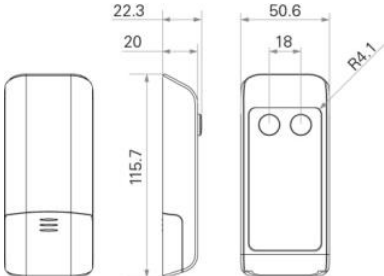

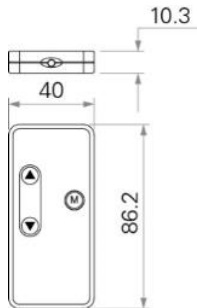

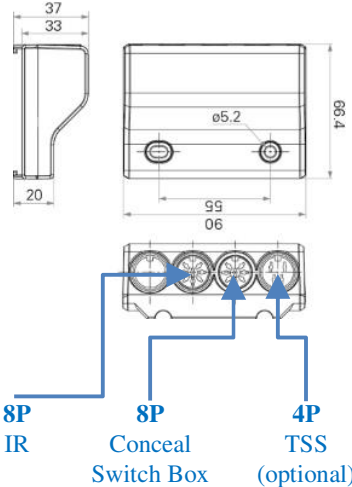



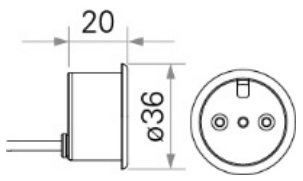

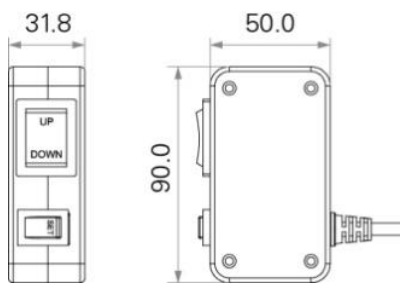

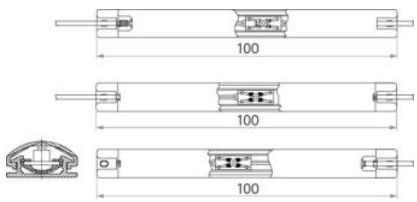
#### FA-TVL-170 Specifications

| Size             | Retracted Length | Stroke | Fixing Hole Distance | Max. Load | Speed (mm/sec)   | Recommended TV Size (inch)<br>(Note) |
|------------------|------------------|--------|----------------------|-----------|--|--------------------------------------|
| FA-TVL-170-24-36 | 31.30"           | 35.98" | 25.60"               | 135 lbs.  | <ul style="list-style-type: none"> <li>◆ 35 mm/s at no load</li> <li>◆ 20 mm/s at full load</li> </ul> | 50" ~ 70"                            |
| FA-TVL-170-24-30 | 26.97"           | 30.71" | 21.46"               |           |  | 40" ~ 55"                            |
| FA-TVL-170-24-25 | 22.44"           | 25.60" | 16.92"               |           |  | 32" ~ 43"                            |

Note: It is based on the current primary plasma TV screen size.



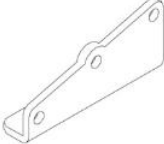
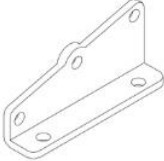



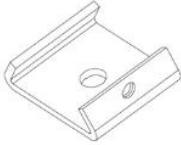
**Other components**




|  |   |   |
|--|---|---|
| <p><b><u>Control Box: FA-CB-170</u></b></p> <ul style="list-style-type: none"> <li>◆ 0.06W standby power consumption</li> <li>◆ Memory functions for column height</li> <li>◆ Soft stop function</li> <li>◆ Over current protection</li> </ul> |    |    |
| <p><b><u>Control: RF Control</u></b></p> <ul style="list-style-type: none"> <li>◆ Maximum remote distance: 5m</li> <li>◆ RF wireless control available</li> </ul>  |    |    |
| <p><b><u>Control: IR Control</u></b></p> <ul style="list-style-type: none"> <li>◆ Used to set the maximum height</li> <li>◆ Works with the IR receiver to control the height</li> </ul>  |    |    |
| <p><b><u>Accessories: TJB2</u></b></p> <ul style="list-style-type: none"> <li>◆ Junction box</li> <li>◆ Embedded with RF receiver</li> </ul>   |  <p style="text-align: center;"> <span style="margin-right: 100px;">8P<br/>IR</span> <span style="margin-right: 100px;">8P<br/>Conceal<br/>Switch Box</span> <span>4P<br/>TSS<br/>(optional)</span> </p> |  <p style="text-align: center;"> <span style="margin-right: 100px;">8P<br/>IR</span> <span style="margin-right: 100px;">8P<br/>Conceal<br/>Switch Box</span> <span>4P<br/>TSS<br/>(optional)</span> </p> |

