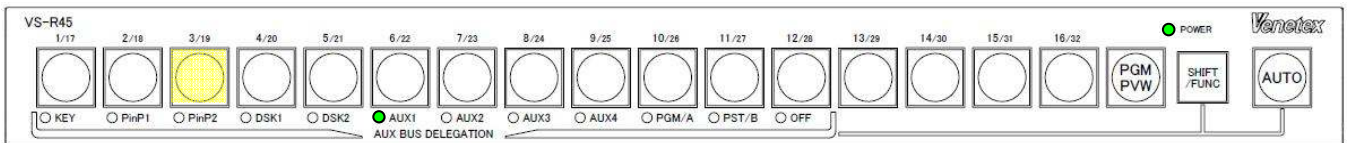




Remote Control Panel For Panasonic Multi Format Live Switcher AV-HS450

VS-R45

Operation Manual



Thank you for purchasing a Venetex product.

■ Please review the Operation Manual for proper and safe operation.

Please read “Important Safety Instructions” section before operating the product.

Please keep the Operation Manual in a secure place for future reference.

Rev.1.0

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Important Safety Instructions (Please be sure to follow the following guidelines.)




The following Important safety instructions are outlined to prevent harm to property, users, and others.

- Please read the following instructions.
- Please retain the following instructions in a secure place.
- Please pay attention to all warnings.
- Please follow the following instructions.









- The following symbols and descriptions are used to categorize the degrees of harm that may occur as a result of failing to follow instructions for the proper operation.

	Warning	The action may cause a "possible risk of serious personal injury or death."
	Caution	The action may cause a "possible risk of personal injury or property damage."

- The following symbols and descriptions are used to categorize the instructions to be followed.

	This symbol indicates "Do Not Try" actions.
	This symbol indicates "Strictly Prohibited" actions.
	This symbol indicates "Caution."

Cautions

<p>Do not place the device on unstable surfaces!</p> <p> This may cause injury due to the device falling or toppling over.</p>	<p>Do not place heavy items on the cable!</p> <p> This may damage cable and cause fire/electric shock. Make sure that the device is not placed over the cable.</p>
<p>Do not place the device near water!</p> <p> This may cause fire and electric shock.</p>	<p>Do not plug or unplug the cord with wet hands!</p> <p> This may cause electric shock.</p>
<p>Always use specified accessories and options!</p> <p> Failure to do so may cause fire and accident.</p>	<p>Do not use power sources or voltage other than indicated!</p> <p> This may cause fire and electric shock.</p>
<p>Do not operate the device near water.</p> <p> This may cause fire and electric shock.</p>	<p>Do not place item containing liquid or small metals on top of the device!</p> <p> This may cause breakdown and accident.</p>

Important Safety Instructions (Please be sure to follow the following guidelines.)

Caution

Do not wet or have water leak into the device!



This may cause fire/electric shock. Please use extra caution when operating in rain or snow, on the beach or near the water.

Do not insert or jam a foreign object into any open slots!



This may cause fire/electric shock.

Do not break, damage, modify the cord! Do not place the cord near high temperature! Do not force the cord to bend, twist or pull! Do not place a heavy item on the cord! Do not roll up or wrap the cord!



This may cause electric shock, short circuit and fire
■ Please consult the dealer about cord and plug repairs.

Do not modify this device!



This may cause fire and electric shock.

Do not remove any housing covers from the device!



This may cause electric shock
■ Please contact the dealer about maintenance and repairs.

Do not remove the cover!



This may cause electric shock.
■ Please contact the dealer about maintenance and repairs.

Always unplug the power cord when the device is damaged or dropped!



It may cause fire and electric shock otherwise.

Always unplug cables when a foreign object falls inside the device!



It may cause fire and electric shock otherwise.

Always unplug the power cord when the device gets wet inside!



It may cause fire and electric shock otherwise.

Always unplug cables when the device displays an abnormal sign such as smoke or burning smell!



It may cause fire and electric shock otherwise.
■ Please contact the dealer to request a repair.

Please ask the service technician for repairing the device.



The repair service must be performed by the trained technician.
In case of damage of power cord or plug, leak of liquid, insertion of foreign object into the device, any damage to the device, exposed to rain or water, not working properly, and dropping the device, the repair service is required.

Important Safety Instructions (Please be sure to follow the following guidelines.)

Caution

Do not place cables close to heating apparatus!



This may cause fire and electric shock by melting cable shields.

Do not expose the device to oily smoke or steam!



This may cause fire and electric shock.

Do not place the device in areas subject to moisture or excessive dust!



This may cause fire and electric

Do not unplug by pulling the cord!



