

SONY®



ISARA

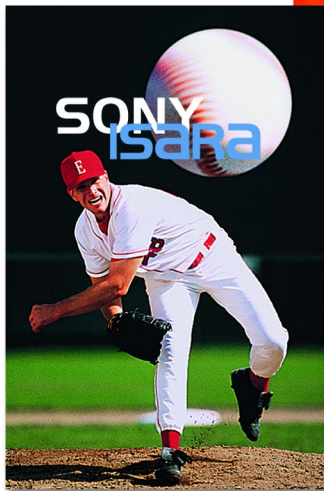


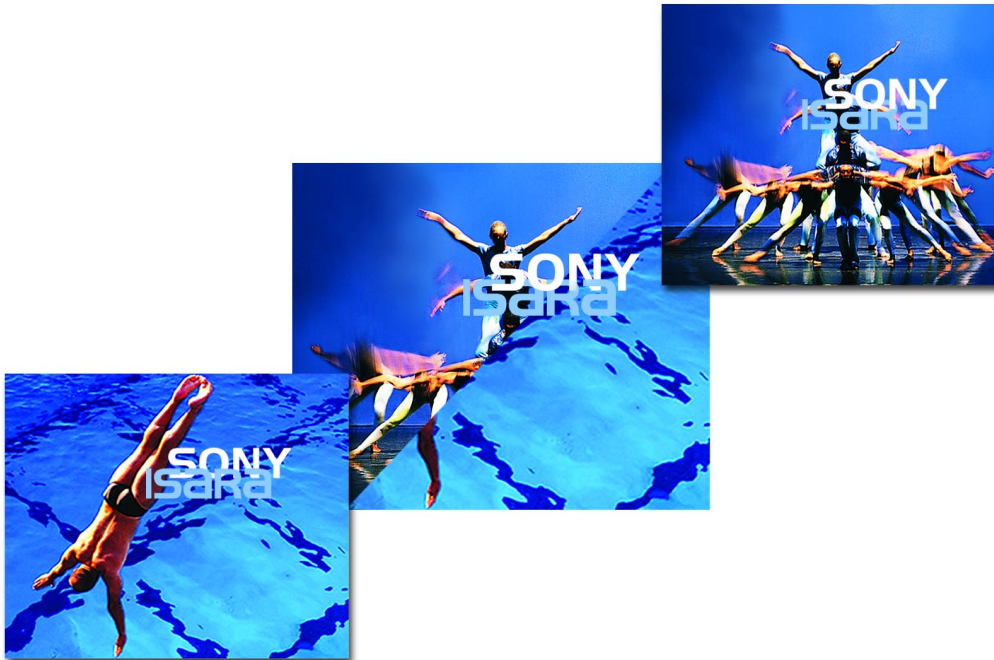
The ISARA™
master
control
switcher.
For the new
world of
Broadcasting.

The old idea of a master control switcher may suit the old broadcasting conditions. But what about multicasting? What about central casting? What about environments where every cubic inch of real estate costs serious money? For the new breed of broadcasters, Sony has created an all-new type of master control switcher. Presenting the Sony ISARA™ master control switcher.

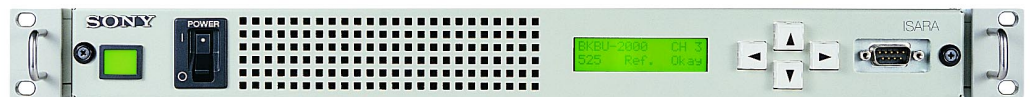
ISARA

a switch to the future





Presenting the Sony ISARA Master Control Switcher



■ **Up to 25 simultaneous channels.**

The ISARA master control switcher supports multi-channel broadcasting with a modular design. So you can originate up to 25 simultaneous broadcast channels from a single control panel.

■ **More flexibility.**

Modular construction enables you to select exactly the control surface and processor options you want. That's a really big advantage in multi-channel environments.

■ **Less space.**

The ISARA processor handles all audio, video and digital effects in just a single Rack Unit. And a full complement of three control panel modules only takes up 19" x 5.25".

■ **Lower cost.**

The large switchers of the past have come with a large price tag. Here again, the ISARA system leaves the past behind. Low cost is important whether you broadcast one channel or 100.

The essence of master control.

Until now, master control switchers have occupied a large processor frame and a large, desk-mounted control surface. Master control switchers needed the real estate because they've included a multi-input router/selector, machine control and external monitoring. But in today's broadcast plant, these systems are already in place.

By stripping away these duplicated systems, Sony has created the ISARA master control switcher. The ISARA system contains just the things you need.

Control Panel with three modules



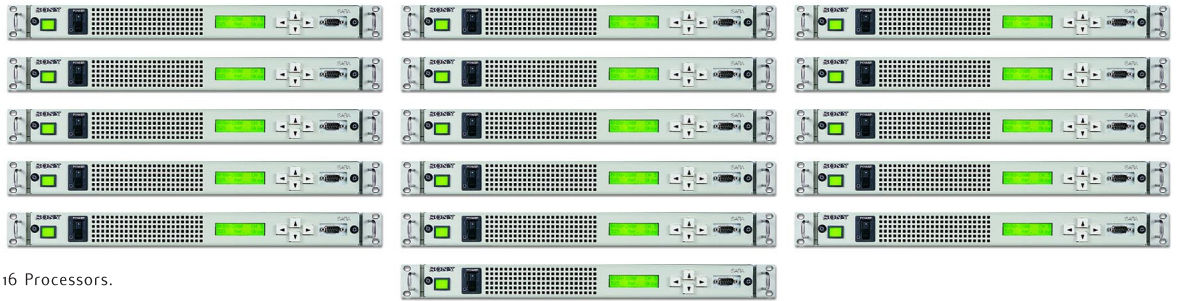
A basic ISARA system, showing three control modules and one broadcast channel.



