

SERVICE MANUAL

TG1 (GA) CHASSIS

<u>MODEL</u>	<u>COMMANDER</u>	<u>DEST.</u>
KLV-19T400A	RM-GA013	E, GE, India, ME, New Zealand, Thailand, South Africa
KLV-19T400A/H (Gun-Metalic Silver)	RM-GA013	E, ME, Thailand
KLV-19T400G	RM-GA013	E, India, ME, Thailand
KLV-19T400W	RM-GA013	E, GE, India, ME, South Africa

<u>MODEL</u>	<u>COMMANDER</u>	<u>DEST.</u>
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KLV-19T400A



KLV-19T400G



RM-GA013



KLV-19T400W

LCD COLOR TV
SONY®

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SECTION 1 SAFETY NOTES

1-1. Caution Handling of LCD Panel

When installing the LCD Panel, make sure you are grounded with a wrist band.

When installing the LCD Panel on the wall, the panel must be secured using the 4 mounting holes on the rear cover.

- 1) Do not press the panel or frame edge to avoid the risk of electric shock.
- 2) Do not scratch or press on the panel with any sharp objects.
- 3) Do not leave the module in high temperature or in areas of high humidity for an extended period of time.
- 4) Do not expose the LCD panel to direct sunlight.
- 5) Avoid contact with water. It may cause short circuit within the module.
- 6) Disconnect the AC adapter when replacing the backlight (CCFL) or inverter circuit. (High voltage occurs at the inverter circuit at 650Vrms)
- 7) Always clean the LCD panel with a soft cloth material.
- 8) Use care when handling the wires or connectors of the inverter circuit. Damaging the wires may cause a short circuit.
- 9) Protect the panel from ESD to avoid damaging the electronic circuit (C-MOS).

1-2. Safety Check-Out

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:-

- 1) Check the area of your repair for unsoldered or poorly soldered connections. Check the entire board surface for solder splashes and bridges.
- 2) Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
- 3) Check all control knobs, shields, covers, ground straps and mounting hardware have been replaced. Be absolutely certain you have replaced all the insulators.
- 4) Look for unauthorized replacement parts, particularly transistors that were installed during a previous repair. Point them out to the customer and recommend their replacement.
- 5) Look for parts which, though functioning show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
- 6) Check the line cords for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
- 7) Check the antenna terminals, metal trim, "metallized" knobs, screws and all other exposed metal parts for AC leakage. Check leakage test as described next.

1-3. Leakage Test

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis must not exceed 0.5mA (500 microamperes). Leakage current can be measured by any one of the three methods:-

1. A commercial leakage tester such as the SIMPSON 229 or RCA WT-540A. Follow the manufacturers instructions to use those instructions.
2. A battery-operated AC milliammeter. The DATA PRECISION 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery operated AC voltmeter. The 'limit' indication is 0.75V so analog meters must have an accurate low voltage scale. The SIMPSON'S 250 and SANWA SH-63TRD are examples of passive VOMs that are suitable. Nearly all battery operated digital multimeters that have a 2 VAC range are suitable. (see Figure 1.)

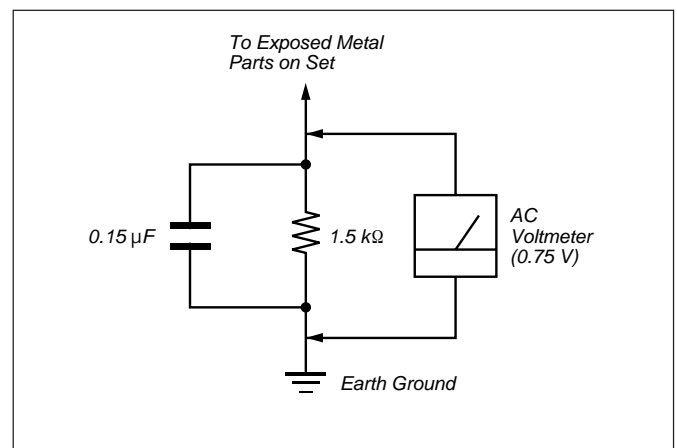


Figure 1. AC voltmeter to check AC leakage

1-4. WARNING !

SAFETY-RELATED COMPONENT WARNING!
COMPONENTS IDENTIFIED BY SHADING AND MARK Δ ON THE EXPLODED VIEWS ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL FOR SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

1-5. Lead Free Information

The circuit boards used in these models have been processed using Lead Free Solder. The boards are identified by the LF logo located close to the board designation.



Figure 2: LF logo

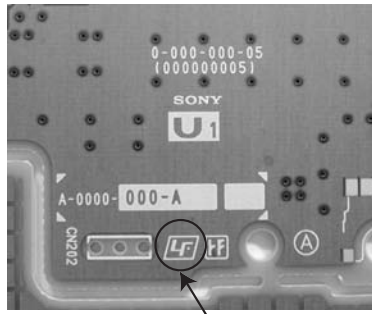


Figure 3: LF logo on circuit board

The servicing of these boards requires special precautions. It is strongly recommended to use Lead Free Solder material in order to guarantee optimal quality of new solder joints. Lead Free Solder is available under the following part numbers:-

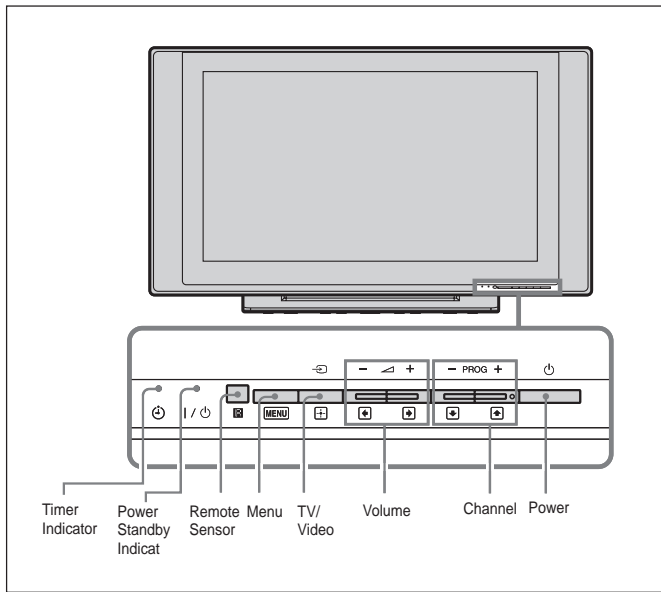
Part number	Diameter	Remarks
7-640-005-19	0.3mm	0.25Kg
7-640-005-20	0.4mm	0.50Kg
7-640-005-21	0.5mm	0.50Kg
7-640-005-22	0.6mm	0.25Kg
7-640-005-23	0.8mm	1.00Kg
7-640-005-24	1.0mm	1.00Kg
7-640-005-25	1.2mm	1.00Kg
7-640-005-26	1.6mm	1.00Kg

Due to high melting point of Lead Free Solder, the soldering iron tip temperature needs to be set to 370 degrees centigrade. This requires soldering equipment capable of accurate temperature control coupled with a good heat recovery characteristics.

For more information on the use of Lead Free Solder, please refer to <http://www.sony-training.com>

SECTION 2 SELF DIAGNOSTIC FUNCTION

2-1. Overview of Control Buttons



2-2. LED Display Specification

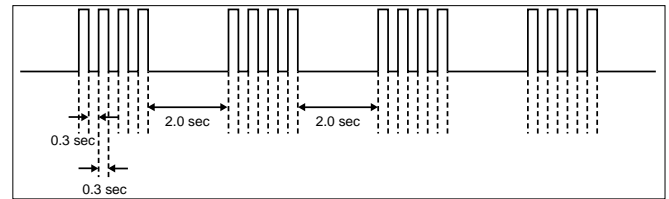
LED Type	Description	Remark
POWER	Green: One LED	Green lights at power ON.
STANDBY	Red: One LED	Red lights during standby.
Picture Off/Timer	Green/Amber : Two LEDs	Green lights during Picture OFF and amber lights during Timer activation.

2-3. LED Display Control

Status	Display		Remark
	Power LED	Standby LED	
POWER ON	Green lights	OFF	Microcomputer is in a normal state.
STANDBY	OFF	Red lights	Microcomputer is in a sleep state.
Failure	OFF	Red flashes	Classify the trouble causes by the no. of red blinking.

2-4. LED Pattern

When safety shutdown occurs, Standby LED display reports the cause by using the blinking patterns as indicated below.

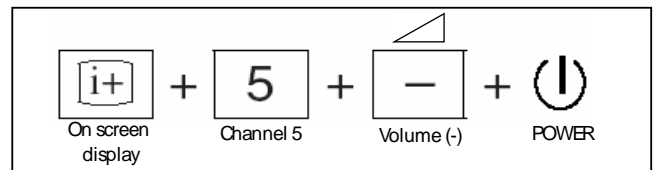


Example:

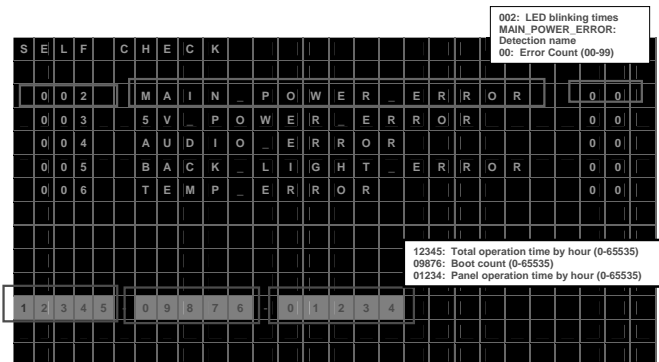
The figure above shows LED display when SHUTDOWN is caused by audio failure. It repeats flashing for a specified number of times in 0.3sec/ cycle and has a 2 seconds interval of lighting off. Please note that a 2 seconds interval of lighting off is fixed regardless of abnormal state types.

2-5. Viewing the Service Diagnosis Display

1. While TV on standby mode, press the following sequence on the Remote commander.



(if wrong key is pressed or passed 3 seconds during each process, cancel entering the self-diagnosis display.)



2. To Exit, press the <I/Power> key.

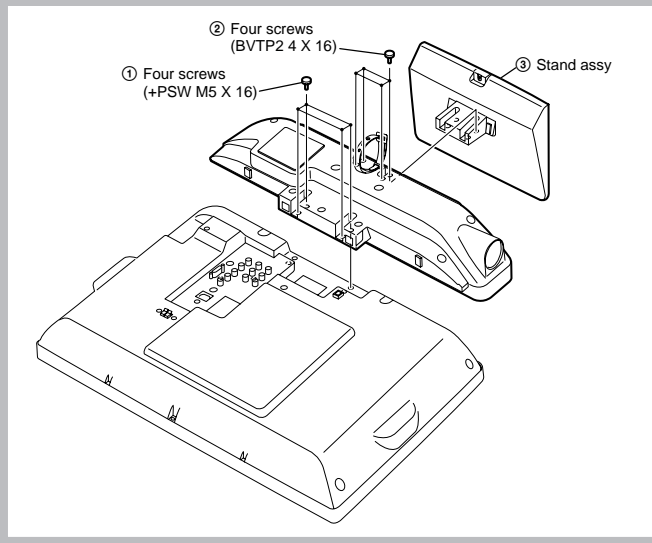
2-6. STANDBY LED ERROR DISPLAY

Blinking times	Detection items	Countermeasure
2	Main power failure	Replace either/both ● BT board ● GT board (19") ● GPT board (26"/32")
3	5V power failure	Replace either/both ● BT board ● GT board (19") ● GPT board (26"/32")
4	Audio failure	Replace either/board. ● BT board ● GT board (19") ● GPT board (26"/32") ● Speaker ● Woofer
5	Back light failure	Replace either/board. ● BT board ● GT board (19") ● GPT board (26"/32")
6	Internal temperature failure	Replace GT board (19")/ GPT Board (26"/ 32")
7	SMIC error	Replace BT Board

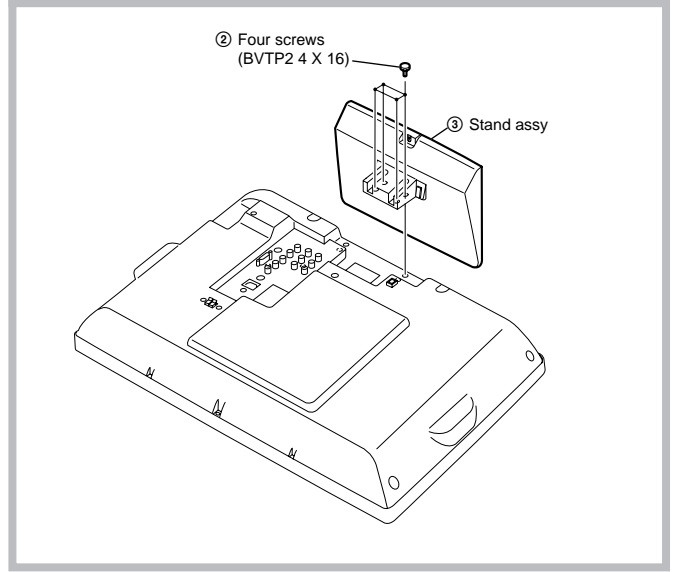
Note: Each of the above blinking repeats every 2 seconds.

SECTION 3 DISASSEMBLY

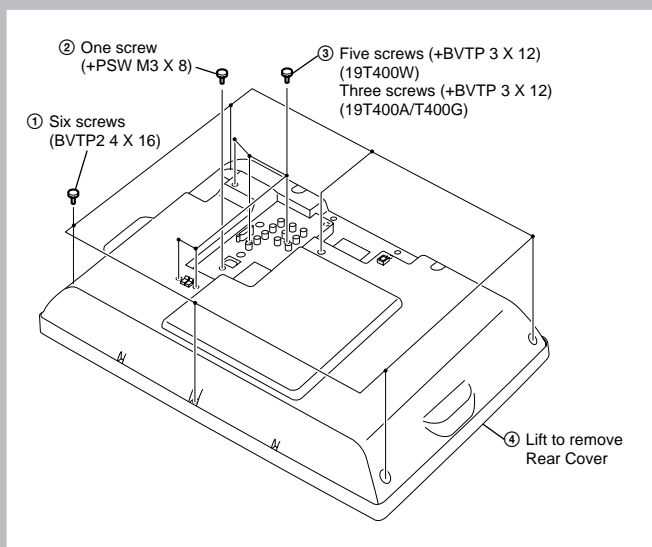
3-1. 3D Woofer and Stand Assy Removal (19T400W)



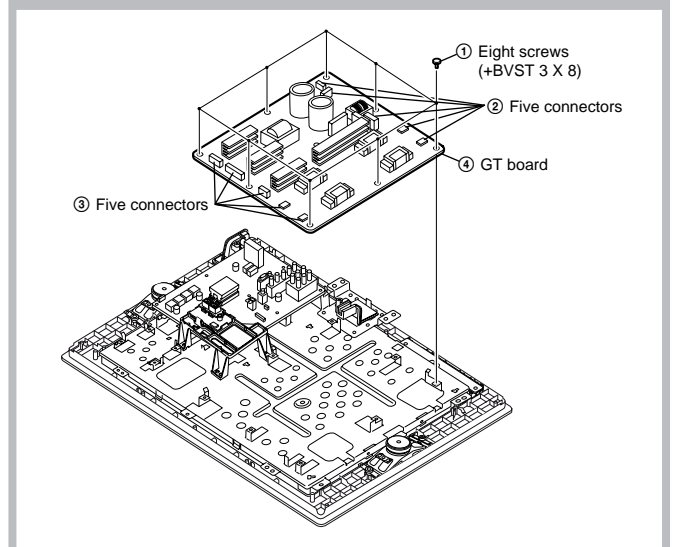
3-2. Stand Assy Removal (19T400A/T400G)



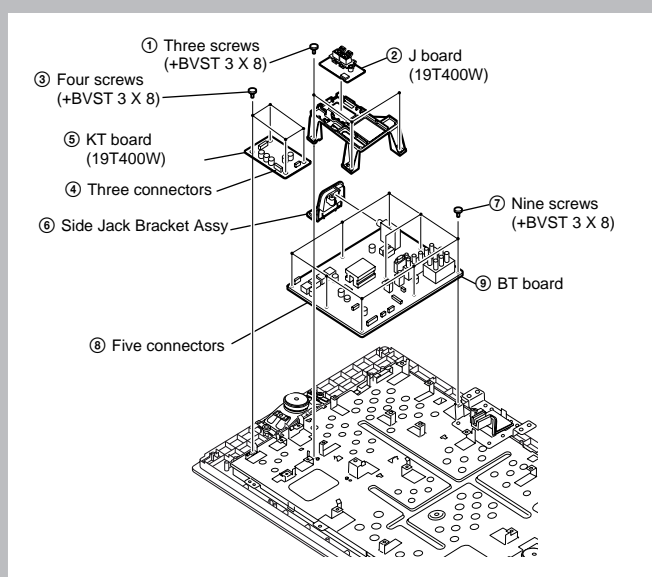
3-3. Rear Cover Removal



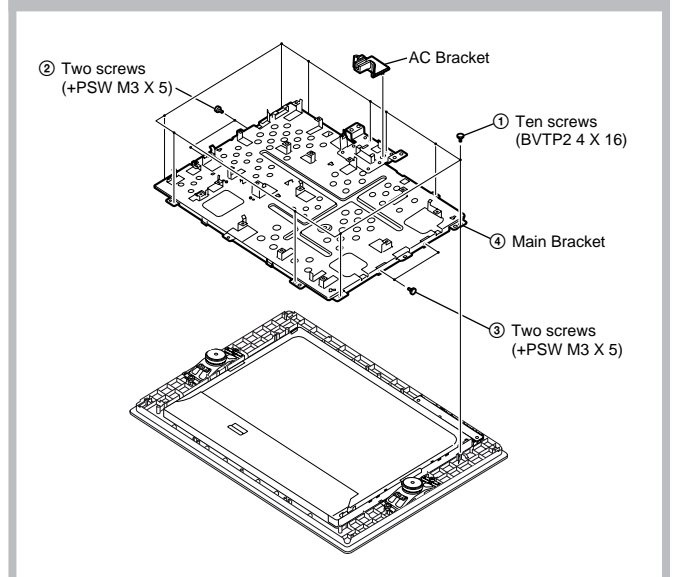
3-4. GT Board Removal



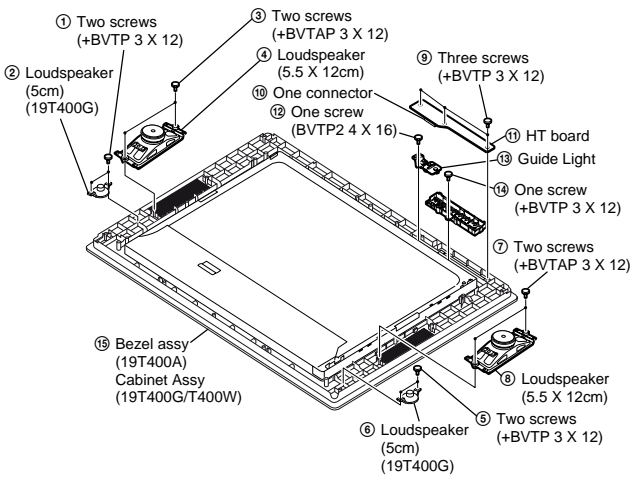
3-5. BT, KT and J Boards Removal



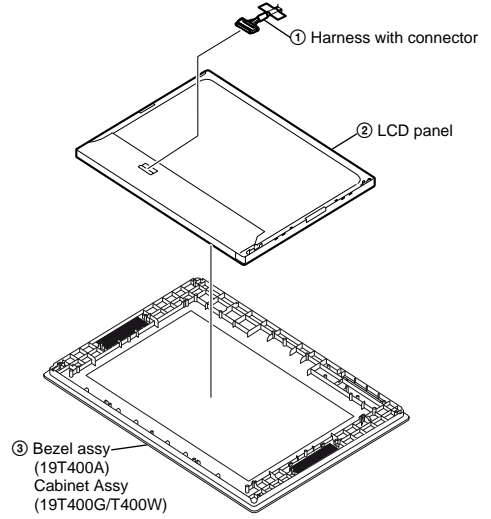
3-6. Main Bracket Removal



3-7. HT Board and Speaker Removal



3-8. LCD Panel and Bezel Assy Removal

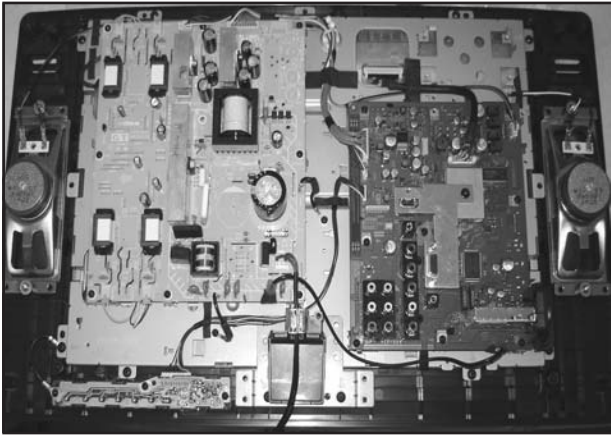


SECTION 4 WIRE DRESSING

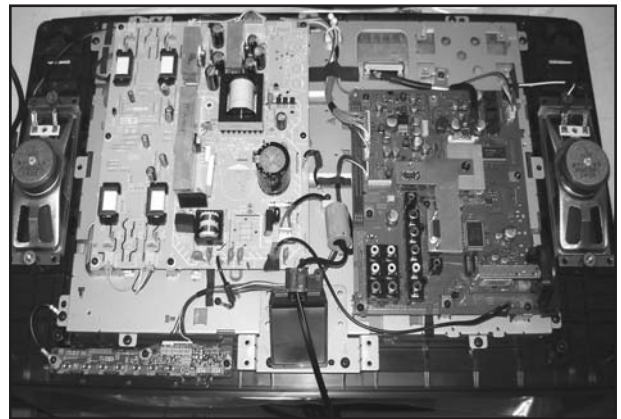
CAUTION :

1. Do not overpull the wires during dressing --> avoid disconnection of wires.
2. Make sure wires are kept away from sharp edges, heatsinks & other high-temperature parts.

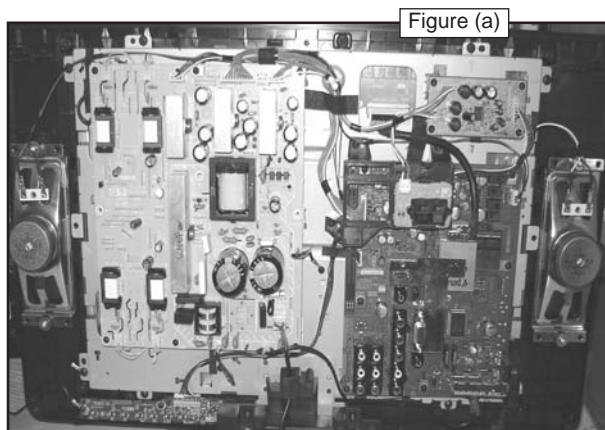
4-1-1. Wire Dressing overview for 19T400A Non-CISPR model.



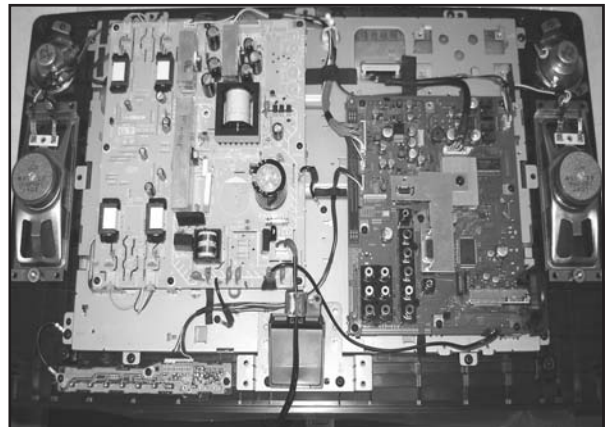
4-1-2. Wire Dressing overview for 19T400A CISPR model.



4-1-3. Wire Dressing overview for 19T400W model.

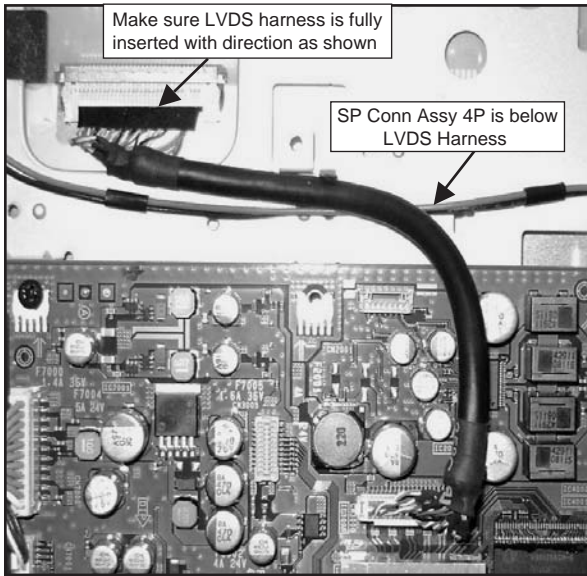


4-1-4. Wire Dressing overview for 19T400G model.



4-1-5. LVDS Harness and SP Connector Assy 4P Dressing (NON CISPR)

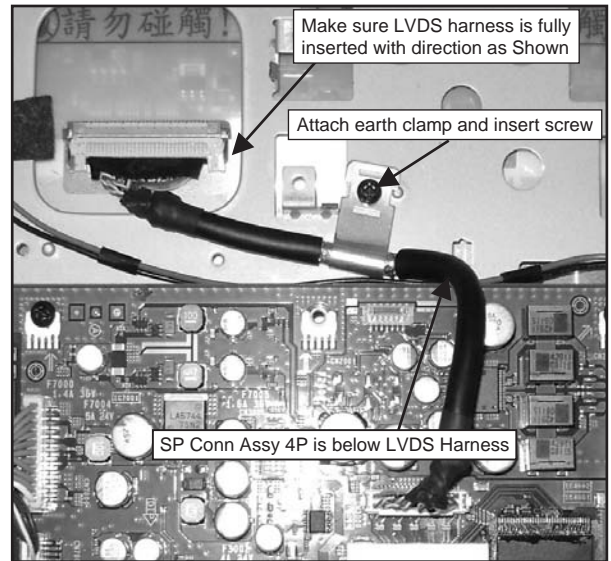
- 1) Insert LVDS harness to panel as shown.
- 2) Ensure SP Conn Assy 4P is below LVDS Harness.



Note: When inserting LVDS harness to panel, make sure it is fully inserted and in the correct direction as shown.

4-1-6. LVDS Harness and SP Connector Assy 4P Dressing (CISPR)

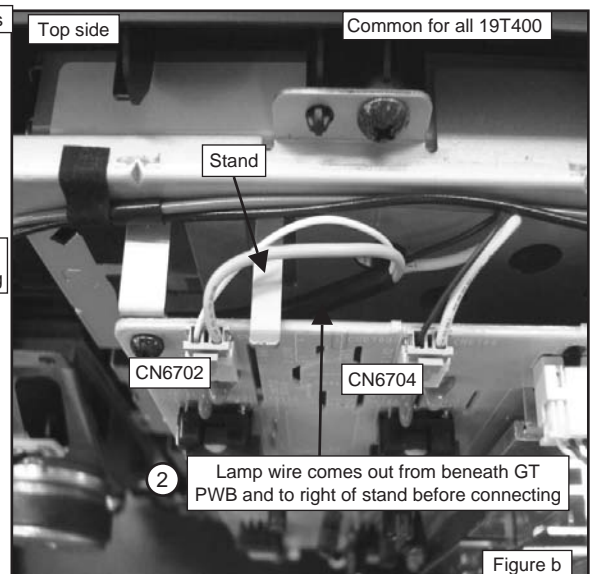
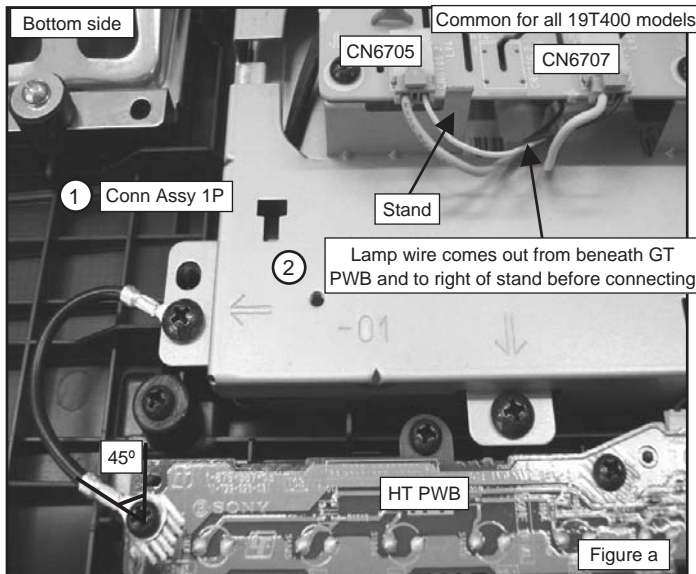
- 1) Insert LVDS harness to panel as shown.
- 2) Ensure SP Conn Assy 4P is below LVDS Harness.
- 3) Screw the Earth Clamp of LVDS Harness' on to the Main Bracket.



Note: When inserting LVDS harness to panel, make sure it is fully inserted and in the correct direction as shown.

4-1-7. Connector Assy 1P and Inverter Harness Dressing

- 1) Insert Connector Assy 1P to HT PWB's screw hole and panel's screw hole as shown.
- 2) Insert Lamp connectors to CN6705; CN6707 (bottom) and CN6702; CN6704 (top) as shown.



4-1-7. Lead Assy, Earth Dressing

- 1) Insert both Lead Assy, Earth to GT PWB and screw them on to main bracket's screw hole as shown.
- 2) Insert Lead Assy, Earth from GT PWB to BT PWB as shown.
- 3) Attach Tape, LCD to Lead Assy, Earth.

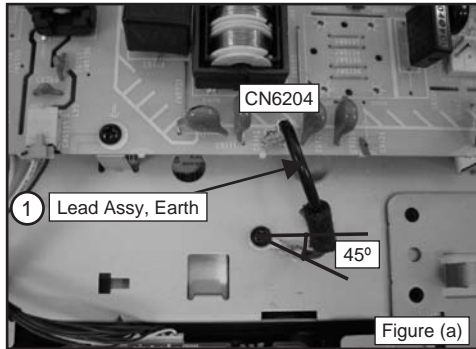


Figure (a)

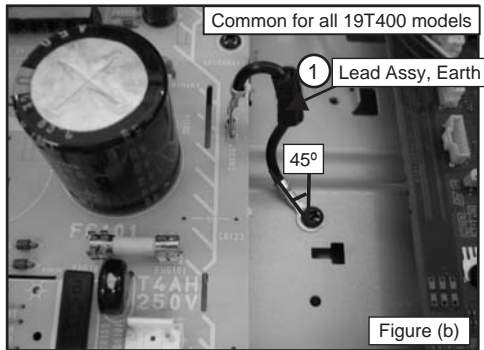


Figure (b)

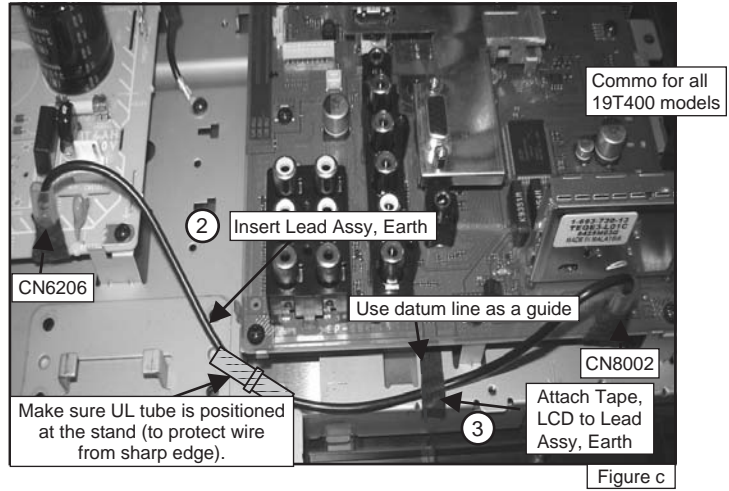
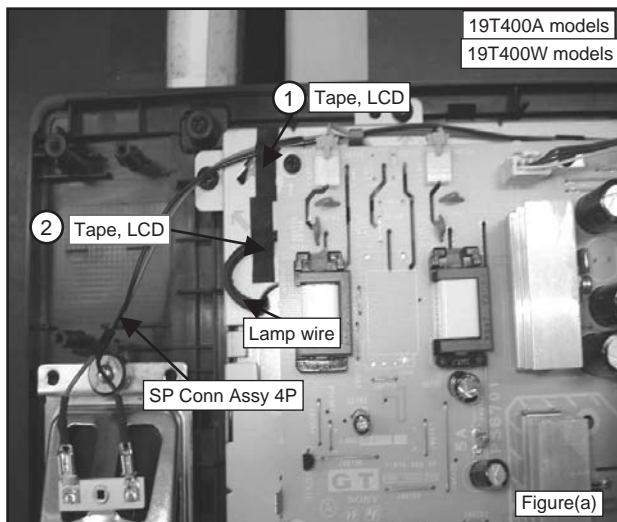


Figure (c)

4-1-8. Wire Harness Dressing

- 1) Dress SP Conn Assy 4P using Tape, LCD as shown (1X).
- 2) Dress Lamp wire using Tape, LCD as shown (1X).