This may damage the cord and cause fire and electric shock.

■ Be sure to hold the plug and pull out.

Do not block any ventilation openings of this device!



This may cause fire by heating up inside the device.

Do not:

■ Jam the device into the area with no air circulation, or

■ Cover the device with table cloth or place it on carpet.

Do not plug or unplug with wet hands!



This may cause electric shock.

Do not place a heavy item on the device!



This may damage the device or it could fall and injure the user.

Do not stand on this device!



This may cause injury by falling and breaking.

Do not transport the device with connected cords!



This may damage the cords and cause fire and electric shock.

Always unplug the cord when cleaning the device!



This will prevent fire and electric

Consult the dealer about cleaning the device once a year!



This will prevent fire and short circuit caused by excessive dust.

The product should be cleaned only with a dry cloth.



The product should be cleaned only with a dry cloth, otherwise may cause fire/electric shock.

Important Safety Instructions (Please be sure to follow the following guidelines.)

Caution

Do not pinch or crush the cable.



Do not crush or pinch the power code particularly at plugs, convenience receptacles, and the point where they exit the device, this may cause fire and breakdown .

Use the attachment such as blacket etc., recommended or specified by Ventex Coporation.



Use only blackets and screws specified by Ventex Corporation, and also should use those with the device in the package. They may cause injury by falling, and also cause of breakdown and damage of the device.

I take off a power supply plug!.



When it is thunder storm or during extended periods when the device is not used, unplug it from the power source to avoid breakdown by thunder striking.

Please follow the following general instructions.

■ **Operate the device in the range of temperature 0°C ~ +40°C (or 32F to 104F).**

Internal parts may fail if operated out of the specified range.

■ **Turn off the power before connecting or disconnecting the cables.**

Turn off the power before connecting or disconnecting the cables.

■ **Use in an area with no excess moisture dust.**

Using the device in an environment with high moisture or excessive dust may cause internal parts to fail.

■ **Cleaning**

Turn the power off and wipe the surface with dry cloth. If more persistent cleaning is necessary, damp a towel with a small amount of diluted kitchen detergent to wipe the surface. Wipe again with a clean damp towel, then with a dry towel.

■ **Note:**

Please do not use volatile liquid such as benzene or paint thinner to clean the device.

Please follow the instructions carefully before using the chemically treated cleaning cloth with the device.

1. Overview

The VS-R45 is a remote control panel that can maximize the functionality of Panasonic AV-HS450.

- It allows you to select materials for AV-HS450 main buses.
- It has flexible structure, which allows cable connection from three directions such as for the console and the rack installation.
- It adopts the same switching mechanism with AV-HS450, allowing easy operation with higher compatibility.

2. Key Features

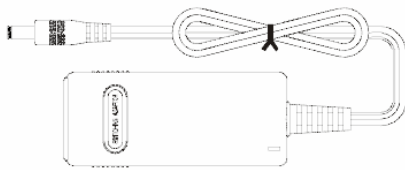
Cross-point setting is used to select materials for the following buses:

- KEY PinP1, PinP2, SDK1, DSK2, AUX1, AUX1, AUX3, AUX4, PGM/A, PST/B
- AUTO Transition is available for AUX1 bus.
(Note: Effects and Time settings are configured from the main switcher unit.)
- The switches and buttons can be locked to avoid operation error.
- The rotary switch located in rear panel controls the selection of the bus when power is turned on.

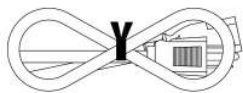
3. Accessories

■ AC Adaptor

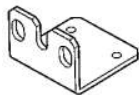
SINPRO·Venetex Brand, AC Adaptor SPU16-105 DC12V 1.25A



■ Power Cable



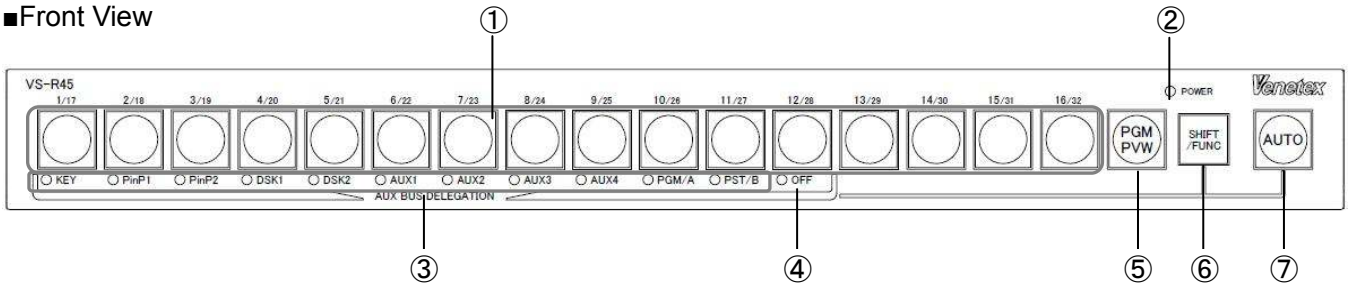
■ Rack Mount Bracket (2 pcs.)



