

# SONY®

DIGITAL INTERFACE UNIT

# PFV-D10



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OPERATION MANUAL

Japanese/English

1st Edition (Revised 2)

Serial No. 10001 and Higher



**WARNING**

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

**VORSICHT**

Um Feuergefahr und die Gefahr eines elektrischen Schlages zu vermeiden, darf das Gerät weder Regen noch Feuchtigkeit ausgesetzt werden.

Um einen elektrischen Schlag zu vermeiden, darf das Gehäuse nicht geöffnet werden. Überlassen Sie Wartungsarbeiten stets nur einem Fachmann.

**For the customers in the USA**

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

The shielded interface cable recommended in this manual must be used with this equipment in order to comply with the limits for a digital device pursuant to Subpart B of Part 15 of FCC Rules.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

**WARNING: THIS WARNING IS APPLICABLE FOR USA ONLY.**

If used in USA, use the UL LISTED power cord specified below.

**DO NOT USE ANY OTHER POWER CORD.**

Plug Cap	Parallel blade with ground pin (NEMA 5-15P Configuration)
Cord	Type SJT, three 16 or 18 AWG wires
Length	Less than 2.5 m (8 ft. 3in.)
Rating	Minimum 10 A, 125 V

Using this unit at a voltage other than 120 V may require the use of a different line cord or attachment plug, or both. To reduce the risk of fire or electric shock, refer servicing to qualified service personnel.

**For the Customers in the United Kingdom**

**WARNING**  
**THIS APPARATUS MUST BE EARTHED.**

**IMPORTANT**

The wires in this mains lead are coloured in accordance with the following code:

Green-and-yellow: Earth

Blue: Neutral

Brown: Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows: The wire which is coloured green-and-yellow must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol  $\perp$  or coloured green or green-and-yellow.

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black. The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

## For the customers in Europe

This product with the CE marking complies with both the EMC Directive (89/336/EEC) and the Low Voltage Directive (73/23/EEC) issued by the Commission of the European Community.

Compliance with these directives implies conformity to the following European standards:

- EN60950: Product Safety
- EN55103-1: Electromagnetic Interference (Emission)
- EN55103-2: Electromagnetic Susceptibility (Immunity)

This product is intended for use in the following Electromagnetic Environment(s):

E1 (residential), E2 (commercial and light industrial), E3 (urban outdoors) and E4 (controlled EMC environment, ex. TV studio).

## Pour les clients européens

Ce produit portant la marque CE est conforme à la fois à la Directive sur la compatibilité électromagnétique (EMC) (89/336/CEE) et à la Directive sur les basses tensions (73/23/CEE) émises par la Commission de la Communauté Européenne.

La conformité à ces directives implique la conformité aux normes européennes suivantes:

- EN60950: Sécurité des produits
- EN55103-1: Interférences électromagnétiques (émission)
- EN55103-2: Sensibilité électromagnétique (immunité)

Ce produit est prévu pour être utilisé dans les environnements électromagnétiques suivants:

E1 (résidentiel), E2 (commercial et industrie légère), E3 (urbain extérieur) et E4 (environnement EMC contrôlé ex. studio de télévision).

## Für Kunden in Europa

Dieses Produkt besitzt die CE-Kennzeichnung und erfüllt sowohl die EMV-Direktive (89/336/EEC) der EG-Kommission als auch die Direktive Niederspannung (73/23/EEC).

Die Erfüllung dieser Direktiven bedeutet Konformität für die folgenden Europäischen Normen:

- EN60950: Produktsicherheit
- EN55103-1: Elektromagnetische Interferenz (Emission)
- EN55103-2: Elektromagnetische Empfindlichkeit (Immunität)

Dieses Produkt ist für den Einsatz unter folgenden elektromagnetischen Bedingungen ausgelegt:

E1 (Wohnbereich), E2 (kommerzieller und in beschränktem Maße industrieller Bereich), E3 (Stadtbereich im Freien) und E4 (kontrollierter EMV-Bereich, z.B. Fernsehstudio).

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# Overview

The PFV-D10 Digital Interface Unit is an apparatus for interfacing various kinds of equipment to process analog and digital video and audio signals. When an optional board is installed into the slot, the power is supplied from the PFV-D10 to the board, and the function of the board is activated. Select the appropriate optional boards and install them into the PFV-D10, allowing the unit to execute various signal processing functions.

## Features

### Various kinds of signal processing with optional boards

Installing the appropriate optional board, various functions regarding serial digital video signals can be processed in the single PFV-D10 unit.

*For the optional boards, see “Optional Boards”.*

### Rack mounting

The unit can be mounted in a 19-inch standard rack.

## Optional Boards

Select boards with the required functions, and install them in slots of the PFV-D10.

### **BKPF-101A/101P A/D Converter Board (Composite)**

This board converts a composite analog video signal into a composite serial digital video signal.

### **BKPF-101CB A/D Converter Board (Component)**

This board converts a component analog video signal into a component serial digital video signal.

### **BKPF-102/102P D/A Converter Board (Composite)**

This board converts a composite serial digital video signal into a composite analog video signal.