|   |   |   |
|---|---|---|
| <p><b><u>Accessories: IR Receiver</u></b></p> <ul style="list-style-type: none"> <li>◆ Required for IR control</li> </ul>   |    |    |
| <p><b><u>Accessories: Conceal Switch Box</u></b></p> <ul style="list-style-type: none"> <li>◆ Used as a back-up control if the primary control runs out of battery</li> <li>◆ Includes SET button for advanced settings (Note)</li> </ul> <p>Note: When this is switched to the “SET” button, it will activate the pairing function for IR/RF controls.</p> |    |    |
| <p><b><u>Accessories: TSS (Optional)</u></b></p> <ul style="list-style-type: none"> <li>◆ Safety Strip</li> <li>◆ Recommended ordering size (Note)</li> </ul> <p>Note: Please refer to the page 6 for the recommended TV size.</p>  |  |  |



**Component Package List**

| No. | Description           | Drawing   | Q'ty (pcs) |
|-----|-----------------------|---|------------|
| 1   | Wheel (Ø18* Ø8*20L)   |    | 3          |
| 2   | Shaft (Ø8* Ø8*28L)    |    | 3          |
| 3   | Shaft Holder          |    | 1          |
| 4   | Shaft Holder          |   | 1          |
| 5   | Screw (M5*8L)         |  | 4          |
| 6   | Manual Screw (M5*10L) |  | 1          |
| 7   | Washer (M8)           |  | 8          |
| 8   | Slider (40*14*3t)     |  | 4          |

|    |                |   |   |
|----|----------------|---|---|
| 9  | Screw (M8*15L) |  | 8 |
| 10 | Handle         |  | 1 |
| 11 | Screw (M6*24L) |  | 4 |

## 2.4 Installation guide

### Important information:

- ◆ Prior to installation onto the FA-TVL-170, remove the stand which is attached to your flat screen TV.
- ◆ Carefully measure all dimensions of the television before proceeding with the installation.

### Step 1: Secure the TV

Lean the TV onto its edge, preferably against a soft surface to prevent scratches and or damage.

### Step 2: Install the Mounting Plates (Fig. 1 and 2)

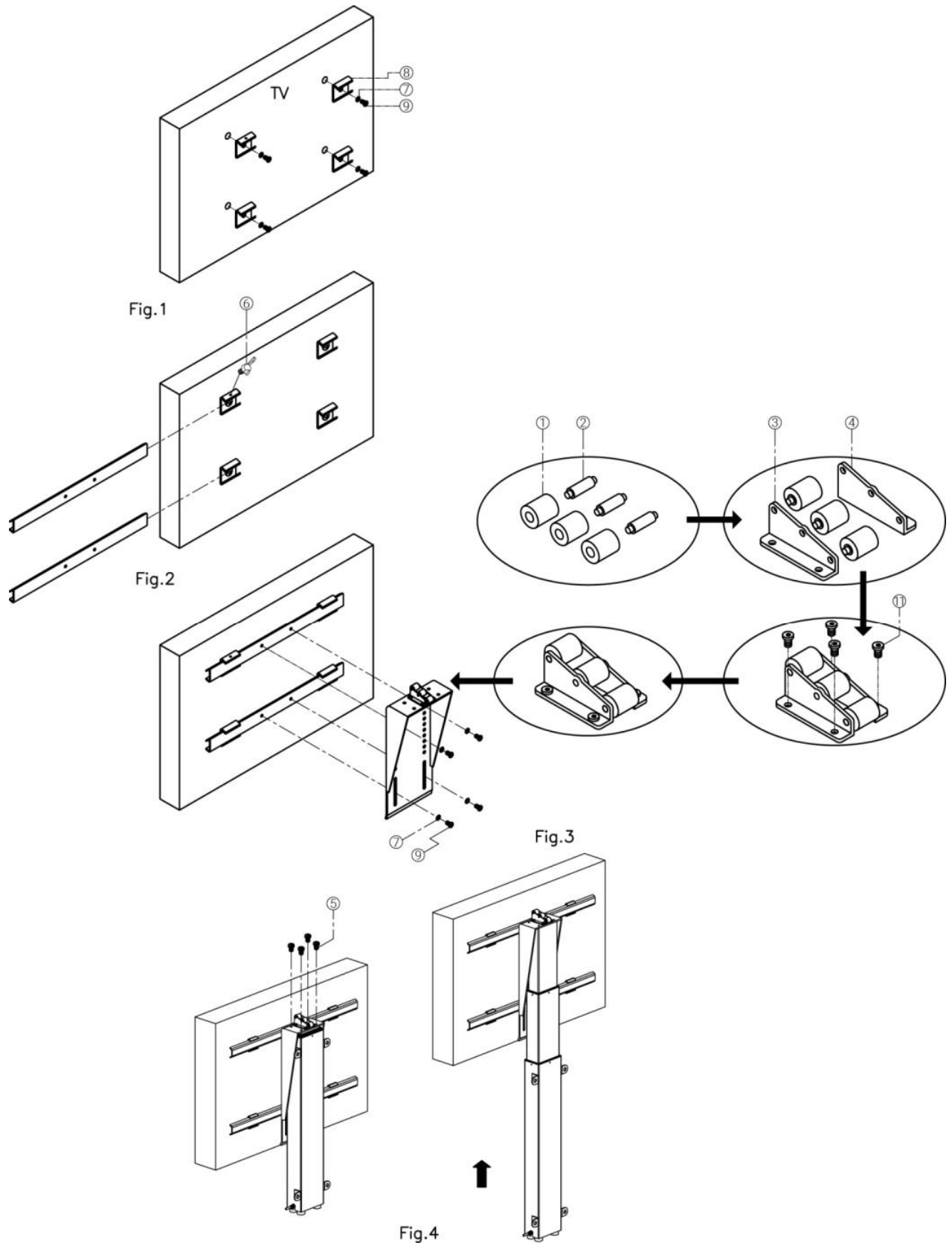
Find the 4 mounting holes on the back of your TV and then choose the 4 screws from the component package that work best for your TV. Install the included TV mounting plates (2) onto the back of the TV.