- Screws for Bracket Attachment (M4 x 10 W, x 4)
- Operation Manual (This document)

4. Part Names and Functions

■Front View



①Material/Bus Selection Buttons

To select materials

To select a bus, press a button while pressing SHIF/FUNC + AUTO simultaneously. Button light will be on for the currently selected material.

②Power Indicator

Green light is on when the device power is on.

③Bus Status Indicator

Indicates the current active bus.

Green light is on for the active bus.

④Key Lock Indicator

Green light is on when Key Lock is in effect.

⑤PGM/PVW Button

To select PGM or PVW Material.

Press once to choose PGM. Press once along with SHIFT/FUNC button for PVW.

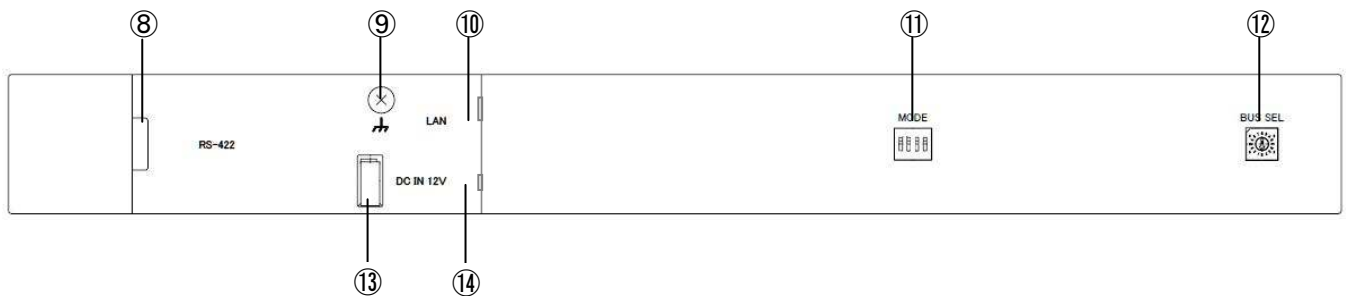
⑥SHIFT/FUNC Button

To select Material #17 and up.

⑦Auto Button

To turn on AUTO Transition.

■Rear View



⑧RS-422 Connector

Connector for RS-422 Cable

⑨Ground Terminal

To Connect ground wire

⑩LAN Connector

To connect LAN cable

※Available in 2010

⑪Dip Switch for Mode Selection

Dip Switch allows you to select operation mode.

⑫Rotary Switch for Bus Selection

To assign the bus on initial power-up.

⑬DC Cable Clip

To fasten the device to avoid power cable disconnection

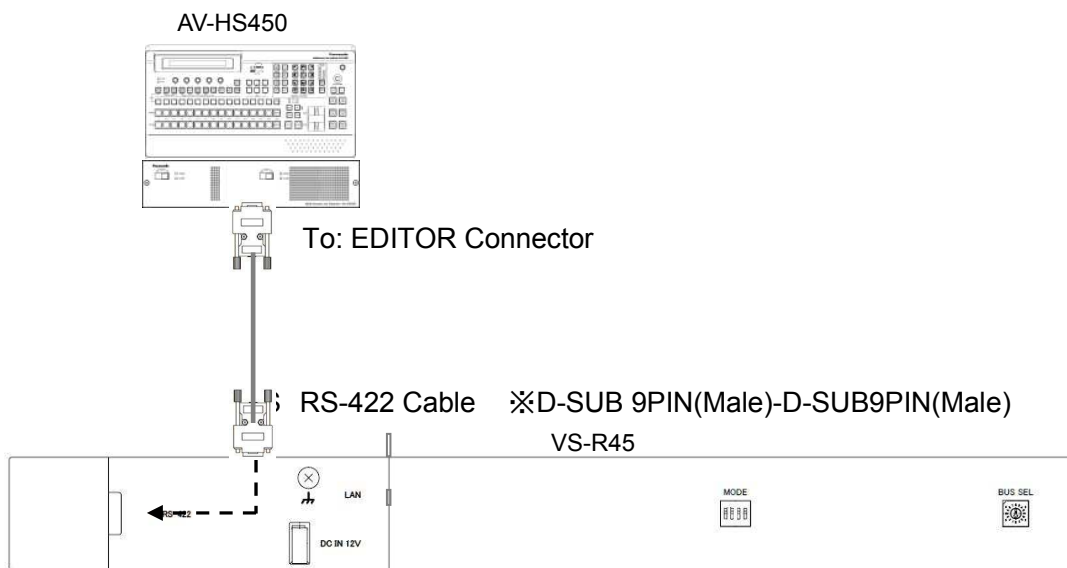
⑭DC Jack

Female DC plug

5. Connecting VS-R45 with AV-HS450 Switcher

You can connect VS-R45 and AV-HS450 as follows:

