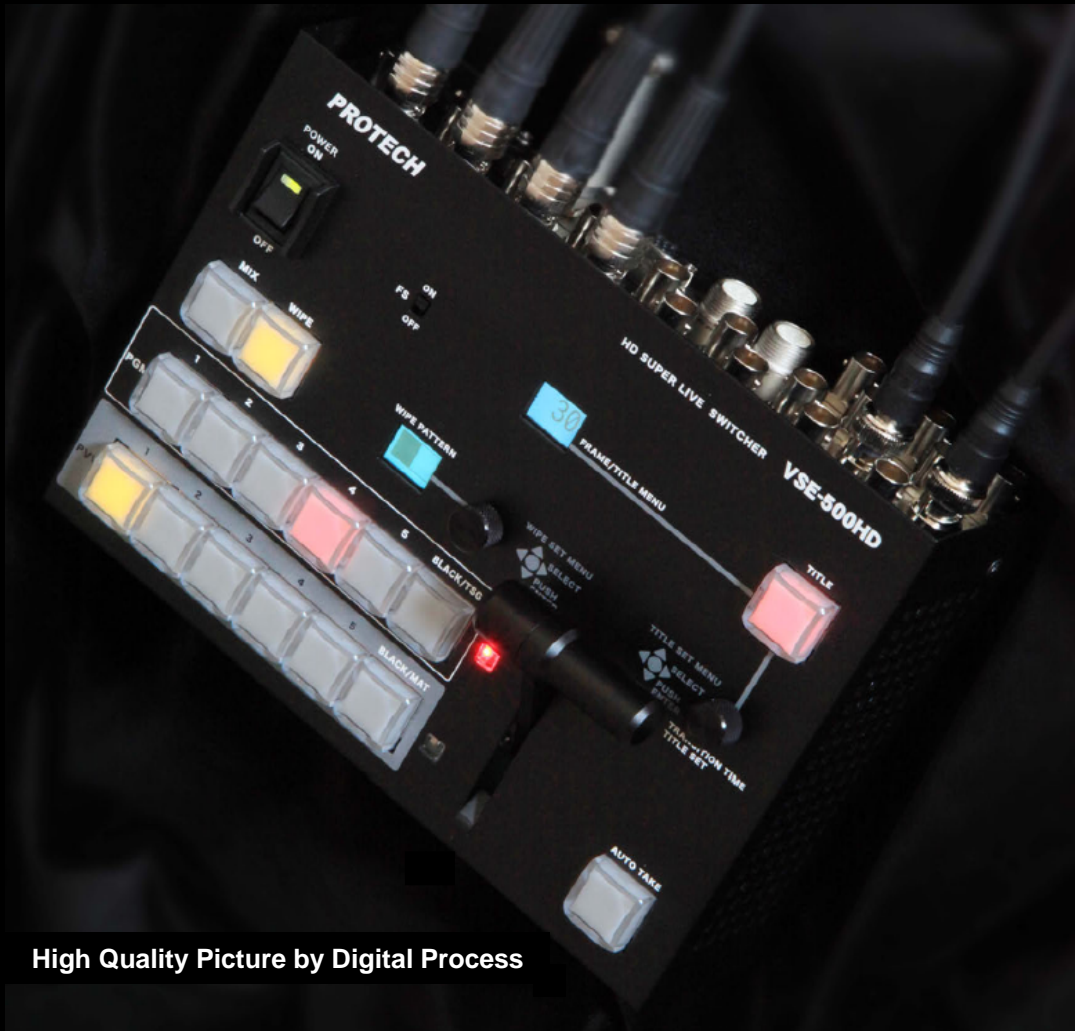


**PROTECH<sup>®</sup>**

HD Super Live Switcher

**VSE-500HD**

**Support Comfortable Operation**  
**HD Super Live Switcher**



High Quality Picture by Digital Process

[www.protechweb.jp](http://www.protechweb.jp) Actual product might be different from the picture.  
Products may be improved without notice.

# Easy set up and excellent operability

## Main features of VSE-500HD

- 6 inputs of HD-SDI 1080/60i(30PsF)
- Through-out for all inputs
- Auto take
- Direct cut
- Fade in/out
- 13 wipe patterns
- Title input
- Built-in frame synchronizer
- ON/OFF of frame synchronizer
- Built-in synchronized signal generator
- Large-sized lever
- 4 channels of PGM OUT
- Preview out
- AC operation
- DC12V operation
- Tally output
- 2-camera operation by one person through Zoom Remote Controller (PAT.P).
- Transition time set up from 0 through 240 frames
- Optional rack-mount kit available

### High quality switching / Easy operation

High quality video switching is realized which utilized the merit of the HD video.

Overlap, direct cut and wipe are possible. There is not disorder of the video with direct cut operation and the switching is very clear.

AC operation and DC12V operation are possible. It is suitable for a live shooting and a event shooting in outdoors.