### **BKPF-102CB D/A Converter Board (Component)**

This board converts a component serial digital video signal into a component analog video signal.

### **BKPF-103 Video Distribution Amplifier Board**

This board distributes a composite or component serial digital video signal to seven outputs.

### **BKPF-104/104P Digital Video Delay Line Board (Composite)**

This board delays a composite serial digital video signal for the specified phase.

### **BKPF-104C Digital Video Delay Line Board (Component)**

This board delays a component serial digital video signal for the specified phase.

### **BKPF-105P Audio/Video Multiplexer Board (PAL Composite)**

This board multiplexes AES/EBU-format digital audio signals to a composite serial digital video signal.

### **BKPF-105A Audio/Video Multiplexer Board (Component/NTSC Composite)**

This board multiplexes AES/EBU-format digital audio signals to a serial digital video signal.

## Overview

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### **BKPF-106P Audio/Video Demultiplexer Board (PAL Composite)**

This board demultiplexes a composite serial digital video signal and AES/EBU-format digital audio signals from a serial digital signal.

### **BKPF-106A Audio/Video Demultiplexer Board (Component/NTSC Composite)**

This board demultiplexes a serial digital video signal and AES/EBU-format digital audio signals from a serial digital signal.

### **BKPF-107 Line Synchronizer Board (NTSC composite)**

This board synchronizes a composite serial digital video signal with a reference video signal.

### **BKPF-107C Line Synchronizer Board (Component)**

This board synchronizes a component serial digital video signal with a reference video signal.

### **BKPF-108 Frame Synchronizer Board (NTSC composite)**

This board synchronizes a composite serial digital video signal with a reference video signal.

### **BKPF-108C Frame Synchronizer Board (Component)**

This board synchronizes a component serial digital video signal with a reference video signal.

### **BKPF-109 Serial-Parallel Interface Board**

This board converts a serial digital video signal to a parallel digital signal.

### **BKPF-110 Parallel-Serial Interface Board**

This board converts a parallel digital video signal to a serial digital signal.

### **BKPF-111 Video Distribution Amplifier Board**

This board distributes three serial digital video signals into two outputs each.

### **BKPF-112 Video Distribution Amplifier Board**

This board distributes two serial digital video signals into four outputs each.

### **BKPF-131B/131BP Decoder Board**

This board converts a composite analog video signal into a component serial digital video signal synchronized with a reference video signal.

### **BKPF-132B/132BP Encoder Board**

This board converts a component serial digital video signal into a composite analog video signal synchronized with a reference video signal.

### **BKPF-152 D/A Converter Board (NTSC composite)**

This board converts a composite serial digital video signal into a composite analog video signal synchronized with a reference video signal.

### **BKPF-152C D/A Converter Board (Component)**

This board converts a component serial digital video signal into a component analog video signal synchronized with a reference video signal.

### **BKPF-012 4:2:2/4fsc NTSC Converter Board**

This board converts a component serial digital video signal into a composite serial digital video signal.

### **BKPF-021 4fsc NTSC/4:2:2 Converter Board**

This board converts a composite serial digital video signal into a component serial digital video signal.

### **BKPF-201/201R Audio A/D Converter Board**

This board converts two-channel analog audio signals into AES/EBU-format digital audio signals.

### **BKPF-202/202R Audio D/A Converter Board**

This board converts AES/EBU-format digital audio signals into two-channel analog audio signals.

### **BKPF-205 Audio /Video Multiplexer Board (Component/NTSC Composite)**

This board converts analog audio signals into digital audio signals and multiplexes it on serial digital video signals.

### **BKPF-206 Audio /Video Demultiplexer Board (Component/NTSC Composite)**

This board demultiplexes serial digital video signals on which digital audio signals are multiplexed into analog audio signals and serial digital video signals.

### **BKPF-R70 Routing Switcher Controller Board**

This board controls a routing switcher.

### **BKPF-300 DIGITAL VIDEO 8 × 2 Selector**

This board is a selector of composite or component serial digital video signals.

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**BKPF-301 Analog Video 8 × 2 Selector**

This board is a selector of analog video signals.