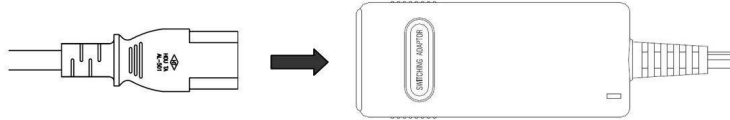
■Using RS-422 Cable



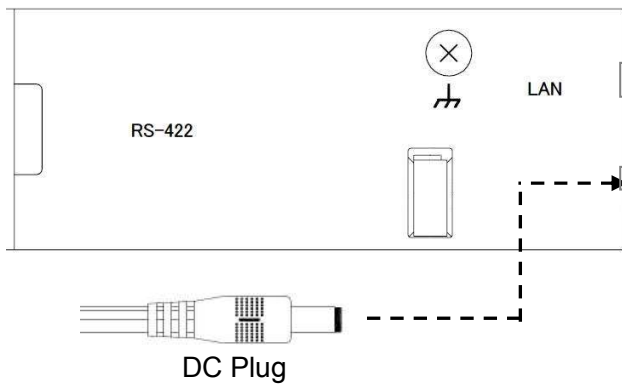
6. Turning On the Power

※Always use SPU16A-105 AC adaptor that comes with the device.

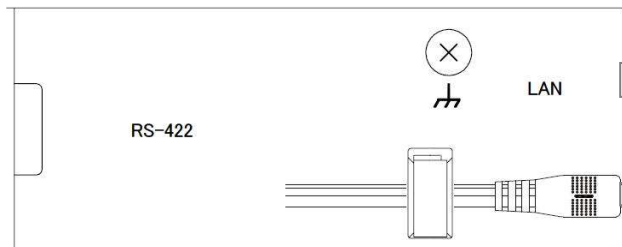
①Connecting Power Cable with AC Adaptor



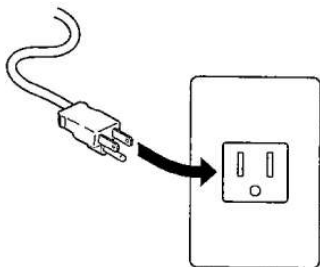
②Connecting AC adaptor to the Unit



③Securing the DC Cable to the Unit

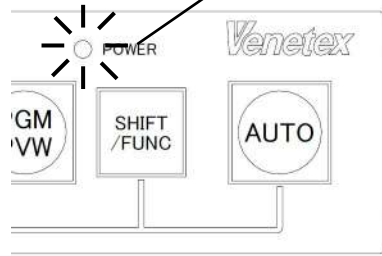


④Plugging the Power Cable into the Outlet.



⑤ Confirm the power is on

Power indicator light turns on (GREEN)



※Operation begins when AC adaptor is connected and AC Code is plugged into the outlet.

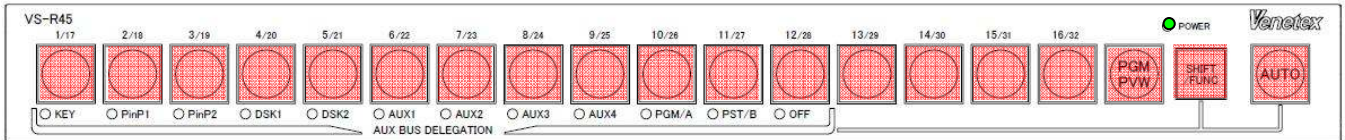
7. Operating the Unit

Followings are sample operations after the VS-R45 unit is turned on.

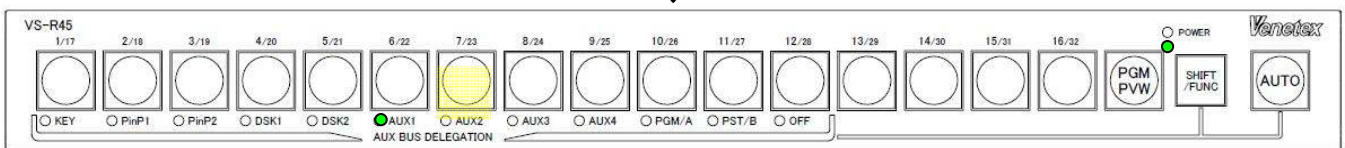
7-1. Turning the Power on

When the device is powered up initially, all buttons on the front panel will be on in RED.