### Step 3: Install the Mounting Brackets (Fig 3)

Fix the TV mounting brackets to the TV mounting plates.

### Step 4: Mount the TV to the FA-TVL-170 (Fig 4)

Install the TV, using the newly installed brackets, to the FA-TVL-170. Screw tight on the top of the brackets. Slowly release the TV to make sure it is installed securely. Plug in the FA-TVL-170 and raise it the full height so that it's fully extended.



## 2.5 Getting started

### 2.5.1 Concealed Switch Box : Setting the desired maximum height

#### How to set the desired lift height

Press and hold the up or down button to the desired height, release the button, and then switch SET to the “ON” position. An audible tone will sound three times from the FA-CB-170 control box, which confirms the height has been memorized.

#### How to recall the desired lift height

After the desired height is memorized, when the SET switch is moved to the “ON” position and then immediately to the “OFF” position, the column will move to the memorized position automatically.

#### How to disable the desired lift height

Switch SET to the “ON” position until you hear the control box beep once. This tone confirms the desired lift height is disabled. Then, move the SET switch to the “OFF” position.



**Note:**

The SET button on the concealed switch box is a rocker switch. If you switch it to the right side, it means “ON”; the opposite (left) side meaning “OFF”.

#### How to set the maximum desired lift height limit?

Press UP until the maximum desired height is reached; switch SET to “ON” , and then press and hold the “UP” button for **3** seconds until you hear two audible beeps from the control box. Then, switch SET to “OFF” and the maximum desired height limit is saved to memory.

#### How to disable the maximum desired lift height limit?

Switch SET to “ON”, then press and hold the UP button for **3** seconds until the control box beeps once. Switch SET to “OFF”. Now, the height limit is disabled.



**How to set the minimum desired height limit?**

(Note)

Press UP/DOWN to the desired minimum height, release UP/DOWN, and switch SET to “ON”. Then, press and hold the “DOWN” button for 3 seconds until the FA-CB-170 beeps twice. Switch SET to “OFF” to complete saving the minimum height to memory.



**How to disable the memorized minimum height limit?** (Note)

Press DOWN to the set minimum height, release DOWN, and then switch SET to “ON”. Press and hold the “DOWN” button for 3 seconds until the FA-CB-170 beeps once. Switch SET to “OFF” to complete the process.

Note: This is primarily used when the FA-TVL-170 is installed within a TV cabinet.