Figure(a)

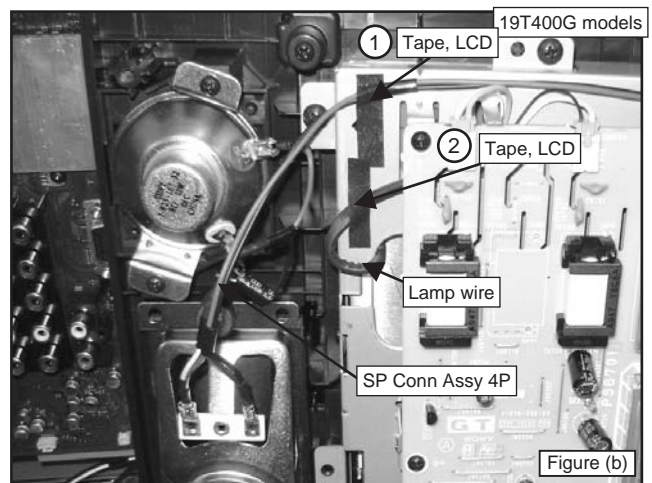


Figure (b)

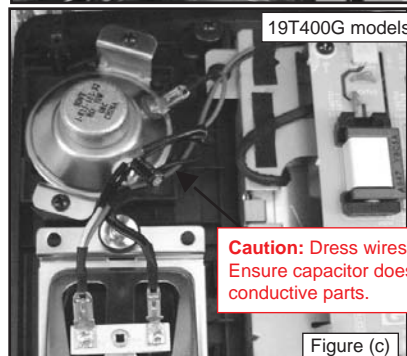
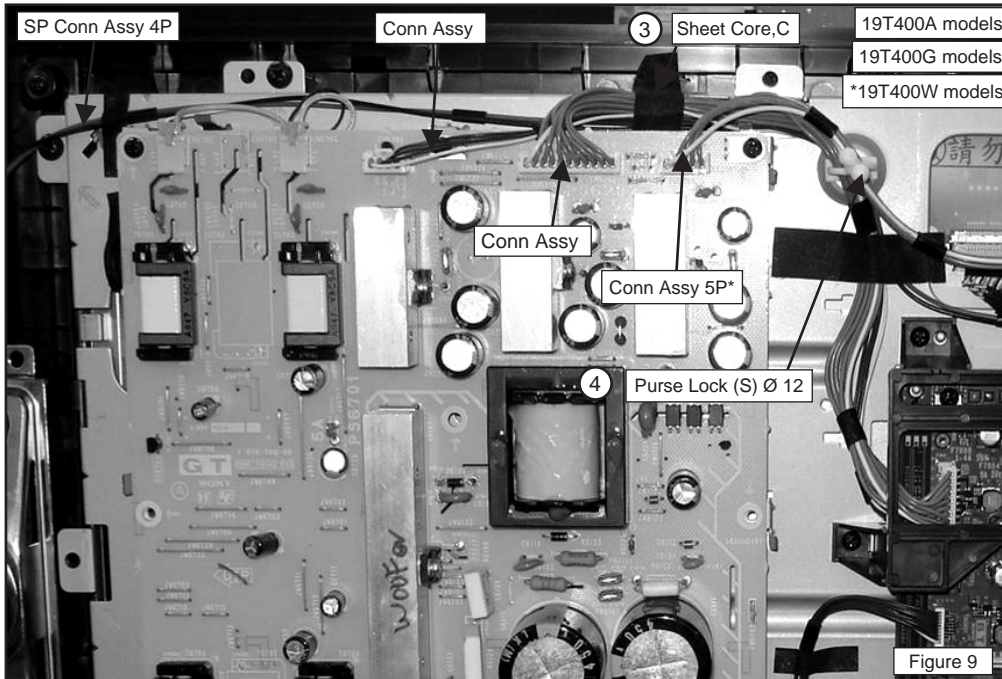


Figure (c)

Caution: Dress wires downward towards the tweeter. Ensure capacitor does not touch tweeter or any conductive parts.

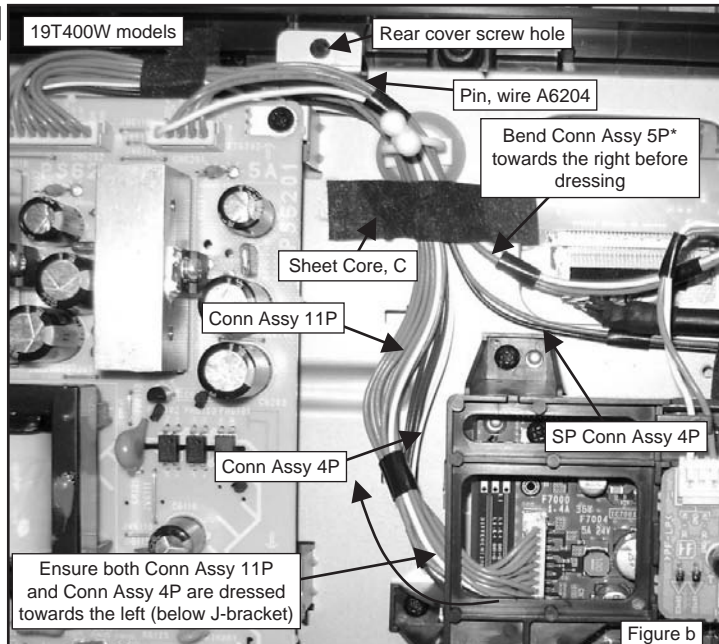
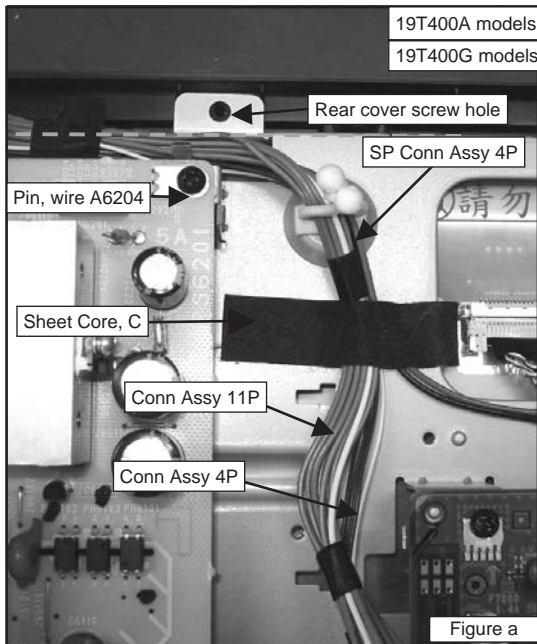
4-1-8. Wire Harness Dressing

- 3) Dress SP Conn Assy 4P; Conn Assy 11P and Conn Assy 4P using Sheet Core, C as shown.
- 4) Insert Conn Assy 4P; Conn Assy 11P; SP Conn Assy 4P and Conn Assy 5P* (for 19T400W model only) into Purse Lock (S) Ø 12.



4-1-9. Connector Assy 4P, 11P, SP Conn Assy 4P and 5P* Dressing

- 1) Dress Conn Assy 4P; Conn Assy 11P; SP Conn Assy 4P and Conn Assy 5P* (for 19T400W) using Sheet Core, C as shown.
- 2) Use pin, wire A6204 to wire dress all wires keep it away from rear cover screw hole.

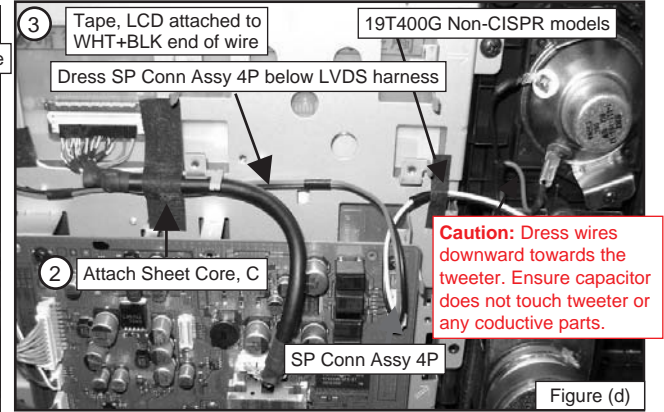
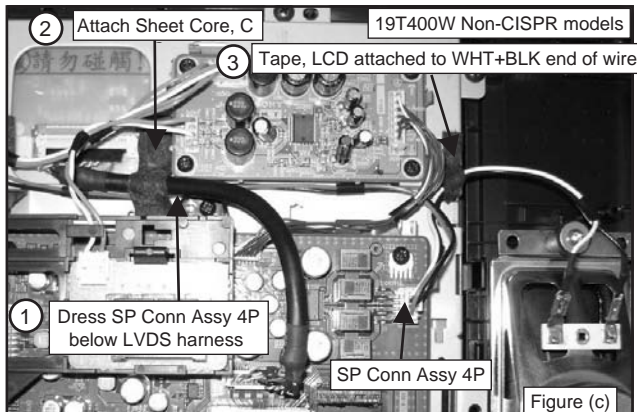
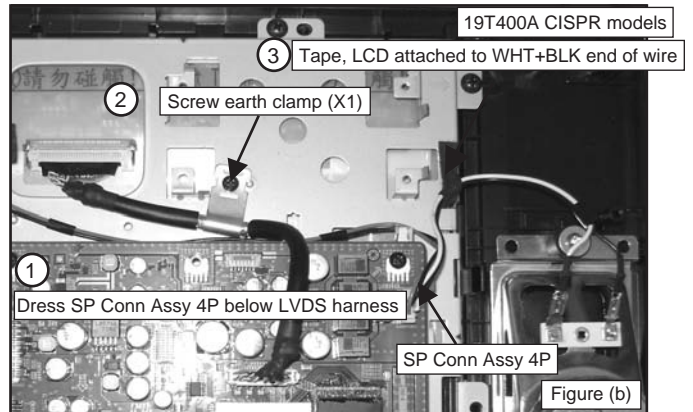
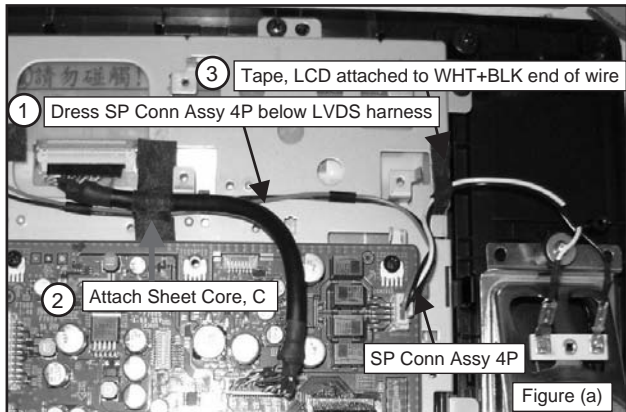


*For 19T400W model only

Caution: Dress all wires below panel's height limit.
Ensure that wires do not block screw hole
(prevent them from being sandwiched when inserting screw to rear cover)

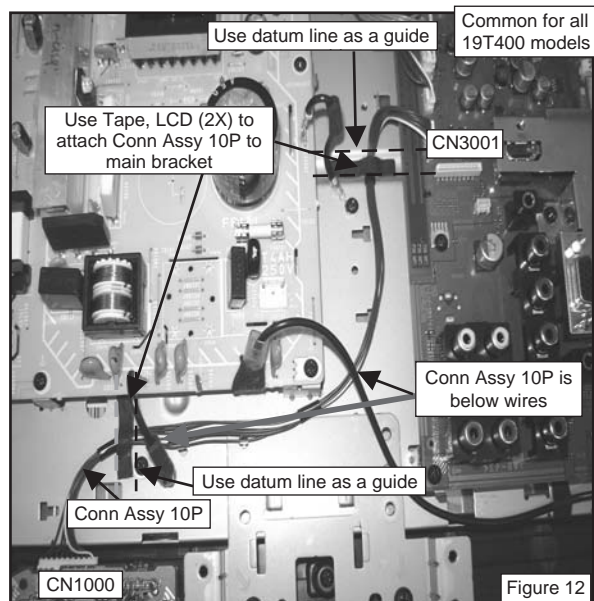
4-1-10. SP Conn Assy 4P and LVDS Harness Dressing

Follow figures below for SP Conn Assy 4P and LVDS Harness dressing.



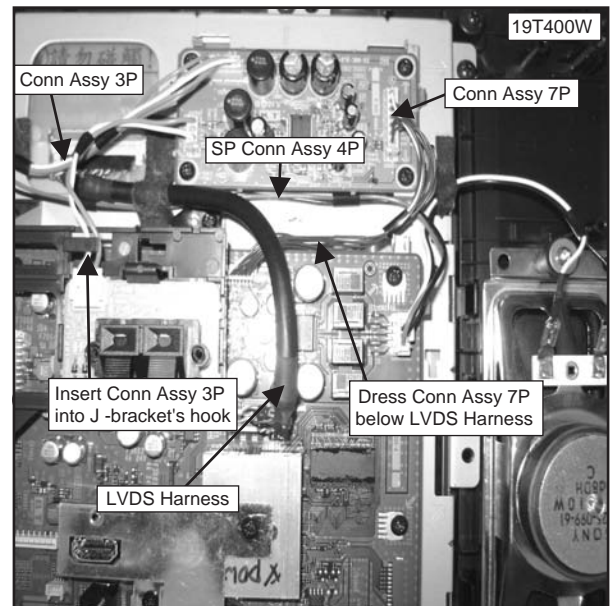
4-1-11. Connector Assy 10P Dressing

Dress Connector Assy 10P using Tape, LCD (2X) as shown.



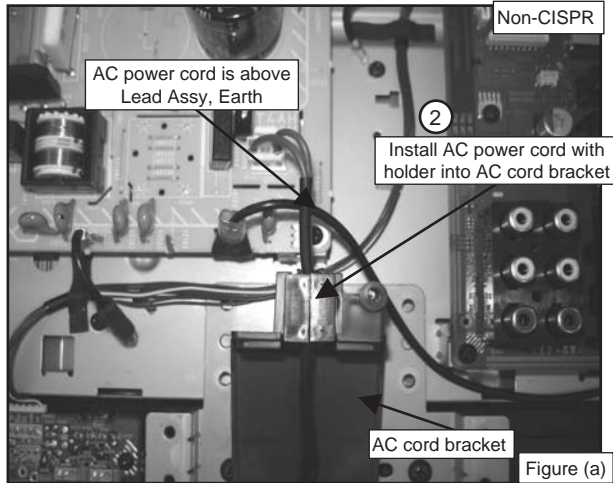
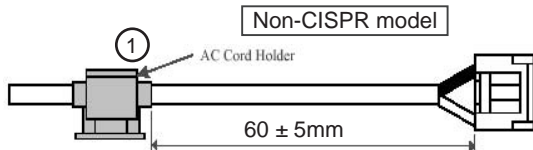
4-1-12. Dressing for 19T400W models only

- 1) Dress Connector Assy 7P as shown.
- 2) Next, dress Conn Assy 3P by inserting the wire into J-bracket's hook.



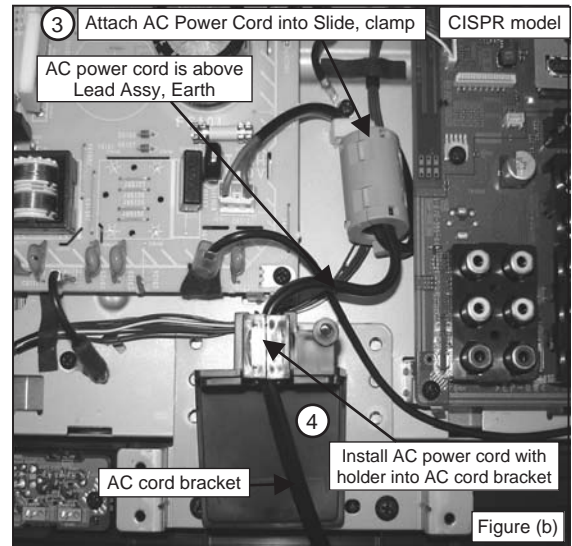
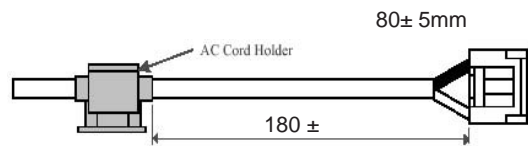
4-1-13. AC Power Cord Wire Dressing (Non-CISPR)

- 1) Install AC cord holder to AC power cord at specified position as shown.
- 2) Then install the AC power cord with holder into AC cord bracket.



4-1-14. AC Power Cord Wire Dressing (CISPR)

- 1) Install Ferrite Core to AC power cord at specified position as shown.
- 2) Next, install AC cord holder to AC power cord at specified position.
- 3) Insert AC power cord into slide, clamp
- 4) Lastly, install the AC power cord with holder into AC cord bracket.



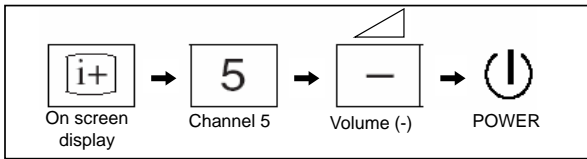
CAUTION:

1. Ensure that AC power cord is not stressed whilst inserting it into AC cord bracket and slider, clamp (CISPR model).

SECTION 5 SERVICE ADJUSTMENTS

5-1. Accessing Diagnostic Menu

- While TV set on standby, press the following sequence on the Remote commander (RMGA013).



The following menu will appear on the screen

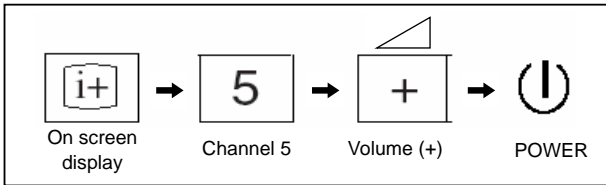
MAIN_POWER_ERROR	0
5V_POWER_ERROR	0
AUDIO_ERROR	0
BALK_LIGHT_ERROR	0
TEMP_ERROR	0

Figure 1

- To quit the diagnostic menu, turn off and on the set.

5-2. Viewing the Service Mode Display

- While TV on standby mode, press the following sequence on the Remote commander.



(if wrong key is pressed or passed 3 seconds during each process, cancel entering the self-diagnosis display.)

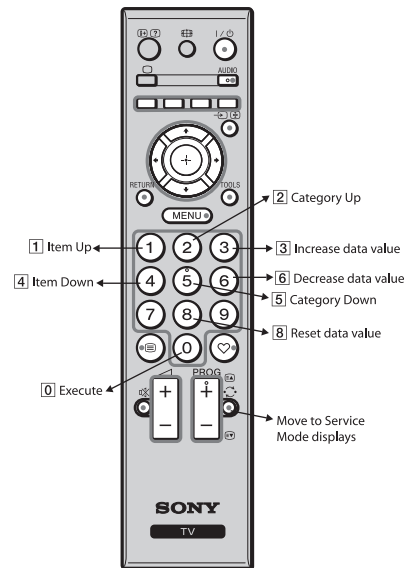
Example on screen display:

Category	Item	[Category/Item name] Within 17 characters	[Data] Within 7 characters
T V	0 0 0	W B	
	0 0 0	W P R C	2 5 5
L O C T O P			
P R O G R A M : T M 0 . 0 7 0			
G T V : M R 1 . 0 . 2			
N V M : T D 0 . 1 0 0			
PROGRAM: Show the Application version GTV: Show the GTV Library version NVM: Show the NVM version in the NVM data (4bytes ASCII data)			

- To reset, press 8 - 0 - \oplus .
- To Exit, press the $\langle I/\text{POWER} \rangle$ key.

5-3. Control keys via Remote Commander.

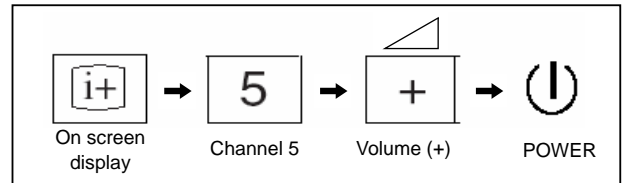
Buttons on the Remote Commander to access the service menu items and adjust the data values.



5-4. Adjustment Method

5-4-1. Aging

- While TV on standby mode, press the following sequence on the Remote commander.



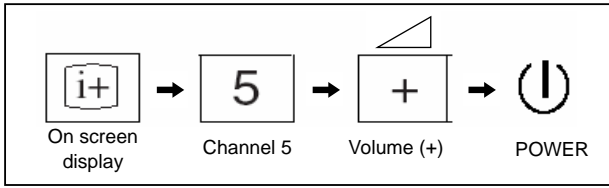
- Select AGING with $\boxed{2}$ or $\boxed{5}$ On the Remote Commander.
- Select AGING MODE with $\boxed{1}$ or $\boxed{4}$ On the Remote Commander.
- Select data value with $\boxed{3}$ or $\boxed{6}$ On the Remote Commander to 1 to enable. Refer to Service Items (Table 1) page 17
- Press $\langle I/\text{POWER} \rangle$ to exit.
- When exit it will have the new data value and start aging.
- Aging condition:
 - Supply voltage : Rating
 - Time: More than 20 minutes
 - Ambient Temp: 22-28 degrees
 - Input : Set no signal except digital and analog RF(Video/Component/PC)

Example on screen display:

Category	Item	[Category/Item name] Within 17 characters	[Data] Within 7 characters
T V	0 0 0	A G I N G	
	0 0 0	A G I N G M O D E	1
L O C T O P			
P R O G R A M : T M 0 . 0 7 0			
G T V : M R 1 . 0 . 2			
N V M : T D 0 . 1 0 0			
PROGRAM: Show the Application version GTV: Show the GTV Library version NVM: Show the NVM version in the NVM data (4bytes ASCII data)			

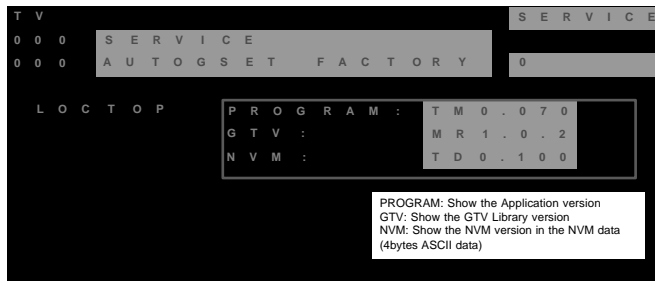
5-4-2. Resetting the User Menu- Factory Reset

1. While TV on standby mode, press the following sequence on the Remote commander.



2. Select SERVICE with **[2]** or **[5]** On the Remote Commander.
3. Select AUTO SET FACTORY with **[1]** or **[4]** On the Remote Commander.
4. Select data value with **[3]** or **[6]** On the Remote Commander to 0 to current condition. Refer to Service Items (Table 1) page 17
5. Press <I/⏻> to exit.

Example on screen display:

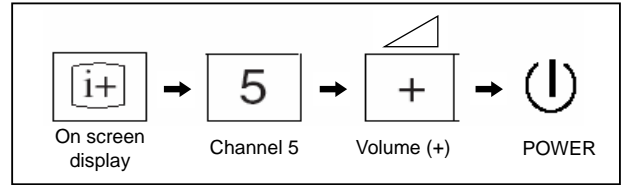


5-4-3. White Balance Adjustment

Test Pattern:

- a) Connect video signal of white to video input
- b) Restort to original value : Color temp=0, Picture=Max,Brightness=50,Backlight=max

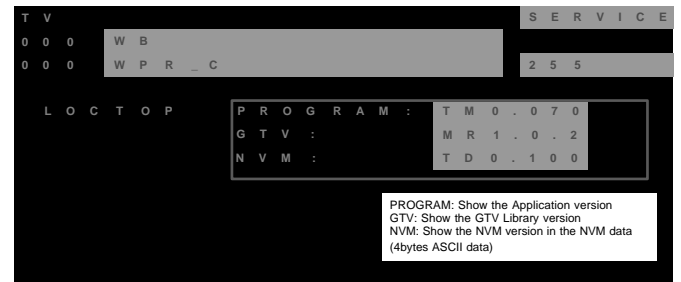
1. While TV on standby mode, press the following sequence on the Remote commander.



2. Select WB with **[2]** or **[5]** On the Remote Commander.
3. Select WPR_C with **[1]** or **[4]** On the Remote Commander.
4. Select data value with **[3]** or **[6]** On the Remote Commander.
5. Press <I/⏻> to exit.

Note: Refer to Service Items (Table 1) page 17 for other item and data value.

Example on screen display:



5-5. Table 1

Category	Item	Description	Remarks	bit	Min	Max	Initial	
WB	WPR C	W/B R adjustment for Cool	Change color temperature to Cool	8	0	255	ADJ value	
	WPG C	W/B G adjustment for Cool		8	0	255	ADJ value	
	WPB C	W/B B adjustment for Cool		8	0	255	ADJ value	
	WPR N	W/B R adjustment for Cool	Change color temperature to Neutral	8	0	255	ADJ value	
	WPG N	W/B G adjustment for Cool		8	0	255	ADJ value	
	WPB N	W/B B adjustment for Cool		8	0	255	ADJ value	
	WPR W1	W/B R adjustment for Warm1	Change color temperature to Warm1	8	0	255	ADJ value	
	WPG W1	W/B G adjustment for Warm1		8	0	255	ADJ value	
	WPB W1	W/B B adjustment for Warm1		8	0	255	ADJ value	
	WPR W2	W/B R adjustment for Warm2	Change color temperature to Warm2	8	0	255	ADJ value	
	WPG W2	W/B G adjustment for Warm2		8	0	255	ADJ value	
	WPB W2	W/B B adjustment for Warm2		8	0	255	ADJ value	
SERVICE	TUNING SYSTEM	"TV" system FIX. "Auto" or "BG" or "DK" or "I" or "M"		3	0	0x08	0	"0:Auto, 1:BG, 2:DK, 3:I, 4:M, 5:_No use"
	NO SIGNAL MUTE	When RF is no signal, select ON/OFF of audio mute.		1	0	1	0	0:OFF, 1:ON
	AUTOSET FACTORY	Select a factory, and preset factory signal.	Refer to the followings and sheet "AUTOSET FACTORY"	3	0	0x08	0	0:current condition 1:SOEM(NORTH) 2:SOEM(SOUTH) 3:STT 4:SSV 5:_No use
	AGC	Control of AGCOUT(66pin) of SMIC	This value is adjust by production. Initial value is adjustment value. AGC Take Over	8	0	0xFF	ADJ value	
	Forced 2D	Select "2D" and "Current"		1	0	0x01	0	0:Current, 1:2D
	OVMADAPT	FM over-moduration adaptation	Initial data is BG/DK/I : 1 M : 0 Radio : 1	1	0	0x01	current condition	0:Disable 1:Enable
	FILTBW	Sound carrier filter bandwidth.	Initial data is BG/DK/I : 1 M : 0 Radio : 1	2	0	0x03	current condition	0:Narrow 1:Extra wide 2:Medium 3:Wide
ADC	AD auto calibration	AD Cal.	1	0	0x01	0	1:Start auto ADC	
PRODUCTION	SER1	Serial Number 1	SONY VERSION NO CHAR1 INDEX	8	0	0xFF	ADJ value	
	SER2	Serial Number 2	SONY VERSION NO CHAR2 INDEX	8	0	0xFF	ADJ value	
	SER3	Serial Number 3	SONY VERSION NO CHAR3 INDEX	8	0	0xFF	ADJ value	
	SER4	Serial Number 4	SONY VERSION NO CHAR4 INDEX	8	0	0xFF	ADJ value	
	SER5	Serial Number 5	SONY VERSION NO CHAR5 INDEX	8	0	0xFF	ADJ value	
	SER6	Serial Number 6	SONY VERSION NO CHAR6 INDEX	8	0	0xFF	ADJ value	
	SER7	Serial Number 7	SONY VERSION NO CHAR7 INDEX	8	0	0xFF	ADJ value	
	SER8	Serial Number 8	SONY VERSION NO CHAR8 INDEX	8	0	0xFF	ADJ value	
AGING	AGING MODE	Aging mode	APRV_AGING_ENABLE_INDEX	1	0	1	0	0:Disable 1:Enable
	AGING TIME	Aging expire time	APRV_AGING_TIME_INDEX	8	0	0xFF	0	
	AGING COLOR	Aging color	APRV_AGING_COLOUR_INDEX	8	0	0xFF	0	0:Black 1:White 2:Red 3:Green 4:Blue
STATUS	TEMP	Read resister "TEMPERATURE"	Same as NXP service mode	8	0	0xFF	current condition	
	SIG_BOOSTER_LEV	Read A/D port for RF signal level	A/D port: SARIN1	8	0	0xFF	current condition	

5-6. Board & Panel Replacement

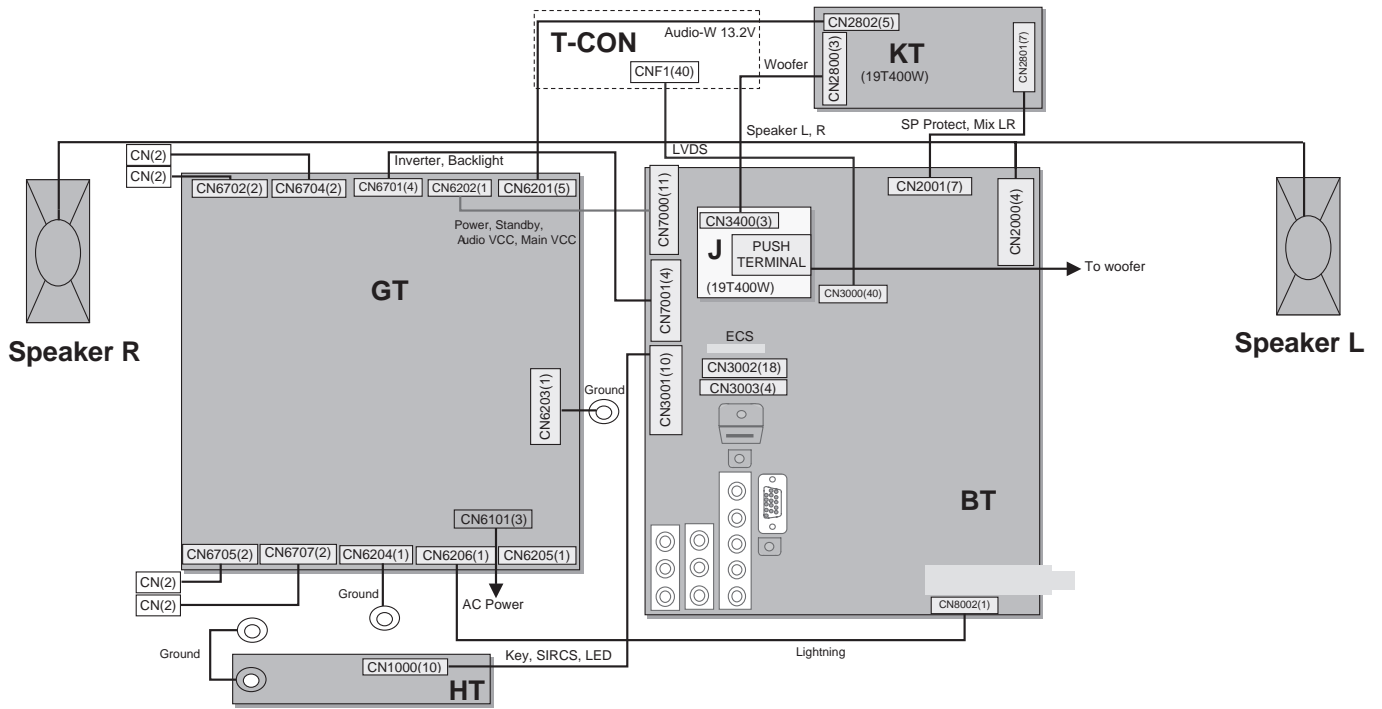
When replacing the BT board and Panel readjust the W/B.

SECTION 6 DIAGRAMS

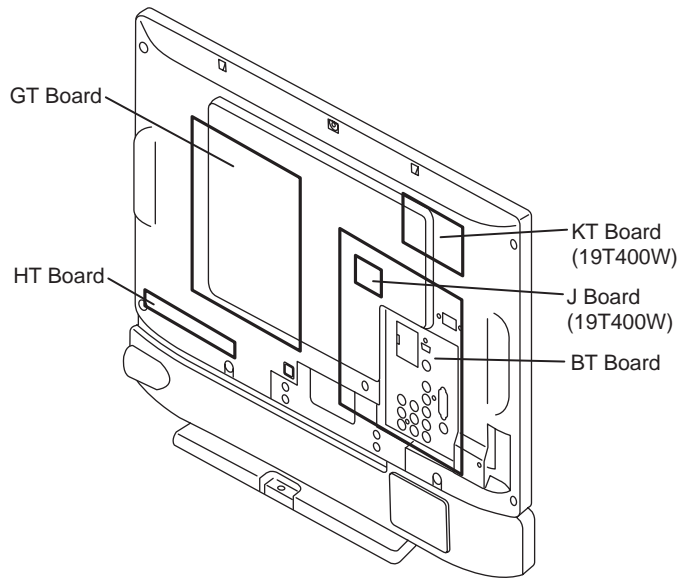
6-1. BLOCK DIAGRAM

Due to complexity of the board, performing component level field repairs are not recommended. Complete board replacement is required if service is necessary.

