Live Switcher
AW-SW350
Proposal of a system solution

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5-inputs, Compact Size Live Switcher with Versatile Functions

Live Switcher

AW-SW350

■**KEY FEATURE**

5 inputs (Composite & Y/C) in Compact Body

● 5 composite inputs/2 outputs are available. Auto termination and loop through outputs.
● 5 Y/C video inputs/1 outputs (4P) are available.
● Possible to switch input 5 and video in self-contained frame memory. Selectable color background: black and nine colors

Three Program Outputs and One Preview Output

● 3 Program outputs（Composite X2, Y/CX1）
● Preview output for confirmation of next operation.

Selectable Bus Switching System

● Selectable A/B bus system or Flip Flop system in bus operation.

10 bit 5-channel Frame Synchronizer/

External Gen-lock System

● Built-in 10 bit 5-channel frame synchronizer, which is useful for high-quality switching(No freeze picture in asynchronous video input)
● This switcher can also has the Frame Synchronizer turned off and thus be used as a gen-lockable device for high-quality video.
● This has Black Burst Output and also this can be gen-locked by external video signal.

Frame Capture, Soft Wipe and Linear Key

● USB port is available for mixing/keying video and characters graphics from PC. One frame memory is self-contained.
● Nine wipe patterns and manual/auto wipe(hard wipe/3 steps of soft wipe)
● Smooth characters keying by linear key system.

DC Operated Compact Switcher

● This half rack size switcher can be operated by DC battery input so that it may be operated as a field switcher.
 (Note:Be careful of rain and water drop because this is not water proof construction.)

Tally and Intercom Function

● 5 tally outputs
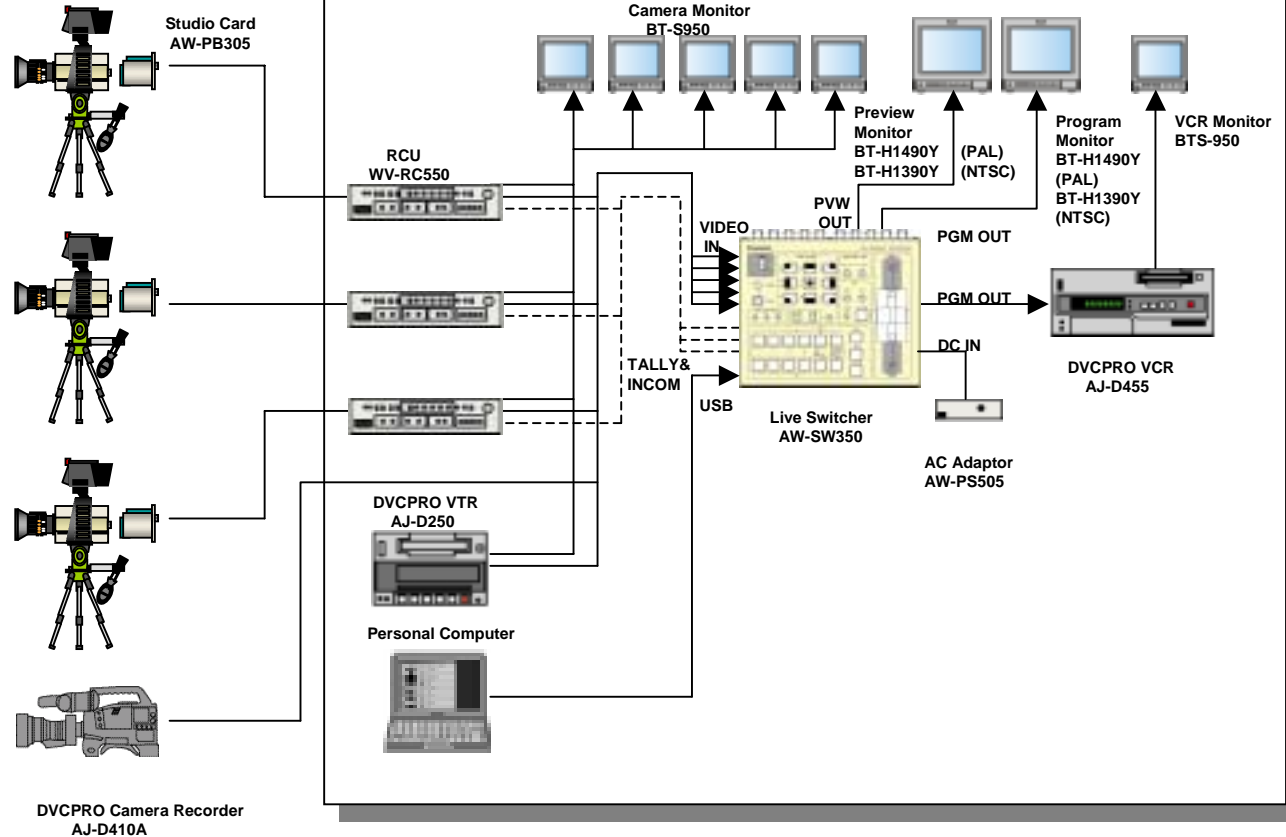● 5 intercom inputs/outputs