### 6 channels inputs in the compact body

#### Through-out for all channels

HD-SDI inputs are 5 channels. Title input is 1channel which can be set to HD-SDI input when title is not used. Total 6 sets of camera or VTR can be connected. Through-out of all channels is possible and a distributor for monitor is not necessary. Wiring is simple and cable wiring around switcher was substantially reduced. It makes the work and the facilities which was sparing time a minimum and it makes a setting at short time possible.



### Built-in frame synchronizer

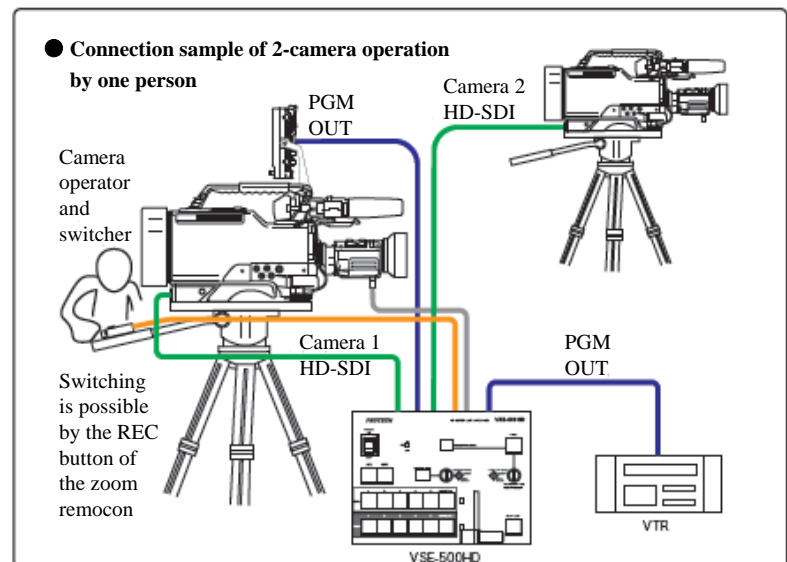
Thanks to the built-in frame synchronizer, direct cut is possible. It is possible to select the picture without disorder.

External synchronization is possible. The system with the synchronization signal generator can be made in order to avoid the delay of lip synchronization by the frame synchronizer. ON/OFF of frame synchronizer is possible.

### Auto take mode makes 2-camera operation by one person possible.

Auto take is possible by using optional pen type auto take switch AR-53, PROTECH zoom remocon AS-520 and the zoom remocon made by the lens manufacture.

2-camera operation by one person is possible. Camera operator can switch a best shot to the main line by own will.



**Small size and light weight:**  
**Space and time saving / Quick installation / Easy logistics.**



Operation Panel



Connector Panel

**Red tally and green tally**

Red tally out and green tally out which indicates next chosen camera are equipped. (When green tally is used, optional view finder HDF-700 and tally unit TU-600 are necessary.)

By the combination with the optical fiber studio system, the functions like a large studio are realized with a small system. Camera rehearsal is substantially reduced because the next chosen camera is announced beforehand.

**Large-sized lever**

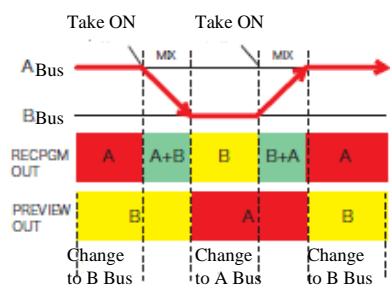
The change lever which changes the picture smoothly is the heart of video switcher, too. When making the exquisite overlap scene manually, the feeling of the image creator must be reflected correctly.

The operation feeling of the lever of VSE-500HD is very fitted.



**Monitor preview function**

In a standard system, 3 monitors are necessary for 3-camera shooting and 5 monitors are necessary for 5-camera shooting in the site. In the case of VSE-500HD, by using VSE-500HD, monitoring of multi-camera shooting can be done by only 2 monitors.

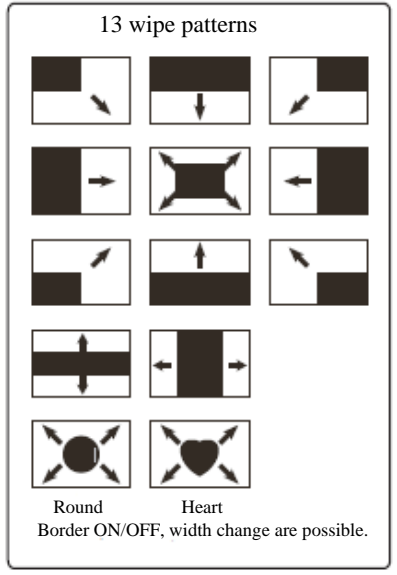


**Cable compensation circuit**

By the built-in cable equalizer, degraded signal is compensated. Approximate 100m cable extension is possible by 5CFB. Compensated signal is output to the through-out.