6-2. CONNECTOR DIAGRAM



6-3. CIRCUIT BOARD LOCATION



6-4. SCHEMATIC DIAGRAM

6-5. PRINTED WIRING BOARDS

Board	Function	Note
BT	I/O, AV INPUT/OUTPUT, HDMI, PC,I, HP/AUDIO/LOC TOP/DDR/ POWER DC/ TUNER.FM.IF/ AV SWITCH.SMIC	Due to complexity of the board, performing component level field repairs are not recommended. Complete board replacement is required if service is necessary. Therefore schematic diagrams and printed wiring boards are not included. For part number information, refer to Exploded View or Electrical Parts List section in this manual.
GT	Power Supply	
HT	Key / LED / SIRCS	
KT	WOOFER (19T400W)	
J	3D (19T400W)	

6-6. SEMICONDUCTOR

Due to complexity of the board, performing component level field repairs are not recommended. Complete board replacement is required if service is necessary.

SECTION 7 EXPLODED VIEWS

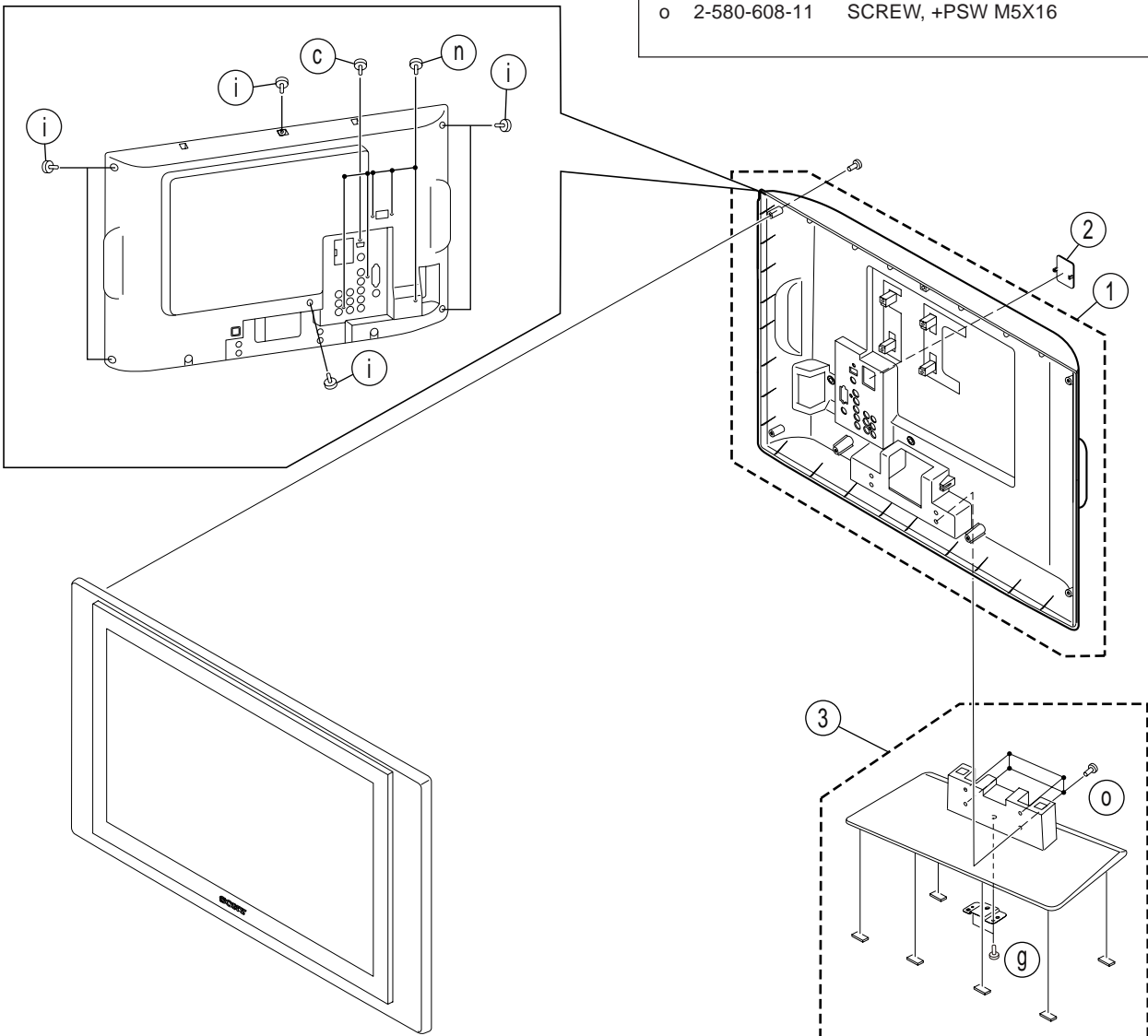
- Components not identified by a part number or description are not stocked because they are not required for routine service.
- The component parts of an assembly are indicated by the reference numbers in the far right column of the part list and within the dotted lines of the diagram.
- Item marked with an asterisk (*) are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these components.

NOTE: The components identified by shading and \triangle mark are critical for safety. Replace only with part number specified.

Note: The components identified by mark \square contain confidential information. Strictly follow the instructions whenever the components are repaired and /or replaced.

a	4-046-797-11	SCREW (3X12), (+) BVTAP
b	2-580-591-01	SCREW, +PSW M3X5
c	2-580-592-01	SCREW, +PSW M3X8
d	2-580-600-01	SCREW, +PSW M4X8
e	2-580-602-01	SCREW, +PSW M4X12
f	2-580-614-01	SCREW, +K M3X8
g	2-580-626-01	SCREW, SP 4-40 UNC
h	2-580-629-01	SCREW, +BVST 3X8
i	2-580-640-01	SCREW, +BVTP2 4X16
j	2-580-644-01	SCREW, +KTP2 3X8
k	2-580-645-01	SCREW, +KTP2 3X10
l	2-674-965-31	SCREW, +PSW 3SG
m	3-398-903-01	SCREW, BVTP2 4X20 (S)
n	7-685-648-79	SCREW, +BVTP 3X12 TYPE2 IT-3
o	2-580-608-11	SCREW, +PSW M5X16

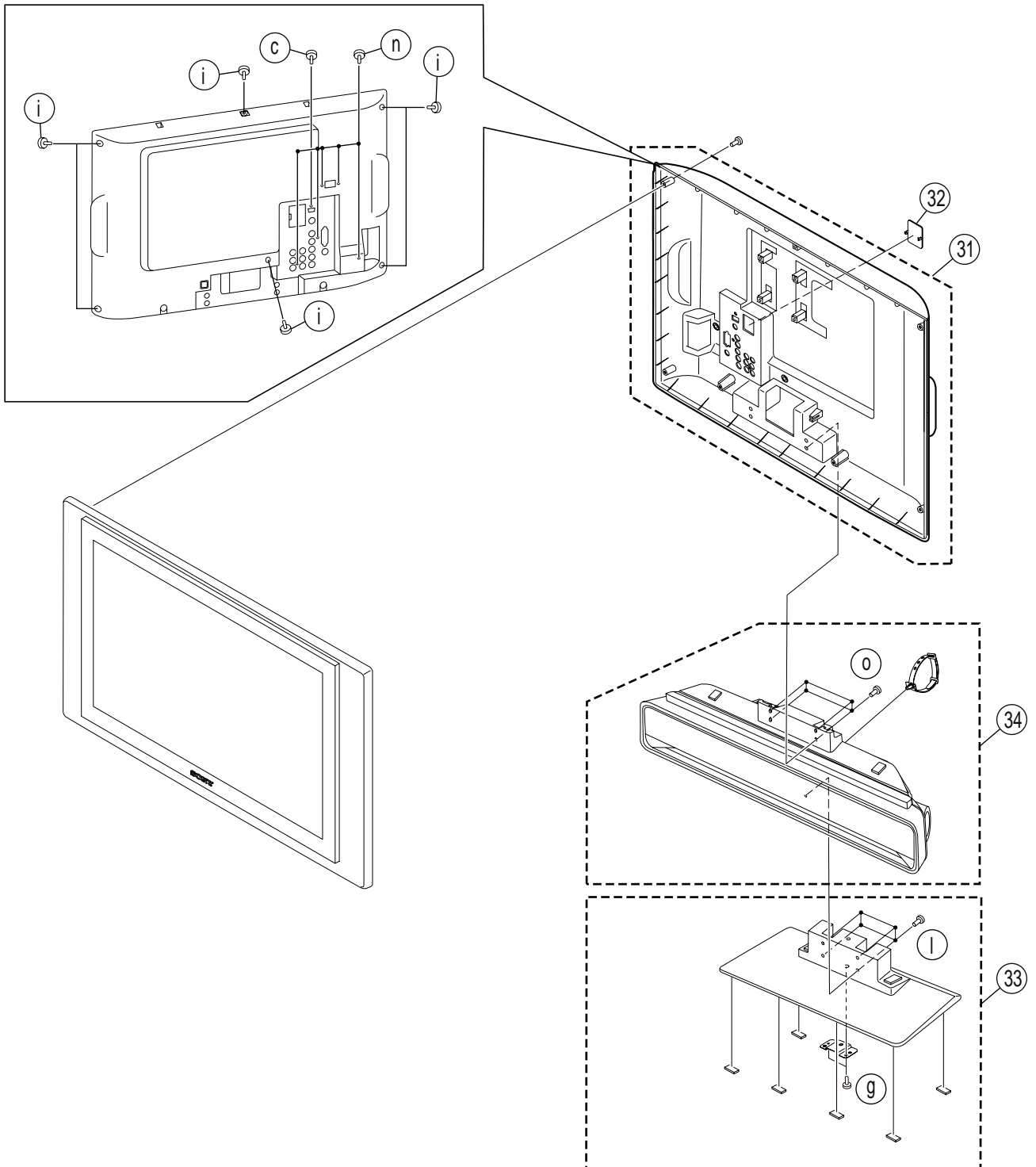
7-1 REAR CABINET AND STAND ASSY (19T400A/T400G)



REF. NO.	PART NO.	DESCRIPTION	REMARK
1	X-2318-604-1	ASSY COVER, REAR (19) (19T400A,T400A/H(ME))	
	X-2320-071-1	ASSY COVER, REAR (19) (19T400A/H(E, Thailand))	
	X-2319-749-1	ASSY COVER, REAR (19G) (19T400G)	
2	* 3-106-086-03	COVER ECS	
3	X-2318-518-1	ASSY STAND(19) (19T400A, 19T400G)	
	X-2320-052-1	ASSY STAND(19) (19T400A/H)	

REF. NO.	PART NO.	DESCRIPTION	REMARK
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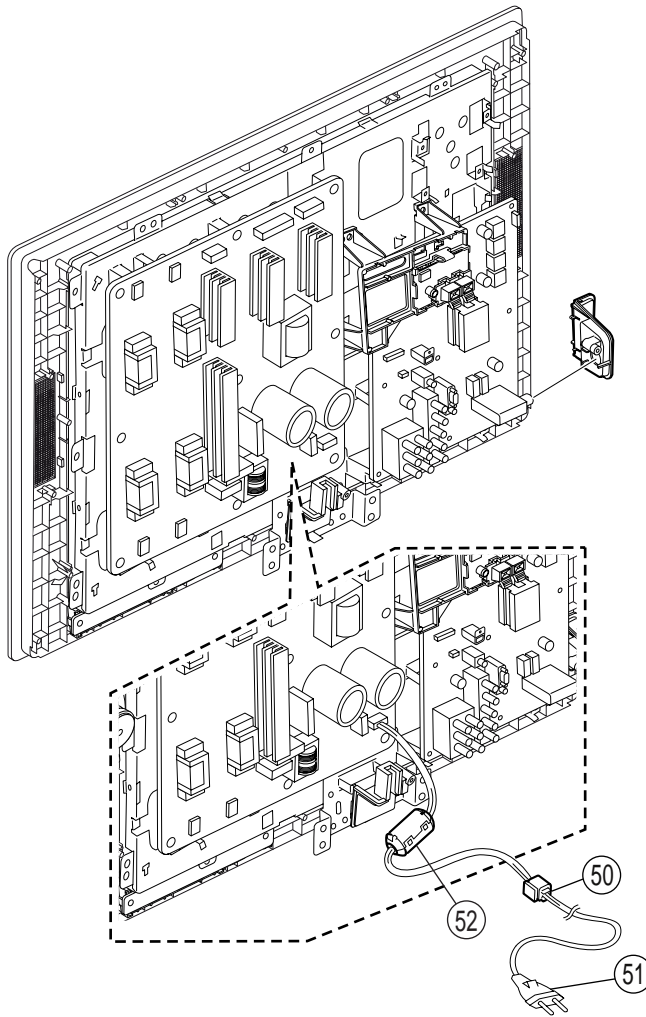
7-2. REAR CABINET, 3D WOOFER AND STAND ASSY WOOFER
(19T400W)



REF. NO.	PART NO.	DESCRIPTION	REMARK
31	X-2318-688-1	ASSY COVER, REAR(19) (19T400W)	
32	* 3-106-086-03	COVER, ECS	
33	* X-2318-517-1	STAND ASSY, WOOFER	
34	* A-1551-100-A	3D WOOFER, ASSY(19T) (19T400W(India))	
	* A-1579-125-A	3D WOOFER, ASSY(19T) (19T400W(E,GE,ME,South Afica))	

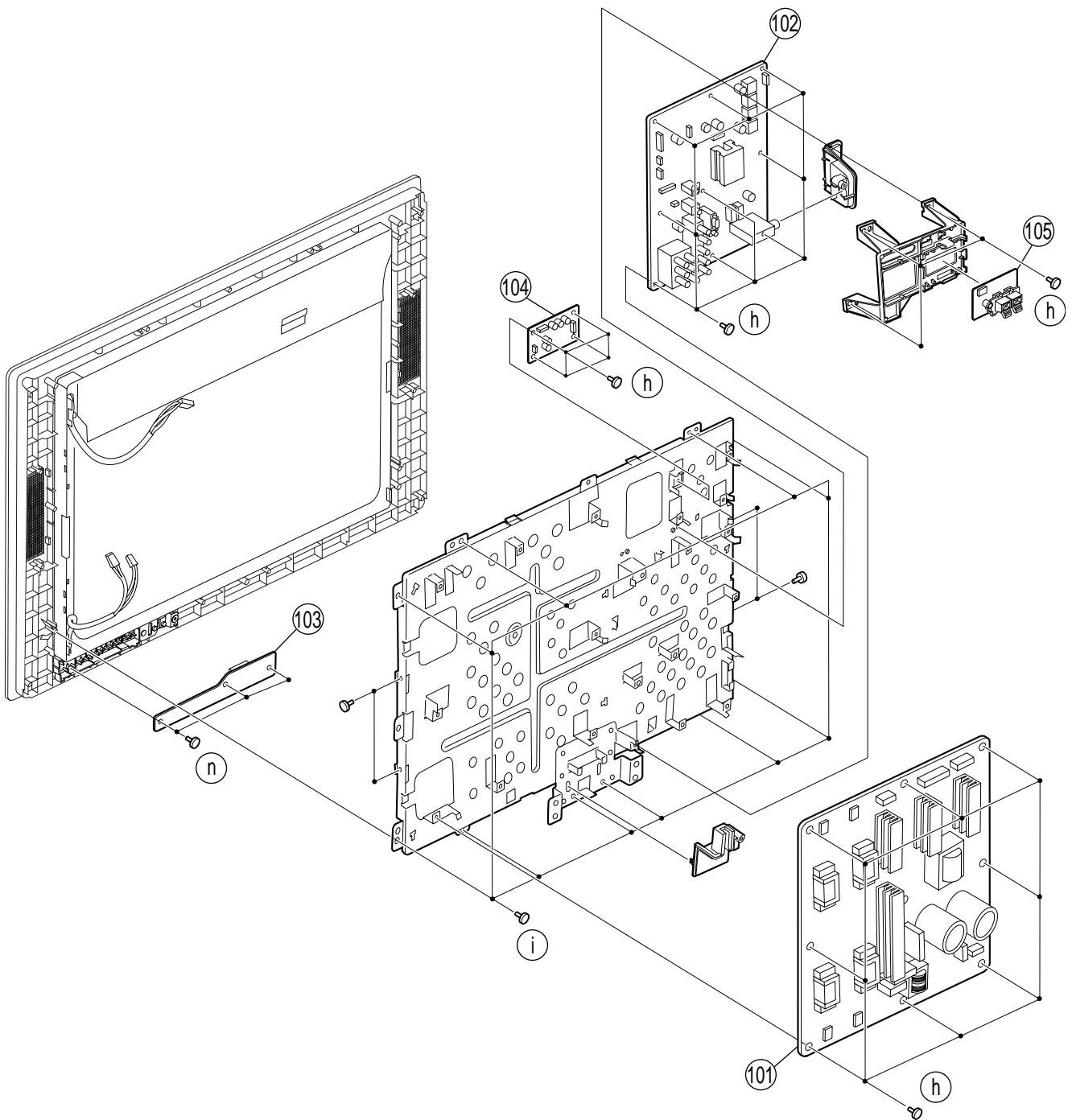
REF. NO.	PART NO.	DESCRIPTION	REMARK
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7-3. POWER CORD, AC CORD HOLDER, CLAMP



<u>REF. NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>REMARK</u>	<u>REF. NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>REMARK</u>
50	4-022-115-00	HOLDER, AC CORD					
51	1-835-128-11	POWER SUPPLY CORD(WITH CONNECTOR) (19T400A(New Zealand))					
	1-835-127-11	POWER SUPPLY CORD(WITH CONNECTOR) (19T400A, 19T400A/H, 19T400G(Thailand))					
	1-835-136-11	POWER SUPPLY CORD(WITH CONNECTOR) (19T400A(SA, GE, E, ME)/(19T400/H(ME, E)/ 19T400G(ME)/19T400W(Thailand, E, ME, GE))					
	1-835-280-11	POWER SUPPLY CORD(WITH CONNECTOR) (19T400A, 19T400G, 19T400W(India))					
52	1-500-497-11	CLAMP FERRITE (19T400A(New Zealand))					

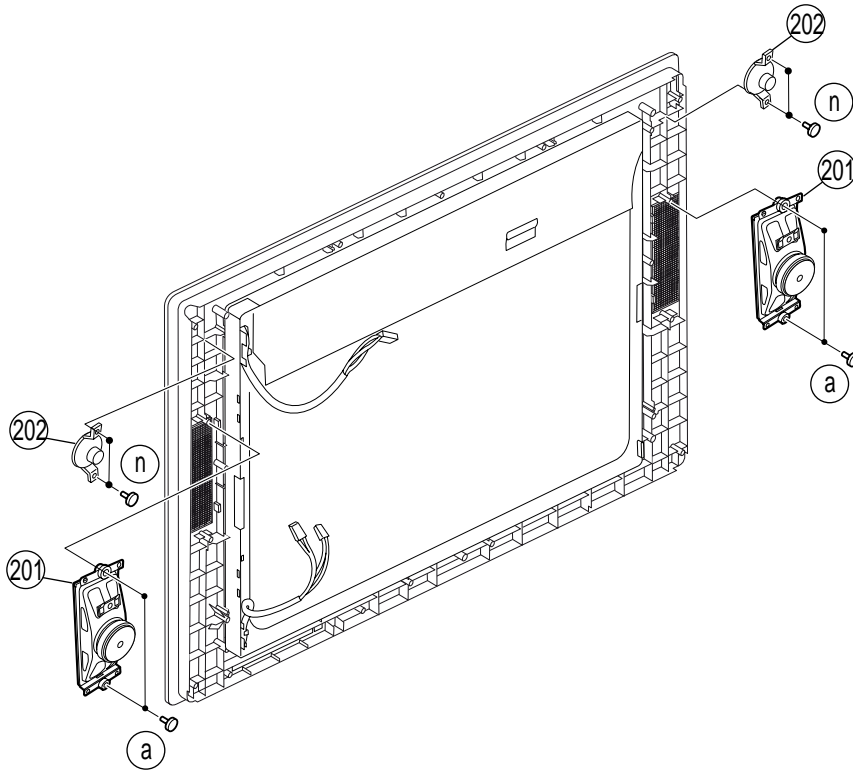
7-4. CHASSIS-1



REF. NO.	PART NO.	DESCRIPTION	REMARK
101	A-1550-334-A	GT COMPLETE (Except 19T400A(New Zealand)/19T400W)	
	A-1551-118-A	GT COMPLETE (19T400W)	
	A-1556-641-A	GT COMPLETE (19T400A(New Zealand))	
102	A-1550-359-A	BT MOUNT(SERVICE) (19T400G)	
	A-1556-645-A	BT MOUNT(SERVICE) (19T400A)	
	A-1564-858-A	BT MOUNT(SERVICE) (19T400W(GE, South Africa))	
	A-1551-126-A	BT MOUNT(SERVICE) (Except 19T400W(GE, South Africa))	
103	A-1550-333-A	HTMOUNT	
104	* A-1551-120-A	KT MOUNT (19T400W)	
105	* A-1551-121-A	J MOUNT (19T400W)	

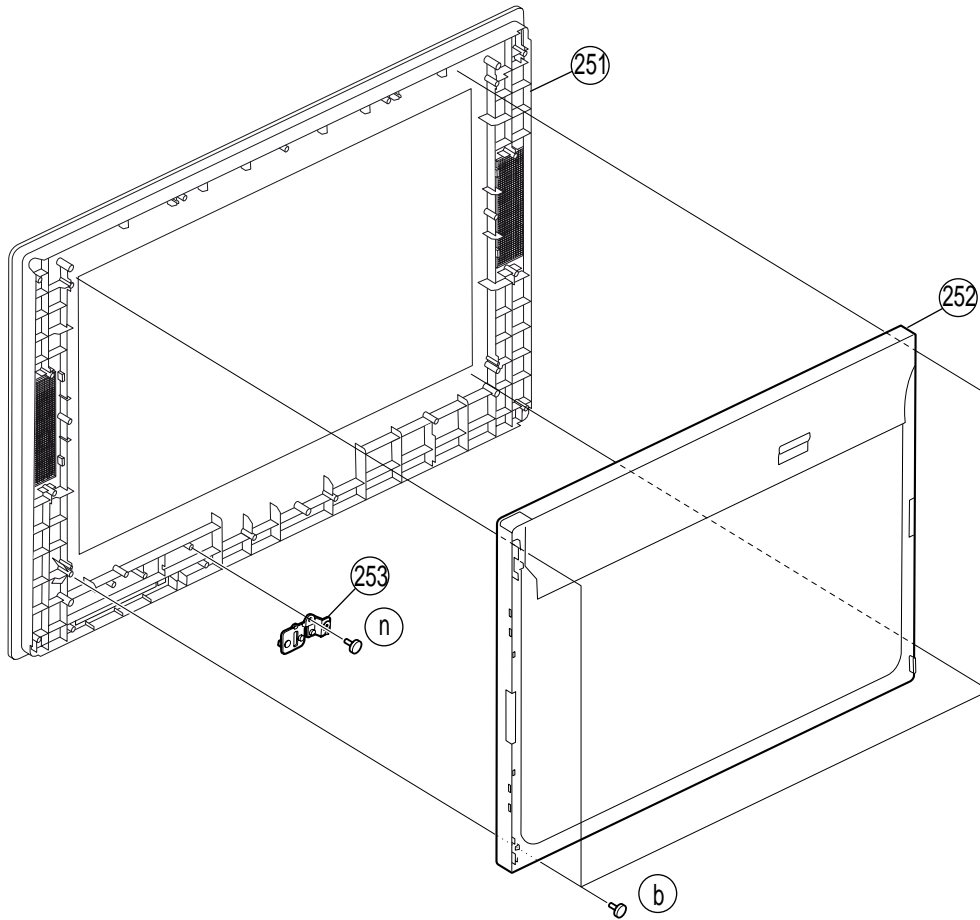
REF. NO.	PART NO.	DESCRIPTION	REMARK
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7-5. SPEAKER



<u>REF. NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>REMARK</u>	<u>REF. NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>REMARK</u>
201	1-858-037-11	LOUDSPEAKER(13 X 5.5CM)					
202	1-858-077-11	LOUDSPEAKER(5CM) (19T400G)					

7-6. BEZEL ASSY AND LCD PANEL



<u>REF. NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>REMARK</u>	<u>REF. NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>REMARK</u>
251	X-2318-579-1	ASSY, BEZEL(19) (19T400A)					
	X-2320-551-1	ASSY, BEZEL(19) (19T400A/H)					
	X-2318-361-1	ASSY, CABINET(19) (19T400W)					
	X-2319-058-1	ASSY, CABINET(19) (19T400G)					
252	1-802-705-11	LCD PANEL (19WXGA TFT)					
253	3-452-787-11	GUIDE, LIGHT					

SECTION 8 ELECTRICAL PARTS LIST

NOTE:

The components identified by mark contain confidential information. Strictly follow the instructions whenever the components are repaired and /or replaced.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

- All resistors are in ohms
- F : nonflammable

CAPACITORS

- MF : μ F, PF : $\mu\mu$ F

COILS

- MMH : mH, UH : μ H

REF NO.	PART NO.	DESCRIPTION	REMARK
	A-1550-359-A	BT MOUNT (SERVICE) (19T400G)	
	A-1551-126-A	BT-MOUNT (SERVICE) (19T400W(Except GE, South Africa))	
	A-1556-645-A	BT MOUNT (SERVICE) (19T400A)	
	A-1564-858-A	BT MOUNT (SERVICE) (19T400W(GE, South Africa))	
	A-1550-333-A	HT MOUNT	
*	A-1551-120-A	KT MOUNT (19T400W)	
*	A-1551-121-A	J MOUNT (19T400W)	
	A-1551-118-A	GT COMPLETE (19T400W)	
	A-1550-334-A	GT COMPLETE (Except 19T400A(New Zealand/19T400W))	
	A-1556-641-A	GT COMPLETE (19T400A(New Zealand)) *****	

Due to complexity of the board, performing component level field repairs are not recommended.
 Complete board replacement is required if service is necessary.
 For part number information refer to the Exploded View or Electrical Parts List section of this Service Manual.

CONNECTORS

*	1-910-047-12	CONNECTOR ASSY 10P CN3001(BT)-CN1000(HT)
*	1-910-047-13	CONNECTOR ASSY 11P CN6202(GT)-CN7000(BT)
*	1-910-047-28	CONNECTOR ASSY 3P (19T400W) CN2800(KT)-CN3400(J)
*	1-910-047-14	CONNECTOR ASSY 4P CN2000(BT)-SP(1)
*	1-910-047-27	CONNECTOR ASSY 5P (19T400W) CN6201(GT)-CN2802(KT)
*	1-910-047-25	CONNECTOR ASSY 7P (19T400W) CN2001(BT)-CN2801(KT)
	1-835-721-11	HARNESS WITH CONNECTOR (LVDS) CN3000(BT)-TCON(1)
*	1-910-047-15	SP CONNECTOR ASSY 4P (19T400A,19T400A/H,19T400G)
*	1-910-047-56	SP CONNECTOR ASSY 4P (19T400W)

<ACCESSORIES AND PACKING MATERIALS>

*	4-111-953-01	CUSHION, LOWER(19) (19T400A(South Africa,GE,Thailand), T400A/H(E,Thailand))
*	4-111-952-01	CUSHION, UPPER (19) (19T400A(South Africa,GE,Thailand),19T400/H(E,Thailand))

REF NO.	PART NO.	DESCRIPTION	REMARK
	* 3-874-041-01	CUSHION, LOWER(19) (19T400A(E,New Zealand), ME,19T400/H(ME),19T400G)	
	* 3-874-040-01	CUSHION, UPPER(19) (19T400A(E,New Zealand,ME),19T400/H(ME),19T400G)	
	* 4-109-579-01	CUSHION, LOWER(19W) (19T400W)	
	* 4-000-878-01	CUSHION, UPPER(19W) (19T400W)	
	* 3-874-042-01	INDIVIDUAL CARTON (19T400A,T400W/H(ME))	
	* 4-000-879-01	INDIVIDUAL CARTON (19T400W)	
	* 4-110-398-01	INDIVIDUAL CARTON (19T400A/H(E/Thailand), 19T400G)	
	4-000-037-11	MANUAL, INSTRUCTION (19T400A (ME,India)/ 19T400A/H(ME), 19T400G(ME,India), 19T400W(E,ME,India)	
	4-000-037-21	MANUAL, INSTRUCTION (Arabic language) (19T00A (ME)/ 19T400A/H(ME),19T400G(ME), 19T400W(ME)	
	4-000-037-31	MANUAL, INSTRUCTION (PR language) (19T00A (ME)/ 19T400A/H(ME),19T400G(ME), 19T400W(ME)	
	4-107-685-11	MANUAL, INSTRUCTION (KLV-19T00A (E,GE,SA)/ A/H(E),19T400G(ME), 19T400W(ME)	
	4-107-685-21	MANUAL, INSTRUCTION (Thai language) (19T00A (THAILAND)/ A/H(THAILAND))	
	4-107-685-31	MANUAL, INSTRUCTION (19T00A (GE) (CT language)	
	4-110-401-11	MANUAL, INSTRUCTION (19T00A (E,NEW ZEALAND)/ 19T400W(THAILAND,GE)	
	4-110-401-21	MANUAL, INSTRUCTION (CT language) (19T00A (E)/ T400W(GE)	
	4-110-401-31	MANUAL, INSTRUCTION (19T00A (E) (PR language)	
	4-110-401-41	MANUAL, INSTRUCTION (Thai language) (19T00G (THAILAND)	
	3-293-042-12	SUPPLEMENT (WALL MOUNT)	
	3-293-042-22	SUPPLEMENT (WALL MOUNT)	
	1-821-926-11	PLUG CONVERSION (19T00A (South Africa) , T400W(Thailand)	
	1-569-008-22	ADAPTOR, CONVERSION 2P (19T400A,A/H,G,W (E))	
	1-770-019-61	ADAPTOR, CONVERSION PLUG (Except 19T400A,A/H,G,W (E))	

<u>REF NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>REMARK</u>	<u>REF NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>REMARK</u>
		MISC					

	X-2186-601-2	BAG ASSY, RUDDER LOCK					

		REMOTE COMMANDER					

	1-480-705-21	REMOTE COMMANDER (RM-GA013)					
	9-885-123-43	COVER, BATTERY					

SONY®

LCD Colour TV

Operating Instructions

KLV-32T400A

KLV-26T400A

KLV-26T400G

KLV-19T400A

KLV-19T400G

KLV-19T400W

BRAVIA

Introduction

Thank you for choosing this Sony product.
Before operating the TV, please read this manual thoroughly and retain it for future reference.

The illustrations used in this manual are of the KLV-32T400A unless otherwise stated.

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Channel Set-up menu	29

Additional Information

Specifications	32
Troubleshooting.....	33

Start-up Guide

Checking the accessories

Stand (1) and screws (4)

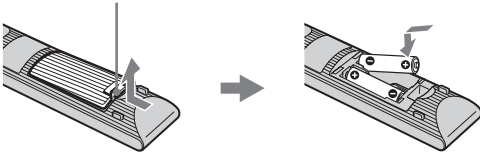
3D WOOFER (1) and screws (4) (KLV-19T400W)

Remote RM-GA013 (1)

Size AA batteries (R6 type) (2)

Inserting batteries into the remote

Push and lift the cover to open.



- Observe the correct polarity when inserting batteries.
- Do not use different types of batteries together or mix old and new batteries.
- Dispose of batteries in an environmentally friendly way. Certain regions may regulate the disposal of batteries. Please consult your local authority.
- Handle the remote with care. Do not drop or step on it, or spill liquid of any kind onto it.
- Do not place the remote in a location near a heat source, a place subject to direct sunlight, or a damp room.

1: Attaching the 3D WOOFER and stand

Please ensure the AC power cord is away from the 3D WOOFER/stand installation location before you attach below 3D WOOFER/stand.

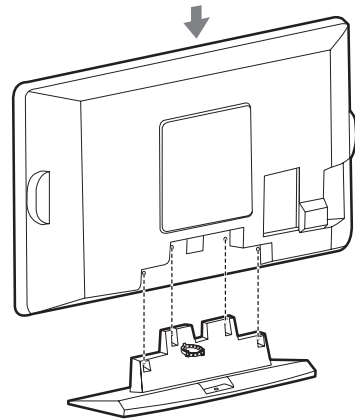
3D WOOFER is only available for KLV-19T400W.