When the communication with AV-HS450 is established, the lights on all buttons come OFF, and then the button and indicator light for currently selected material and bus will come on.



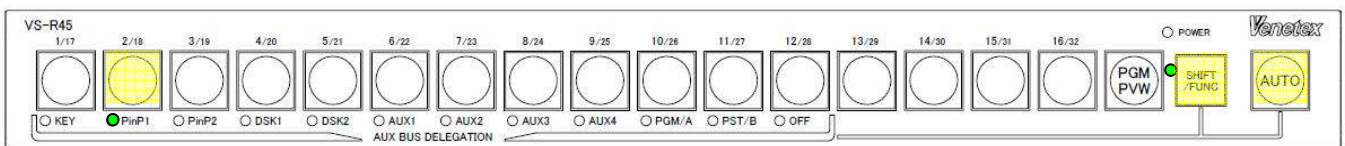
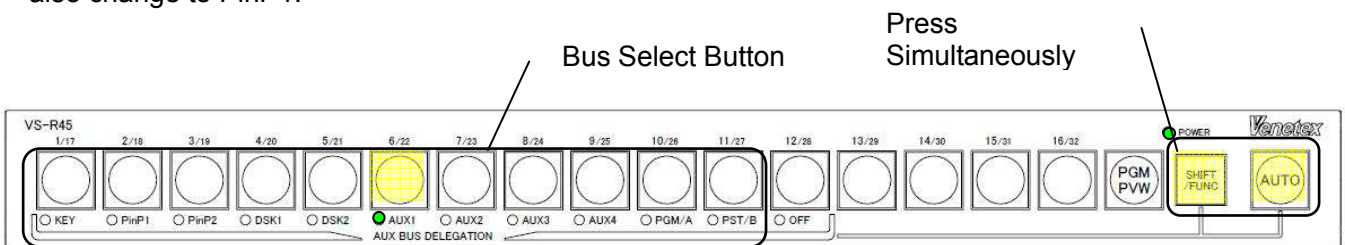
↓ After Communication is Established



7-2. Current Bus Status and Selecting Bus

When SHIFT/FUNC and AUTO buttons are simultaneously pressed, the light for the currently selected bus turns AMBER. You can then select a different bus.

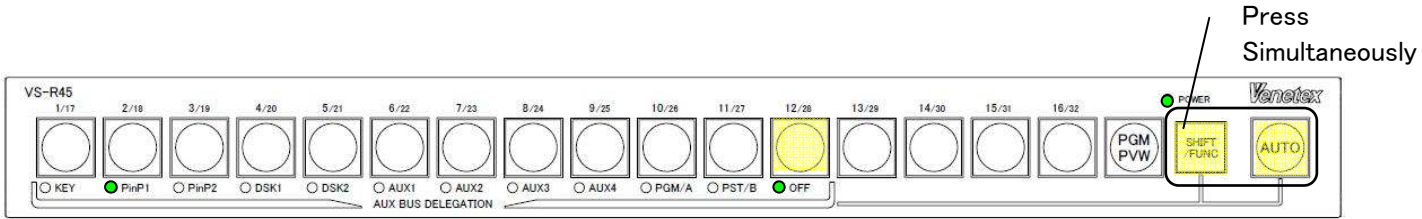
The following diagram shows that AUX1 bus is currently selected. If PinP1 button is pressed, then AUX1 button comes OFF and instead PinP1 button light comes on in AMBER. Bus Status Indicator is also change to PinP1.



※When A/B bus mode is set on AV-HS450, the unit will always operate with PGM bus if PGM/A is selected and also with PST bus if PST/B is selected.

7-3. Key Lock

It employs the Key Lock feature to avoid button operation errors. Key Lock indicator light is on when the lock is on. Bus, material or AUTO Transition cannot be changed in this mode. Key Lock can be set ON or OFF by pressing the OFF button while pressing both SHIFT/FUNC and AUTO buttons simultaneously. Key Lock setting rotates between ON and OFF each time the OFF button is pressed.