**13 wipe patterns**

13 wipe patters are prepared. Round wipe, square wipe, heart wipe, etc are available. ON/OFF of border and adjustment of the width are possible. It is possible to make a back to be a picture or a mat color.



**Robust, thin and light-weight design**

It was designed with high reliability considering a severe status to be used by professional operators in various conditions.

It uses metal chassis for the body.

The weight of the main unit is approximately 1.4kg. Robustness, thin and light-weight are realized.

**Title insertion**

Title signal can be chosen by Key. Title printed on a paper can be input easily by shooting with a camera and choosing with Key as well as PC input. ON/OFF of border is possible.



When using Title, bus changing is not possible.

**Various options are available**

The HD LCD monitor which used high-intensity, high contrast LCD panel is available as option. It is expandable to 2-monitor, 3-monitor and 4-monitor system. All-in-one recording becomes possible with the carrying case SC-550 fixed by the rack-mount kit HS-RA80.

## Option and related products



Hard Case

### SC-550

Hard case to put 1 set of VSE-500HD, intercom, monitor, etc



Hard case for VSE-500HD, Intercom FD-300A, View finder HDF-700, Hyper Limiter FS-206, etc



Intercom

### FD-300A

Wired intercom with headset. Wiring is BNC cable.



HD View Finder  
(used as monitor)

### HDF-700

Clear-peaking function is equipped. It can be used as a master monitor.



Swing Arm for tripod installation

### STF-100

The metal fittings to install between the pan tilt head and the tripod base.



Tally Adaptor  
**TU-600**

BNC output adaptor of the tally signal of VSE-500HD



Hyper Limiter  
**FS-206**

Limiter to suppress +30dB over input instantly



Auto Take Switch  
**AR-53**

Auto take switch for VSE-500HD



EIA 2U 4-set 4.3" Rack-mount Monitor

### HDM-4000

4-set 4.3inch monitor. HD-SDI input. Measurement function is equipped.



EIA 3U 3-set 5" Rack-mount Monitor

### HDM-3000

3-set 5inch monitor. HD-SDI input. Measurement function is equipped.



EIA 3U 2-set 7" Rack-mount Monitor

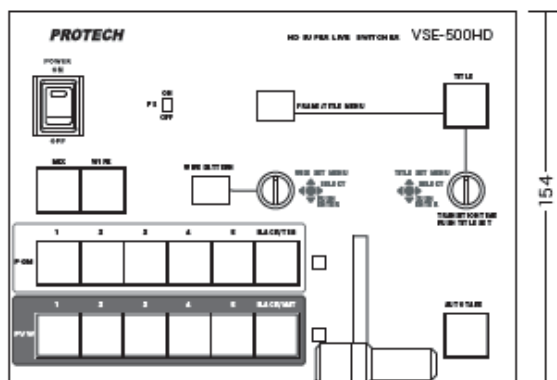
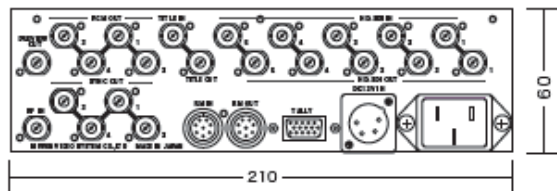
### HDM-2000

2-set 7inch monitor. HD-SDI input. Measurement function is equipped.

## Main specification

Video format	HD-SDI 1080/60i (30PsF)
Video signal process	Sampling Y:Cb:Cr, 4:2:2 10bit
Video input	HD-SDI IN (1080/60i): 5 channels TITLE IN: 1 channel (SDI input possible)
Video output	HD-SDI OUT (1080/60i): 5 channels TITLE OUT : 1 channel (TITLE IN through- out)
Video switching	PGM OUT: 4 channels PREVIEW OUT: 1 channel
Number of wipe pattern	Direct cut, Overlap wipe 13
Transition time	From 0 frame to 240 frames
Title key	Key number: 1 channel When using wipe/mix, wipe/mix has priority. When using title, title has priority.
Kind of key	Liner key, Luminance key, Absolute key
TALLY	RED TALLY, GREEN TALLY D-sub 15-pin female
2-camera by one person	A/B switching function by zoom remocon (PAT.P)
Sync. Generator	SYNC OUT: 4 channels
Synchronization	External synchronization is possible. RF IN: 1 channel
Frame Synchronizer	Built-in frame synchronizer (ON/OFF possible)
Power supply	DC12V ±10%, 1A
Operating temperature	0°C~40°C
Operating humidity	10%~90% (without dew)
Outside dimension	210mm x 60mm x 154mm (W x H x D)
Weight	Approx. 1.4kg
Accessory	Power supply code

## Outside view



**Manufactured by: Nippon Video System Co., Ltd**  
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