Attaching the stand

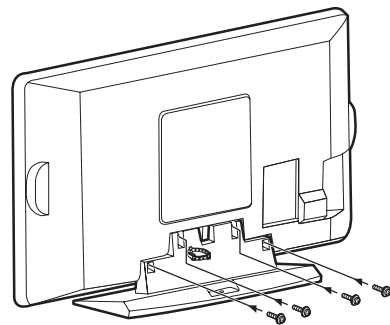
– Except for KLV-19T400W

► KLV-32T400A

1

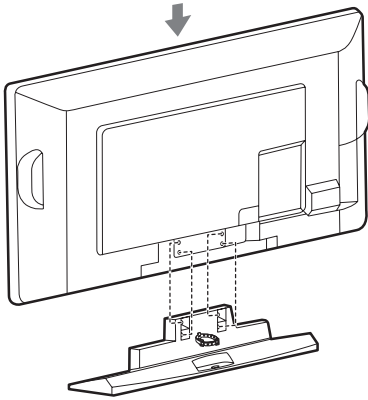


2

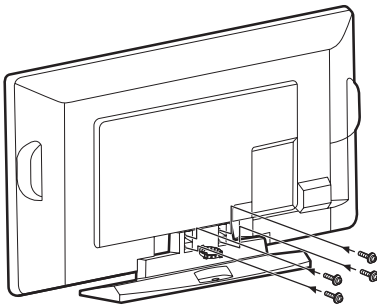


► KLV-26T400A/26T400G

1

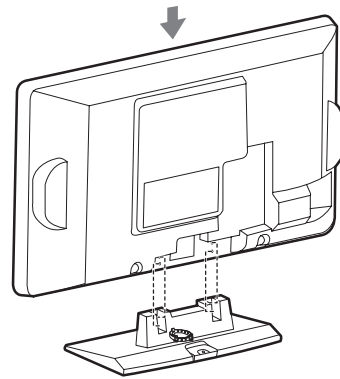


2

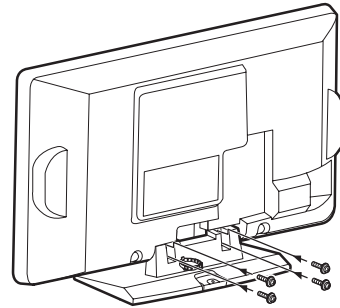


► KLV-19T400A/19T400G

1



2



1 Place the TV onto the stand by aligning the screw hole alignment lines over the stand as shown.

2 Fix the TV to the stand according to the arrow marks ➔ that guide the screw holes using the supplied screws.

- ⚠ • This TV is very heavy, so two or more people should place the TV onto the stand.
- If using an electric screwdriver, set the tightening torque at approximately 1.5N·m (15kgf·cm).
- Ensure the AC power cord is away from screw holes during stand installation to avoid damage to the AC power cord.

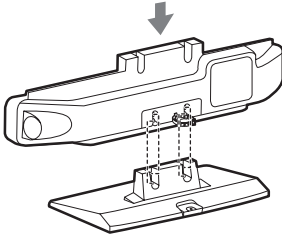
Continued

Attaching the 3D WOOFER and stand

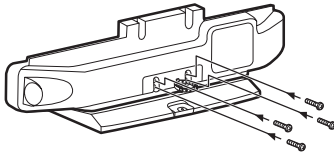
You can enjoy high quality sound by attaching the 3D WOOFER as follows:

► KLV-19T400W

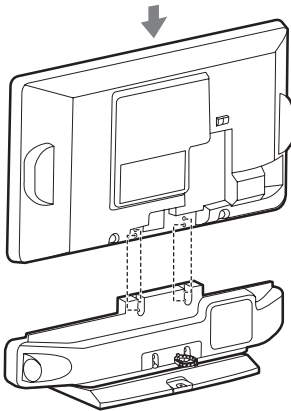
1



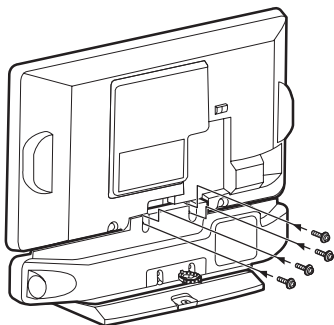
2



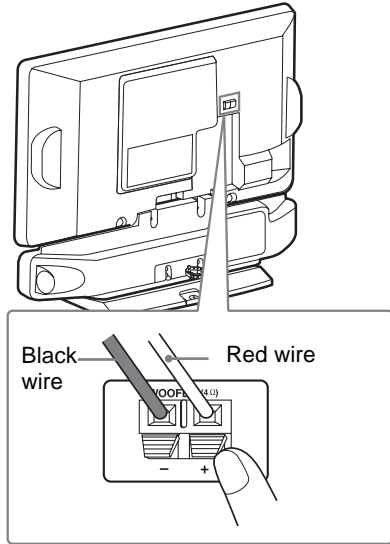
3



4



5

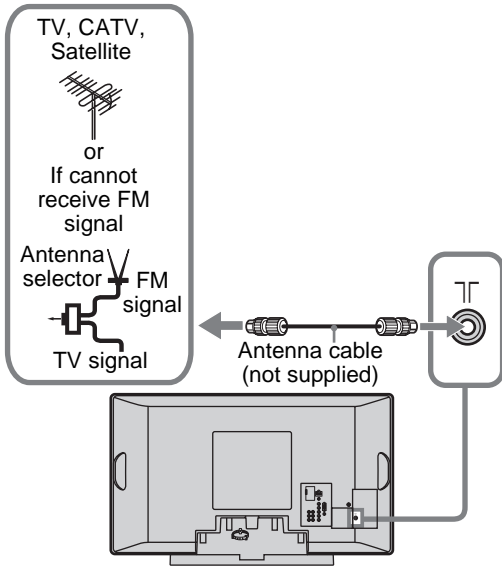


- 1 Place the 3D WOOFER onto the stand by aligning the screw hole alignment lines over the stand as shown.
- 2 Fix the 3D WOOFER to the stand according to the arrow marks ➔ that guide the screw holes using the supplied screws (+BVTP2 4x16).
- 3 Place the TV onto the 3D WOOFER by aligning the screw hole alignment lines over the 3D WOOFER as shown.
- 4 Fix the TV to the 3D WOOFER according to the arrow marks ➔ that guide the screw holes using the supplied screws (+PSW M5x16).
- 5 Connect using only the supplied 3D WOOFER; otherwise your TV may malfunction.

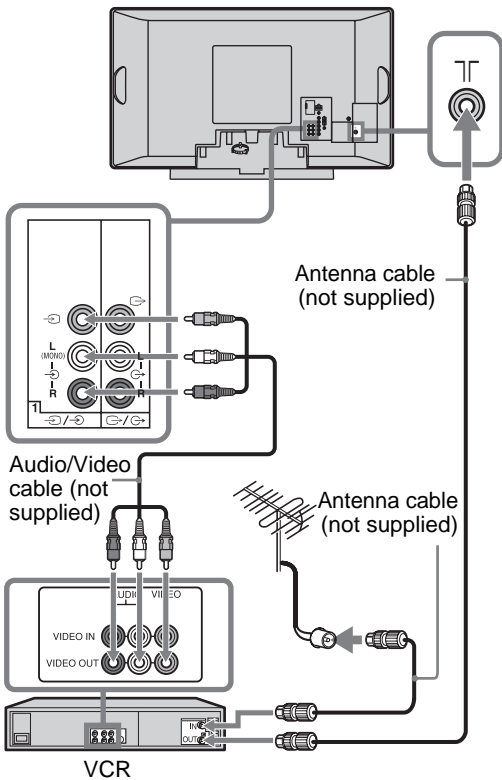
- If using an electric screwdriver, set the tightening torque at approximately 1.2N·m (12kgf·cm) when attaching the stand. However, set the tightening torque at approximately 1.5N·m (15kgf·cm) when attaching the TV to the 3D WOOFER.
- Ensure the AC power cord is away from screw holes during stand installation to avoid damage to the AC power cord.

2: Connecting an antenna/cable/VCR

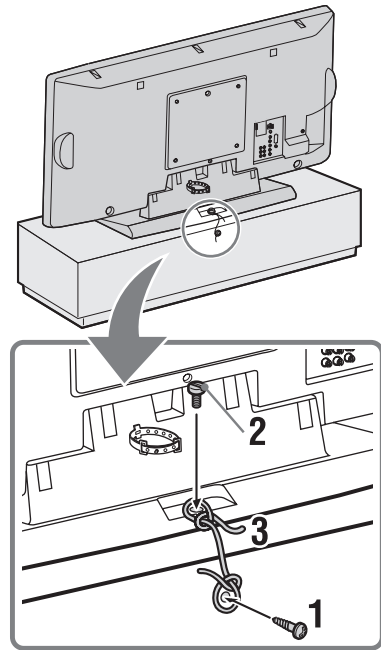
Connecting an antenna/cable



Connecting an antenna/cable and VCR

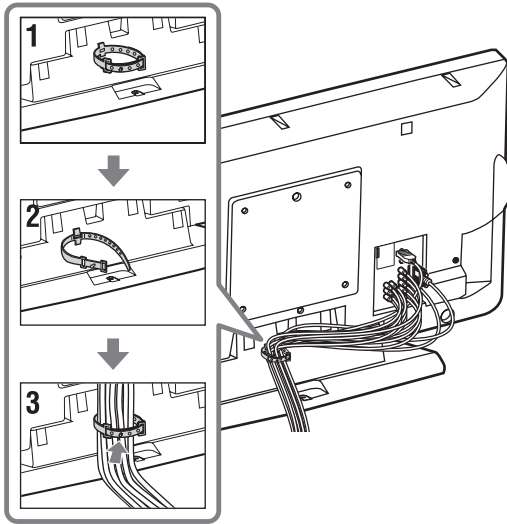


3: Preventing the TV from toppling over



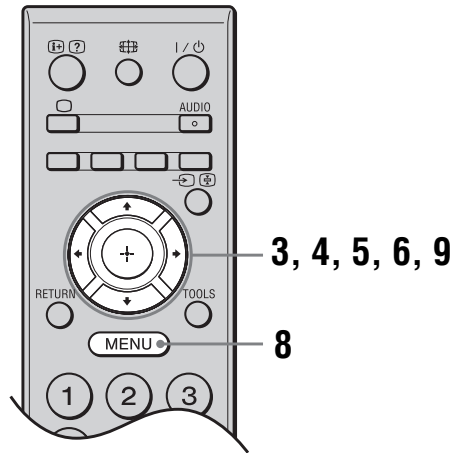
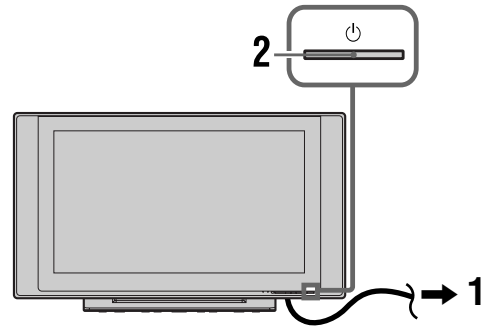
- 1** Install a wood screw (4 mm in diameter, not supplied) in the TV stand.
- 2** Install a machine screw (M6 x 12, not supplied) into the screw hole of the TV.
- 3** Tie the wood screw and the machine screw with a strong cord.

4: Bundling the cables






- Cable holder is located at 3D WOOFER for KLV-19T400W.

5: Performing the initial set-up



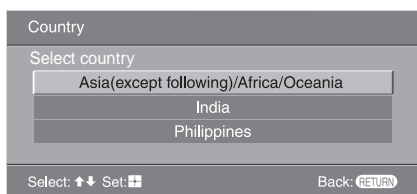
Selecting the language

- 1 Connect the TV to your AC power outlet (110-240 V AC, 50/60 Hz).
- 2 Press  on the TV.
When the TV is in standby mode (the  (standby) indicator on the TV front panel is red), press  on the remote to turn on the TV.
When you turn on the TV for the first time, the “Language” menu appears on the screen.

- 3 Press \uparrow/\downarrow to select the language displayed on the menu screens, then press \oplus .



- 4 Press \uparrow/\downarrow to select the country/region, then press \oplus .

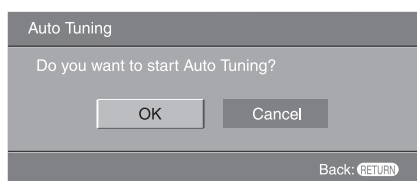


- 5 Press \uparrow/\downarrow to select "Home", then press \oplus .



Auto-tuning the TV

- 6 Press \leftarrow/\rightarrow to select "OK", then press \oplus .



The TV starts searching for all available channels. This may take some time, please be patient and do not press any buttons on the TV or remote.

If a message appears for you to confirm the antenna connection

No programmes found. Please connect antenna (aerial) and select "Confirm" to start auto-tuning again. If 200 channels are found, auto-tuning is stopped.

- 7 When the "Programme Sorting" menu appears on the screen, follow the steps of "Programme Sorting" (page 29).

If you do not want to change the order in which the channels are stored on the TV, go to step 8.



- 8 Press MENU to exit.

The TV has now tuned in all the available channels.


- 9 Press \leftarrow/\rightarrow to select the desired setting in "Display this menu next time?" dialogue, then press \oplus to exit.

- If "Yes" is selected and the TV is turned off by pressing ⏻ on the TV, or is disconnected from the AC power outlet, the initial set-up procedure restarts the next time the TV is turned on.

Watching TV

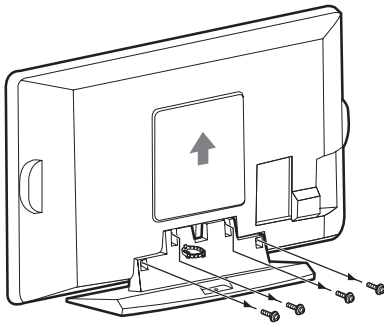
- 1 Press  on the TV to turn on the TV.
- 2 Press the number buttons or PROG +/- to select a TV channel.
- 3 Press  to adjust the volume.

Detaching the Table-Top Stand from the TV

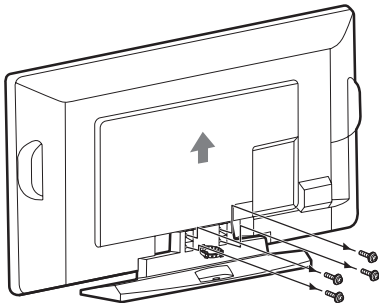
Remove the screws guided by the arrow marks  of the TV.

Do not remove the Table-Top Stand for any reason other than to wall-mount the TV.

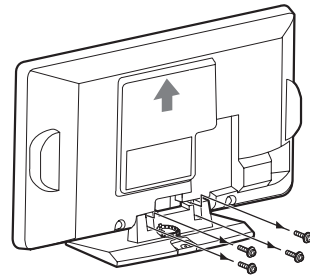
► KLV-32T400A



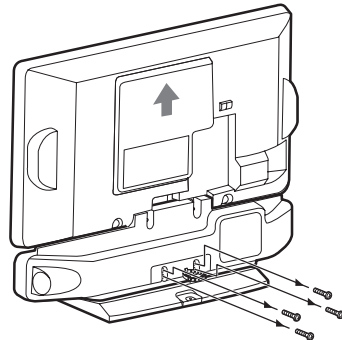
► KLV-26T400A/26T400G




► KLV-19T400A/19T400G



► KLV-19T400W



-  For bracket installation, refer to the instruction guide provided by the Wall-Mount Bracket model for your TV. Sufficient expertise is required in installing this TV, especially to determine the strength of the wall for withstanding the TV's weight. **For product protection and safety reasons, Sony strongly recommends that you use the Wall-Mount Bracket model designed for your TV and the wall-mounting of your TV should be performed by Sony dealers or licensed contractors.**

Safety information

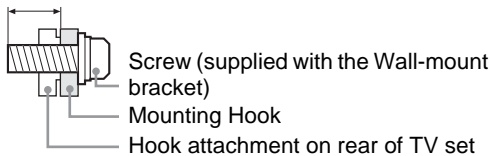
Installation/Set-up

Install and use the TV set in accordance with the instructions below in order to avoid any risk of fire, electrical shock or damage and/or injuries.

Installation

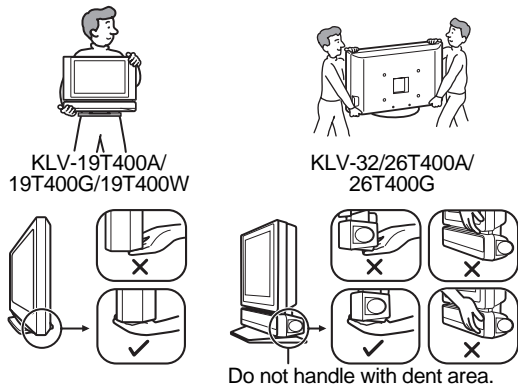
- The TV set should be installed near an easily accessible AC power outlet.
- Place the TV set on a stable, level surface to avoid it from falling down and cause personal injury or damage to the TV.
- Only qualified service personnel should carry out wall installations.
- For safety reasons, it is strongly recommended that you use Sony accessories, including:
 - KLV-32T400A: Wall-mount bracket SU-WL500 or SU-WL50B
 - KLV-26/19T400A/26/19T400G/19T400W: Wall-mount bracket SU-WL100
- Be sure to use the screws supplied with the Wall-mount bracket when attaching the mounting hooks to the TV set. The supplied screws are designed so that they are 8 mm to 12 mm in length when measured from the attaching surface of the mounting hook. The diameter and length of the screws differ depending on the Wall-mount bracket model. Use of screws other than those supplied may result in internal damage to the TV set or cause it to fall, etc.

8mm - 12mm



Transporting

- Before transporting the TV set, disconnect all cables.
- Two or more people are needed to transport a large TV set.
- When transporting the TV set by hand, hold it as shown. Do not put stress on the LCD panel.

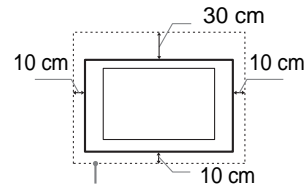


- When lifting or moving the TV set, hold it firmly from the bottom.
- When transporting the TV set, do not subject it to jolts or excessive vibration.
- When transporting the TV set for repairs or when moving, pack it using the original carton and packing material.

Ventilation

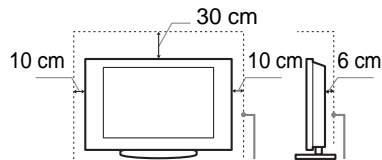
- Never cover the ventilation holes or insert anything in the cabinet.
- Leave space around the TV set as shown below.
- It is strongly recommended that you use a Sony wall-mount bracket in order to provide adequate air-circulation.

Installed on the wall



Leave at least this space around the set.

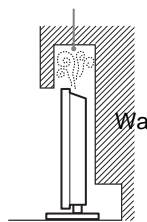
Installed with stand



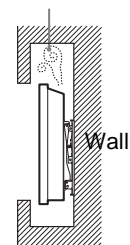
Leave at least this space around the set.

- To ensure proper ventilation and prevent the collection of dirt or dust:
 - Do not lay the TV set flat, install upside down, backwards, or sideways.
 - Do not place the TV set on a shelf, rug, bed or in a closet.
 - Do not cover the TV set with a cloth, such as curtains, or items such as newspapers, etc.
 - Do not install the TV set as shown below.

Air circulation is blocked.



Air circulation is blocked.



AC power cord

Handle the AC power cord and outlet as follows in order to avoid any risk of fire, electrical shock or damage and/or injuries:

- Use only Sony supplied AC power cords, not those of other brands.
- Insert the plug fully into the AC power outlet.
- Operate the TV set on a 110-240 V AC supply only.
- When wiring cables, be sure to unplug the AC power cord for your safety and take care not to catch your feet on the cables.
- Disconnect the AC power cord from the AC power outlet before working on or moving the TV set.
- Keep the AC power cord away from heat sources.
- Unplug the AC power plug and clean it regularly. If the plug is covered with dust and it picks up moisture, its insulation may deteriorate, which could result in a fire.

Continued

Notes

- Do not use the supplied AC power cord on any other equipment.
- Do not pinch, bend, or twist the AC power cord excessively. The core conductors may be exposed or broken.
- Do not modify the AC power cord.
- Do not put anything heavy on the AC power cord.
- Do not pull on the AC power cord itself when disconnecting the AC power cord.
- Do not connect too many appliances to the same AC power outlet.
- Do not use a poor fitting AC power outlet.

Prohibited Usage

Do not install/use the TV set in locations, environments or situations such as those listed below, or the TV set may malfunction and cause a fire, electrical shock, damage and/or injuries.

Location:

Outdoors (in direct sunlight), at the seashore, on a ship or other vessel, inside a vehicle, in medical institutions, unstable locations, near water, rain, moisture or smoke.

Environment:

Places that are hot, humid, or excessively dusty; where insects may enter; where it might be exposed to mechanical vibration, near flammable objects (candles, etc). The TV shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the TV.

Situation:

Do not use when your hands are wet, with the cabinet removed, or with attachments not recommended by the manufacturer. Disconnect the TV set from AC power outlet and antenna during lightning storms.

Broken pieces:

- Do not throw anything at the TV set. The screen glass may break by the impact and cause serious injury.
- If the surface of the TV set cracks, do not touch it until you have unplugged the AC power cord. Otherwise electric shock may result.

When not in use

- If you will not be using the TV set for several days, the TV set should be disconnected from the AC power for environmental and safety reasons.
- As the TV set is not disconnected from the AC power when the TV set is just turned off, pull the plug from the AC power outlet to disconnect the TV set completely.
- However, some TV sets may have features that require the TV set to be left in standby to work correctly.

For children

- Do not allow children to climb on the TV set.
- Keep small accessories out of the reach of children, so that they are not mistakenly swallowed.

If the following problems occur...

Turn off the TV set and unplug the AC power cord immediately if any of the following problems occur. Ask your dealer or Sony service centre to have it checked by qualified service personnel.

When:

- AC power cord is damaged.
- Poor fitting of AC power outlet.
- TV set is damaged by being dropped, hit or having something thrown at it.
- Any liquid or solid object falls through openings in the cabinet.

Precautions

Viewing the TV

- View the TV in moderate light, as viewing the TV in poor light or during long period of time, strains your eyes.

LCD Screen

- Although the LCD screen is made with high-precision technology and 99.99% or more of the pixels are effective, black dots may appear or bright points of light (red, blue, or green) may appear constantly on the LCD screen. This is a structural property of the LCD screen and is not a malfunction.
- Do not push or scratch the front filter, or place objects on top of this TV set. The image may be uneven or the LCD screen may be damaged.
- If this TV set is used in a cold place, a smear may occur in the picture or the picture may become dark. This does not indicate a failure. These phenomena disappear as the temperature rises.
- Ghosting may occur when still pictures are displayed continuously. It may disappear after a few moments.
- The screen and cabinet get warm when this TV set is in use. This is not a malfunction.
- The LCD screen contains a small amount of liquid crystal. Mercury is sometimes contained depending on the kind of fluorescent tubes. Follow your local ordinances and regulations for disposal.

Handling and cleaning the screen surface/cabinet of the TV set

Be sure to unplug the AC power cord connected to the TV set from AC power outlet before cleaning.

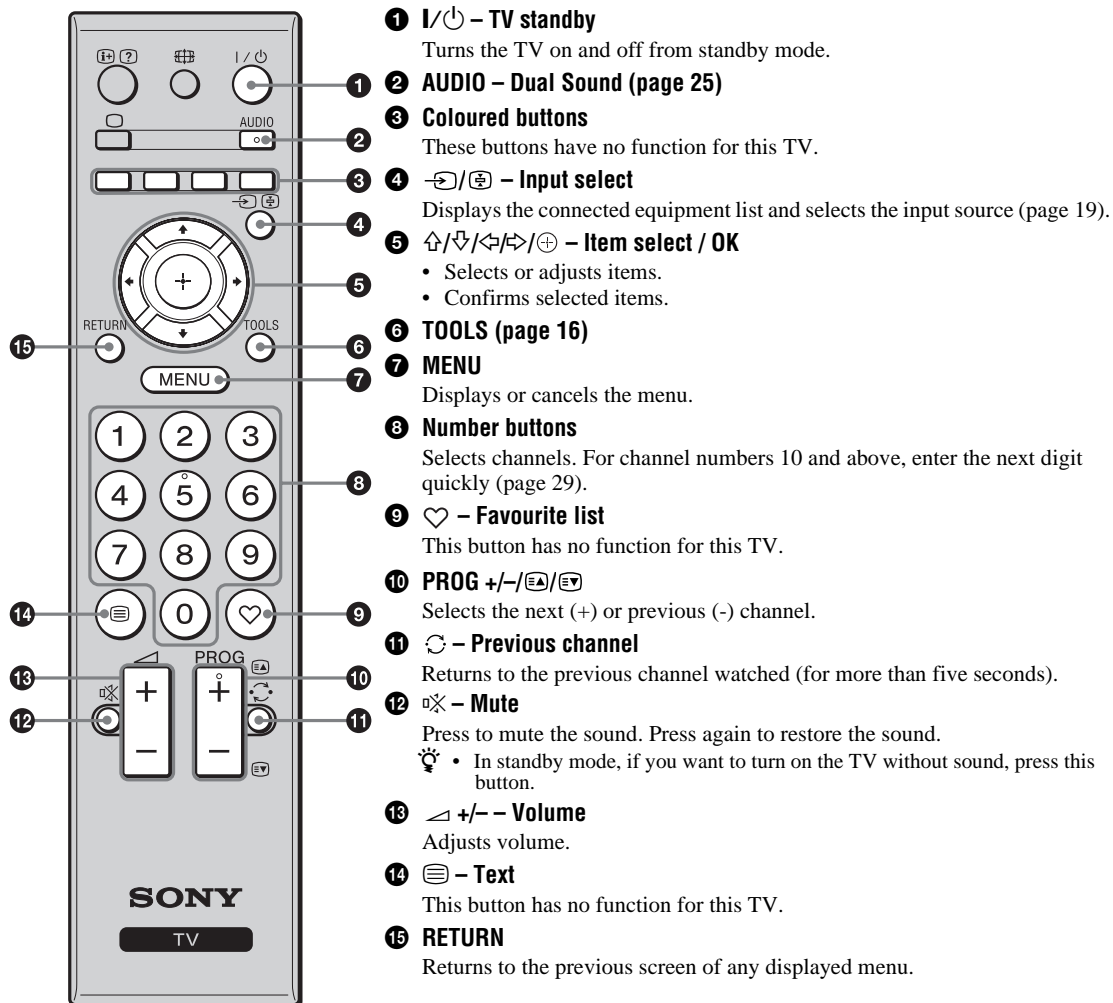
To avoid material degradation or screen coating degradation, observe the following precautions.

- To remove dust from the screen surface/cabinet, wipe gently with a soft cloth. If dust is persistent, wipe with a soft cloth slightly moistened with a diluted mild detergent solution.
- Never use any type of abrasive pad, alkaline/acid cleaner, scouring powder, or volatile solvent, such as alcohol, benzene, thinner or insecticide. Using such materials or maintaining prolonged contact with rubber or vinyl materials may result in damage to the screen surface and cabinet material.
- When adjusting the angle of the TV set, move it slowly so as to prevent the TV set from moving or slipping off from its table stand.

Optional Equipment

Keep optional components or any equipment emitting electromagnetic radiation away from the TV set. Otherwise picture distortion and/or noisy sound may occur.




Overview of the remote



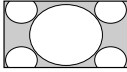
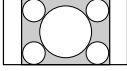
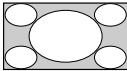
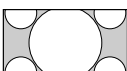
- 1 I/⏻ – TV standby**
Turns the TV on and off from standby mode.
- 2 AUDIO – Dual Sound (page 25)**
- 3 Coloured buttons**
These buttons have no function for this TV.
- 4 – Input select**
Displays the connected equipment list and selects the input source (page 19).
- 5 – Item select / OK**
 - Selects or adjusts items.
 - Confirms selected items.
- 6 TOOLS (page 16)**
- 7 MENU**
Displays or cancels the menu.
- 8 Number buttons**
Selects channels. For channel numbers 10 and above, enter the next digit quickly (page 29).
- 9 – Favourite list**
This button has no function for this TV.
- 10 PROG +/-/EA/EB**
Selects the next (+) or previous (-) channel.
- 11 – Previous channel**
Returns to the previous channel watched (for more than five seconds).
- 12 – Mute**
Press to mute the sound. Press again to restore the sound.
 • In standby mode, if you want to turn on the TV without sound, press this button.
- 13 +/- – Volume**
Adjusts volume.
- 14 – Text**
This button has no function for this TV.
- 15 RETURN**
Returns to the previous screen of any displayed menu.

• The number 5, PROG + and AUDIO buttons have tactile dots. Use the tactile dots as references when operating the TV.



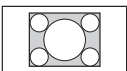
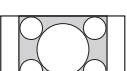

- 16**  – **TV mode**
Switches to a TV display when displaying external input.
- 17**  – **Info**
Displays information. Press once to display current channel number and screen mode. Press again to remove the display from the screen.
- 18**  – **Wide Mode**
Changes the picture size. Press repeatedly to select the desired wide mode.

For TV, Video, HD/DVD or HDMI (except PC input)

Wide Zoom* 	Enlarges the centre portion of the picture. The left and right edges of the picture are stretched to fill the 16:9 screen.
Normal 	Displays the 4:3 picture in its original size. Side bars are shown to fill the 16:9 screen.
Full 	Stretches the 4:3 picture horizontally to fill the 16:9 screen (KLV-32/26T400A/26T400G) and the 16:10 screen (KLV-19T400A/19T400G/19T400W).
Zoom* 	Displays cinematic (letter box format) broadcasts in the correct proportions.

* Parts of the top and bottom of the picture may be cut off.
 ⚠ • You cannot select “Normal” for HD signal source pictures.

For PC Input

Normal 	Displays the picture in its original pixel size. Bars are shown at the top, bottom, and both sides for small picture.
Full 1 	Stretches the original picture to fill the screen vertically.
Full 2 	Stretches the Full 1 picture horizontally to fill the 16:9 screen (KLV-32/26T400A/26T400G) and the 16:10 screen (KLV-19T400A/19T400G/19T400W).

Using the Tools menu

Press TOOLS enables you to access various options and change/make adjustments according to the source and screen mode. The options displayed vary depending on the input source.

Viewing TV programme

Options	Description
Picture Mode	See page 24.
Sound Mode	See page 25.
Intelligent Picture	See page 29.
MPEG Noise Reduction	See page 24.
Speaker	See page 27.
Sleep Timer	See page 27.
Wake Up Timer	See page 27.
Power Saving	See page 27.

Listening FM Radio

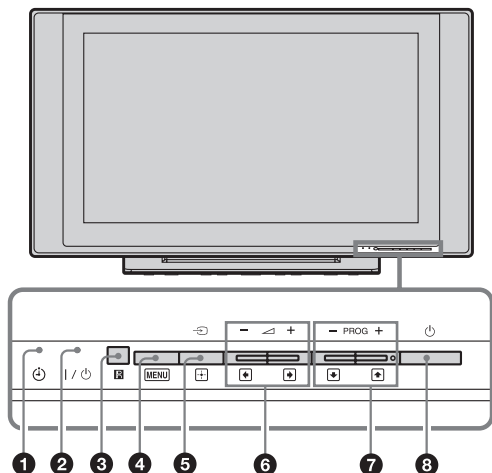
Options	Description
Sound Mode	See page 25.
Speaker	See page 27.
Sleep Timer	See page 27.
Wake Up Timer	See page 27.
Power Saving	See page 27.

Viewing connected equipment

Options	Description
Picture Mode (except PC input mode)	See page 24.
Display Mode (in PC input mode only)	See page 24.
Sound Mode	See page 25.
MPEG Noise Reduction (except PC input mode)	See page 24.
Speaker	See page 27.
Auto Adjustment (in PC input mode only)	See page 28.
Horizontal Shift (in PC input mode only)	See page 28.
Sleep Timer (except PC input mode)	See page 27.
Wake Up Timer (except PC input mode)	See page 27.
Power Saving	See page 27.