7-4. Selecting the Material

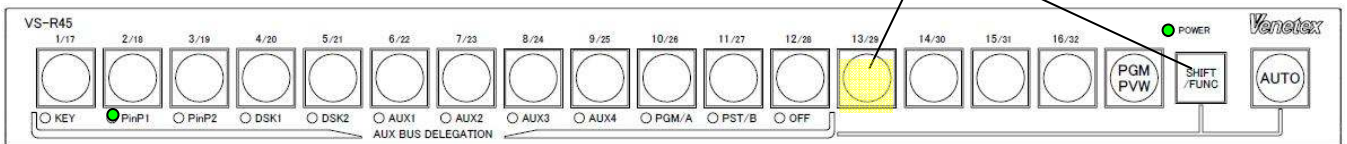
Button light comes on for the selected material. You can select from up to 32 types of materials. To select material #1 through #16, press a corresponding button once. To select material #17 through #32, pressing a corresponding button 1 through 16 with SHIFT/FUNC simultaneously. PGM/PVW material can be selected for AUX1 through AUX4 buses.

※It indicates the status of Material 1 to 16 when SHIFT/FUNC is OFF and 17 to 32 when SHIFT/FUNC is ON.

※When SHIFT feature is set on Cross Point Button with AV-HS450, corresponding button switches to the material assigned to each SHIFT.

Table 7.1 summarizes the relationship between the button operations and material selections.

It shows Material #13 when SHIFT/FUNC is OFF.



It shows Material #22 when SHIFT/FUNC is ON.

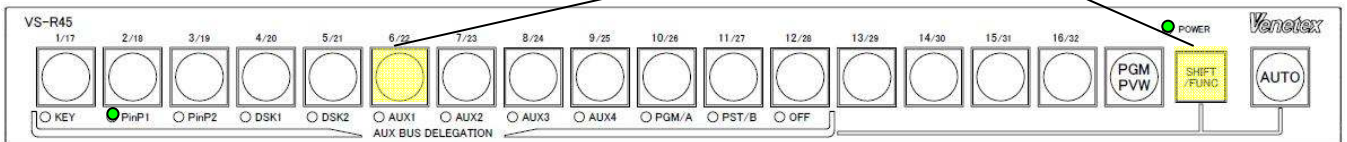


Table 7.1: Relationship between button operations and material selections

Button Operation	Material No.	Button Operation	Material No.
Press No. 1 button	Material 1	SHIFT/FUNC + No. 1 button	Material 17
Press No. 2 button	Material 2	SHIFT/FUNC + No. 2 button	Material 18
Press No. 3 button	Material 3	SHIFT/FUNC + No. 3 button	Material 19
Press No. 4 button	Material 4	SHIFT/FUNC + No. 4 button	Material 20
Press No. 5 button	Material 5	SHIFT/FUNC + No. 5 button	Material 21
Press No. 6 button	Material 6	SHIFT/FUNC + No. 6 button	Material 22
Press No. 7 button	Material 7	SHIFT/FUNC + No. 7 button	Material 23
Press No. 8 button	Material 8	SHIFT/FUNC + No. 8 button	Material 24
Press No. 9 button	Material 9	SHIFT/FUNC + No. 9 button	Material 25
Press No. 10 button	Material 10	SHIFT/FUNC + No. 10 button	Material 26
Press No. 11 button	Material 11	SHIFT/FUNC + No. 11 button	Material 27
Press No. 12 button	Material 12	SHIFT/FUNC + No. 12 button	Material 28
Press No. 13 button	Material 13	SHIFT/FUNC + No. 13 button	Material 29
Press No. 14 button	Material 14	SHIFT/FUNC + No. 14 button	Material 30
Press No. 15 button	Material 15	SHIFT/FUNC + No. 15 button	Material 31
Press No. 16 button	Material 16	SHIFT/FUNC + No. 16 button	Material 32

(1) Button Color for Material Selected

Button color of selected material differs depending on the selected bus.
Table 7.2 summarizes the button color for each material selected.

Table 7.2: Button Colors for Selected Material

Order	Bus	Color of Button
1	KeyF Bus	Amber
2	KeyS Bus	Green
3	PinP1 Bus	Amber
4	PinP2 Bus	Amber
5	Dsk1F Bus	Amber
6	Dsk1S Bus	Green
7	Dsk2F Bus	Amber
8	Dsk2S Bus	Green
9	Aux1 Bus	Amber
10	Aux2 Bus	Amber
11	Aux3 Bus	Amber
12	Aux4 Bus	Amber
13	PGM/A Bus	Amber
14	PST/B Bus	Green
15	PGM	Amber
16	PVW	Green

(2) Fill Bus & Source Bus

•Key Bus

You can set the bus line to Key Fill or Key Source when Key Bus is selected.

(Each time the button is pressed, it alternates between Key Fill and Key Source. Button illuminates in Amber for Key Fill and Green for Key Source.)