NTSC/PAL Switchable

● This can be used in both NTSC and PAL format.

FIELD/STUDIO PRODUCTION SYSTEM

**EFP Studio Camera
AW-E800A/E600/E300A**

**Studio Card
AW-PB305**

**Camera Monitor
BT-S950**

**RCU
WV-RC550**

**Preview
Monitor
BT-H1490Y
BT-H1390Y**

**(PAL)
(NTSC)**

**Program
Monitor
BT-H1490Y
(PAL)
BT-H1390Y
(NTSC)**

**VCR Monitor
BTS-950**

**PVW
OUT**

**VIDEO
IN**

PGM OUT

PGM OUT

**DVCPRO VCR
AJ-D455**

**TALLY&
INCOM**

USB

**Live Switcher
AW-SW350**

DC IN

**AC Adaptor
AW-PS505**

**DVCPRO VTR
AJ-D250**

Personal Computer

**DVCPRO Camera Recorder
AJ-D410A**

■KEY FEATURES

①High quality video production system with no gen-lock system or gen-lock system.

②AC operation in production studio or DC operation in field production.

③Total 5 cameras, camera recorders or VCRs can be connected. (Total 5 video inputs)

④Title characters or graphic through USB port from PC can be wiped, mixed or imposed in the program video.

⑤Each camera operator can be communicated with a director by tally indicator and intercom communication.

⑥Program video from the switcher can be recorded by DVCPRO studio recorder.
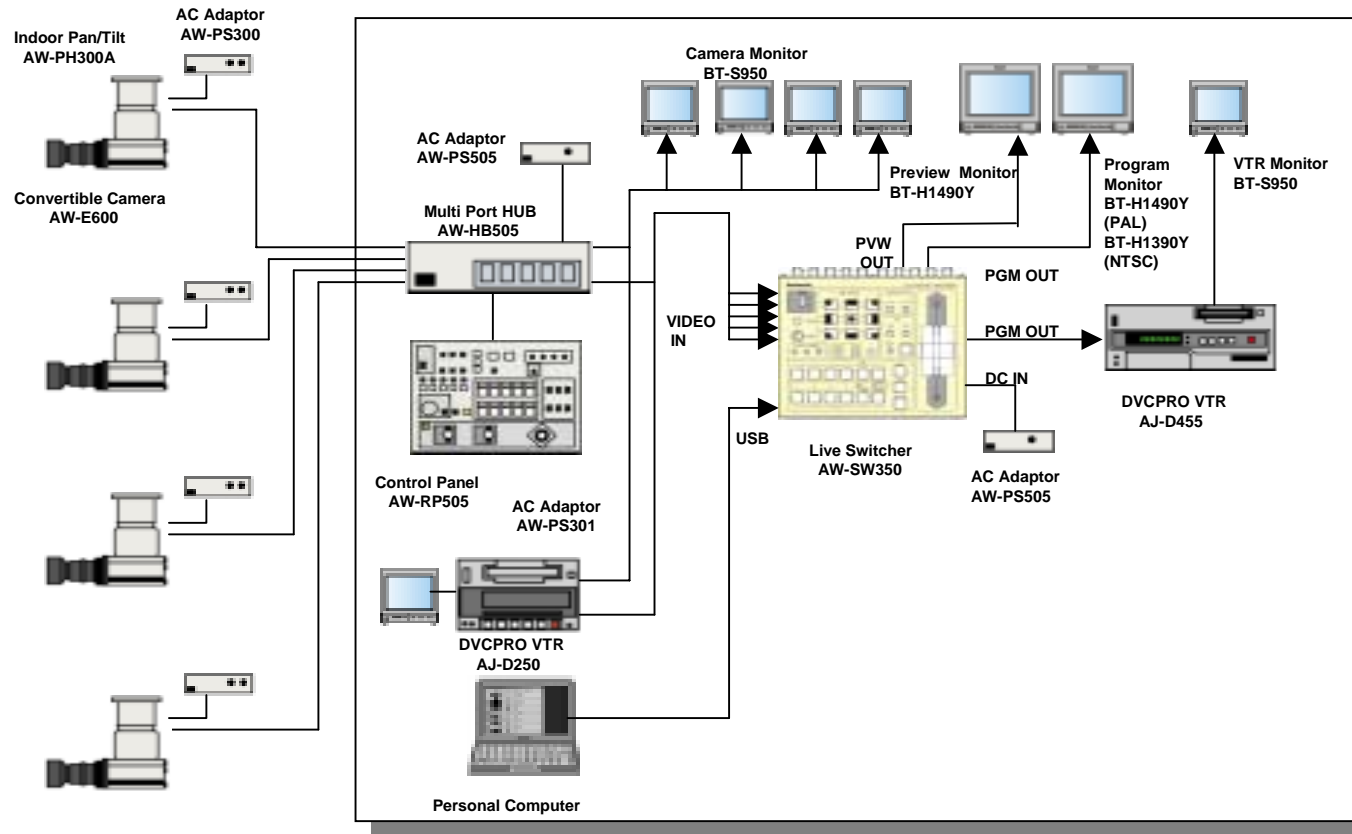
■PRODUCT CONFIGURATION

