

## Bridge to DIGITAL

#### **Wide range of inputs and outputs including SDI**

Whether analog or digital, the DFS-700/P accomodates a wide range of signal input/output requirements. The system comes with eight standard inputs — four SDIs\* and four analog components. With the optional BKDF-701 or BKDF-702/P boards, you can add eight or four inputs, making the total number of inputs 16 or 12 respectively, any eight of which can be freely assigned to the control panel. Four SDIs and four analog components

are added with the BKDF-701, and four composites (composite or Y/C) are added with the BKDF-702/P. The system also includes a complete range of outputs: two SDIs, two analog components, two analog composites, and two Y/Cs. This means you can configure the DFS-700/P to match existing equipment and anticipate your future needs!

\*SDI (Serial Digital Interface): serial component digital signal (270Mb/s)

#### ■No need for external A/D converters

Some digital equipment requires expensive and cumbersome external analog-to-digital/digital-to-analog converters. But that's something you never have to worry about with the DFS-700/P. Just take out your analog switcher and drop in the DFS-700/P. It's the simple, easy, cost-effective upgrade that transforms a tired, old analog system into a creative, digital powerhouse.

#### ■The perfect companion for Sony digital VTRs and servers

Maybe you're considering digital production system with DVCAM, Betacam SX®, MPEG IMX™ or Digital Betacam® recorders or the Sony MAV-555 server. And whichever format you choose, the DFS-700/P is an ideal complement. With this unit, you get full compatibility with analog machines, plus excellent component digital performance to maintain digital VTR picture quality. Starting with the DFS-700/P is a cost-effective first step. You can then gradually add Sony digital video cameras, VTRs and servers at your own pace to build an all-powerful, all-digital system!

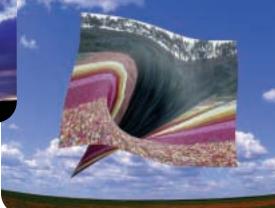












## **SPEED** is Power

#### **Fast response for more productivity**

If you've ever been held back by the "rendering" and "processing time" of nonlinear editing systems, you'll come to appreciate the performance of the DFS-700/P. This is a real-time system, capable of delivering true 3D, page turns and effects in an instant. So there's no drumming your fingers, no looking at your watch, no running for coffee. Operation is also very easy. The addition of optional boards and software gives you over 800 pre-programmed special effects that you can recall with the numeric keypad. Power-packed yet extremely user-friendly, that's what the DFS-700/P is all about.

#### **I**Ergonomic control panel

From simple switching to complex effects, the ergonomic control panel makes everything easy. The layout is straightforward and streamlined for maximum efficiency. As a result, the DFS-700/P is an excellent tool for EFP and remote live broadcasting, where split-second timing and instant response are absolute necessities.

#### ■The simplicity of pre-programmed effects

Some special effects systems require complex, tedious programming. Not the DFS-700/P. With pre-programmed effect patterns, anyone can create artistic, impressive, amusing, or stunning visuals. You can concentrate on expressing your creativity — and let the DFS-700/P work on the effects. Or if you like, you can execute partial modifications to the preset effect pattern and add your own, personal touch.

### **Be CREATIVE**

#### Spectacular special effects

The DFS-700/P draws on Sony's expertise in high-end nonlinear image processing. This affordable system incorporates the ground-breaking effects and capabilities of Sony's landmark video editing products. Preprogrammed and ready-to-use effects include Fanta Trail and several features from Digital SPARKLE™ (such as ripple and swirl effects). Add optional boards and software, and you have over 800 effects to choose from.

#### **■2-channel effects**

Adding an optional second channel video board will add a professional touch with two-channel special effects, such as push-in, push-out, Duality  $^{\text{TM}}$  effect (two-channel picture in picture), combined operations (two-channel intersect) and brick-like effect.















# Systematic PERFORMANCE

#### **■**3-dimensional mapping

Three-dimensional special effects can be impressive but they can also be extremely difficult to use. The DFS-700/P makes things easy. The optional 3D Mapping Board delivers 3D effects in a simple, ready-to-use format. Without wasting significant time on programming, you have easy access to 3D effects such as 3D cubes, 3D explosion, 3D vase, and 3D frames. Your productions become more exciting. And most importantly, you become more creative.

#### **■Add-on Effects**

The DFS-700/P provides an even greater spectrum of effects with the optional Add-on Effects software installed. Nearly 130 additional effects including Crystal Wipe, Multi Pillars and Polygon V-studio are available with this software upgrade option, which is easily loaded from a PC via a single USB connection.