•DSK1 Bus

You can set the bus line to DSK1 Fill or DSK1 Source when DSK1 Bus is selected.

(Each time the button is pressed, it alternates between DSK1 Fill and DSK1 Source. Button illuminates in Amber for DSK1 Fill and Green for DSK1 Source.)

•DSK2 Bus

You can set the bus line to DSK2 Fill or DSK2 Source when DSK2 Bus is selected.

(Each time the button is pressed, it alternates between DSK2 Fill and DSK2 Source. Button illuminates in Amber for DSK2 Fill and Green for DSK2 Source.)

(3) PGM/PVW

PGM and PVW are also available in addition to Materials 1 through 32 when AUX1, AUX2, AUX3, or AUX4 bus is selected.

※PGM/PVW button is prohibited when the material is assigned 1 through 32.

7-5. AUTO Button

Transition runs by pressing AUTO button when KEY, PinP1, PinP2, DSK1 or DSK2 bus is selected. When AUX1 bus is selected, AUX1 transition is effective if the light is on and not effective if the light is off.

※Button Indication will not correspond between AV-HS450 and VS-R45 if ON/OFF setting is changed from the menu on AV-HS450 after operating from the remote panel.

※The transition time of AUTO Transition is configured from AV-HS450 unit.

7—6. Selecting the Bus on Initial Power-up

Use the rear panel rotary switch to select the bus on initial power-up. Select the appropriate number to choose the bus. The bus setting with the rotary switch becomes invalid once the bus setting is changed from the front panel buttons.

Table 7.3 shows the correspondence of the rotary switch and the bus selection.

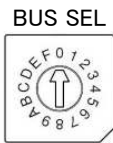


Chart #7.3 Point the arrow at the number or letter you want to select.
Factory Default Setting

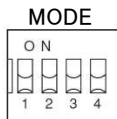
Table 7.3 Rotary Switch and Corresponding Bus

No.	Bus
0	KeyF Bus
1	KeyS Bus
2	PinP1 Bus
3	PinP2 Bus
4	Dsk1F Bus
5	Dsk1S Bus
6	Dsk2F Bus
7	Dsk2S Bus
8	Aux1 Bus
9	Aux2 Bus
A	Aux3 Bus
B	Aux4 Bus
C	PGM/A Bus
D	PST/B Bus
E	Unused (Aux1 Bus if selected.)
F	Unused (Aux1 Bus if selected.)

7—8. Operation Mode Settings

Use the dip switches on the rear panel to set the operation modes.

Table 7.4 shows the operation mode settings



Factory Default Setting

1 2 3 4
OFF OFF OFF OFF

Table 7.4 Setting the Operation Mode

No	Type of Operation	Setting
1	Reserve	OFF: (Leave OFF at the all time)
2	Reserve	OFF: (Leave OFF at the all time)
3	Reserve	OFF: (Leave OFF at the all time)
4	Disabling PGM/A, PST/B	OFF: PGM/A, PST/B Bus selection is available ON: PGM/A, PST/B Bus selection is prohibited

8. Specifications

8-1. Device Specifications

Table 8.1: Device Specifications

項目		仕様	備考
Name of Device		Remote Control Panel for Switcher	
Model No		VS-R45	
Intended Switcher (to use with)		AV-HS450 (Panasonic)	
Operation Switches	Material Selection Buttons	32 (Also used for Bus selection)	※ All buttons illuminate in Green, Red and Amber.
	PGM/PVW Button	1	
	SHIFT/FUNC Button	1 (Activate FUNCTION mode by pressing AUTO + SHIFT/FUNC)	
	AUTO Button	1 (Activate FUNCTION mode by pressing AUTO + SHIFT/FUNC)	
Control	RS-422	DSUB 9Pin	
	LAN	RJ-45 (10/100Base-T)	Available in 2010
Power Supply	Model No	SPU16A-105	
	Input	AC 100~240V	
	Output	DC +12V	
	Power Consumption	Less than 10W	
Operating Environment		0□ to 40□ (or 32F to 104F), 10% RH ~ 90%RH (No condensation)	
Dimensions / Weight		1U size 420(W)×43.6(H)× 55(D)mm / Less than 3Kg	
Accessories		AC Adaptor, Rack Mount Kit(Blaketx2, screwx4), Operation Manual (this document)	
Safety and Environmental Compliance		RoHS, MET, CE, GOST, FCC, VCCI	

8-2. RS-422 Specifications

(1) Type of Connector

D-SUB 9 PIN Female (DDK Brand: 17JE-13090-02)