Overview of the TV buttons and indicators

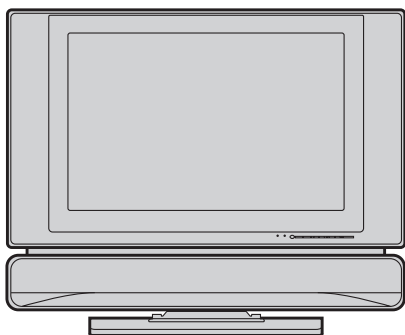
► KLV-32/26/19T400A



► KLV-26/19T400G




► KLV-19T400W

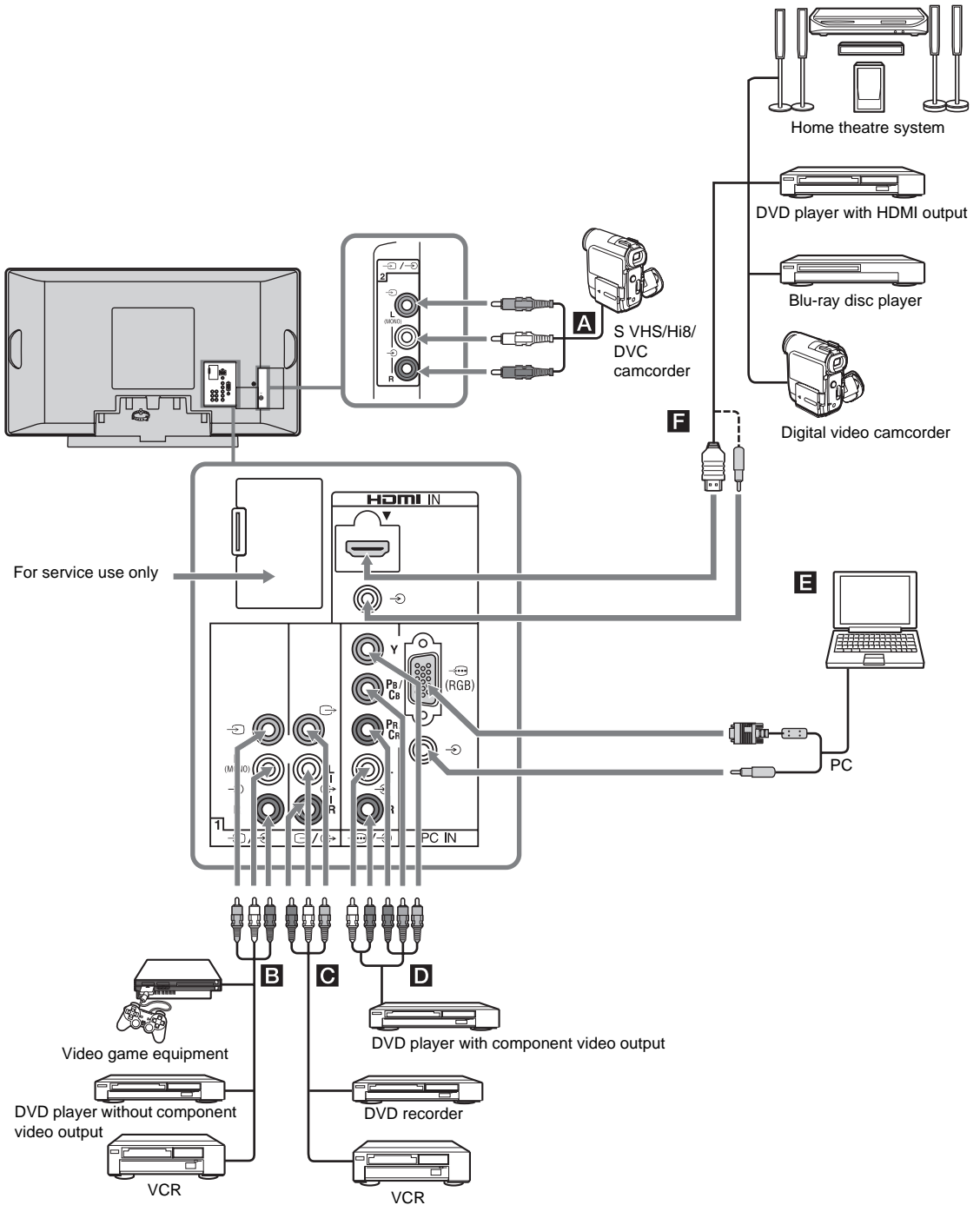


- ❶ – **Timer indicator**
Lights up in amber when the timer is set (page 27).
- ❷ – **Power indicator / Standby indicator**
 - Lights up in green when the TV is turned on.
 - Flashes while the remote is being operated.
 - Lights up in red when the TV is in standby mode.
- ❸ – **Remote sensor**
Receives IR signals from the remote.
- ❹ **MENU**
Displays or cancels the menu.
- ❺ – **Input select / OK**
 - Displays the connected equipment list and selects the input source (page 19).
 - In TV menu: Selects the menu or option, and confirms the setting.
- ❻ – **+/-/↔/↔**
 - Increases (+) or decreases (-) the volume.
 - In TV menu: Moves through the options right (→) or left (←).
- ❼ **PROG +/-/↑/↓**
 - Selects the next (+) or previous (-) channel.
 - In TV menu: Moves through the options up (↑) or down (↓).
- ❽ – **Power**
Turns the TV on or off.
 - 🔌 • To disconnect the TV from the AC power completely, pull the plug from the AC power outlet.

Connecting optional equipment

You can connect a wide range of optional equipment to your TV.

 • The below terminals vary depending on TV models.



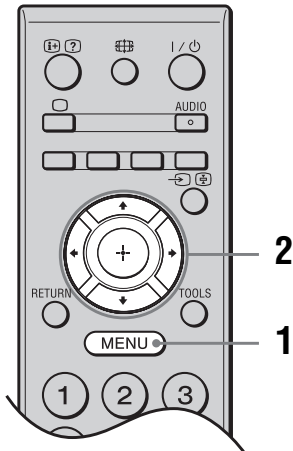
Viewing pictures from the connected equipment

Turn on the connected equipment, then press / to display the connected equipment list. Press / to select the desired input source, then press . (The highlighted item is selected if 2 seconds pass without any operation after pressing / .) When the input source is set to “Skip” in the “Video Labels” under the “AV Set-up” menu (page 27), that input does not appear in the list.

- Press / on the TV to display the connected equipment list and select the desired input source. You can also press / to select the desired input source. Then wait for 2 seconds to display the selected input source.

Jacks/ Input symbol on screen	Description
A 2, and 2 Video 2 (KLV-32/26T400A/ 26T400G only)	Connect to the video jack 2, and the audio jacks 2. If you connect mono equipment, connect to the L(MONO) jack 2.
B 1, and 1 Video 1 (KLV-32/26T400A/ 26T400G) Video (KLV-19T400A/ 19T400G/ 19T400W)	Connect to the video jack 1, and the audio jacks 1. If you connect mono equipment, connect to the L(MONO) jack 1.
C	Connect to the video output jack to record the image from the TV. Connect to the audio output jacks to record the sound from the TV on DVD recorder or VCR. To turn off the sound of the TV speakers, set “Speaker” to “Audio System” (page 27). If you connect mono equipment, connect to the L jack . <ul style="list-style-type: none"> • The monitor output jacks cannot support HD/DVD, HDMI and PC signals source pictures, also digital audio signal for sound.
D / HD/DVD	Connect to the component jacks and the audio jacks / . For better picture quality, component connection is recommended if your DVD player has a component video output.
E PC IN (RGB) / PC	Connect to the PC IN (RGB) jack and the audio jack . It is recommended to use a PC cable with ferrite core.
F HDMI IN / HDMI	Connect to the HDMI IN jack if the equipment has an HDMI jack. The digital video and audio signals are input from the equipment. For equipment with DVI jack, connect the DVI jack to the HDMI IN jack using a DVI-HDMI adaptor interface (not supplied). Then, connect the equipment’s audio out jack to the audio in jack of the HDMI IN. <ul style="list-style-type: none"> • The HDMI jack only support the following video inputs: 480i, 480p, 576i, 576p, 720p (50/60 Hz), 1080i (50/60 Hz) and 1080p (50/60 Hz). • Be sure to use only an HDMI cable that bears the HDMI logo (recommended Sony HDMI cable). • To connect a PC, use the PC IN jack.

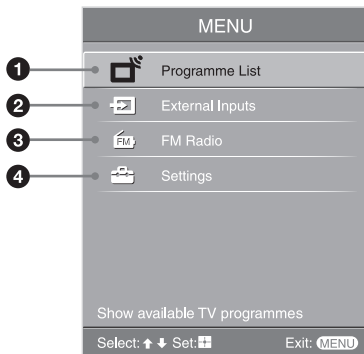
Navigating through menus



“MENU” allows you to enjoy various convenient features of this TV. You can easily select channels or inputs sources, preset FM radio stations and change the settings for your TV.

- 1 Press MENU.
- 2 Press \uparrow/\downarrow to select an option, then press \oplus .

To exit the menu, press MENU.



1 Programme List

Displays available TV channels.

- To watch the desired channel, select the channel, then press \oplus .
- To assign a label to a channel, select “Edit Programme Labels”, then see page 29.

2 External Inputs

Selects equipment connected to your TV.

- To watch the desired external input, select the input source, then press \oplus .
- To assign a label to an external input, select “Edit Video Labels”, then see page 27.

3 FM Radio

Listens to the FM Radio (page 21).

4 Settings

Displays the “Settings” menu where most of the advanced settings and adjustments are performed.

For details about settings, see page 22 to 23.

Listening to the FM Radio

You are able to listen to the FM radio stations using your TV by connecting an antenna (page 7). FM Radio tuning range is from 87.5-108.0 MHz.


To access to FM Radio mode:

Press MENU and select "FM Radio" (page 20).









To exit from FM Radio mode:

Press MENU, select the desired items: "Programme List" or "External Inputs", then press ⊕. Select the desired TV channels or external inputs and press ⊕.

Listening to preset stations

- 1 Access to FM Radio mode.
 - 2 Press MENU and select "Settings". Preset the desired FM radio stations and its labels in "FM Radio Set-up" from "Channel Set-up" menu (page 31).
 - 3 Exit from "Channel Set-up" menu by pressing MENU. The selected preset FM radio station number and label will appear on the screen. To select the desired preset FM radio station, press PROG +/-.
-  • You can also use the 1-9 buttons on the remote to directly select the desired preset FM radio station.

Listening to non-preset stations


- 1 Access to FM Radio mode.
 - 2 Press / to automatically search for the desired FM radio station.
-  • You can also manually search for the desired FM radio station by pressing /.
- The available radio frequency is only for temporary listening pleasure and cannot be stored in the memory.
 - If the message "Please set-up FM Radio" appears, display the "Channel Set-up" menu and select "FM Radio Set-up" to preset the desired FM radio stations (page 31).
-  • If the station has a noisy sound, you may be able to improve the sound quality by pressing /.

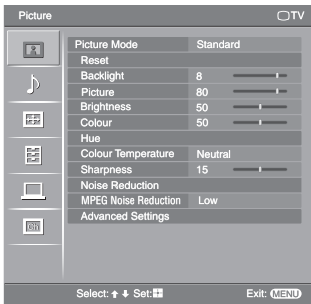
Settings adjustment

You are able to change the settings of your TV from “Settings” menu.

- 1 Press MENU. Press \uparrow/\downarrow to select “Settings”, then press \oplus .
- 2 Press \uparrow/\downarrow to select a menu icon, then press \oplus .
- 3 Press $\uparrow/\downarrow/\leftarrow/\rightarrow$ to select an option or adjust a setting, then press \oplus .

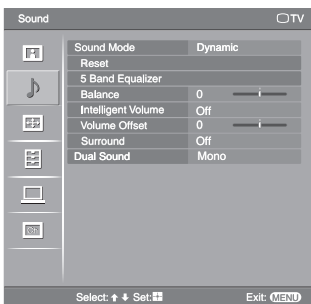
The following is an overview of the items that can be adjusted.

 • The options you can adjust vary depending on the situation. Unavailable options are greyed out or not displayed.



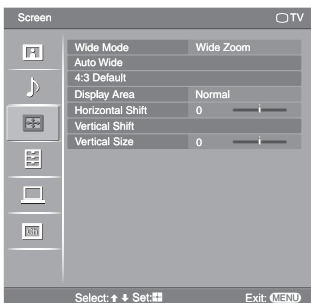
Picture menu (page 24)

“Picture Mode”: “Vivid” → “Standard” → “Cinema”
“Display Mode”: “Video” → “Text”
“Reset”
“Backlight”
“Picture”
“Brightness”
“Colour”
“Hue”
“Colour Temperature”: “Cool” → “Neutral” → “Warm 1” → “Warm 2”
“Sharpness”
“Noise Reduction”: “High” → “Medium” → “Low” → “Off”
“MPEG Noise Reduction”: “High” → “Medium” → “Low” → “Off”
“Advanced Settings”: “Reset”, “Adv. Contrast Enhancer”, “Gamma”, “Clear White”, “Live Colour”



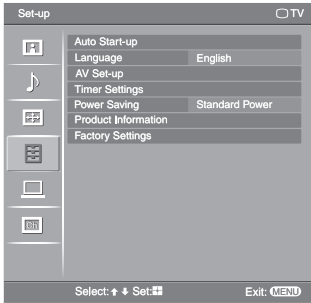
Sound menu (page 25)

“Sound Mode”: “Dynamic” → “Standard” → “Clear Voice”
“Reset”
“5 Band Equalizer”: “Adjust”, “Reset”
“Balance”
“Intelligent Volume”: “On” → “Off”
“Volume Offset”
“Surround”: “On” → “Simulated Stereo” → “Off”
“Dual Sound”



Screen menu (page 25)

“Wide Mode”: “Wide Zoom” → “Normal” → “Full” → “Zoom”
“Auto Wide”: “On” → “Off”
“4:3 Default”: “Wide Zoom” → “Normal” → “Off”
“Display Area”: “Normal” → “-1” → “-2”
“Horizontal Shift”
“Vertical Shift”
“Vertical Size”



Set-up menu (page 26)

“Auto Start-up”

“Language”: “English” → “中文” (Chinese) → “ภาษาไทย” (Thai) → “عربي” (Arabic) → “فارسی” (Persian) → “Tiếng Việt” (Vietnamese)

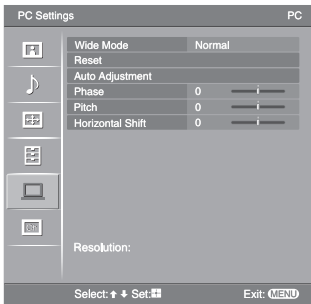
“AV Set-up”: “Video Labels”, “Speaker”, “Colour System”

“Timer Settings”: “Sleep Timer”, “Wake Up Timer”

“Power Saving”: “Standard Power” → “Reduced Power”

“Product Information”

“Factory Settings”



PC Settings menu (page 28)

“Wide Mode”: “Normal” → “Full 1” → “Full 2”

“Reset”

“Auto Adjustment”

“Phase”

“Pitch”

“Horizontal Shift”



Channel Set-up menu (page 29)

“1 Digit Direct”: “On” → “Off”

“Auto Tuning”

“Programme Sorting”

“Programme Labels”

“Programme Block”


“Intelligent Picture”: “On with Indicator” → “On” → “Off”


“Manual Programme Preset”: “Programme”, “TV System”, “VHF Low”/ “VHF High”/ “UHF”, “Label”, “AFT”, “Skip”, “Colour System”, “Signal Booster”, “Signal Level”











“FM Radio Set-up”






Picture menu








Press MENU and select “Settings”. Make sure the “Picture” icon () is selected, then press ⊕.

 • “Picture” menu is not available for FM Radio mode.




Picture Mode	Selects the picture mode except for PC input source. “Vivid” : For enhanced picture contrast and sharpness. “Standard” : For standard picture. Recommended for home entertainment. “Cinema” : For optimum picture quality of film videos.
Display Mode	Selects the display mode for PC input source. “Video” : For video images. “Text” : For text, charts or tables.  • The options displayed vary depending on the input source.
Reset	Resets all the “Picture” settings except “Picture Mode” and “Display Mode” to the factory settings.
Backlight	Adjusts the brightness of the backlight.
Picture	Increases or decreases picture contrast.
Brightness	Brightens or darkens the picture.
Colour	Increases or decreases colour intensity.  • “Colour” is not available for a PC input source.
Hue	Increases or decreases the green tones and red tones.  • “Hue” can only be adjusted for an NTSC colour system (e.g. U.S.A. video tapes).  • “Hue” is not available for PC input, component and HDMI input source.
Colour Temperature	Adjusts the whiteness of the picture. “Cool” : Gives the white colours a blue tint. “Neutral” : Gives the white colours a neutral tint. “Warm 1”/“Warm 2” : Gives the white colours a red tint. “Warm 2” gives a redder tint than “Warm 1”.  • “Warm 1” and “Warm 2” are not available when “Picture Mode” is set to “Vivid”.
Sharpness	Sharpens or softens the picture.  • “Sharpness” is not available for a PC input source.
Noise Reduction	Reduces the picture noise (snowy picture) in a weak broadcast signal. “High”/“Medium”/“Low” : Modifies the effect of the noise reduction. “Off” : Turns off the “Noise Reduction” feature.  • “Noise Reduction” can only be adjusted when “Intelligent Picture” is set to “Off”.  • “Noise Reduction” is not available for a PC input source.
MPEG Noise Reduction	Reduces the picture noise in MPEG-compressed video. Choose either “High”, “Medium”, “Low” or “Off”.  • “MPEG Noise Reduction” is not available for a PC input source.
Advanced Settings	Customises the “Picture” function in more detail. When you set “Picture Mode” to “Standard” or “Cinema”, you can set/change these settings. “Reset” : Resets all the advanced settings to the factory settings. “Adv. Contrast Enhancer” : Automatically adjusts “Backlight” and “Picture” to the most suitable settings judging from the brightness of the screen. This setting is especially effective for dark images scenes. It will increase the contrast distinction of the darker picture scenes. “Gamma” : Adjusts the balance between bright and dark areas of the picture. “Clear White” : Emphasises white colours. “Live Colour” : Makes colours more vivid.  • “Advanced Settings” is not available for a PC input source or when “Picture Mode” is set to “Vivid”.


Sound menu




Press MENU and select “Settings”. Press  to select the “Sound” icon (), then press .


Sound Mode	“ Dynamic ”: Enhances treble and bass. Recommended for home entertainment. “ Standard ”: For standard sound. “ Clear Voice ”: Makes voice sound clearer.
Reset	Resets all the “Sound” settings except “Sound Mode” and “Dual Sound” to the factory settings.
5 Band Equalizer	Adjusts sound frequency settings. 1 Make sure that “Adjust” is selected, then press  Selecting “Reset” will set your TV to the factory settings. 2 Press  /  to select the desired sound frequency, then press  to adjust the setting and press  The adjusted settings will be received when you select “Sound Mode” options.  • Adjusting higher frequency will affect higher pitched sound and adjusting lower frequency will affect lower pitched sound.
Balance	Emphasises left or right speaker balance.
Intelligent Volume	Keeps a constant volume level even when volume level gaps occur (e.g. adverts tend to be louder than programmes).
Volume Offset	Adjusts the volume level of the current input relative to other inputs.
Surround	Choose either “On” (surround), “Simulated Stereo” (stereo-like monaural sound) or “Off”.
Dual Sound	Choose either “Stereo”, “Main” or “Sub” when you select optional equipment connected to the TV.  • When the optional equipment connected to the HDMI jack is selected, “Dual Sound” is fixed to “Stereo”, except HDMI IN with DVI analogue sound input. • “Dual Sound” is fixed to “Mono” for TV programmes and for FM Radio mode.

Screen menu

Press MENU and select “Settings”. Press  to select the “Screen” icon (), then press .




 • “Screen” menu is not available for FM Radio mode and PC input mode. When receiving PC signal, you can use “PC Settings” menu to perform related settings (page 28).

Wide Mode	For details about the wide mode, see page 15.
Auto Wide	Automatically changes the wide mode according to the input signal from an external equipment. To keep your setting, select “Off”.  • “Auto Wide” is only available when watching programmes from video input and HDMI input.  • Even if “Auto Wide” is set to “On” or “Off”, you can always modify the format of the screen by pressing  repeatedly.

4:3 Default	<p>Selects the default screen mode for use with 4:3 broadcasts.</p> <p>“Wide Zoom”: Displays conventional 4:3 broadcasts with an imitation wide screen effect.</p> <p>“Normal”: Displays conventional 4:3 broadcasts in the correct proportions.</p> <p>“Off”: Keeps the current “Wide Mode” setting when the channel or input is changed.</p> <p> • “4:3 Default” is available only if “Auto Wide” is set to “On”.</p> <ul style="list-style-type: none"> • “4:3 Default” is not available when watching TV programmes, component input or for HD input signal.
Display Area	<p>Adjusts the screen area for displaying the picture.</p> <p>“Normal”: Displays the picture in the original size.</p> <p>“-1”/“-2”: Enlarges the picture to hide the edge of the picture.</p>
Horizontal Shift	Adjusts the horizontal position of the picture.
Vertical Shift	Adjusts the vertical position of the picture when “Wide Mode” is set to “Zoom”.
Vertical Size	Adjusts the vertical size of the picture when “Wide Mode” is set to “Wide Zoom” or “Zoom”.



Set-up menu

Press MENU and select “Settings”. Press  to select the “Set-up” icon (), then press .

Auto Start-up	<p>Starts the initial set-up procedure.</p> <p>Usually, you do not need to do this operation because it was done when the TV was first installed (page 8).</p> <p>However, this option allows you to repeat the process (e.g. to retune the TV after moving house, or to search for new channels that have been launched by broadcasters).</p>
Language	Selects the language in which the menus are displayed.

AV Set-up

Video Labels

Assigns a name to any equipment connected to the side (refer **A** in page 18) and rear jacks. The name will be displayed briefly on the screen when the equipment is selected. You can skip input signals from connected equipment that you do not want displayed on the screen.

1 Press / to select the desired input source, then press .

2 Press / to select the desired option below, then press .

Equipment labels: Uses one of the preset labels to assign a name to connected equipment.

“Edit:”: Creates your own label. Follow steps 2 to 4 of “Programme Labels” (page 29).

“Skip”: Skips an unnecessary input source.

Speaker

Turns on/off the TV’s internal speakers.

“TV Speaker”: The TV speakers are turned on in order to listen to the TV’s sound through the TV speakers.

“Audio System”: The TV speakers are turned off in order to listen to the TV’s sound only through your external audio equipment connected to the audio output jacks.

• All items in “Sound” menu except “Dual Sound” are not available when “Speaker” is set to “Audio System”.

Colour System

Selects the colour system (“Auto”, “PAL”, “SECAM”, “NTSC3.58”, “NTSC4.43” or “PAL60”) according to the composite video signal from the input source.

Timer Settings

Sets the timer to turn on/off the TV.

Sleep Timer

Sets a period of time after which the TV automatically switches itself into standby mode.

When the “Sleep Timer” is activated, the (Timer) indicator on the TV front panel lights up in amber.

- If you turn off the TV and turn it on again, “Sleep Timer” is reset to “Off”.
- A notification message appears on the screen one minute before the TV switches to standby mode.

Wake Up Timer

Sets the desired period of time to turn on the TV from standby mode.

“Time”: Sets the desired period of time to turn on the TV.

“Duration”: Selects the time period after which the TV automatically switches to standby mode again.

- A notification message “TV has been turned on by Wake Up Timer” appears on the screen when the TV is turned on using the wake up timer.

Power Saving

Selects the power saving mode to reduce the power consumption of the TV. Choose either “Standard Power” or “Reduced Power”.

Product Information


Displays your TV’s product information.


Factory Settings

Resets all settings to factory settings other than “Programme Block”, programme preset data and the FM Radio preset data. After completing this process, the initial set-up screen is displayed the next time you turn on the TV. Completing auto tuning in initial set-up will reset these settings (except the FM Radio preset data). To keep them, select “Cancel” in the auto tuning confirmation dialogue.

- Be sure not to turn the TV off during this period (it takes about 30 seconds) or press any buttons.
-



PC Settings menu

Press MENU and select “Settings”. Press \uparrow/\downarrow to select the “PC Settings” icon (), then press \oplus .

Wide Mode	Selects a screen mode for displaying input from your PC, see page 15. “Normal” : Displays the picture in its original size. “Full 1” : Enlarges the picture to fill the display area, keeping its original horizontal-to-vertical aspect ratio. “Full 2” : Enlarges the picture to fill the display area.
Reset	Resets all the “PC Settings” except “Wide Mode” to the factory settings.
Auto Adjustment	Automatically adjusts the display position and phase of the picture when the TV receives an input signal from the connected PC.  • “Auto Adjustment” may not work well with certain input signals. In such cases, manually adjust “Phase” and “Horizontal Shift”.
Phase	Adjusts the phase when the screen flickers.
Pitch	Adjusts the pitch when the picture has unwanted vertical stripes.
Horizontal Shift	Adjusts the horizontal position of the picture.


PC Input Signal Reference Chart for supported signals and “Resolution:” value displayed

Signals	Horizontal (Pixel)	Vertical (Line)	Horizontal frequency (kHz)	Vertical frequency (Hz)	Standard
VGA	640	480	31.5	60	VGA
	640	480	37.5	75	VESA
	720	400	31.5	70	VGA-T
SVGA	800	600	37.9	60	VESA Guidelines
	800	600	46.9	75	VESA
XGA	1024	768	48.4	60	VESA Guidelines
	1024	768	56.5	70	VESA
	1024	768	60	75	VESA
WXGA	1280	768	47.4	60	VESA
	1280	768	47.8	60	VESA
	1360	768	47.7	60	VESA

-  • This TV’s PC input does not support Sync on Green or Composite Sync.
- This TV’s PC input does not support interlaced signals.
- If input signal is not shown in above chart, then this signal may not be displayed properly or cannot be displayed according to your settings.
-  • For the best picture quality, it is recommended to use the signals (boldfaced) in the above chart with a 60 Hz vertical frequency from a personal computer. In plug and play, signals with a 60 Hz vertical frequency will be selected automatically.




Channel Set-up menu

Press MENU and select “Settings”. Press \uparrow/\downarrow to select the “Channel Set-up” icon (), then press \oplus .

 • All the items in “Channel Set-up” menu except “FM Radio Set-up” are not available for FM Radio mode.

1 Digit Direct

When “1 Digit Direct” is set to “On”, you can select a channel using one preset number button (0 - 9) on the remote.

 • When “1 Digit Direct” is set to “On”, you cannot select channel numbers 10 and above entering next digit using the remote.

Auto Tuning

Tunes in all the available channels.

This option allows you to retune the TV after moving house, or to search for new channels that have been launched by broadcasters.

Programme Sorting

Changes the order in which the channels are stored on the TV.

1 Press \uparrow/\downarrow to select the channel you want to move to a new position, then press \oplus .

2 Press \uparrow/\downarrow to select the new position for your channel, then press \oplus .

Programme Labels

Assigns a channel name of your choice up to five letters or numbers. The name will be displayed briefly on the screen when the channel is selected.

1 Press \uparrow/\downarrow to select the channel you want to name, then press \oplus .

2 Press \uparrow/\downarrow to select the desired letter or number (“_” for a blank space), then press \leftrightarrow .

If you input a wrong character

Press \leftrightarrow to select the wrong character. Then, press \uparrow/\downarrow to select the correct character.

To delete all the characters

Select “Reset”, then press \oplus .

3 Repeat the procedure in step 2 until the name is completed.

4 Select “OK”, then press \oplus .

Programme Block

Blocks an individual channel from being watched.

1 Press \uparrow/\downarrow to select the channel you want to block, then press \oplus .

2 Press \uparrow/\downarrow to select “Block”, then press \oplus .

To watch the channel, select “Allow”.

Intelligent Picture

“**On with Indicator**”: Automatically reduces the picture noise. The signal level bar is displayed when the channel is changed or the display is changed from an input screen to a TV programme.

“**On**”: Automatically reduces the picture noise.

“**Off**”: Turns off the “Intelligent Picture” feature.

Manual Programme Preset

Before selecting “Label”/“AFT”/“Skip”/“Colour System”/“Signal Booster”, press PROG +/- to select the programme number with the channel. You cannot select a programme number that is set to “Skip” (page 30).

Programme/TV System/VHF or UHF

Presets programme channels manually.

- 1 Select “Programme”, then press ⊕.
- 2 Press ⬆/⬇ to select the programme number you want to manually tune (if tuning a VCR, select channel 000), then press RETURN.
- 3 Press ⬆/⬇ to select “TV System”, then press ⊕.
- 4 Press ⬆/⬇ to select your TV broadcast systems, then press ⊕.
- 5 Press ⬆/⬇ to go to the frequency range indication (“VHF Low”, “VHF High” or “UHF”), then press ⊕.

- 6 Tune the channels as follows:

Press ⬅/➡ to search for the next available channel. When a channel has been found, the search will stop. To continue searching, press ⬅/➡.

Repeat the procedure above to preset other channels manually.

Label

Assigns a name of your choice, up to five letters or numbers, to the selected channel. This name will be displayed briefly on the screen when the channel is selected. To input characters, follow steps 2 to 4 of “Programme Labels” (page 29).

AFT

Allows you to fine-tune the selected programme number manually if you feel that a slight tuning adjustment will improve the picture quality.

You can adjust the fine tuning over a range of -15 to +15. When “On” is selected, the fine tuning is performed automatically.

Skip

Skips unused channels when you press PROG +/- to select channels. (You can still select a skipped channel using the number buttons.)

Colour System

Selects the colour system (“Auto”, “PAL”, “SECAM”, “NTSC3.58”, “NTSC4.43” or “PAL60”) according to the channel.

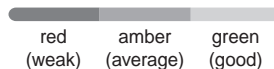
Signal Booster (Intelligent Signal Booster)

Improves the picture quality if the TV signal is too strong or weak.

Press ⬆/⬇ to select either “Off” if the signal is too strong (picture distorted; picture with lines; signal interference) or “Auto” if the signal is weak (snowy picture), then press ⊕.

Signal Level


Displays the signal level for programme currently being watched.



FM Radio Set-up

Preset up to nine FM radio stations.

You can manually preset each FM radio station that can be received in your area and then store the radio frequency of the desired FM radio stations.

- 1 Press \uparrow/\downarrow to select the desired FM radio station position, then press \oplus .
 - 2 Press \uparrow/\downarrow to search the FM radio stations.
Searching stops automatically when a station is tuned in.
If the station has a noisy sound, you may be able to improve the sound quality by pressing \leftarrow/\rightarrow .
Press \oplus to store the FM radio station.
 - 3 You may edit the FM radio station label. Press \uparrow/\downarrow to select alphanumeric characters for the label, then press \oplus .
 - 4 Repeat steps 1 to 3 to preset other FM radio stations.
-  • “FM Radio Set-up” can only be adjusted in FM Radio mode. To enable this feature, access to FM Radio mode by using MENU (page 20), then preset your desired FM radio stations according to the steps mentioned above.
-

Additional Information

Specifications

Model name	KLV-32T400A	KLV-26T400A	KLV-26T400G	KLV-19T400A	KLV-19T400G	KLV-19T400W	
System							
Panel System	LCD (Liquid Crystal Display) Panel						
TV System	B/G, I, D/K, M						
Colour System	PAL, PAL60, SECAM, NTSC4.43, NTSC3.58						
Channel Coverage	B/G: VHF: E2 to E12/ UHF: E21 to E69/ CATV: S01 to S03, S1 to S41 I: UHF: B21 to B69/ CATV: S01 to S03, S1 to S41 D/K: VHF: C1 to C12, R1 to R12/ UHF: C13 to C57, R21 to R60/ CATV: S01 to S03, S1 to S41, Z1 to Z39 M: VHF: A2 to A13/ UHF: A14 to A79/ CATV: A-8 to A-2, A to W+4, W+6 to W+84						
Sound Output	10 W + 10 W			5 W + 5 W			
3D WOOFER						15 W	
Input/Output jacks							
Antenna	75 ohm external terminal						
① 1, 2 (②: KLV-32/26T400A/ 26T400G only)	Video input (phono jack)						
① 1, 2 (②: KLV-32/26T400A/ 26T400G only)	Audio input (phono jacks): 500 mVrms, Impedance: 47 kilohms						
①	Supported formats: 1080p (50/60 Hz), 1080i (50/60 Hz), 720p (50/60 Hz), 576p, 576i, 480p, 480i Y: 1 Vp-p, 75 ohms, 0.3V sync negative/Pb/Cb: 0.7 Vp-p, 75 ohms/Pr/Cr: 0.7 Vp-p, 75 ohms						
①	Audio input (phono jacks): 500 mVrms, Impedance: 47 kilohms						
①	Video output (phono jack)						
①	Audio output (phono jacks)						
HDMI IN	Video: 1080p (50/60 Hz), 1080i (50/60 Hz), 720p (50/60 Hz), 576p, 576i, 480p, 480i Audio: Two channel linear PCM 32, 44.1 and 48 kHz, 16, 20 and 24 bits Analogue audio input (minijack): 500 mVrms, Impedance: 47 kilohms						
PC IN ①(RGB)	PC Input (D-sub 15-pin) (see page 28) G: 0.7 Vp-p, 75 ohms, non Sync on Green/B: 0.7 Vp-p, 75 ohms/ R: 0.7 Vp-p, 75 ohms/HD: 1.5 Vp-p/VD: 1.5 Vp-p						
PC IN ①	PC audio input (minijack)						
Power and others							
Power Requirements	110–240 V AC, 50/60 Hz						
Screen Size (inches)	32	26		19			
Display Resolution	1,366 pixels (horizontal) × 768 lines (vertical)			1,680 pixels (horizontal) × 1,050 lines (vertical)			
Power Consumption	Indicated on the rear of the TV.						
Dimensions (w × h × d)* (mm)	with stand	929 × 558 × 208	789 × 486 × 180	789 × 486 × 180	595 × 379 × 159	595 × 379 × 159	595 × 477 × 190
	without stand	929 × 520 × 109	789 × 448 × 105	789 × 448 × 105	595 × 348 × 93	595 × 348 × 93	595 × 449 × 94
Mass*	with stand	13.9	10.1	10.3	5.9	6.1	7.4
	without stand	13.0	9.5	9.7	5.6	5.8	7.0
Optional Accessories	Wall-Mount bracket	SU-WL500 or SU-WL50B		SU-WL100			

* Dimensions and mass are approximate values.

Design and specifications are subject to change without notice.



Troubleshooting

If you find any problem while viewing your TV, you can either check the Troubleshooting guide below or use the “Factory Settings” function (page 27). If the problem persists, contact your Sony dealer.

Check whether the  (standby) indicator is flashing in red.

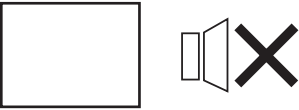





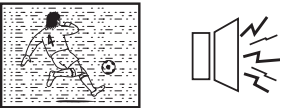
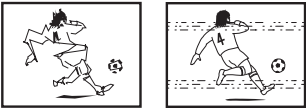
When it is flashing

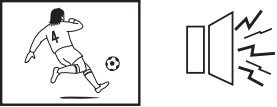








The self-diagnosis function is activated.

- Count how many times the  (standby) indicator flashes between each two second break.
For example, the indicator flashes three times, then there is a two second break, followed by another three flashes, etc.
- Press  on the TV to turn it off, disconnect the AC power cord, and inform your dealer or Sony service centre of how the indicator flashes (number of flashes).