\*To use the Add-on Effects software, the 2nd Channel DME board and 3D Video Mapping board must be installed

#### **Switcher function**

You can integrate the DFS-700/P into an existing switcher system as a powerful digital effects enhancement. But special effects are only part of the story. The integrated switcher functions of the DFS-700/P include chroma keyer, Y/U/V color correction, down stream keyer, fade-to-black, and frame memory.

#### **■**Editing interface

The DFS-700/P is also a comprehensive interface with Sony editing controllers. For example, you can use the DFS-700/P with Sony BVE-2000/P and PVE-500/P editors via the serial interface. As a post-production tool, the DFS-700/P is an editor's dream.

#### **■**Live operation

The DFS-700/P cross-point buttons offer broadcast-grade "feel" for extra durability in the most extreme applications. For live operation, the DFS-700/P also offers Preview and Tally outputs.

#### **■DME LINK**<sup>TM</sup>

The powerful effects of the DFS-700/P are easy to integrate into a high-end DVS switcher system. By installing the optional DME LINK software, DFS-700/P snapshots can be controlled from the DVS-2000C and DVS-7000 Series switchers. As with the Add-on Effects software, this package is easily installed from a PC.

\*Only user program DME LINK is supported \*An Rx/Tx cross cable is required

#### **■**Ideal for any application

The DFS-700/P is an amazingly powerful integrated switcher with digital multi effects — ideally suited for newsrooms, post-production, field editing, small studios and outside broadcasting systems. It's the single, simple solution for today's demanding digital requirements.



#### **Specifications**

General	
Model	DFS-700 (NTSC)/DFS-700P (PAL)
Power requirements	AC 100/120 V, 50/60 Hz (DFS-700)
	AC 220/240 V, 50/60 Hz (DFS-700P)
Operating voltage	AC 90 to 130 V, 47 to 63 Hz (DFS-700)
	AC 180 to 260 V, 47 to 63 Hz (DFS-700P)
Power consumption	200 W
Operating temperature	0 to 40 °C (32 to 104 °F)
Dimensions	Control panel: 440 × 121 × 287 mm
$(W \times H \times D)$	$17^{1/4} \times 4^{3/4} \times 11^{1/4}$ inches
	Processor unit: $440 \times 132 \times 520 \text{ mm}$
	$17^{-1/4} \times 5^{-1/4} \times 20^{-1/2}$ inches
Weight	Control panel: 3 kg, 6 lb 10 oz
	Processor unit: 14 kg, 30 lb 14 oz
Input Signals	

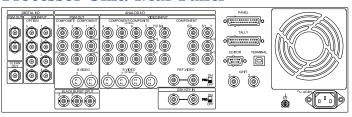
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Input Signals	
VIDEO INPUTS	
SDI	BNC type × 4
	270 Mb/s
Component	BNC type $\times$ 4 (Y/R-Y/B-Y)
	Y: 1.0 Vp-p, 75 Ω, Sync negative
	R-Y/B-Y: 0.7 Vp-p, 75 Ω (DFS-700)
	R-Y/B-Y: 0.525 Vp-p, 75 Ω (DFS-700P)
DSK KEY IN	BNC type $\times$ 2, Loop-through, 1.0 Vp-p, 75 $\Omega$
REF VIDEO	BNC type x 2, Loop-through connection
	Sync: 0.286 Vp-p (DFS-700)
	Sync: 0.3 Vp-p (DFS-700P)
	Burst: 0.286 Vp-p (DFS-700)
	Burst: 0.3 Vp-p (DFS-700P)

Output Signals	
PGM OUT	
SDI	BNC type × 2
	270 Mb/s
Component	BNC type × 2 (Y/R-Y/B-Y)
	Y: 1.0 Vp-p, 75 Ω, Sync negative
	R-Y/B-Y: 0.7 Vp-p, 75 Ω (DFS-700)
	R-Y/B-Y: 0.525 Vp-p, 75 Ω (DFS-700P)
Composite	BNC type × 2
	Video: 1.0 Vp-p, 75 $\Omega$ , Sync negative
S-Video	DIN type $\times$ 2 (Y/C)
	Y: 1.0 Vp-p, 75 $\Omega$ , Sync negative
	C: 0.286 Vp-p at burst, 75 Ω (DFS-700)
	C: 0.3 Vp-p at burst, 75 Ω (DFS-700P)
CLEAN OUT	BNC type × 1
	SDI: 270 Mb/s
PREVIEW OUT	BNC type × 1, Composite
	Video: 1.0 Vp-p, 75 Ω, Sync negative
BLACK BURST OUT	BNC type × 3
	Sync: 0.286 Vp-p, 75 Ω (DFS-700)
	Sync: 0.3 Vp-p, 75 Ω (DFS-700P)
	Burst: 0.286 Vp-p, 75 Ω (DFS-700)
	Burst: 0.3 Vp-p, 75 $\Omega$ (DFS-700P)