(2) Pin Assignment

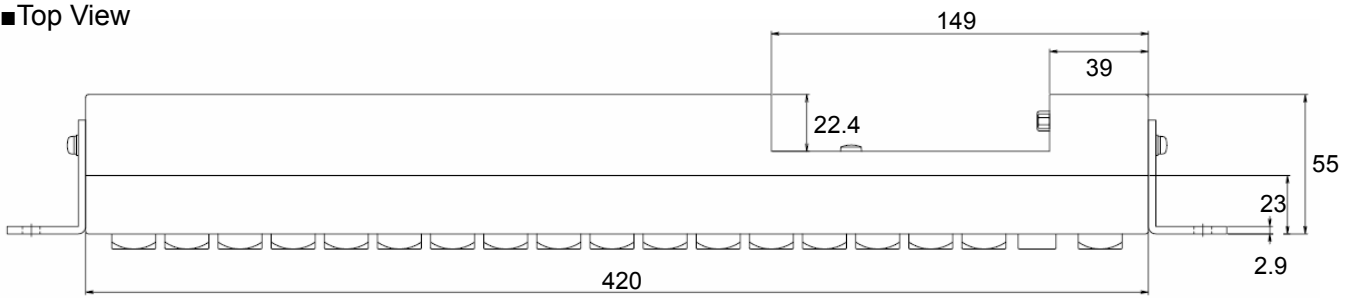
Table 8.2: Pin Assignment

Pin No	Assignment
1	FG
2	RXD-
3	TXD+
4	GND
5	NC
6	GND
7	RXD+
8	TXD-
9	FG

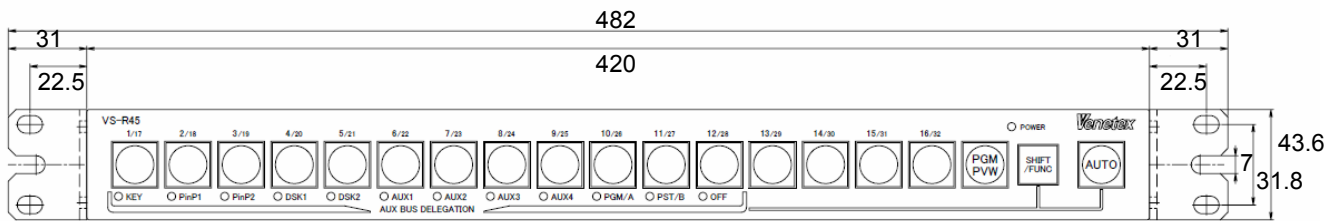
(3) RS-422 Cable: should be used with D-SUB9PIN(Male) both end.

9. Outline Dimensions

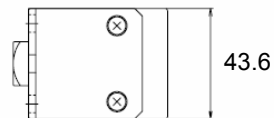
■ Top View



■ Front View



■ Side View



10. Customer Support

(1) Warranty

Warranty period is limited to one year from the date of delivery.

Repairs are provided free of charge during the warranty period for conditions occurring under normal operations.

Such warranty includes software bug repairs occurring within one-year warranty period.

Repairs for the following conditions will be performed for a fee even within the warranty period:

- Breakdown and/or damage caused by an operational error or repair and/or alteration performed by an unauthorized party.
- Natural disaster, installation and environmental conditions such as vibrations, ambient temperature, moisture, dust and caustic gas. Breakdown and/or damage caused by the abnormal voltage or power supply not specified in the specifications (voltage/frequency).
- Breakdown and/or damage caused by the usage under the abnormal conditions not specified by the manufacturer.
- Breakdown and/or damage caused by other peripheral equipment or parts connected to the unit.
- Breakdown and/or damage of the consumable parts and items specified.

(2) Requesting Repair Service

For all maintenance, please contact the dealer you purchased the unit from.

【Please have the following information ready when contacting the Repair Department】

- Company Name, Department, Name, Phone Number
- Product Name, Model Number, Dealer Name, Purchase Date
- Detailed Description of the Problem or Abnormal Condition
- Preference for Repair Date and Time

Warranty Conditions

Products: Remote Control Panel for Multi Format Live Switcher AV-HS450 (Panasonic)

Model : VS-R45

Warranty Period: One Year

Serial No:

Customer Information

Address:

Name of Company

Department

Name of person in charge

Phone No.

Dealer Information

Address

Name of Company

Phone No.

Date of Purchase

Warranty provides free repair services for mechanical failures under the normal usage specified in the operation manual.

For repair services, please contact the dealer that you purchased the unit from.

Please review "About Maintenance Services" in the operation manual for more information.

Venetex Corporation

8-3-9 Shin-machi, Ohme-shi, Tokyo 198-0024, Japan

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