When it is not flashing

- Check the items listed below.
- If the problem still persists, have your TV serviced by qualified service personnel.

Problem	Cause/Remedy
No Picture	
No picture (screen is dark) and no sound 	<ul style="list-style-type: none"> Check the antenna/cable connection. Connect the TV to the AC power outlet, and press  on the TV. If the  (standby) indicator lights up in red, press .
No picture or no menu information from equipment connected to the video input jack	<ul style="list-style-type: none"> Press / to display the connected equipment list, then select the desired input. Check the connection between the optional equipment and the TV.
Poor Picture	
Only snow and noise appear on the screen 	<ul style="list-style-type: none"> Check if the antenna is broken or bent. Check if the antenna has reached the end of its serviceable life (three to five years in normal use, one to two years at the seaside).
Distorted picture (dotted lines or stripes) 	<ul style="list-style-type: none"> Keep the TV away from electrical noise sources such as cars, motorcycles, hair-dryers or optional equipment. When installing optional equipment, leave some space between the optional equipment and the TV. Check the antenna/cable connection. Keep the antenna cable away from other connecting cables. Broadcast signals are too strong. Set the “Signal Booster” to “Off” (page 30) or turn off or disconnect the booster if it is in use.
Picture or sound noise when viewing a TV channel	<ul style="list-style-type: none"> Select “Manual Programme Preset” in the “Channel Set-up” menu and adjust “AFT” (Automatic Fine Tuning) to obtain better picture reception (page 30). Select “Noise Reduction” in the “Picture” menu to reduce the noise in the picture (page 24).

Problem	Cause/Remedy
Good picture, but noisy sound 	<ul style="list-style-type: none"> The TV system setting is inappropriate. If the sound of all the channels are noisy, perform “Auto Tuning” in the “Channel Set-up” menu to preset the channel again (page 29). If the sound of some channels is noisy, select the channel, then perform “Manual Programme Preset” in the “Channel Set-up” menu, and select the appropriate TV system (“TV System”) (page 30).
Some tiny black points and/or bright points appear on the screen	<ul style="list-style-type: none"> The picture of a display unit is composed of pixels. Tiny black points and/or bright points (pixels) on the screen do not indicate a malfunction.
No colour on programmes 	<ul style="list-style-type: none"> Select “Reset” in the “Picture” menu to return to the factory settings (page 24).
No colour or irregular colour when viewing a signal from the Y, Pb/Cb, Pr/Cr jacks of 	<ul style="list-style-type: none"> Check the connection of the Y, Pb/Cb, Pr/Cr jacks of . Make sure that the Y, Pb/Cb, Pr/Cr jacks of  are firmly seated in their respective jacks.
Picture flashes initially when changing to HDMI mode or switching on the TV with HDMI mode	<ul style="list-style-type: none"> This is probably caused by the authentication process between HDMI equipment and the TV. It does not indicate a malfunction.
Sound	
No sound, but good picture 	<ul style="list-style-type: none"> Press  +/- or  (Mute). Check if the “Speaker” is set to “TV Speaker” from the “AV Set-up” menu in “Set-up” menu (page 27).
TV cannot receive FM radio station	<ul style="list-style-type: none"> Connect a separate FM antenna and the TV channel source through an antenna selector (switch) to your TV (page 7).
General	
The TV turns off automatically (the TV enters standby mode)	<ul style="list-style-type: none"> Check if the “Sleep Timer” is activated, or confirm the “Duration” setting of “Wake Up Timer” (page 27).
The TV turns on automatically	<ul style="list-style-type: none"> Check if the “Wake Up Timer” is activated (page 27).
Some input sources cannot be selected	<ul style="list-style-type: none"> Select “Video Labels” in the “AV Set-up” menu and cancel “Skip” of the input source (page 27).
The remote does not function	<ul style="list-style-type: none"> Replace the batteries.
The wide screen mode changes spontaneously when “Auto Wide” is “On”	<ul style="list-style-type: none"> When changing between two input modes, the TV detects the optimum wide screen mode. During this period, an irregular wide screen mode may appear. The wide mode is switched automatically according to the revised signal with a Wide ID signal (only available for video input and HDMI input). The “Auto Wide” feature stops working temporarily when you press , and resumes after a while. To fix in the manually selected wide screen mode, set “Auto Wide” to “Off” in the “Screen” menu (page 25).
Cannot play shooting games	<ul style="list-style-type: none"> Some shooting games which involve pointing a light beam at the TV screen with an electronic gun or rifle cannot be used with your TV. For details, see the instruction manual supplied with the video game software.
The TV cabinet creaks	<ul style="list-style-type: none"> Changes in room temperature sometimes make the TV cabinet expand or contract, causing a noise. This does not indicate a malfunction.

Problem	Cause/Remedy
Static discharge is felt when touching the TV cabinet	<ul style="list-style-type: none"> • This is the same static discharge that is felt when touching metal door handles or car doors especially when the air is dry, for example in winter. This does not indicate a malfunction.
Weak signal (signal level indicator displayed in red)	<ul style="list-style-type: none"> • Check the antenna/cable connection. • Set the “Signal Booster” to “Auto” (page 30) or try using an external booster.
Sound does not match pictures on the screen when audio is output directly from the amplifier system	<ul style="list-style-type: none"> • Adjust the sound delay settings from the connected equipment to minimize the time gap between the audio and video output.



Customer support

<http://www.sony-asia.com/support>



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SONY®

LCD Colour TV

Operating Instructions

KLV-32T400A

KLV-26T400A

KLV-26T400G

KLV-19T400A

KLV-19T400G

KLV-19T400W

BRAVIA

Introduction

Thank you for choosing this Sony product. Before operating the TV, please read this manual thoroughly and retain it for future reference.

The illustrations used in this manual are of the KLV-32T400A unless otherwise stated.

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Start-up Guide

Checking the accessories

Stand (1) and screws (4)

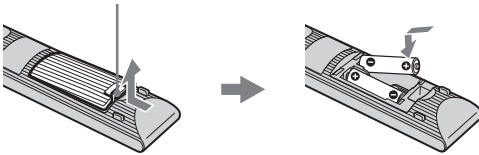
3D WOOFER (1) and screws (4) (KLV-19T400W)

Remote RM-GA013 (1)

Size AA batteries (R6 type) (2)

Inserting batteries into the remote

Push and lift the cover to open.



- Observe the correct polarity when inserting batteries.
- Do not use different types of batteries together or mix old and new batteries.
- Dispose of batteries in an environmentally friendly way. Certain regions may regulate the disposal of batteries. Please consult your local authority.
- Handle the remote with care. Do not drop or step on it, or spill liquid of any kind onto it.
- Do not place the remote in a location near a heat source, a place subject to direct sunlight, or a damp room.

1: Attaching the 3D WOOFER and stand

Please ensure the AC power cord is away from the 3D WOOFER/stand installation location before you attach below 3D WOOFER/stand.

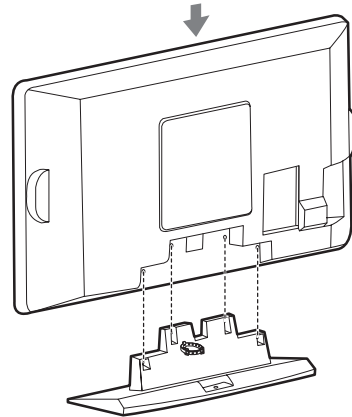
3D WOOFER is only available for KLV-19T400W.

Attaching the stand

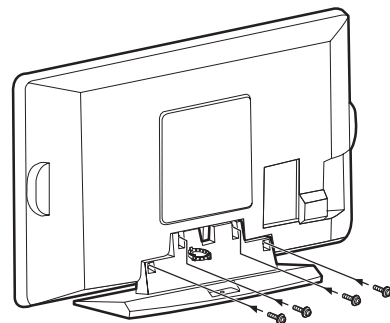
– Except for KLV-19T400W

► KLV-32T400A

1

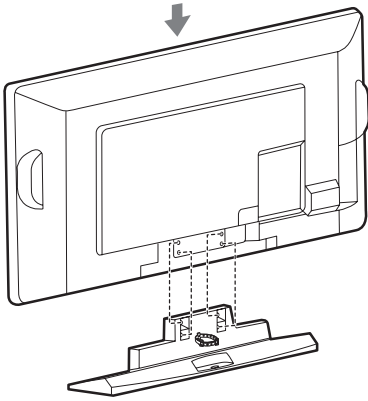


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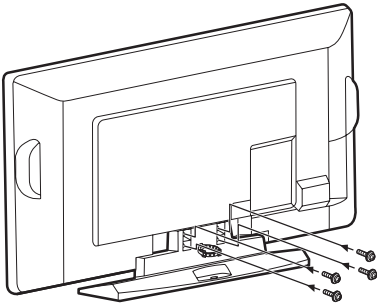


► KLV-26T400A/26T400G

1

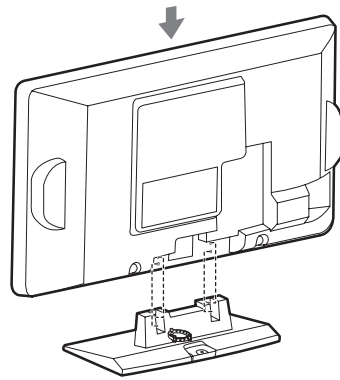


2

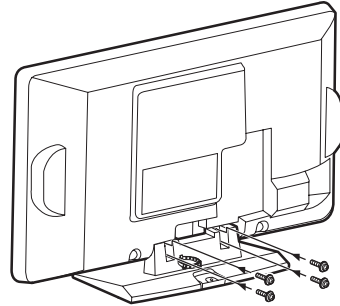


► KLV-19T400A/19T400G

1



2



1 Place the TV onto the stand by aligning the screw hole alignment lines over the stand as shown.

2 Fix the TV to the stand according to the arrow marks ➔ that guide the screw holes using the supplied screws.

- This TV is very heavy, so two or more people should place the TV onto the stand.
- If using an electric screwdriver, set the tightening torque at approximately 1.5N·m (15kgf·cm).
- Ensure the AC power cord is away from screw holes during stand installation to avoid damage to the AC power cord.

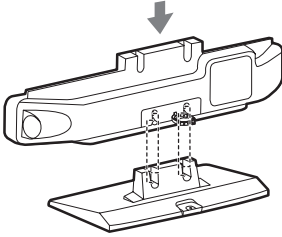
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Attaching the 3D WOOFER and stand

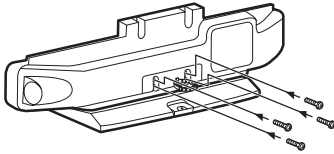
You can enjoy high quality sound by attaching the 3D WOOFER as follows:

► KLV-19T400W

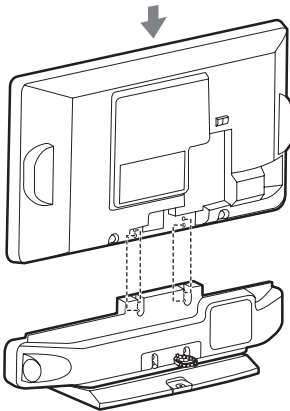
1



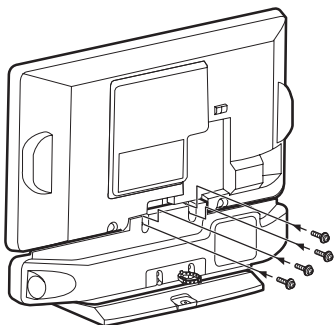
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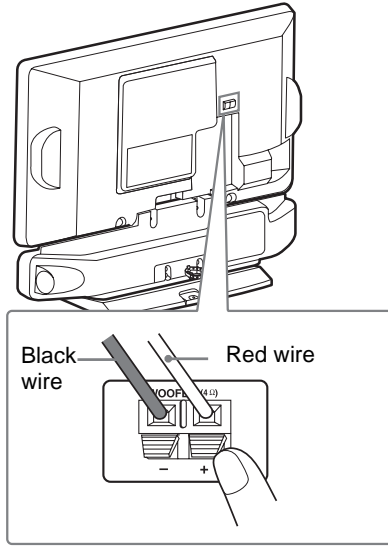
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4



5

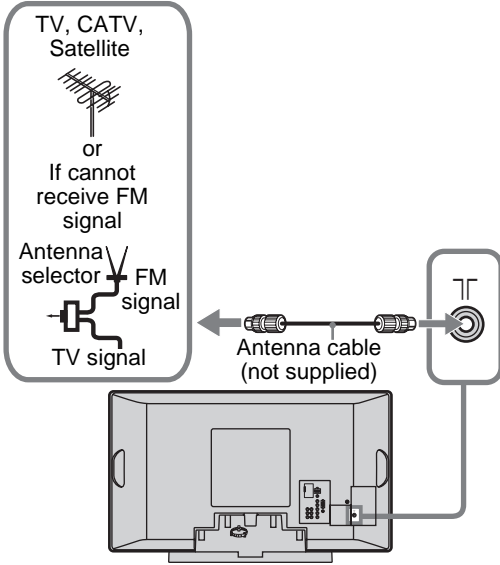


- 1 Place the 3D WOOFER onto the stand by aligning the screw hole alignment lines over the stand as shown.
- 2 Fix the 3D WOOFER to the stand according to the arrow marks ➔ that guide the screw holes using the supplied screws (+BVTP2 4x16).
- 3 Place the TV onto the 3D WOOFER by aligning the screw hole alignment lines over the 3D WOOFER as shown.
- 4 Fix the TV to the 3D WOOFER according to the arrow marks ➔ that guide the screw holes using the supplied screws (+PSW M5x16).
- 5 Connect using only the supplied 3D WOOFER; otherwise your TV may malfunction.

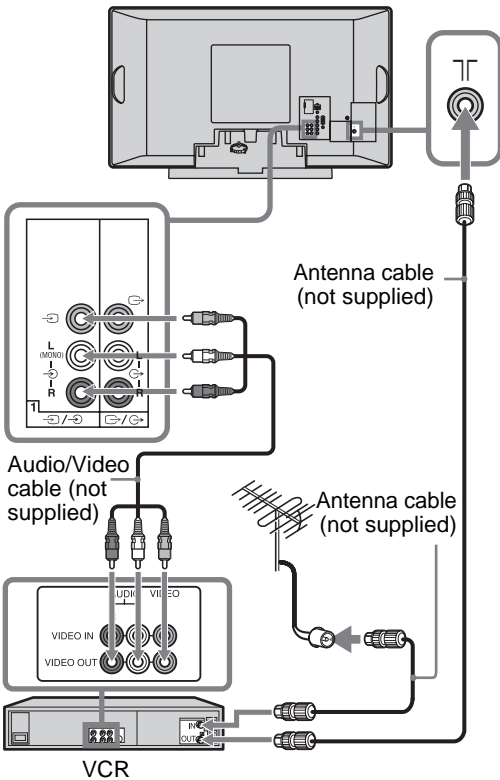
- If using an electric screwdriver, set the tightening torque at approximately 1.2N·m (12kgf·cm) when attaching the stand. However, set the tightening torque at approximately 1.5N·m (15kgf·cm) when attaching the TV to the 3D WOOFER.
- Ensure the AC power cord is away from screw holes during stand installation to avoid damage to the AC power cord.

2: Connecting an antenna/cable/VCR

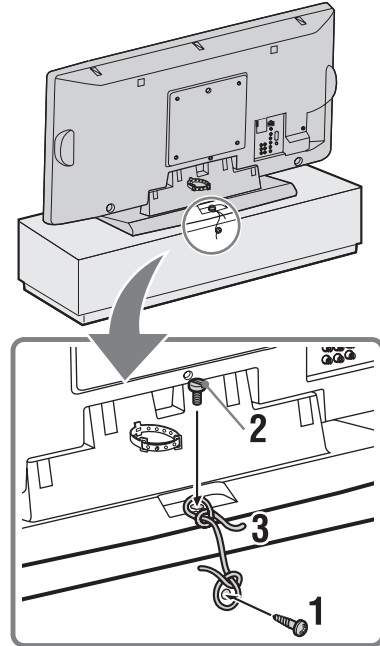
Connecting an antenna/cable



Connecting an antenna/cable and VCR

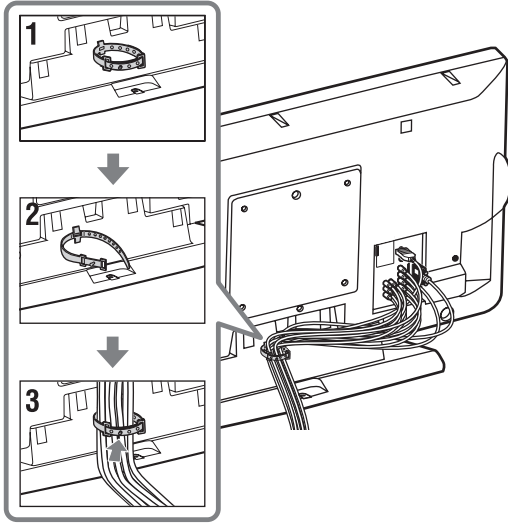


3: Preventing the TV from toppling over



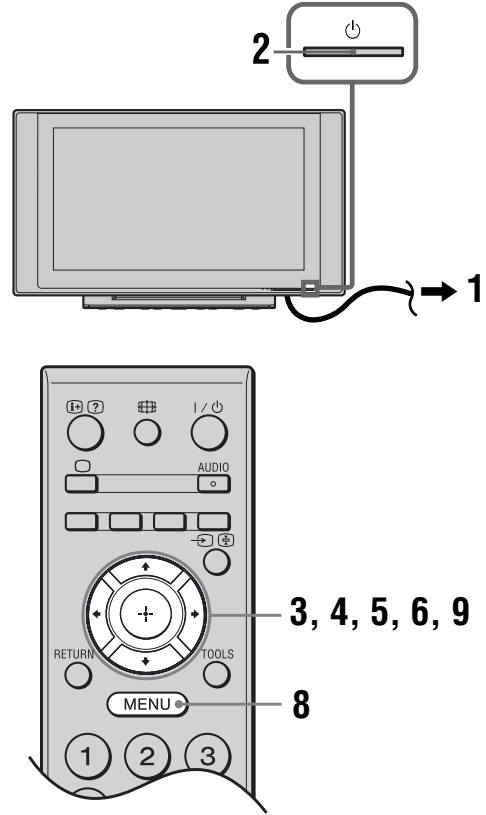
- 1** Install a wood screw (4 mm in diameter, not supplied) in the TV stand.
- 2** Install a machine screw (M6 x 12, not supplied) into the screw hole of the TV.
- 3** Tie the wood screw and the machine screw with a strong cord.

4: Bundling the cables






- Cable holder is located at 3D WOOFER for KLV-19T400W.

5: Performing the initial set-up



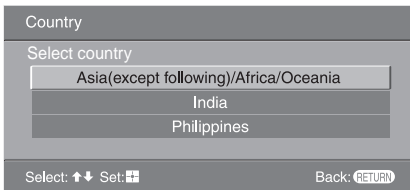
Selecting the language

- 1 Connect the TV to your AC power outlet (110-240 V AC, 50/60 Hz) (New Zealand only: 220-240 V AC, 50/60 Hz).
- 2 Press  on the TV.
When the TV is in standby mode (the  (standby) indicator on the TV front panel is red), press  on the remote to turn on the TV.
When you turn on the TV for the first time, the “Language” menu appears on the screen.

- 3 Press \uparrow/\downarrow to select the language displayed on the menu screens, then press \oplus .



- 4 Press \uparrow/\downarrow to select the country/region, then press \oplus .

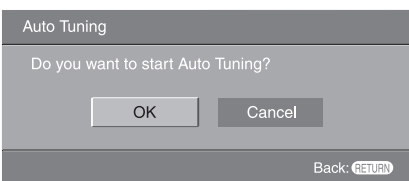


- 5 Press \uparrow/\downarrow to select "Home", then press \oplus .



Auto-tuning the TV

- 6 Press \leftarrow/\rightarrow to select "OK", then press \oplus .



The TV starts searching for all available channels. This may take some time, please be patient and do not press any buttons on the TV or remote.

If a message appears for you to confirm the antenna connection

No programmes found. Please connect antenna (aerial) and select "Confirm" to start auto-tuning again. If 200 channels are found, auto-tuning is stopped.

- 7 When the "Programme Sorting" menu appears on the screen, follow the steps of "Programme Sorting" (page 31).

If you do not want to change the order in which the channels are stored on the TV, go to step 8.



- 8 Press MENU to exit.

The TV has now tuned in all the available channels.


- 9 Press \leftarrow/\rightarrow to select the desired setting in "Display this menu next time?" dialogue, then press \oplus to exit.

💡 • If "Yes" is selected and the TV is turned off by pressing ⏻ on the TV, or is disconnected from the AC power outlet, the initial set-up procedure restarts the next time the TV is turned on.

Watching TV

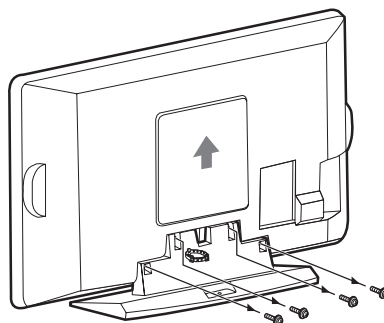
- 1 Press  on the TV to turn on the TV.
- 2 Press the number buttons or PROG +/- to select a TV channel.
- 3 Press  +/- to adjust the volume.

Detaching the Table-Top Stand from the TV

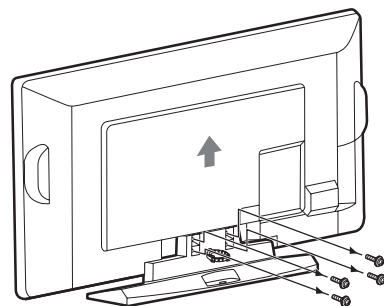
Remove the screws guided by the arrow marks  of the TV.

Do not remove the Table-Top Stand for any reason other than to wall-mount the TV.

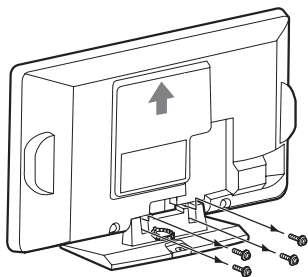
► KLV-32T400A



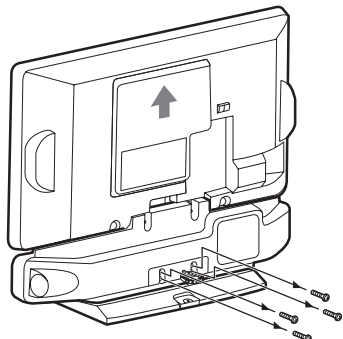
► KLV-26T400A/26T400G




► KLV-19T400A/19T400G



► KLV-19T400W



-  • For bracket installation, refer to the instruction guide provided by the Wall-Mount Bracket model for your TV. Sufficient expertise is required in installing this TV, especially to determine the strength of the wall for withstanding the TV's weight. **For product protection and safety reasons, Sony strongly recommends that you use the Wall-Mount Bracket model designed for your TV and the wall-mounting of your TV should be performed by Sony dealers or licensed contractors.**

Safety information

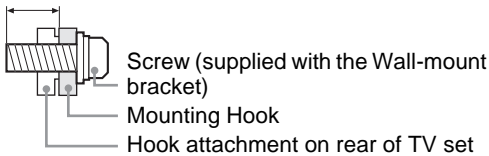
Installation/Set-up

Install and use the TV set in accordance with the instructions below in order to avoid any risk of fire, electrical shock or damage and/or injuries.

Installation

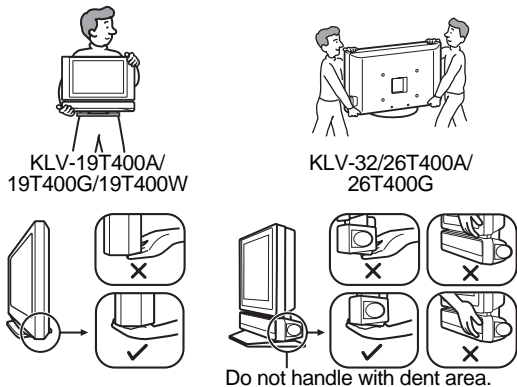
- The TV set should be installed near an easily accessible AC power outlet.
- Place the TV set on a stable, level surface to avoid it from falling down and cause personal injury or damage to the TV.
- Only qualified service personnel should carry out wall installations.
- For safety reasons, it is strongly recommended that you use Sony accessories, including:
 - KLV-32T400A:
Wall-mount bracket SU-WL500 or SU-WL50B
 - KLV-26/19T400A/26/19T400G/19T400W:
Wall-mount bracket SU-WL100
- Be sure to use the screws supplied with the Wall-mount bracket when attaching the mounting hooks to the TV set. The supplied screws are designed so that they are 8 mm to 12 mm in length when measured from the attaching surface of the mounting hook. The diameter and length of the screws differ depending on the Wall-mount bracket model. Use of screws other than those supplied may result in internal damage to the TV set or cause it to fall, etc.

8mm - 12mm



Transporting

- Before transporting the TV set, disconnect all cables.
- Two or more people are needed to transport a large TV set.
- When transporting the TV set by hand, hold it as shown. Do not put stress on the LCD panel.

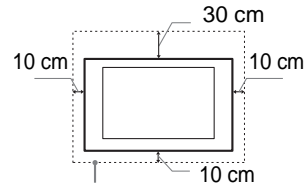


- When lifting or moving the TV set, hold it firmly from the bottom.
- When transporting the TV set, do not subject it to jolts or excessive vibration.
- When transporting the TV set for repairs or when moving, pack it using the original carton and packing material.

Ventilation

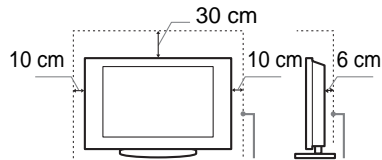
- Never cover the ventilation holes or insert anything in the cabinet.
- Leave space around the TV set as shown below.
- It is strongly recommended that you use a Sony wall-mount bracket in order to provide adequate air-circulation.

Installed on the wall



Leave at least this space around the set.

Installed with stand

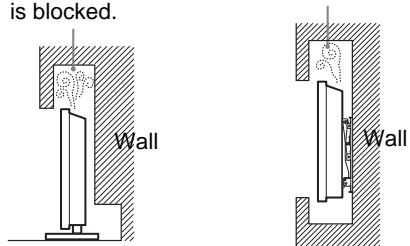


Leave at least this space around the set.

- To ensure proper ventilation and prevent the collection of dirt or dust:
 - Do not lay the TV set flat, install upside down, backwards, or sideways.
 - Do not place the TV set on a shelf, rug, bed or in a closet.
 - Do not cover the TV set with a cloth, such as curtains, or items such as newspapers, etc.
 - Do not install the TV set as shown below.

Air circulation is blocked.

Air circulation is blocked.



AC power cord

Handle the AC power cord and outlet as follows in order to avoid any risk of fire, electrical shock or damage and/or injuries:

- Use only Sony supplied AC power cords, not those of other brands.
- Insert the plug fully into the AC power outlet.
- Operate the TV set on a 110-240 V AC supply only (New Zealand only: 220-240 V AC).
- When wiring cables, be sure to unplug the AC power cord for your safety and take care not to catch your feet on the cables.
- Disconnect the AC power cord from the AC power outlet before working on or moving the TV set.
- Keep the AC power cord away from heat sources.
- Unplug the AC power plug and clean it regularly. If the plug is covered with dust and it picks up moisture, its insulation may deteriorate, which could result in a fire.

Notes

- Do not use the supplied AC power cord on any other equipment.
- Do not pinch, bend, or twist the AC power cord excessively. The core conductors may be exposed or broken.
- Do not modify the AC power cord.
- Do not put anything heavy on the AC power cord.
- Do not pull on the AC power cord itself when disconnecting the AC power cord.
- Do not connect too many appliances to the same AC power outlet.
- Do not use a poor fitting AC power outlet.

Prohibited Usage

Do not install/use the TV set in locations, environments or situations such as those listed below, or the TV set may malfunction and cause a fire, electrical shock, damage and/or injuries.

Location:

Outdoors (in direct sunlight), at the seashore, on a ship or other vessel, inside a vehicle, in medical institutions, unstable locations, near water, rain, moisture or smoke.

Environment:

Places that are hot, humid, or excessively dusty; where insects may enter; where it might be exposed to mechanical vibration, near flammable objects (candles, etc). The TV shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the TV.

Situation:

Do not use when your hands are wet, with the cabinet removed, or with attachments not recommended by the manufacturer. Disconnect the TV set from AC power outlet and antenna during lightning storms.

Broken pieces:

- Do not throw anything at the TV set. The screen glass may break by the impact and cause serious injury.
- If the surface of the TV set cracks, do not touch it until you have unplugged the AC power cord. Otherwise electric shock may result.

When not in use

- If you will not be using the TV set for several days, the TV set should be disconnected from the AC power for environmental and safety reasons.
- As the TV set is not disconnected from the AC power when the TV set is just turned off, pull the plug from the AC power outlet to disconnect the TV set completely.
- However, some TV sets may have features that require the TV set to be left in standby to work correctly.

For children

- Do not allow children to climb on the TV set.
- Keep small accessories out of the reach of children, so that they are not mistakenly swallowed.

If the following problems occur...

Turn off the TV set and unplug the AC power cord immediately if any of the following problems occur. Ask your dealer or Sony service centre to have it checked by qualified service personnel.

When:

- AC power cord is damaged.
- Poor fitting of AC power outlet.
- TV set is damaged by being dropped, hit or having something thrown at it.
- Any liquid or solid object falls through openings in the cabinet.

Precautions

Viewing the TV

- View the TV in moderate light, as viewing the TV in poor light or during long period of time, strains your eyes.

LCD Screen

- Although the LCD screen is made with high-precision technology and 99.99% or more of the pixels are effective, black dots may appear or bright points of light (red, blue, or green) may appear constantly on the LCD screen. This is a structural property of the LCD screen and is not a malfunction.
- Do not push or scratch the front filter, or place objects on top of this TV set. The image may be uneven or the LCD screen may be damaged.
- If this TV set is used in a cold place, a smear may occur in the picture or the picture may become dark. This does not indicate a failure. These phenomena disappear as the temperature rises.
- Ghosting may occur when still pictures are displayed continuously. It may disappear after a few moments.
- The screen and cabinet get warm when this TV set is in use. This is not a malfunction.
- The LCD screen contains a small amount of liquid crystal. Mercury is sometimes contained depending on the kind of fluorescent tubes. Follow your local ordinances and regulations for disposal.

Handling and cleaning the screen surface/cabinet of the TV set

Be sure to unplug the AC power cord connected to the TV set from AC power outlet before cleaning.

To avoid material degradation or screen coating degradation, observe the following precautions.

- To remove dust from the screen surface/cabinet, wipe gently with a soft cloth. If dust is persistent, wipe with a soft cloth slightly moistened with a diluted mild detergent solution.
- Never use any type of abrasive pad, alkaline/acid cleaner, scouring powder, or volatile solvent, such as alcohol, benzene, thinner or insecticide. Using such materials or maintaining prolonged contact with rubber or vinyl materials may result in damage to the screen surface and cabinet material.
- When adjusting the angle of the TV set, move it slowly so as to prevent the TV set from moving or slipping off from its table stand.

Optional Equipment

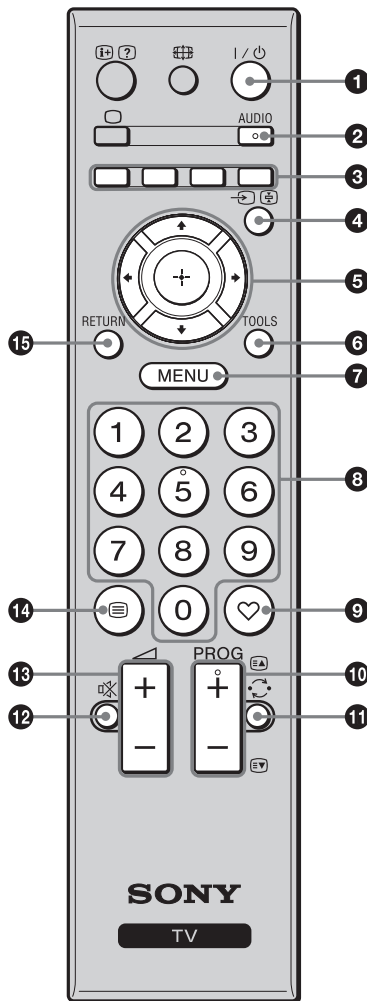
Keep optional components or any equipment emitting electromagnetic radiation away from the TV set. Otherwise picture distortion and/or noisy sound may occur.

Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems)

This symbol is on the remote control.