**BKPF-350 Digital Analog 8 × 2 Selector**

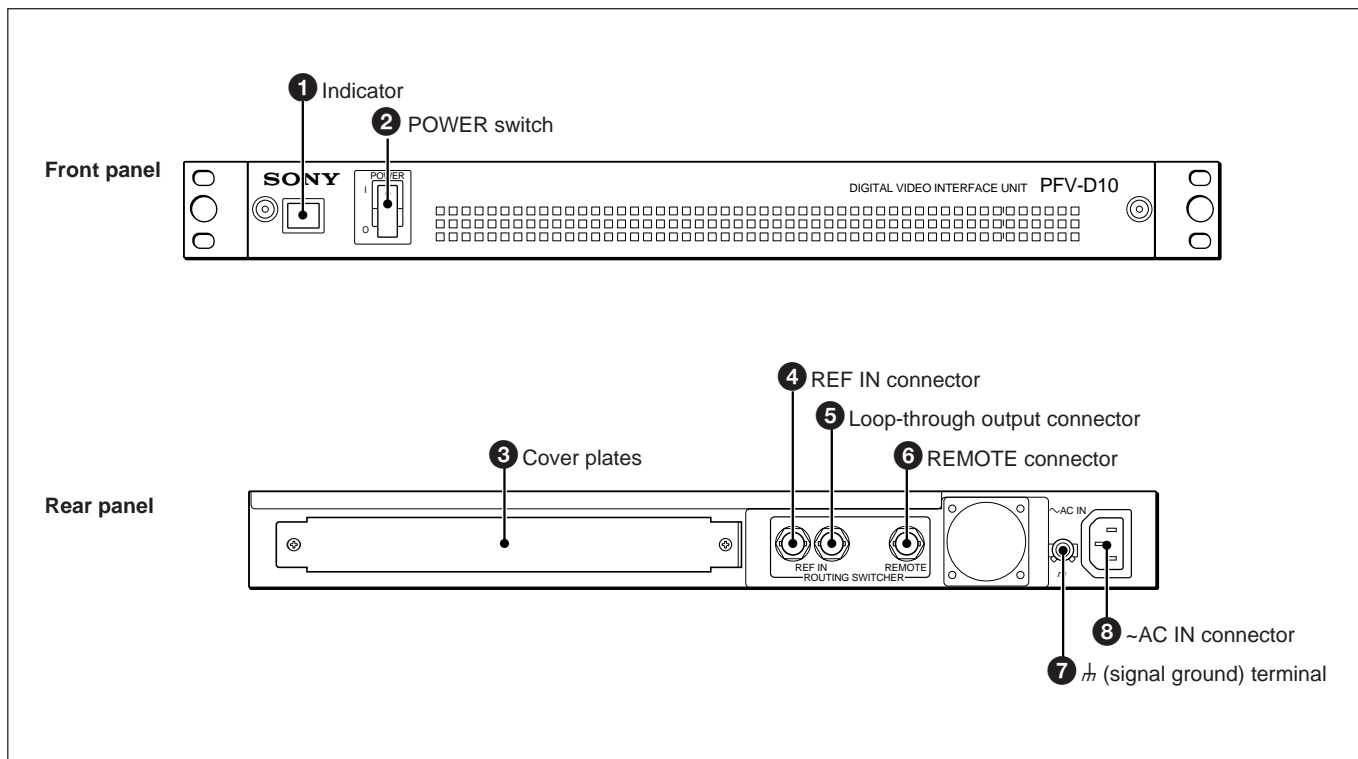
This board is a selector of AES/EBU format digital audio signal.

**BKPF-351 Analog Audio 8 × 1 Stereo Selector**

This board is a selector of analog audio signals.



# Location and Function of Parts



## 1 Indicator

Lights in green when this unit is turned on.

Flashes in red in the following cases:

- The temperature inside the unit has risen to a specified level.
- The ventilation fans have stopped rotating.
- Trouble occurs with the output voltage on the negative side.

May flash in green in the following cases:

- The rotation of the ventilation fans slows down drastically.
- Until the rotation of the ventilation fans becomes stable just after the power is turned on.

## 2 POWER switch

Turns on and off the power of this unit.

## 3 Cover plates

Remove the corresponding plates to install the optional boards.

## 4 REF IN (reference signal) input connector (BNC type)

When an optional board such as a BKPF-300-series board that requires a reference signal input to the PFV-D10 is installed, input an analog black burst signal as a reference signal.

## 5 Loop-through output connector (BNC type)

The reference signal input to the REF IN connector is supplied as it is. When this connector is not used, connect a 75-ohm terminator.

## 6 REMOTE connector (BNC type)

For controlling a routing switcher, connect an S-BUS line when an optional board such as a BKPF-300-series board that requires an S-BUS protocol input to the PFV-D10 is installed.

## 7 $\hbar$ (signal ground) terminal

For signal ground. Connect to a ground wire as required.

## 8 ~AC IN connector

Connect to an AC power supply using a power cord below:

Model available in North America:

DK-2401 AC Power Cord

Model available in the United Kingdom:

Parts No. 1-590-910-11



# Specifications

Power requirements	100 to 240 V AC, 50/60 Hz
Current drain	100 V: 0.8 A, 240 V: 0.4 A
Power supply capacity	+5 V DC: max. 2.4 A -5 V DC: max. 2.4 A
Peak inrush current	
(1) Power ON, current probe method:	12 A (240 V)
(2) Hot switching inrush current, measured in accordance with European standard EN55103-1:	60 A (230 V)
Operating temperature	5°C to 40°C (41°F to 104°F)
Storage temperature	-20°C to +60°C (-4°F to +140°F)
Operating humidity	10% to 90%
Dimensions	424 × 44 × 426 mm (w/h/d) (16 <sup>3</sup> / <sub>4</sub> × 1 <sup>3</sup> / <sub>4</sub> × 16 <sup>7</sup> / <sub>8</sub> inches)
Mass	Approx. 5 kg (11 lb 4 oz) (not including the optional boards)
Supplied accessories	Operation Manual (1) Installation Manual (1)

Design and specifications are subject to change without notice.



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# Sony Corporation

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