### 2.5.2 IR Control: Setting the lift height

|   |  |
|---|--|
| <p>Press and hold the “▲” button on the IR Remote Control. The FA-TVL-170 will continuously travel upwards.</p> <p>Press and hold the “▼” button on the IR Remote Control. The FA-TVL-170 will continuously travel downwards</p>  |   |
| <p><b>How to set the memorized height</b></p> <p>Once the desired height has been reached, press and hold the “M” button until the FA-CB-170 beeps 3 times. This confirms the desired height is saved to memory. Click “M” and the FA-TVL-170 will automatically travel to the memorized height.</p> <p><b>How to disable the memorized height</b></p> <p>Press and hold the “M” button until the buzzer on the FA-CB-170 beeps once.</p> |  |

### 2.5.3 RF Control: Setting the lift height

**How to activate the pairing function?**

Take the Concealed Switch Box and switch SET to “ON” for 10 seconds until the FA-CB-170 begins to beep continuously. Then, press any button on the RF control and the buzzer will then stop. Switch SET to “OFF”, then the pairing function is completed. (Note)

Note: By switching SET to “ON” for approximately 3 seconds, the FA-CB-170 will start to sound (refer to the page 13: Setting up the desired height stage), please do not release SET button, but continue holding until the pairing function is completed.



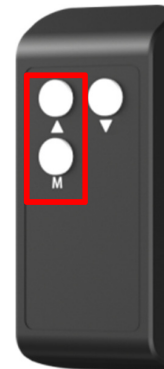
**How to set the desired maximum height limit?**

Press and hold the “▲” button on the RF Control; The FA-TVL-170 will travel upwards.

Once the desired maximum height has been reached, press and hold the “M” and “▲” button until the FA-CB-170 beeps twice. Then release the buttons and the desired height is saved to memory.

**How to disable the memorized maximum height limit?**

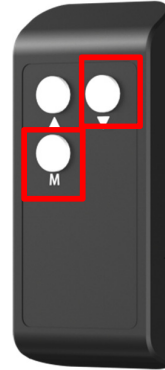
Press and hold the “▲” button to travel upwards to the desired maximum height. Then press and hold the “M” and “▲” buttons until the FA-CB-170 beeps once.





**How to set the desired minimum height limit?**

Press and hold the “▲/▼” button on the RF Control to adjust FA-TVL-170. Once the desired minimum height has been reached, press and hold the “M” and “▼” buttons until the FA-CB-170 beeps twice. Then release the buttons and the desired minimum height is saved to memory.

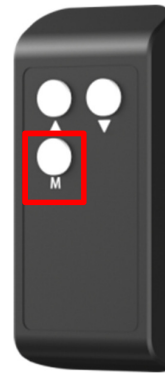


**How to disable the memorized minimum height limit?**

Press and hold the “▼” button travel downwards to the desired minimum height. Then press and hold the “M” and “▼” buttons until the FA-CB-170 beeps once.

**How to set the memorized height**

Once the desired height has been reached, press and hold the “M” button until the FA-CB-170 beeps 3 times. This confirms the memorized height is now saved to memory. Click “M” and the FA-TVL-170 will automatically travel to the memorized height.



**How to disable the memorized height**

To disable the memorized height, press and hold the “M” button until the FA-CB-170 beeps once.

## 2.5.4 Operation

Once the memorized height of the FA-TVL-170 column is set, users can use either the RF or IR Control to control movement of the lifting system.

- (1) Press and hold the ▲ symbol to move the column upwards.
- (2) Press and hold the ▼ symbol to move the column downwards.
- (3) Release the button at any time to stop the column's movement.
- (4) The Concealed Switch Box serves as a back-up control, if both the RF and IR Controls are out of battery.

## 2.6 Safety (for end users)

- (1) Please adhere to the proper installation procedure as detailed in the installation instructions.
- (2) Safety precaution measures must be practiced at all times during installation of this product.
- (3) The entire installation instructions should be fully read and understood before beginning installation.
- (4) At least two people should be available to mount the TV on the lift mechanism. Please take care when handling your flat screen TV as injury and damage can result from dropping or mishandling of the TV.
- (5) TV's should remain upright at all times. Never place screen face down on the floor. This could cause damage to the TV.
- (6) The stand on your flat screen TV is removable. Please remove the stand prior to installing the TV on the lift mechanism. Consult your TV's owner's manual for instructions for removing the stand.
- (7) Carefully measure all dimensions of your LCD, PLASMA, or LED TV before proceeding. Then consult the Specification section of this manual for maximum acceptable TV size.
- (8) The TV Lift Mechanism contains moving parts. Please keep hands, arms, and fingers away from the lift and cabinet lid opening when the lift is in motion. Cables should be wire-tied or secured neatly so the lift does not contact them during operation.
- (9) About the TSS Safety Strip accessory  
The TSS safety strip is an optional accessory which can be installed onto the bottom of the TV. To avoid the risk of personal injury, the TSS will stop the lift column once the strip is pressed.