Overview of the remote



- 1 I/⏻ – TV standby**
Turns the TV on and off from standby mode.
- 2 AUDIO – Dual Sound (page 27)**
- 3 Coloured buttons**
In Text mode: Accesses the corresponding coloured Fastext menu quickly and easily. The Fastext feature can be used only when the Fastext broadcast is available.
- 4 ↵/⏻ – Input select / Text hold**
 - Displays the connected equipment list and selects the input source (page 20).
 - In Text mode: Holds the current page.
- 5 ⏪/⏩/⏴/⏵/⏶/⏷ – Item select / OK**
 - Selects or adjusts items.
 - Confirms selected items.
- 6 TOOLS (page 17)**
- 7 MENU**
Displays or cancels the menu.
- 8 Number buttons**
 - Selects channels. For channel numbers 10 and above, enter the next digit quickly (page 31).
 - In Text mode: Enters the three digit page number to select the page.
- 9 ♡ – Favourite list**
This button has no function for this TV.
- 10 PROG +/-/⏪/⏩**
 - Selects the next (+) or previous (-) channel.
 - In Text mode: Selects the next (⏪) or previous (⏩) page.
- 11 ⏴ – Previous channel**
Returns to the previous channel watched (for more than five seconds).
- 12 🔇 – Mute**
Press to mute the sound. Press again to restore the sound.
 - In standby mode, if you want to turn on the TV without sound, press this button.
- 13 ⏴ +/- – Volume**
Adjusts volume.
- 14 ☰ – Text**
In Text mode: Displays Text broadcast.
Each time you press ☰, the display changes cyclically as follows:
Text → Text over the TV picture (mix mode) → No Text (exit the Text service)
 - Text language displays can be either English, Persian or French depending on your broadcast signal.
- 15 RETURN**
Returns to the previous screen of any displayed menu.

• The number 5, PROG + and AUDIO buttons have tactile dots. Use the tactile dots as references when operating the TV.

Continued



- 16** – **TV mode**
Exit Text mode, or switches to a TV display when displaying external input.
- 17** – **Info / Text reveal**
 - Displays information. Press once to display current channel number and screen mode. Press again to remove the display from the screen.
 - In Text mode: Reveals hidden information (e.g. answers to a quiz).
- 18** – **Wide Mode**
Changes the picture size. Press repeatedly to select the desired wide mode.

For TV, Video, HD/DVD or HDMI (except PC input)

	Enlarges the centre portion of the picture. The left and right edges of the picture are stretched to fill the 16:9 screen.
	Displays the 4:3 picture in its original size. Side bars are shown to fill the 16:9 screen.
	Stretches the 4:3 picture horizontally to fill the 16:9 screen (KLV-32/26T400A/26T400G) and the 16:10 screen (KLV-19T400A/19T400G/19T400W).
	Displays cinematic (letter box format) broadcasts in the correct proportions.

* Parts of the top and bottom of the picture may be cut off.

• You cannot select “Normal” for HD signal source pictures.

For PC Input

	Displays the picture in its original pixel size. Bars are shown at the top, bottom, and both sides for small picture.
	Stretches the original picture to fill the screen vertically.
	Stretches the Full 1 picture horizontally to fill the 16:9 screen (KLV-32/26T400A/26T400G) and the 16:10 screen (KLV-19T400A/19T400G/19T400W).

Using the Tools menu

Press TOOLS enables you to access various options and change/make adjustments according to the source and screen mode. The options displayed vary depending on the input source.

Viewing TV programme

Options	Description
Picture Mode	See page 25.
Sound Mode	See page 26.
Intelligent Picture	See page 31.
MPEG Noise Reduction	See page 25.
Speaker	See page 28.
Sleep Timer	See page 29.
Wake Up Timer	See page 29.
Power Saving	See page 29.

Listening FM Radio

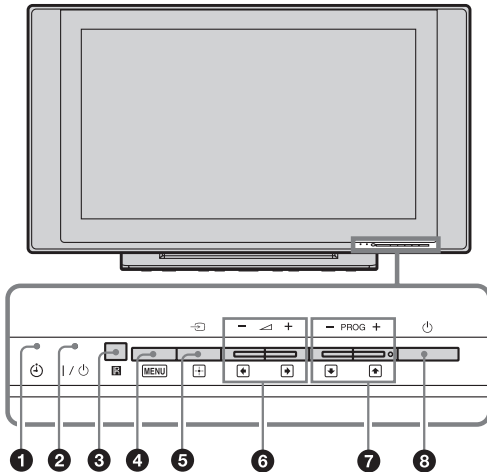
Options	Description
Sound Mode	See page 26.
Speaker	See page 28.
Sleep Timer	See page 29.
Wake Up Timer	See page 29.
Power Saving	See page 29.

Viewing connected equipment

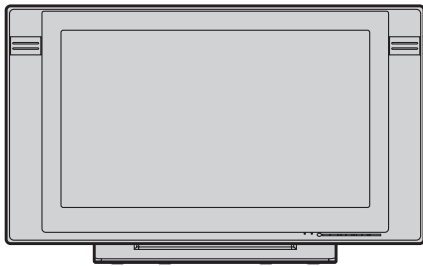
Options	Description
Picture Mode (except PC input mode)	See page 25.
Display Mode (in PC input mode only)	See page 25.
Sound Mode	See page 26.
MPEG Noise Reduction (except PC input mode)	See page 25.
Speaker	See page 28.
Auto Adjustment (in PC input mode only)	See page 30.
Horizontal Shift (in PC input mode only)	See page 30.
Sleep Timer (except PC input mode)	See page 29.
Wake Up Timer (except PC input mode)	See page 29.
Power Saving	See page 29.

Overview of the TV buttons and indicators

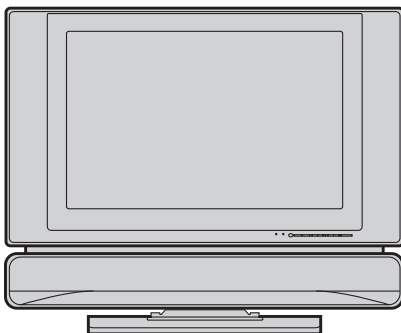
► KLV-32/26/19T400A



► KLV-26/19T400G



► KLV-19T400W

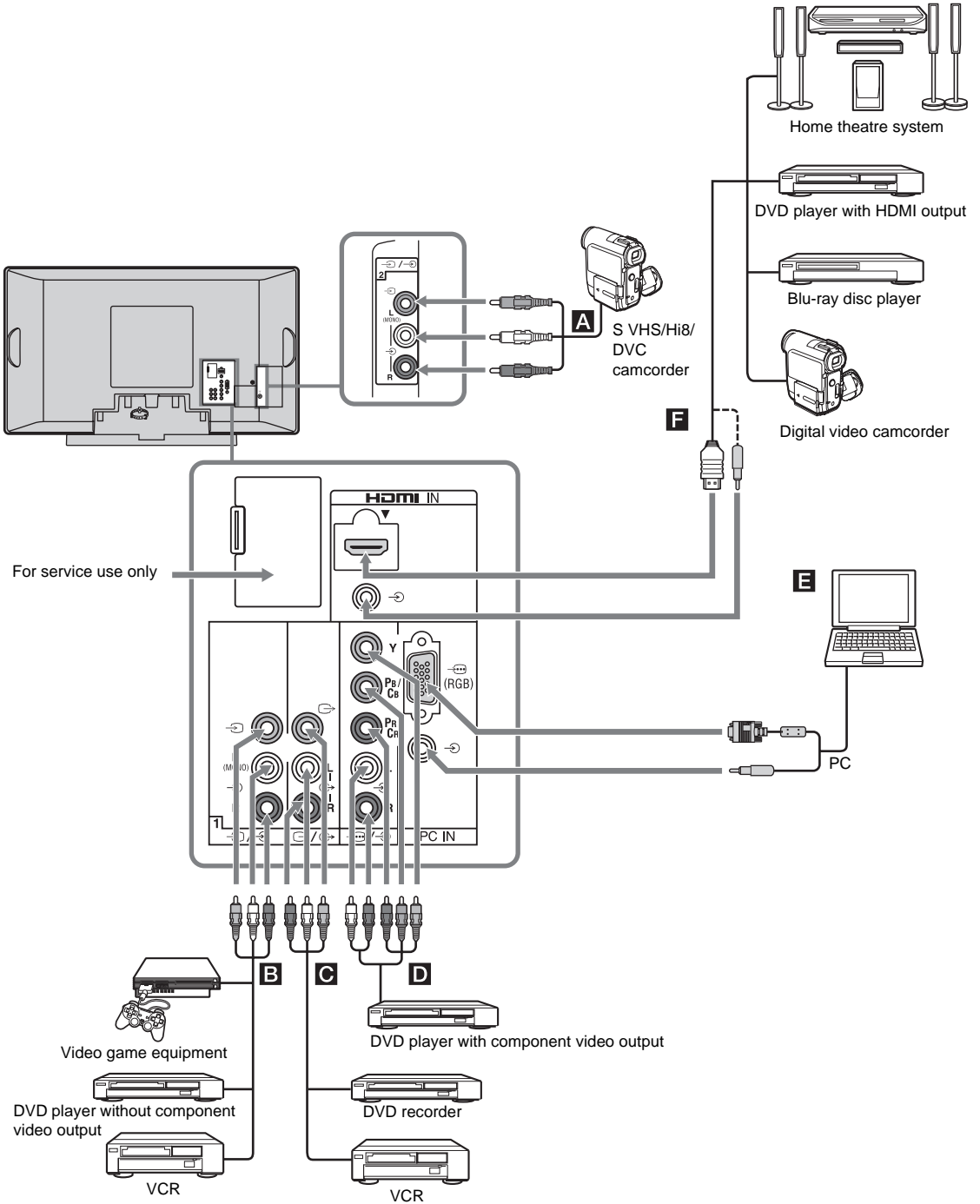


- 1 – **Timer indicator**
Lights up in amber when the timer is set (page 29).
- 2 – **Power indicator / Standby indicator**
 - Lights up in green when the TV is turned on.
 - Flashes while the remote is being operated.
 - Lights up in red when the TV is in standby mode.
- 3 – **Remote sensor**
Receives IR signals from the remote.
- 4 – **MENU**
Displays or cancels the menu.
- 5 – **Input select / OK**
 - Displays the connected equipment list and selects the input source (page 20).
 - In TV menu: Selects the menu or option, and confirms the setting.
- 6 – **+/-/↔/↕**
 - Increases (+) or decreases (-) the volume.
 - In TV menu: Moves through the options right (↔) or left (↕).
- 7 – **PROG +/-/↕/↔**
 - Selects the next (+) or previous (-) channel.
 - In TV menu: Moves through the options up (↕) or down (↔).
- 8 – **Power**
Turns the TV on or off.
 - ✂ • To disconnect the TV from the AC power completely, pull the plug from the AC power outlet.

Connecting optional equipment

You can connect a wide range of optional equipment to your TV.

• The below terminals vary depending on TV models.



Continued

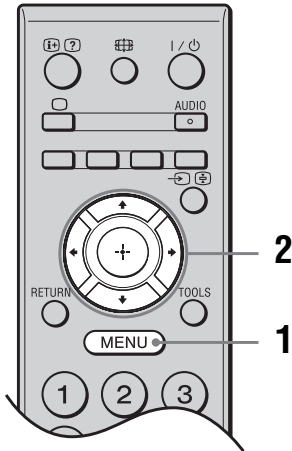
Viewing pictures from the connected equipment

Turn on the connected equipment, then press / to display the connected equipment list. Press / to select the desired input source, then press . (The highlighted item is selected if 2 seconds pass without any operation after pressing / .) When the input source is set to "Skip" in the "Video Labels" under the "AV Set-up" menu (page 28), that input does not appear in the list.

- Press / on the TV to display the connected equipment list and select the desired input source. You can also press / to select the desired input source. Then wait for 2 seconds to display the selected input source.

Jacks/ Input symbol on screen	Description
A 2, and 2 Video 2 (KLV-32/26T400A/ 26T400G only)	Connect to the video jack 2, and the audio jacks 2. If you connect mono equipment, connect to the L(MONO) jack 2.
B 1, and 1 Video 1 (KLV-32/26T400A/ 26T400G) Video (KLV-19T400A/ 19T400G/ 19T400W)	Connect to the video jack 1, and the audio jacks 1. If you connect mono equipment, connect to the L(MONO) jack 1.
C /	Connect to the video output jack to record the image from the TV. Connect to the audio output jacks to record the sound from the TV on DVD recorder or VCR. To turn off the sound of the TV speakers, set "Speaker" to "Audio System" (page 28). If you connect mono equipment, connect to the L jack . • The monitor output jacks cannot support HD/DVD, HDMI and PC signals source pictures, also digital audio signal for sound.
D / /	Connect to the component jacks and the audio jacks / / . For better picture quality, component connection is recommended if your DVD player has a component video output.
E PC IN (RGB) /	Connect to the PC IN (RGB) jack and the audio jack . It is recommended to use a PC cable with ferrite core.
F HDMI IN /	Connect to the HDMI IN jack if the equipment has an HDMI jack. The digital video and audio signals are input from the equipment. For equipment with DVI jack, connect the DVI jack to the HDMI IN jack using a DVI-HDMI adaptor interface (not supplied). Then, connect the equipment's audio out jack to the audio in jack of the HDMI IN. • The HDMI jack only support the following video inputs: 480i, 480p, 576i, 576p, 720p (50/60 Hz), 1080i (50/60 Hz) and 1080p (50/60 Hz). <ul style="list-style-type: none"> • Be sure to use only an HDMI cable that bears the HDMI logo (recommended Sony HDMI cable). • To connect a PC, use the PC IN jack.

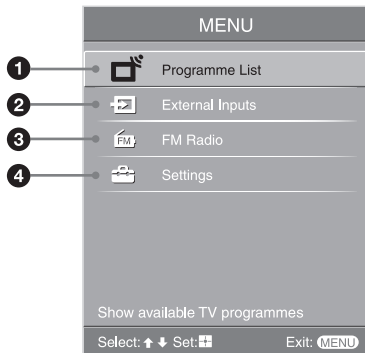
Navigating through menus



“MENU” allows you to enjoy various convenient features of this TV. You can easily select channels or inputs sources, preset FM radio stations and change the settings for your TV.

- 1** Press MENU.
- 2** Press \uparrow/\downarrow to select an option, then press \oplus .

To exit the menu, press MENU.



1 Programme List

Displays available TV channels.

- To watch the desired channel, select the channel, then press \oplus .
- To assign a label to a channel, select “Edit Programme Labels”, then see page 31.

2 External Inputs

Selects equipment connected to your TV.

- To watch the desired external input, select the input source, then press \oplus .
- To assign a label to an external input, select “Edit Video Labels”, then see page 28.

3 FM Radio

Listens to the FM Radio (page 22).

4 Settings

Displays the “Settings” menu where most of the advanced settings and adjustments are performed.

For details about settings, see page 23 to 24.

Listening to the FM Radio

You are able to listen to the FM radio stations using your TV by connecting an antenna (page 7). FM Radio tuning range is from 87.5-108.0 MHz.

To access to FM Radio mode:

Press MENU and select "FM Radio" (page 21).

To exit from FM Radio mode:

Press MENU, select the desired items: "Programme List" or "External Inputs", then press ⊕. Select the desired TV channels or external inputs and press ⊕.

Listening to preset stations

- 1 Access to FM Radio mode.
- 2 Press MENU and select "Settings". Preset the desired FM radio stations and its labels in "FM Radio Set-up" from "Channel Set-up" menu (page 33).
- 3 Exit from "Channel Set-up" menu by pressing MENU. The selected preset FM radio station number and label will appear on the screen. To select the desired preset FM radio station, press PROG +/-.
 - ✎ • You can also use the 1-9 buttons on the remote to directly select the desired preset FM radio station.

Listening to non-preset stations


- 1 Access to FM Radio mode.
 - 2 Press ⬆/⬇ to automatically search for the desired FM radio station.
 - ✎ • You can also manually search for the desired FM radio station by pressing ⬆/⬇.
 - The available radio frequency is only for temporary listening pleasure and cannot be stored in the memory.
 - If the message "Please set-up FM Radio" appears, display the "Channel Set-up" menu and select "FM Radio Set-up" to preset the desired FM radio stations (page 33).
- ✎ • If the station has a noisy sound, you may be able to improve the sound quality by pressing ⬆/⬇.
 - When a FM stereo programme has static noise, press AUDIO until "Mono" appears. There will be no stereo effect, but the noise will be reduced.

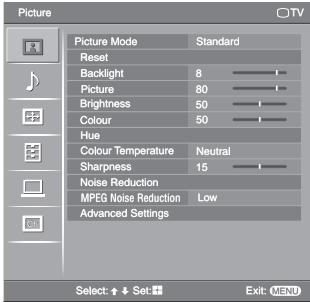
Settings adjustment

You are able to change the settings of your TV from “Settings” menu.

- 1 Press MENU. Press \uparrow/\downarrow to select “Settings”, then press \oplus .
- 2 Press \uparrow/\downarrow to select a menu icon, then press \oplus .
- 3 Press $\uparrow/\downarrow/\leftarrow/\rightarrow$ to select an option or adjust a setting, then press \oplus .

The following is an overview of the items that can be adjusted.

 • The options you can adjust vary depending on the situation. Unavailable options are greyed out or not displayed.



Picture menu (page 25)

“Picture Mode”: “Vivid” → “Standard” → “Cinema”

“Display Mode”: “Video” → “Text”

“Reset”

“Backlight”

“Picture”

“Brightness”

“Colour”

“Hue”

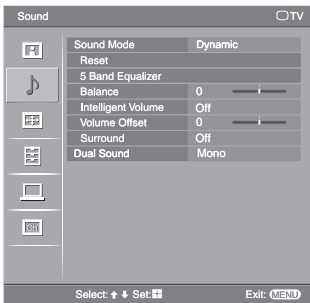
“Colour Temperature”: “Cool” → “Neutral” → “Warm 1” → “Warm 2”

“Sharpness”

“Noise Reduction”: “High” → “Medium” → “Low” → “Off”

“MPEG Noise Reduction”: “High” → “Medium” → “Low” → “Off”

“Advanced Settings”: “Reset”, “Adv. Contrast Enhancer”, “Gamma”, “Clear White”, “Live Colour”



Sound menu (page 26)

“Sound Mode”: “Dynamic” → “Standard” → “Clear Voice”

“Reset”

“5 Band Equalizer”: “Adjust”, “Reset”

“Balance”

“Intelligent Volume”: “On” → “Off”

“Volume Offset”

“Surround”: “On” → “Simulated Stereo” → “Off”

“Dual Sound”



Screen menu (page 27)

“Wide Mode”: “Wide Zoom” → “Normal” → “Full” → “Zoom”

“Auto Wide”: “On” → “Off”

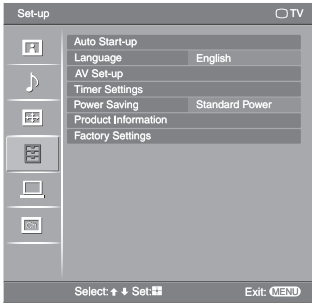
“4:3 Default”: “Wide Zoom” → “Normal” → “Off”

“Display Area”: “Normal” → “-1” → “-2”

“Horizontal Shift”

“Vertical Shift”

“Vertical Size”



Set-up menu (page 28)

“Auto Start-up”

“Language”: “English” → “中文” (Chinese) → “ภาษาไทย” (Thai) → “عربي” (Arabic) → “فارسی” (Persian) → “Tiếng Việt” (Vietnamese)

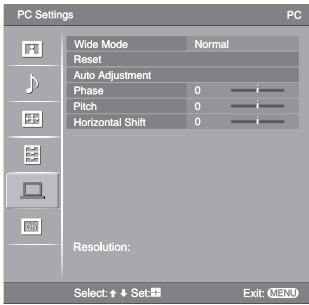
“AV Set-up”: “Video Labels”, “Speaker”, “Colour System”

“Timer Settings”: “Sleep Timer”, “Wake Up Timer”

“Power Saving”: “Standard Power” → “Reduced Power”

“Product Information”

“Factory Settings”



PC Settings menu (page 30)

“Wide Mode”: “Normal” → “Full 1” → “Full 2”

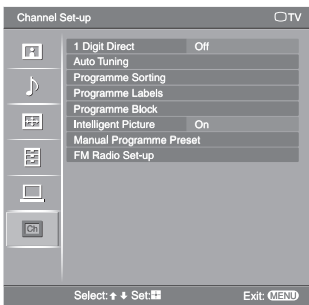
“Reset”

“Auto Adjustment”

“Phase”

“Pitch”

“Horizontal Shift”



Channel Set-up menu (page 31)

“1 Digit Direct”: “On” → “Off”

“Auto Tuning”

“Programme Sorting”

“Programme Labels”

“Programme Block”


“Intelligent Picture”: “On with Indicator” → “On” → “Off”


“Manual Programme Preset”: “Programme”, “TV System”, “VHF Low”/ “VHF High”/ “UHF”, “Label”, “AFT”, “Skip”, “Colour System”, “Signal Booster”, “Signal Level”









“FM Radio Set-up”




Picture menu


Press MENU and select “Settings”. Make sure the “Picture” icon () is selected, then press ⊕.

 • “Picture” menu is not available for FM Radio mode.

Picture Mode	Selects the picture mode except for PC input source. “Vivid” : For enhanced picture contrast and sharpness. “Standard” : For standard picture. Recommended for home entertainment. “Cinema” : For optimum picture quality of film videos.
Display Mode	Selects the display mode for PC input source. “Video” : For video images. “Text” : For text, charts or tables.  • The options displayed vary depending on the input source.
Reset	Resets all the “Picture” settings except “Picture Mode” and “Display Mode” to the factory settings.
Backlight	Adjusts the brightness of the backlight.
Picture	Increases or decreases picture contrast.
Brightness	Brightens or darkens the picture.
Colour	Increases or decreases colour intensity.  • “Colour” is not available for a PC input source.
Hue	Increases or decreases the green tones and red tones.  • “Hue” can only be adjusted for an NTSC colour system (e.g. U.S.A. video tapes). • “Hue” is not available for PC input, component and HDMI input source.
Colour Temperature	Adjusts the whiteness of the picture. “Cool” : Gives the white colours a blue tint. “Neutral” : Gives the white colours a neutral tint. “Warm 1”/“Warm 2” : Gives the white colours a red tint. “Warm 2” gives a redder tint than “Warm 1”.  • “Warm 1” and “Warm 2” are not available when “Picture Mode” is set to “Vivid”.
Sharpness	Sharpens or softens the picture.  • “Sharpness” is not available for a PC input source.
Noise Reduction	Reduces the picture noise (snowy picture) in a weak broadcast signal. “High”/“Medium”/“Low” : Modifies the effect of the noise reduction. “Off” : Turns off the “Noise Reduction” feature.  • “Noise Reduction” can only be adjusted when “Intelligent Picture” is set to “Off”. • “Noise Reduction” is not available for a PC input source.
MPEG Noise Reduction	Reduces the picture noise in MPEG-compressed video. Choose either “High”, “Medium”, “Low” or “Off”.  • “MPEG Noise Reduction” is not available for a PC input source.
Advanced Settings	Customises the “Picture” function in more detail. When you set “Picture Mode” to “Standard” or “Cinema”, you can set/change these settings. “Reset” : Resets all the advanced settings to the factory settings. “Adv. Contrast Enhancer” : Automatically adjusts “Backlight” and “Picture” to the most suitable settings judging from the brightness of the screen. This setting is especially effective for dark images scenes. It will increase the contrast distinction of the darker picture scenes. “Gamma” : Adjusts the balance between bright and dark areas of the picture. “Clear White” : Emphasises white colours. “Live Colour” : Makes colours more vivid.  • “Advanced Settings” is not available for a PC input source or when “Picture Mode” is set to “Vivid”.

Sound menu

Press MENU and select “Settings”. Press \uparrow/\downarrow to select the “Sound” icon (), then press \oplus .

Sound Mode	“Dynamic” : Enhances treble and bass. Recommended for home entertainment. “Standard” : For standard sound. “Clear Voice” : Makes voice sound clearer.
Reset	Resets all the “Sound” settings except “Sound Mode” and “Dual Sound” to the factory settings.
5 Band Equalizer	Adjusts sound frequency settings. 1 Make sure that “Adjust” is selected, then press \oplus . Selecting “Reset” will set your TV to the factory settings. 2 Press \leftarrow/\rightarrow to select the desired sound frequency, then press \uparrow/\downarrow to adjust the setting and press \oplus . The adjusted settings will be received when you select “Sound Mode” options.  • Adjusting higher frequency will affect higher pitched sound and adjusting lower frequency will affect lower pitched sound.
Balance	Emphasises left or right speaker balance.
Intelligent Volume	Keeps a constant volume level even when volume level gaps occur (e.g. adverts tend to be louder than programmes).
Volume Offset	Adjusts the volume level of the current input relative to other inputs.
Surround	Choose either “On” (surround), “Simulated Stereo” (stereo-like monaural sound) or “Off”.

Dual Sound


Selects the sound from the speaker for a stereo or bilingual broadcast. The selection varies, depending on the Broadcasting.

Broadcasting	Selection
NICAM stereo	Stereo (stereo sound) Mono (regular sound)
NICAM bilingual	Main (main sound) Sub (sub sound) Mono (regular sound)
NICAM monaural	Main (main sound) Mono (regular sound)
A2 (German) stereo	Stereo (stereo sound) Mono (regular sound)
A2 (German) bilingual	Main (main sound) Sub (sub sound)

- If the signal is very weak, the sound becomes monaural automatically.
- If the stereo sound is noisy when receiving a NICAM programme, select “Mono”. The sound becomes monaural, but the noise is reduced.
- The “Dual Sound” setting is memorised for each programme position.
- You cannot receive a stereo broadcast signal when “Mono” is selected for the programme position.
- 📶 • NICAM is receivable in following countries/regions. Hong Kong, Singapore, New Zealand, Malaysia, Thailand, etc.
- A2 (German) is receivable in following countries/regions. Australia, Malaysia, Thailand, etc.
- If you select other equipment connected to the TV, set “Dual Sound” to “Stereo”, “Main” or “Sub”. However, when the external equipment connected to the HDMI jack is selected, this is fixed to “Stereo”, except HDMI IN with DVI analogue sound input.
- If you access to FM Radio mode, set “Dual Sound” to “Stereo” or “Mono”.



Screen menu

Press MENU and select “Settings”. Press \uparrow/\downarrow to select the “Screen” icon () , then press \oplus .

- 🔇 • “Screen” menu is not available for FM Radio mode and PC input mode. When receiving PC signal, you can use “PC Settings” menu to perform related settings (page 30).

Wide Mode

For details about the wide mode, see page 16.

Auto Wide

Automatically changes the wide mode according to the input signal from an external equipment. To keep your setting, select “Off”.

- 🔇 • “Auto Wide” is only available when watching programmes from video input and HDMI input.
- 📶 • Even if “Auto Wide” is set to “On” or “Off”, you can always modify the format of the screen by pressing \boxplus repeatedly.

4:3 Default

Selects the default screen mode for use with 4:3 broadcasts.

“**Wide Zoom**”: Displays conventional 4:3 broadcasts with an imitation wide screen effect.

“**Normal**”: Displays conventional 4:3 broadcasts in the correct proportions.


“**Off**”: Keeps the current “Wide Mode” setting when the channel or input is changed.

- 🔇 • “4:3 Default” is available only if “Auto Wide” is set to “On”.
- “4:3 Default” is not available when watching TV programmes, component input or for HD input signal.

Continued

Display Area	Adjusts the screen area for displaying the picture. “Normal” : Displays the picture in the original size. “-1”/“-2” : Enlarges the picture to hide the edge of the picture.
Horizontal Shift	Adjusts the horizontal position of the picture.
Vertical Shift	Adjusts the vertical position of the picture when “Wide Mode” is set to “Zoom”.
Vertical Size	Adjusts the vertical size of the picture when “Wide Mode” is set to “Wide Zoom” or “Zoom”.

Set-up menu

Press MENU and select “Settings”. Press \uparrow/\downarrow to select the “Set-up” icon (), then press \oplus .

Auto Start-up	Starts the initial set-up procedure. Usually, you do not need to do this operation because it was done when the TV was first installed (page 8). However, this option allows you to repeat the process (e.g. to retune the TV after moving house, or to search for new channels that have been launched by broadcasters).
Language	Selects the language in which the menus are displayed.

AV Set-up

Video Labels

Assigns a name to any equipment connected to the side (refer **A** in page 19) and rear jacks. The name will be displayed briefly on the screen when the equipment is selected. You can skip input signals from connected equipment that you do not want displayed on the screen.

1 Press \uparrow/\downarrow to select the desired input source, then press \oplus .

2 Press \uparrow/\downarrow to select the desired option below, then press \oplus .

Equipment labels: Uses one of the preset labels to assign a name to connected equipment.

“Edit”: Creates your own label. Follow steps 2 to 4 of “Programme Labels” (page 31).


“Skip”: Skips an unnecessary input source.

Speaker

Turns on/off the TV’s internal speakers.

“TV Speaker”: The TV speakers are turned on in order to listen to the TV’s sound through the TV speakers.

“Audio System”: The TV speakers are turned off in order to listen to the TV’s sound only through your external audio equipment connected to the audio output jacks.

 • All items in “Sound” menu except “Dual Sound” are not available when “Speaker” is set to “Audio System”.

Colour System

Selects the colour system (“Auto”, “PAL”, “SECAM”, “NTSC3.58”, “NTSC4.43” or “PAL60”) according to the composite video signal from the input source.

Timer Settings

Sets the timer to turn on/off the TV.

Sleep Timer

Sets a period of time after which the TV automatically switches itself into standby mode.

When the “Sleep Timer” is activated, the ☺ (Timer) indicator on the TV front panel lights up in amber.

- ☺ • If you turn off the TV and turn it on again, “Sleep Timer” is reset to “Off”.
- A notification message appears on the screen one minute before the TV switches to standby mode.

Wake Up Timer

Sets the desired period of time to turn on the TV from standby mode.

“**Time**”: Sets the desired period of time to turn on the TV.

“**Duration**”: Selects the time period after which the TV automatically switches to standby mode again.

- ☺ • A notification message “TV has been turned on by Wake Up Timer” appears on the screen when the TV is turned on using the wake up timer.
-

Power Saving

Selects the power saving mode to reduce the power consumption of the TV. Choose either “Standard Power” or “Reduced Power”.

Product Information


Displays your TV’s product information.


Factory Settings

Resets all settings to factory settings other than “Programme Block”, programme preset data and the FM Radio preset data. After completing this process, the initial set-up screen is displayed the next time you turn on the TV. Completing auto tuning in initial set-up will reset these settings (except the FM Radio preset data). To keep them, select “Cancel” in the auto tuning confirmation dialogue.

- ☺ • Be sure not to turn the TV off during this period (it takes about 30 seconds) or press any buttons.
-



PC Settings menu

Press MENU and select “Settings”. Press \uparrow/\downarrow to select the “PC Settings” icon (), then press \oplus .

Wide Mode	Selects a screen mode for displaying input from your PC, see page 16. “Normal” : Displays the picture in its original size. “Full 1” : Enlarges the picture to fill the display area, keeping its original horizontal-to-vertical aspect ratio. “Full 2” : Enlarges the picture to fill the display area.
Reset	Resets all the “PC Settings” except “Wide Mode” to the factory settings.
Auto Adjustment	Automatically adjusts the display position and phase of the picture when the TV receives an input signal from the connected PC.  • “Auto Adjustment” may not work well with certain input signals. In such cases, manually adjust “Phase” and “Horizontal Shift”.
Phase	Adjusts the phase when the screen flickers.
Pitch	Adjusts the pitch when the picture has unwanted vertical stripes.
Horizontal Shift	Adjusts the horizontal position of the picture.

PC Input Signal Reference Chart for supported signals and “Resolution:” value displayed

Signals	Horizontal (Pixel)	Vertical (Line)	Horizontal frequency (kHz)	Vertical frequency (Hz)	Standard
VGA	640	480	31.5	60	VGA
	640	480	37.5	75	VESA
	720	400	31.5	70	VGA-T
SVGA	800	600	37.9	60	VESA Guidelines
	800	600	46.9	75	VESA
XGA	1024	768	48.4	60	VESA Guidelines
	1024	768	56.5	70	VESA
	1024	768	60	75	VESA
WXGA	1280	768	47.4	60	VESA
	1280	768	47.8	60	VESA
	1360	768	47.7	60	VESA

-  • This TV’s PC input does not support Sync on Green or Composite Sync.
- This TV’s PC input does not support interlaced signals.
- If input signal is not shown in above chart, then this signal may not be displayed properly or cannot be displayed according to your settings.
-  • For the best picture quality, it is recommended to use the signals (boldfaced) in the above chart with a 60 Hz vertical frequency from a personal computer. In plug and play, signals with a 60 Hz vertical frequency will be selected automatically.

Channel Set-up menu

Press MENU and select “Settings”. Press \uparrow/\downarrow to select the “Channel Set-up” icon (), then press \oplus .

∇ • All the items in “Channel Set-up” menu except “FM Radio Set-up” are not available for FM Radio mode.