3 CCD Convertible Camera	AW-E600	3	$
16X Zoom Lens	AW-LZ16ST73P	3	$
Studio Card	AW-PB305	3	$
5" Viewfinder	AW-VF65B	3	$
Viewfinder Bracket	AW-Q40	3	$
Lens Control Kit	AW-LK50	3	$
ote Control Unit	WV-RC550	3	$
RCU Cable(15m)	AW-CA50A26	3	$
DVCPRO Camera Recorder	AJ-D410A	1	$

16X Zoom Lens	YH16X7KRS	1	$
DC Battery	32142	1	$
1.5" Viewfinder	AJ-VF15	1	$
Live Switcher	AW-SW350	1	$
DVCPRO Studio Recorder	AJ-D455	1	$
DVCPRO Desktop Recorder	AJ-D250	1	$
9" Professional Monitor	BT-S950	6	$
13" Professional Monitor	BT-H1490Y(1390Y)	1	$
AC Adaptor	AW-PS505	1	$
Power Cable	AW-CA4T1	1	$
PC		1	$

Note:Cost of Audio System is estimated separately

REMOTE OPERATION VIDEO SHOOTING SYSTEM

SYSTEM 2

Indoor Pan/Tilt
AW-PH300A

AC Adaptor
AW-PS300

Convertible Camera
AW-E600

AC Adaptor
AW-PS505

Multi Port HUB
AW-HB505

Camera Monitor
BT-S950

Preview Monitor
BT-H1490Y

Program Monitor
BT-H1490Y
(PAL)
BT-H1390Y
(NTSC)

VTR Monitor
BT-S950

PVW OUT

PGM OUT

PGM OUT

DC IN

VIDEO IN

USB

Live Switcher
AW-SW350

AC Adaptor
AW-PS505

DVCPRO VTR
AJ-D455

Control Panel
AW-RP505

AC Adaptor
AW-PS301

DVCPRO VTR
AJ-D250

Personal Computer

■KEY FEATURE

①Total 5 cameras and pan/tilt system can be remotely controlled.

②High quality video can be distributed and recorded by DVCPRO VTR.

③Quiet, smooth and accurate pan/tilt motion are suitable for quiet production studio, conference room, church, parliament,etc.

④Titles, graphics through USB port from PC can be wiped, mixed and superimposed in program video.

⑥Program video from the switcher can be recorded by DVCPRO studio recorder. Maximum recording time is 184 minutes by using "L" cassette.