Signal Processing	
Sampling rate	Y: 13.5 MHz
	R-Y/B-Y: 6.75 MHz
Quantization	Y/R-Y/B-Y: 8 bits
Linearity (Composite output)	DG: Less than 3.5% (composite input)
	Less than 2% (component, S-Video input)
	DP: Less than 2.5° (composite input)
	Less than 1° (component, S-Video input)
Frequency response	0 to 5 MHz +0.5 dB/-1 dB
S/N	More than 50 dB (composite)
	More than 55 dB (component, S-Video)
Y/C delay	Less than 20 ns (component)
	Less than 50 ns (composite, S-Video)

	*
Control Signals	
Editor	D-sub 9 pin × 1, RS-422A
GPI/T	BNC type × 2, TTL Level
Panel	D-sub 25-pin × 1
Tally	D-sub 25-pin × 1, Relay contact outputs × 8
Terminal	USB B-type

#### **Processor Unit: Rear Panel**



#### **Optional Accessories**

BKDF-701 Digital/Analog Input Board for NTSC/PAL **BKDF-702** Analog Composite Input Board for NTSC BKDF-702P Analog Composite Input Board for PAL

BKDF-711 2nd Channel DME Board

BKDF-712 3D Video Mapping Effects Board

BZDF-701 DME-LINK Software BZDF-710 Add-on Effects Software

#### ■ BKDF-701

With the BKDF-701, the following 8 inputs can be added to the standard 8 inputs of the DFS-700/P, making the total number of inputs 16. During use, any 8 of the 16 inputs can be assigned to the control panel.

Input Signals	
SDI	BNC type × 4
	270 Mb/s
Component	BNC type $\times$ 4 (Y/R-Y/B-Y)
	Y: 1.0 Vp-p, 75 Ω, Sync negative
	R-Y/B-Y: 0.7 Vp-p, 75 $\Omega$ (with DFS-700)
	R-Y/B-Y: 0.525 Vp-p. 75 $\Omega$ (with DFS-700P)

#### **■ BKDF-702/P**

With the BKDF-702/P, the following 4 inputs (composite or S-Video) can be added to the standard 8 inputs of the DFS-700/P, making the total number of inputs 12. During use, any 8 of the 12 inputs can be assigned to the control panel.

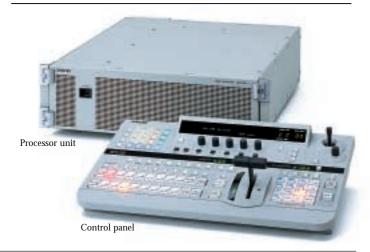
Input Signals	
Composite	BNC type × 4
	Video: 1.0 Vp-p, 75 $\Omega$ , Sync negative
S-Video	DIN type $\times$ 4 (Y/C)
	Y: 1.0 Vp-p, 75 Ω, Sync negative
	C: 0.286 Vp-p at burst, 75 Ω (BKDF-702)
	C: 0.3 Vp-p at burst, 75 Ω (BKDF-702P)

#### **■ BKDF-711**

The BKDF-711 adds a second Title Key.

#### **Product Configuration**

Processor unit, Control panel, D-sub 25-pin control cable (10 m), AC cord, Instruction manual



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# Powerful Digital Performance at Your Fingertips!

What happens when you put outstanding digital effects and an advanced digital switcher together in an extremely compact package? You get the Sony DFS-700/P\*—an ideally proportioned, easy-to-operate switcher incorporating the latest digital multi effects. Offering the precision of full component digital processing, all the creativity of hundreds of preset special effects, and the flexibility of 16:9 or 4:3 operation, the DFS-700/P is your promise of top-flight productivity. Cost-effective yet extremely versatile, Sony's DFS-700/P will open up new horizons in digital television performance.