1 Digit Direct	<p>When “1 Digit Direct” is set to “On”, you can select a channel using one preset number button (0 - 9) on the remote.</p> <p>∇ • When “1 Digit Direct” is set to “On”, you cannot select channel numbers 10 and above entering next digit using the remote.</p>
Auto Tuning	<p>Tunes in all the available channels.</p> <p>This option allows you to retune the TV after moving house, or to search for new channels that have been launched by broadcasters.</p>
Programme Sorting	<p>Changes the order in which the channels are stored on the TV.</p> <p>1 Press \uparrow/\downarrow to select the channel you want to move to a new position, then press \oplus.</p> <p>2 Press \uparrow/\downarrow to select the new position for your channel, then press \oplus.</p>
Programme Labels	<p>Assigns a channel name of your choice up to five letters or numbers. The name will be displayed briefly on the screen when the channel is selected.</p> <p>1 Press \uparrow/\downarrow to select the channel you want to name, then press \oplus.</p> <p>2 Press \uparrow/\downarrow to select the desired letter or number (“_” for a blank space), then press \rightleftarrows.</p> <p>If you input a wrong character</p> <p>Press \leftarrow/\rightarrow to select the wrong character. Then, press \uparrow/\downarrow to select the correct character.</p> <p>To delete all the characters</p> <p>Select “Reset”, then press \oplus.</p> <p>3 Repeat the procedure in step 2 until the name is completed.</p> <p>4 Select “OK”, then press \oplus.</p>
Programme Block	<p>Blocks an individual channel from being watched.</p> <p>1 Press \uparrow/\downarrow to select the channel you want to block, then press \oplus.</p> <p>2 Press \uparrow/\downarrow to select “Block”, then press \oplus.</p> <p>To watch the channel, select “Allow”.</p>
Intelligent Picture	<p>“On with Indicator”: Automatically reduces the picture noise. The signal level bar is displayed when the channel is changed or the display is changed from an input screen to a TV programme.</p> <p>“On”: Automatically reduces the picture noise.</p> <p>“Off”: Turns off the “Intelligent Picture” feature.</p>

Manual Programme Preset

Before selecting “Label”/“AFT”/“Skip”/“Colour System”/“Signal Booster”, press PROG +/- to select the programme number with the channel. You cannot select a programme number that is set to “Skip” (page 32).

Programme/TV System/VHF or UHF

Presets programme channels manually.

- 1 Select “Programme”, then press ⊕.
- 2 Press ⬆/⬇ to select the programme number you want to manually tune (if tuning a VCR, select channel 000), then press RETURN.
- 3 Press ⬆/⬇ to select “TV System”, then press ⊕.
- 4 Press ⬆/⬇ to select your TV broadcast systems, then press ⊕.
- 5 Press ⬆/⬇ to go to the frequency range indication (“VHF Low”, “VHF High” or “UHF”), then press ⊕.
- 6 Tune the channels as follows:

Press ⬅/➡ to search for the next available channel. When a channel has been found, the search will stop. To continue searching, press ⬅/➡.

Repeat the procedure above to preset other channels manually.

Label

Assigns a name of your choice, up to five letters or numbers, to the selected channel. This name will be displayed briefly on the screen when the channel is selected. To input characters, follow steps 2 to 4 of “Programme Labels” (page 31).

AFT

Allows you to fine-tune the selected programme number manually if you feel that a slight tuning adjustment will improve the picture quality.

You can adjust the fine tuning over a range of -15 to +15. When “On” is selected, the fine tuning is performed automatically.

Skip

Skips unused channels when you press PROG +/- to select channels. (You can still select a skipped channel using the number buttons.)

Colour System

Selects the colour system (“Auto”, “PAL”, “SECAM”, “NTSC3.58”, “NTSC4.43” or “PAL60”) according to the channel.

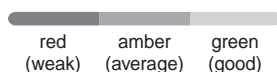
Signal Booster (Intelligent Signal Booster)

Improves the picture quality if the TV signal is too strong or weak.

Press ⬆/⬇ to select either “Off” if the signal is too strong (picture distorted; picture with lines; signal interference) or “Auto” if the signal is weak (snowy picture), then press ⊕.

Signal Level


Displays the signal level for programme currently being watched.



FM Radio Set-up











Preset up to nine FM radio stations.

You can manually preset each FM radio station that can be received in your area and then store the radio frequency of the desired FM radio stations.

- 1 Press \uparrow/\downarrow to select the desired FM radio station position, then press \oplus .
 - 2 Press \uparrow/\downarrow to search the FM radio stations.
Searching stops automatically when a station is tuned in.
If the station has a noisy sound, you may be able to improve the sound quality by pressing \leftarrow/\rightarrow .
Press \oplus to store the FM radio station.
 - 3 You may edit the FM radio station label. Press \uparrow/\downarrow to select alphanumeric characters for the label, then press \oplus .
 - 4 Repeat steps 1 to 3 to preset other FM radio stations.
-  • “FM Radio Set-up” can only be adjusted in FM Radio mode. To enable this feature, access to FM Radio mode by using MENU (page 21), then preset your desired FM radio stations according to the steps mentioned above.
-

Additional Information

Specifications

Model name	KLV-32T400A	KLV-26T400A	KLV-26T400G	KLV-19T400A	KLV-19T400G	KLV-19T400W	
System							
Panel System	LCD (Liquid Crystal Display) Panel						
TV System	B/G, I, D/K, M						
Colour System	PAL, PAL60, SECAM, NTSC4.43, NTSC3.58						
Channel Coverage	B/G: VHF: E2 to E12/ UHF: E21 to E69/ CATV: S01 to S03, S1 to S41 VHF: 1 to 11/ UHF: 21 to 69/ CATV: S01 to S03, S1 to S41 (New Zealand only) I: UHF: B21 to B69/ CATV: S01 to S03, S1 to S41 D/K: VHF: C1 to C12, R1 to R12/ UHF: C13 to C57, R21 to R60/ CATV: S01 to S03, S1 to S41, Z1 to Z39 M: VHF: A2 to A13/ UHF: A14 to A79/ CATV: A-8 to A-2, A to W+4, W+6 to W+84						
Sound Output	10 W + 10 W			5 W + 5 W			
3D WOOFER	-					15 W	
Input/Output jacks							
Antenna	75 ohm external terminal						
 1, 2 ( 2: KLV-32/26T400A/26T400G only)	Video input (phono jack)						
 1, 2 ( 2: KLV-32/26T400A/26T400G only)	Audio input (phono jacks): 500 mVrms, Impedance: 47 kilohms						
	Supported formats: 1080p (50/60 Hz), 1080i (50/60 Hz), 720p (50/60 Hz), 576p, 576i, 480p, 480i Y: 1 Vp-p, 75 ohms, 0.3V sync negative/Pb/Cb: 0.7 Vp-p, 75 ohms/Pr/Cr: 0.7 Vp-p, 75 ohms						
	Audio input (phono jacks): 500 mVrms, Impedance: 47 kilohms						
	Video output (phono jack)						
	Audio output (phono jacks)						
HDMI IN	Video: 1080p (50/60 Hz), 1080i (50/60 Hz), 720p (50/60 Hz), 576p, 576i, 480p, 480i Audio: Two channel linear PCM 32, 44.1 and 48 kHz, 16, 20 and 24 bits Analogue audio input (minijack): 500 mVrms, Impedance: 47 kilohms						
PC IN  (RGB)	PC Input (D-sub 15-pin) (see page 30) G: 0.7 Vp-p, 75 ohms, non Sync on Green/B: 0.7 Vp-p, 75 ohms/ R: 0.7 Vp-p, 75 ohms/HD: 1-5 Vp-p/VD: 1-5 Vp-p						
PC IN 	PC audio input (minijack)						
Power and others							
Power Requirements	110–240 V AC, 50/60 Hz 220–240 V AC, 50/60 Hz (New Zealand only)						
Screen Size (inches)	32	26		19			
Display Resolution	1,366 pixels (horizontal) × 768 lines (vertical)			1,680 pixels (horizontal) × 1,050 lines (vertical)			
Power Consumption	Indicated on the rear of the TV.						
Dimensions (w × h × d)*	with stand (mm)	929 × 558 × 208	789 × 486 × 180	789 × 486 × 180	595 × 379 × 159	595 × 379 × 159	595 × 477 × 190
	without stand (mm)	929 × 520 × 109	789 × 448 × 105	789 × 448 × 105	595 × 348 × 93	595 × 348 × 93	595 × 449 × 94
Mass*	with stand (kg)	13.9	10.1	10.3	5.9	6.1	7.4
	without stand (kg)	13.0	9.5	9.7	5.6	5.8	7.0
Optional Accessories	Wall-Mount bracket	SU-WL500 or SU-WL50B		SU-WL100			

* Dimensions and mass are approximate values.

Design and specifications are subject to change without notice.



Troubleshooting

If you find any problem while viewing your TV, you can either check the Troubleshooting guide below or use the "Factory Settings" function (page 29). If the problem persists, contact your Sony dealer.

Check whether the  (standby) indicator is flashing in red.

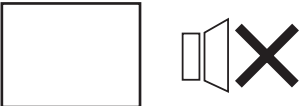





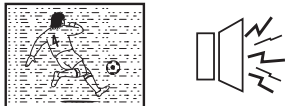
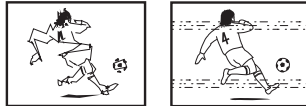
When it is flashing

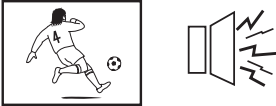








The self-diagnosis function is activated.

- 1 Count how many times the  (standby) indicator flashes between each two second break.
For example, the indicator flashes three times, then there is a two second break, followed by another three flashes, etc.
- 2 Press  on the TV to turn it off, disconnect the AC power cord, and inform your dealer or Sony service centre of how the indicator flashes (number of flashes).

When it is not flashing

- 1 Check the items listed below.
- 2 If the problem still persists, have your TV serviced by qualified service personnel.

Problem	Cause/Remedy
No Picture	
No picture (screen is dark) and no sound 	<ul style="list-style-type: none"> • Check the antenna/cable connection. • Connect the TV to the AC power outlet, and press  on the TV. • If the  (standby) indicator lights up in red, press .
No picture or no menu information from equipment connected to the video input jack	<ul style="list-style-type: none"> • Press / to display the connected equipment list, then select the desired input. • Check the connection between the optional equipment and the TV.
Poor Picture	
Only snow and noise appear on the screen 	<ul style="list-style-type: none"> • Check if the antenna is broken or bent. • Check if the antenna has reached the end of its serviceable life (three to five years in normal use, one to two years at the seaside).
Distorted picture (dotted lines or stripes) 	<ul style="list-style-type: none"> • Keep the TV away from electrical noise sources such as cars, motorcycles, hair-dryers or optional equipment. • When installing optional equipment, leave some space between the optional equipment and the TV. • Check the antenna/cable connection. • Keep the antenna cable away from other connecting cables. • Broadcast signals are too strong. Set the "Signal Booster" to "Off" (page 32) or turn off or disconnect the booster if it is in use.
Picture or sound noise when viewing a TV channel	<ul style="list-style-type: none"> • Select "Manual Programme Preset" in the "Channel Set-up" menu and adjust "AFT" (Automatic Fine Tuning) to obtain better picture reception (page 32). • Select "Noise Reduction" in the "Picture" menu to reduce the noise in the picture (page 25).

Problem	Cause/Remedy
Good picture, but noisy sound 	<ul style="list-style-type: none"> • The TV system setting is inappropriate. • If the sound of all the channels are noisy, perform “Auto Tuning” in the “Channel Set-up” menu to preset the channel again (page 31). • If the sound of some channels is noisy, select the channel, then perform “Manual Programme Preset” in the “Channel Set-up” menu, and select the appropriate TV system (“TV System”) (page 32).
Some tiny black points and/or bright points appear on the screen	<ul style="list-style-type: none"> • The picture of a display unit is composed of pixels. Tiny black points and/or bright points (pixels) on the screen do not indicate a malfunction.
No colour on programmes 	<ul style="list-style-type: none"> • Select “Reset” in the “Picture” menu to return to the factory settings (page 25).
No colour or irregular colour when viewing a signal from the Y, Pb/Cb, Pr/Cr jacks of 	<ul style="list-style-type: none"> • Check the connection of the Y, Pb/Cb, Pr/Cr jacks of . • Make sure that the Y, Pb/Cb, Pr/Cr jacks of  are firmly seated in their respective jacks.
Picture flashes initially when changing to HDMI mode or switching on the TV with HDMI mode	<ul style="list-style-type: none"> • This is probably caused by the authentication process between HDMI equipment and the TV. It does not indicate a malfunction.
Sound	
No sound, but good picture 	<ul style="list-style-type: none"> • Press  +/- or  (Mute). • Check if the “Speaker” is set to “TV Speaker” from the “AV Set-up” menu in “Set-up” menu (page 28).
Stereo broadcast sound switches on and off, or is distorted; the sound switches between stereo and monaural frequently	<ul style="list-style-type: none"> • The antenna connection is loose or the antenna cable is damaged. Check the cable and connection on the TV, VCR, and on the wall (page 7). • Adjust the antenna direction for the minimum interference. Contact a Sony dealer for advice. • Signal transmission is low. Try using a booster. Otherwise, use the fine tuning (“AFT”) function (page 32).
TV cannot receive FM radio station	<ul style="list-style-type: none"> • Connect a separate FM antenna and the TV channel source through an antenna selector (switch) to your TV (page 7).
General	
The TV turns off automatically (the TV enters standby mode)	<ul style="list-style-type: none"> • Check if the “Sleep Timer” is activated, or confirm the “Duration” setting of “Wake Up Timer” (page 29).
The TV turns on automatically	<ul style="list-style-type: none"> • Check if the “Wake Up Timer” is activated (page 29).
Some input sources cannot be selected	<ul style="list-style-type: none"> • Select “Video Labels” in the “AV Set-up” menu and cancel “Skip” of the input source (page 28).
The remote does not function	<ul style="list-style-type: none"> • Replace the batteries.
The wide screen mode changes spontaneously when “Auto Wide” is “On”	<ul style="list-style-type: none"> • When changing between two input modes, the TV detects the optimum wide screen mode. During this period, an irregular wide screen mode may appear. • The wide mode is switched automatically according to the revised signal with a Wide ID signal (only available for video input and HDMI input). • The “Auto Wide” feature stops working temporarily when you press  , and resumes after a while. To fix in the manually selected wide screen mode, set “Auto Wide” to “Off” in the “Screen” menu (page 27).

Problem	Cause/Remedy
Text display is incomplete or garbled	<ul style="list-style-type: none"> • Your area may not be able to receive Text. Text is displayed only in the area that is covered by Text services. • The antenna connection is loose or the antenna cable is damaged. Check the cable and connection on the TV, VCR, and on the wall (page 7). • Adjust the antenna direction. Contact a Sony dealer for advice. • Signal transmission is too low. Try using a booster. • Using the fine tuning (“AFT”) function may improve the picture (page 32).
Cannot play shooting games	<ul style="list-style-type: none"> • Some shooting games which involve pointing a light beam at the TV screen with an electronic gun or rifle cannot be used with your TV. For details, see the instruction manual supplied with the video game software.
The TV cabinet creaks	<ul style="list-style-type: none"> • Changes in room temperature sometimes make the TV cabinet expand or contract, causing a noise. This does not indicate a malfunction.
Static discharge is felt when touching the TV cabinet	<ul style="list-style-type: none"> • This is the same static discharge that is felt when touching metal door handles or car doors especially when the air is dry, for example in winter. This does not indicate a malfunction.
Weak signal (signal level indicator displayed in red)	<ul style="list-style-type: none"> • Check the antenna/cable connection. • Set the “Signal Booster” to “Auto” (page 32) or try using an external booster.
Sound does not match pictures on the screen when audio is output directly from the amplifier system	<ul style="list-style-type: none"> • Adjust the sound delay settings from the connected equipment to minimize the time gap between the audio and video output.



Customer support

<http://www.sony-asia.com/support>



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VOC (Volatile Organic Compound)-free
vegetable oil based ink.



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<http://www.sony.net/>

Printed in Malaysia

SONY®

KLV-26S400A
KLV-26T400A
KLV-26T400G
KLV-19T400A
KLV-19T400G
KLV-19T400W

Installing the Wall-Mount Bracket

GB

安裝掛壁式支架

CT

تثبيت السناد الخاص بتركيب التلفزيون على الجدار

AR

نصب کردن دیوار کوب

PR



* 3 2 9 3 0 4 2 1 2 * (1)

To Customers:

For product protection and safety reasons, Sony strongly recommends that installing of your TV be performed by Sony dealers or licensed contractors. Do not attempt to install it yourself.

Your KLV-26S400A/KLV-26T400A/KLV-26T400G/KLV-19T400A/KLV-19T400G/KLV-19T400W can be installed using SU-WL100 Wall-Mount Bracket (sold separately). Please provide your licensed contractor with this installation supplement as well as the Instructions (supplied with the SU-WL100 Wall-Mount Bracket). Read these documents carefully for safety and proper installation.

To Sony Dealers and Contractors:

Provide full attention to safety during the installation, periodic maintenance and examination of this product.

Installing the TV

The TV can be installed on a wall by attaching a Wall-Mount Bracket (sold separately).

Verify your TV's model number and be sure to use the bracket specified for your model only. Refer to the steps on this manual along with the Instructions supplied with the SU-WL100 Wall-Mount Bracket, to properly carry out the installation.

Sufficient expertise is required for installing this product, especially to determine the strength of the wall for withstanding the TV's weight. Be sure to entrust the attachment of this product to the wall to Sony dealers or licensed contractors and pay adequate attention to safety during the installation. Sony is not liable for any damage or injury caused by mishandling or improper installation.

Step 1: Checking the parts required for the installation

Open the Wall-Mount Bracket package and check the contents for all required parts along with the Instructions.

Step 2: Adjusting the position of the holders of the Base Plate

Refer to the Instructions for the SU-WL100.

Step 3: Deciding on the installation location

Decide where you want to install your TV. Refer to the last 3 pages of this manual for the TV installation dimensions and determine the location.

Refer to the Instructions for the SU-WL100.

Step 4: Installing the Base Plate on the wall

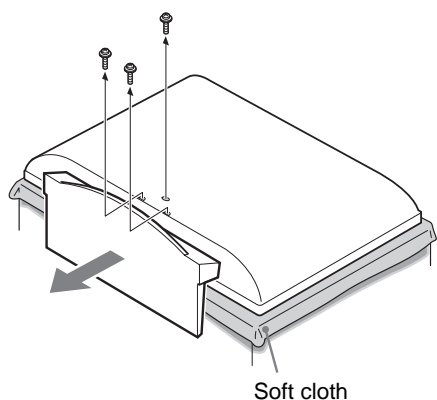
Refer to the Instructions for the SU-WL100.

Step 5: Preparing for the installation of the TV

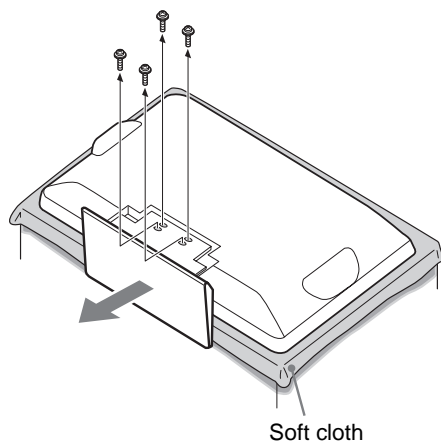
Before detaching the Table-Top Stand, disconnect all the cables from the TV.

- 1 Remove the screws from the rear of the TV. Then detach the Table-Top Stand from the TV.

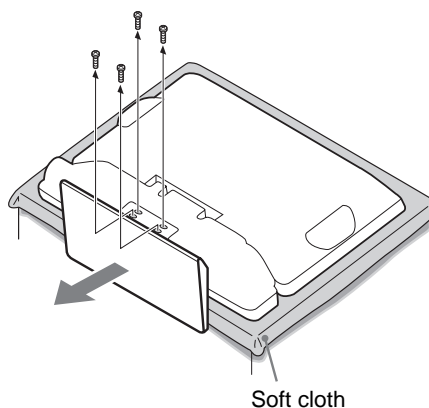
► For KLV-26S400A



► For KLV-26T400A/KLV-26T400G/KLV-19T400A/ KLV-19T400G



► For KLV-19T400W



Do not remove any other screws from the TV.

Notes

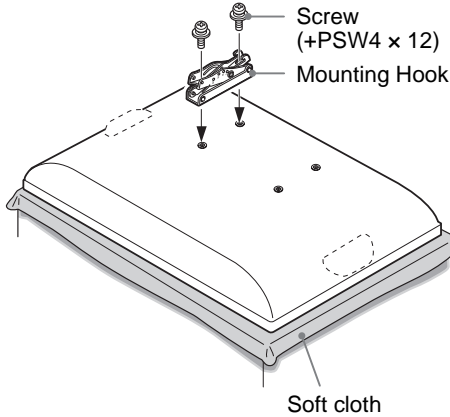
- When removing the Table-Top Stand from the TV, lay the display face down on a stable work surface that is larger than the TV.
- To prevent damaging the surface of the LCD display, make sure to place a soft cloth on the work surface.
- If pressure or shock is applied to the surface of the TV, the LCD display may break or become damaged.
- Lay the display face down on a stable and level surface with the Table-Top Stand hanging over the edge of the surface. Having the display face and the base of the Table-Top Stand on the same level surface will create an unstable working condition and can damage the TV.
- When detaching the Table-Top Stand from the TV, hold the Table-Top Stand securely with both hands.

GB

2 Secure the Mounting Hook from the left side of the rear of the TV.

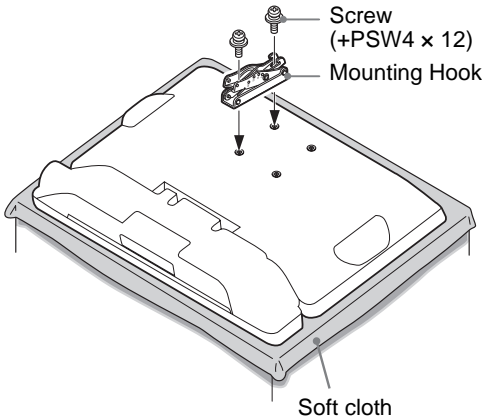
- 1 Secure the Mounting Hook to the rear of the TV temporarily, using the supplied two screws (+PSW4 × 12).
- 2 Be sure that both screws are tightened securely with equal torque strength to the rear of the TV.

► For KLV-26S400A/KLV-26T400A/KLV-26T400G/ KLV-19T400A/KLV-19T400G



GB

► For KLV-19T400W



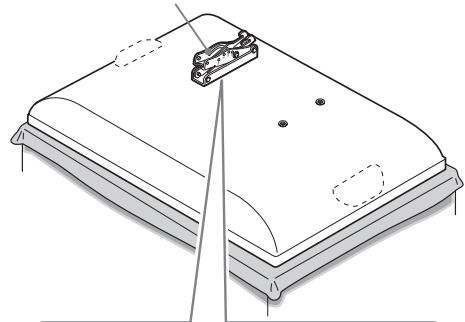
3 Adjust the angle of the Mounting Hook.

When installing the TV parallel to the wall (0 degrees), adjustment of the Mounting Hook angle (procedures 1 and 2 below) is not necessary.

- 1 Remove the angle adjusting screw from the arm of the Mounting Hook. Choose the holes corresponding to the desired angle (5, 10, 15 or 20 degrees).
- 2 Firmly secure the arm using the screw removed in the previous procedure 1.

► For KLV-26S400A/KLV-26T400A/KLV-26T400G/ KLV-19T400A/KLV-19T400G

Mounting Hook



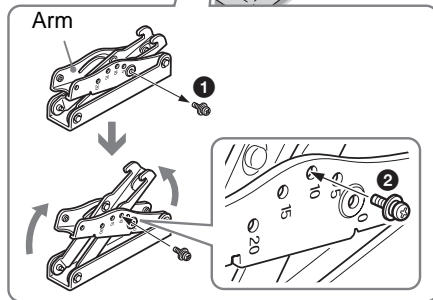
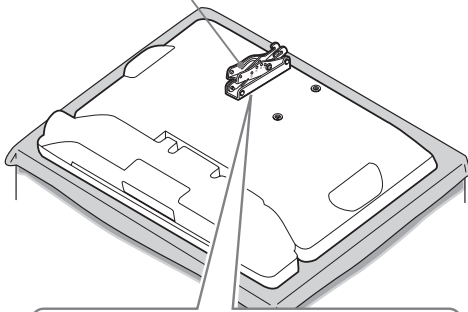
Arm

Notes

- If you install the right Mounting Hook first, it will be difficult to adjust its angle. Install the left Mounting Hook first.
- Be sure not to use any screws other than the supplied ones (+PSW4 × 12) when securing the Mounting Hook.

► For KLV-19T400W

Mounting Hook

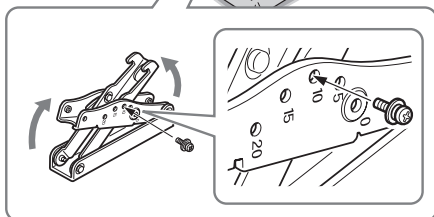
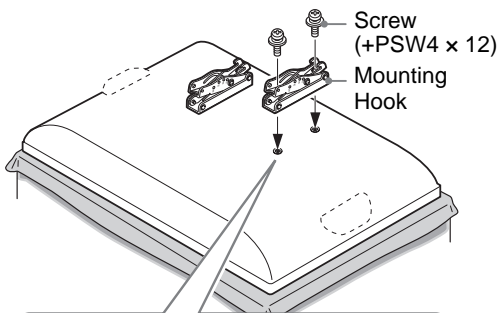


4 Secure the Mounting Hook to the right side of rear of the TV.

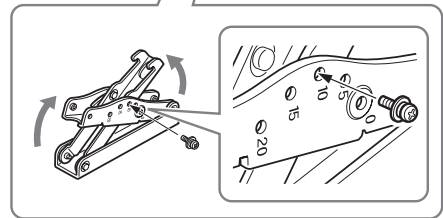
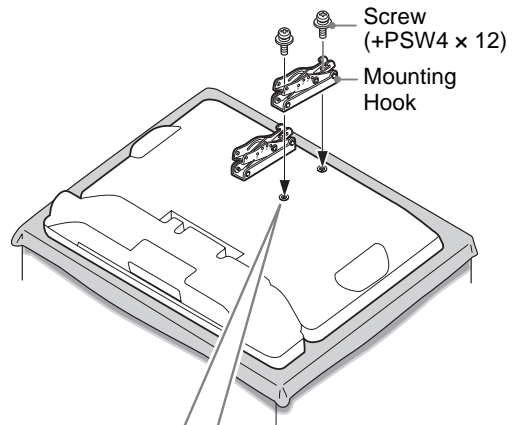
- ❶ Secure the Mounting Hook to the rear of the TV temporarily, using the supplied two screws (+PSW4 × 12).
- ❷ Be sure that both screws are tightened securely with equal torque strength to the rear of the TV.

If you adjusted the left angle of the Mounting Hook, also perform the same adjustment as in 3 of Step 5 “Adjust the angle of the Mounting Hook” for the right.

► For KLV-26S400A/KLV-26T400A/KLV-26T400G/
KLV-19T400A/KLV-19T400G



► For KLV-19T400W



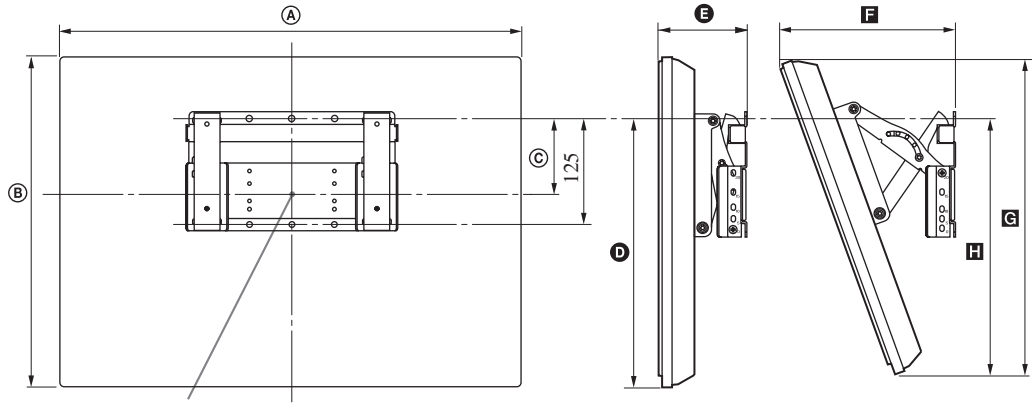
GB

Notes

- Be sure to adjust the right and left arms to the same angle.
- Make sure that the two arm bases are screwed in securely.

Step 6: Installing the TV on the wall

Refer to the Instructions for the SU-WL100.



Screen centre point/
 螢幕中心點/
 مؤشر مركز الشاشة/
 نقطه مركز صفحه

English Installation dimensions table *

AR

* جدول ابعاد التركيب

中文 安裝尺寸表 *

PR

* جدول ابعاد نصب

Unit: mm

單位: mm

الوحدة: مم

واحد: ميلي متر

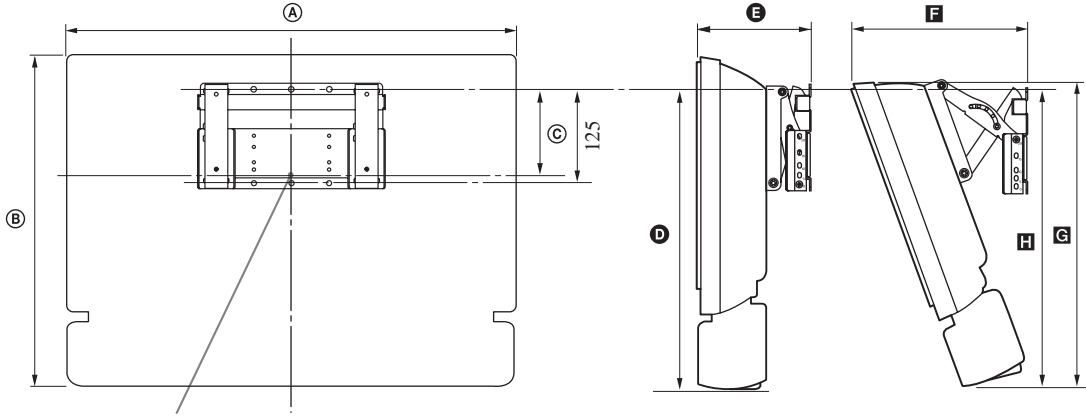
Model Name/ 型號/ إسم الموديل/ نام مدل	Display dimensions/ 電視機尺寸/ أبعاد التلفزيون/ ابعاد صفحه نمایش		Screen centre dimension/ 螢幕中心尺寸/ حجم مركز الشاشة/ ابعاد مركز صفحه	Length for each mounting angle/ 不同安裝角度時的長度/ طول كل زاوية للتثبيت/ طول برای هر زاویه ای از سوار کردن				
				Angle (0°)/ 角度 (0°)/ زاوية (0 درجة)/ زاوية (0 درجه)		Angle (20°)/ 角度 (20°)/ زاوية (20 درجة)/ زاوية (20 درجه)		
				A	B	C	D	E
KLV-26S400A	675	466	83	335	157	269	453	342
KLV-26T400A / KLV-26T400G	789	448	83	318	155	266	428	324
KLV19T400A / KLV-19T400G	595	348	116	300	152	237	331	308

* Installation dimensions may differ according to how the TV is installed.

* 安裝尺寸視如何安裝電視機而異。

** تختلف ابعاد التركيب بكيفية تركيب التلفزيون.

** ابعاد نصب ممكن است مطابق با چگونگی نصب تلویزیون متفاوت باشند.



Screen centre point/
 螢幕中心點/
 مؤشر مركز الشاشة/
 نقطه مركز صفحه

English Installation dimensions table *

AR

جدول أبعاد التركيب *

中文

安裝尺寸表 *

PR

جدول ابعاد نصب *

Unit: mm
 單位: mm
 الوحدة: مم
 واحد: ميلي متر

Model Name/ 型號/ إسم الموديل/ نام مدل	Display dimensions/ 電視機尺寸/ أبعاد التلفزيون/ ابعاد صفحه نمایش		Screen centre dimension/ 螢幕中心尺寸/ حجم مركز الشاشة/ ابعاد مركز صفحه	Length for each mounting angle/ 不同安裝角度時的長度/ طول كل زاوية للتثبيت/ طول برای هر زاویه ای از سوار کردن				
				Angle (0°)/ 角度 (0°)/ زاویه (0 درجه)/ زاویه (0 درجه)		Angle (20°)/ 角度 (20°)/ زاویه (20 درجه)/ زاویه (20 درجه)		
	A	B	C	D	E	F	G	H
KLW-19T400W	595	449	116	401	152	237	418	394

* Installation dimensions may differ according to how the TV is installed.

* 安裝尺寸視如何安裝電視機而異。

* تختلف أبعاد التركيب بكيفية تركيب التلفزيون.

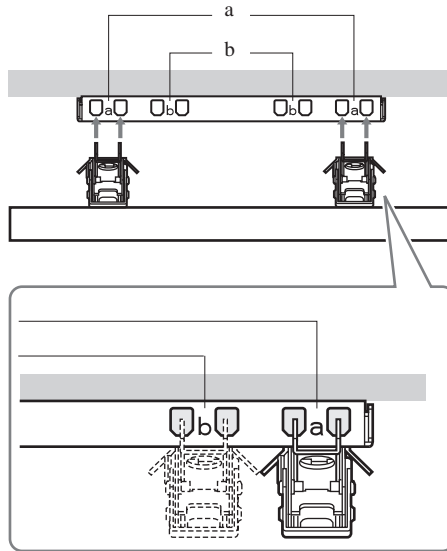
* ابعاد نصب ممكن است مطابق با چگونگی نصب تلویزیون متفاوت باشند.

Hook location

掛鉤位置

مكان الخطاف

محل قلاب



Model Name / 型號 / اسم الموديل / نام مدل	Hook location / 掛鉤位置 / مكان الخطاف / محل قلاب
KLV-26S400A / KLV-26T400A / KLV-26T400G	a
KLV-19T400A / KLV-19T400G / KLV-19T400W	b



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