■PRODUCT CONFIGURATION

3CCD Convertible Camera	AW-E600	4	$
16X Zoom Lens	AW-LZ16MD73	4	$
Pan/tilt Head	AW-PH300A	4	$
Pan/tilt Cable	AW-CA50T16	4	$
AC Adaptor	AW-PS300	4	$
Control Panel	AW-RP505	1	$
AC Adaptor	AW-PS301	1	$

Switcher	AW-SW350	1	$
Hub Unit	AW-HB505	1	$
DVCPRO Studio Recorder	AJ-D455	1	$
9" Professional Monitor	BT-S950	6	$
13" Professional Monitor	BT-H1490Y(1390Y)	2	$
PC		1	$
AC Adaptor	AW-PS505	2	$
Power Cable	AW-CA4T1	1	$

Note:Cost of Audio System is estimated separately
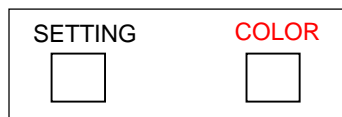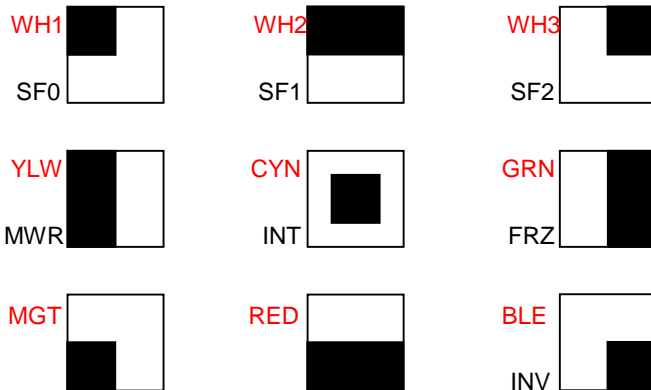
Wipe, Key and Still Video Capture

①Transition Wipe

●A picture in B bus is switched to a picture in A bus by wiping.

②Wipe Pattern

●9 types of pattern are available.
●Selectable 3 types soft wipe by pushing WIPE and SETTING buttons.
  （3 steps soft wipe:SF0，SF1，SF2）
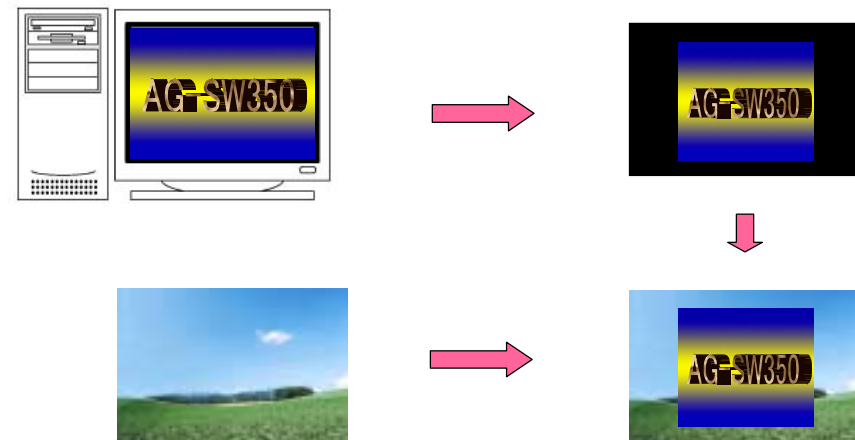●Selectable 9 colors by pushing WIPE and COLOR buttons.

WH1	WH2	WH3
SF0	SF1	SF2
YLW	CYN	GRN
MWR	INT	FRZ
MGT	RED	BLE
		INV

SETTING   COLOR

③Luminance Key

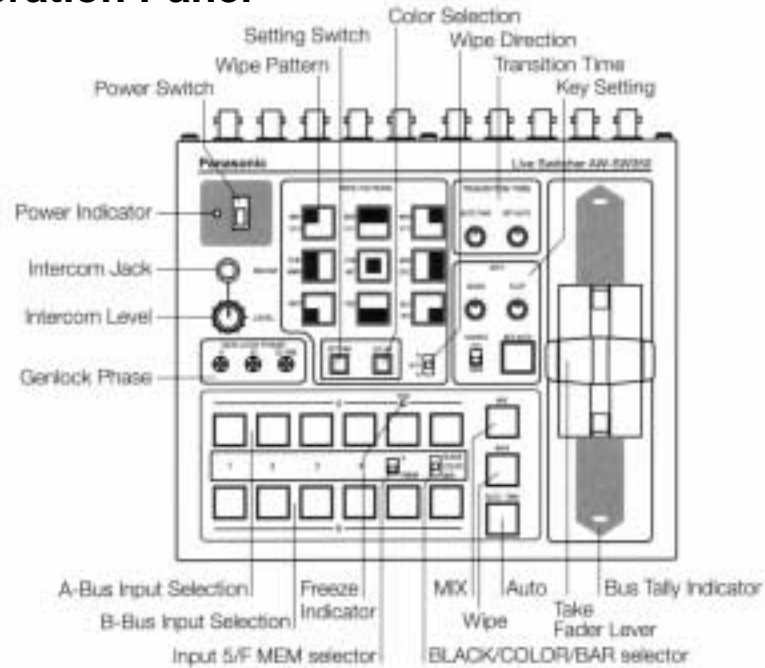●A key video can be imposed in a picture in A bus.

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④Still Video Capture

●A still picture in PC can be captured in frame memory through USB port
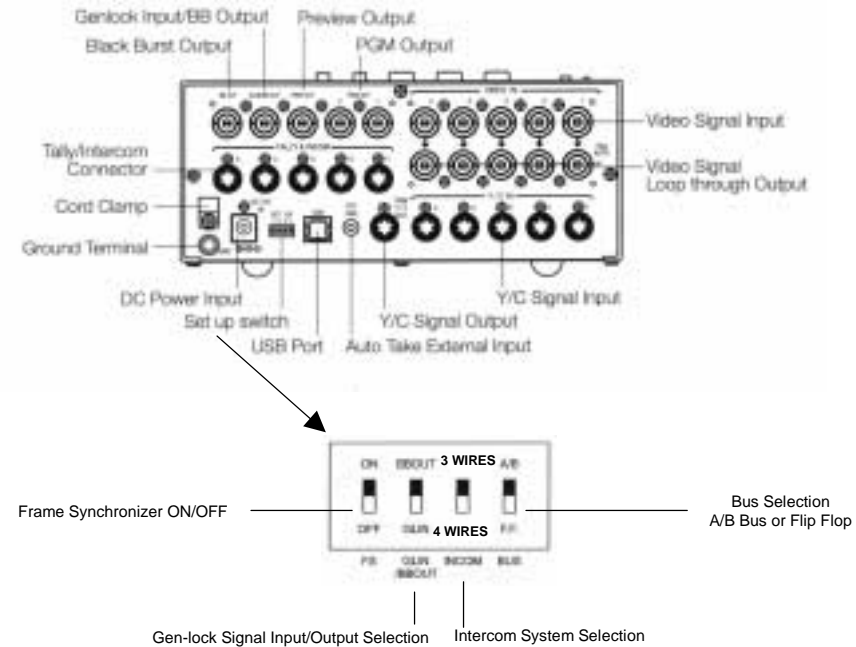●A picture captured in frame memory can be mixed with a picture of input 1, 2, 3, or 4.

AG-SW350

Control Panel/Connectors/Switches

•Operation Panel

Power Switch
Wipe Pattern
Setting Switch
Color Selection
Wipe Direction
Transition Time
Key Setting

Power Indicator
Intercom Jack
Intercom Level
Genlock Phase

Panasonic   Live Switcher AW-SW350

A-Bus Input Selection
B-Bus Input Selection
Input 5/F MEM selector
Freeze Indicator
MIX
Auto
Wipe
Take
Fader Lever
Bus Tally Indicator
BLACK/COLOR/BAR selector

•Back Side

Genlock Input/BB Output
Black Burst Output
Preview Output
PGM Output
Tally/Intercom Connector
Cont Clamp
Ground Terminal
DC Power Input
Set up switch
USB Port
Y/C Signal Output
Auto Take External Input
Video Signal Input
Video Signal Loop through Output
Y/C Signal Input

Frame Synchronizer ON/OFF
ON   BBOUT **3 WIRES** A/B
OFF   GLIN **4 WIRES** F/F
FS   GLIN/BBOUT   INCOM   BUS
Bus Selection A/B Bus or Flip Flop
Gen-lock Signal Input/Output Selection
Intercom System Selection

•Specifications

Input signal	Composite video	VBS 1.0Vp-p/75ohmX5 (auto term.)
	Y/C	Y:1.0Vp-p C:0.286Vp-pX5 (S connector)
	USB	USB 1.1
Output signal	Composite Loop through	Loop through output of composite Video output X each 1 (BNC)
	PGM output	75ohmX3 (VBS:BNCX2,S: SX1)
	PVW output	VBS 1.0Vp-pX1
	BBS output	BBSX1 (BNC), GL In/BBSoutX1
Function	Wipe	Direction(normal/reverse, normal, reverse) Nine Patterns
	Background	White/Black/6 Colors **(100%,90%,80% White)**
	Key	GAIN, CLIP
	Wipe/Mix	Manual (Fader lever)/auto (auto take)

Function	Intercom	1~5 (6 pin connector,3/4 wires switchable) Main frame (M6 jack)
	Tally control	1~5 open collector output
	Color bar	SMPTE (NTSC), EBU (PAL)
	External VR	Auto Take/Key Auto Time Adjustment,Incom. Level Adjustment, Key Level/ Key Clip Adjustment
	External Switch	WIPE,MIX,INPUT SELECTOR (1~5), Wipe Pattern Selector, Bar/Color/Black Selector, Input 5/Frame memory selection switch, Auto Take, Wipe Direction Switch
	Power	DC12V 1.35A (16W)*
	Ope. temperature	0°C~+40°C
	Weight	4.9 lbs (2.2kg)
	Dimension	8-1/4"(W) X 3-7/16"(H) X 6-15/16"(D) 210(W) X 86(H) X 177(D)mm

*Recommended Power Supply: AW-PS505(Power Supply)
AW-CA4T1 (Power Cable)

Comparison Chart

	AW-SW300	AW-SW350	AG-MX70
Description	Production Switcher	Production Switcher	AV digital Mixer
Frame Synchronizer	YES (2ch)	YES (5ch)	YES (2ch)
Frame Synchronizer OFF	YES	YES	N/A
Sampling Frequency	14.3MHz	13.5MHz	13.5MHz
Sampling	4:2:2	4:2:2	4:2:2:4
Quantization	10bit	10bit	9bit (8bit internal proc.)
Frequency Response	FS OFF ; 10MHz FS ON ; 6MHz	FS OFF ; 10MHz FS ON ; 6MHz	N/A (6MHz)
S/N	FS OFF ; 60dB FS ON ; 56dB	FS OFF ; 65dB FS ON ; 58dB	50dB (56dB Component)
DG,DP	+/-2.5° +/-2.5%	FS OFF ; +/-1.5° +/-1.5% FS ON ; +/-2.0° +/-2.0%	3° 3%
Color Bar	SMPTE	SMPTE or FULL	FULL
Intercom	YES	YES	NO
Tally	YES	YES	YES
Wipe Pattern	4	9	1600
Input	4 composite or 4 Y/C	5 composite or 5 Y/C	8 Composite, 4 Component 4 Y/C, 4 SDI (OP)
Output	2 composite, 2 Y/C A Bus Select, B Bus Select	2 composite, 1 Y/C Preview	2 composite, 2 Component 2 Y/C, Preview, 1 SDI(OP)
Sync. Output	1 Black Burst	1 Ref. IN + 1BB out or 2 BB out	1 Ref. IN + 1BB out
External Control	AUTOTAKE	AUTOTAKE KEY AUTO	Editor I/F
DC Operation	12V DC 2.2A	12V DC 1.35A	NO
AC Operation	option AW-PS505	option AW-PS505	AC100V 70W (max)
Weight	2.2Kg	2.2Kg	8.7Kg
Size	210(W) x 88(H) x 177(D)	210(W) x 88(H) x 177(D)	424(W) x 197(H) x 400(D)
Configuration	Half Rack	Half Rack	Table Top
Graphic File Transfer	NO	YES	YES
NTSC/PAL switchable	NO	YES	YES
Price			