Processor

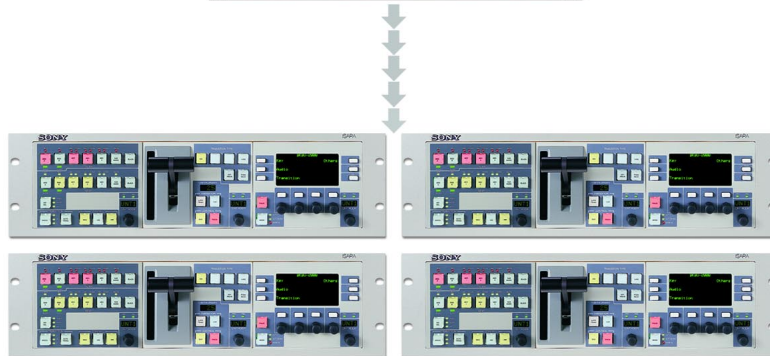
ISARA

a new take on master control



16 Processors.

A multi-channel system, with 12 control modules and 16 simultaneous channels of broadcasting.



Control Panel with 12 modules

Up to 25 channels.

Imagine controlling 25 channels with conventional master control switchers. You'd need a team of engineers and a desk as long as a tennis court. The ISARA system changes all this. Up to 25 processor frames can be operated by a single 3RU control surface!

Modular control panel.

The control panel itself is modular, with separate modules for Cuts, Transitions and System setup. You can combine up to three of these modules, in any combination, in one ISARA system panel chassis. And you can cascade up to four chassis, for as many as 12 control modules, also in any combination, per system. You can also operate ISARA systems directly from your station automation system. In the event of an automation fault, manual takeover is instantaneous.



Proven, future-proof technology.

The standard ISARA master control switcher connects to today's broadcast plant, while expansion slots anticipate tomorrow's. New methods of operation within a broadcasting environment has led to the continued use of logo insertion during transmission and the use of push back during credits and between programs. The logo insertion and push back board are options that can be installed into the BKBU-2000 Video/Audio Processor Unit.

Six SDI inputs.

The ISARA master control switcher has six SDI inputs: A, B, two Keys, and two Fills. You can also self-key one of these sources. With your plant routing switcher feeding the ISARA master control switcher, the number of inputs is limited only by the number of sources in the router!

A/B Mix and Wipe.

The ISARA system performs mixes and wipes between the two sources. You have your pick of 23 different wipe patterns.

Dual Linear Keyers.

The ISARA system supports dual linear keyers, plus a third self-keyer. These can be configured in any way, with 2 upstream/1 down-stream or 1 upstream/2 down-stream. You can select key source and key fills externally or from either of the inputs for self-keying. Key priority enables one key to take priority over another. All inputs have line synchronizers that can accommodate differences up to 0.5H (with respect to the reference).

Four channels of embedded audio.

Audio functions include mixing, fading, level adjustment, muting, channel swap and phase inversion. You can also perform voice-overs by mixing up to four auxiliary audio sources with the embedded audio of the SDI input. The aux sources can be analog or digital, selected in pairs.

a new take on master control

Three types of output.

ISARA provides three output signals:

On-Air. The main program output comes after the downstream keyer. This SDI output includes embedded audio. In the event of a power failure, a relay connects input A to the On-Air output, to ensure a continuous signal to air.

Next. What the main program output will be on the next transition.

Clean. The main program output, without the downstream key.

Three types of control.

To fulfill Sony's plan for complete flexibility, the ISARA master control switcher is designed to operate under three types of control:

Under an automation system. The ISARA system can execute events in a playlist under the control of popular station automation systems. An RS-422 interface makes the connection. Should the automation system ever fail, manual takeover is instantaneous.

GPI control. Eight incoming GPIs enable external systems to initiate ISARA system controlled audio and video events. So you can trigger transitions, turn on keys or even cut channels to silence. In addition, sixteen outgoing GPIs enable the ISARA system to trigger external events and show status.

And you can cascade up to four chassis, for as many as 12 control modules per system. The panel chassis also includes main and backup power supplies. A single control surface can operate up to 25 processors, for 25 simultaneous broadcast channels.

ISARA system control modules. You can build a manual control surface by combining Sony's three control modules: Cuts, Transition and System. Up to three modules fit the ISARA system panel chassis.



Cuts Module



Transition Module



System Module

Cuts Module

On-Air and Next selection

Auto transition control with three preset speeds

Event type: video only, video/audio or audio only

Voice-over control

Automatic or manual control

Addressing/control of other processor units

Transition Module

Manual mix and wipe

Auto mix and wipe

Transition type selection

Addressing/control of other processor units

System Module

System configuration

Video and audio signal routing

Key level adjust

Audio level adjust

GPI input and output setup

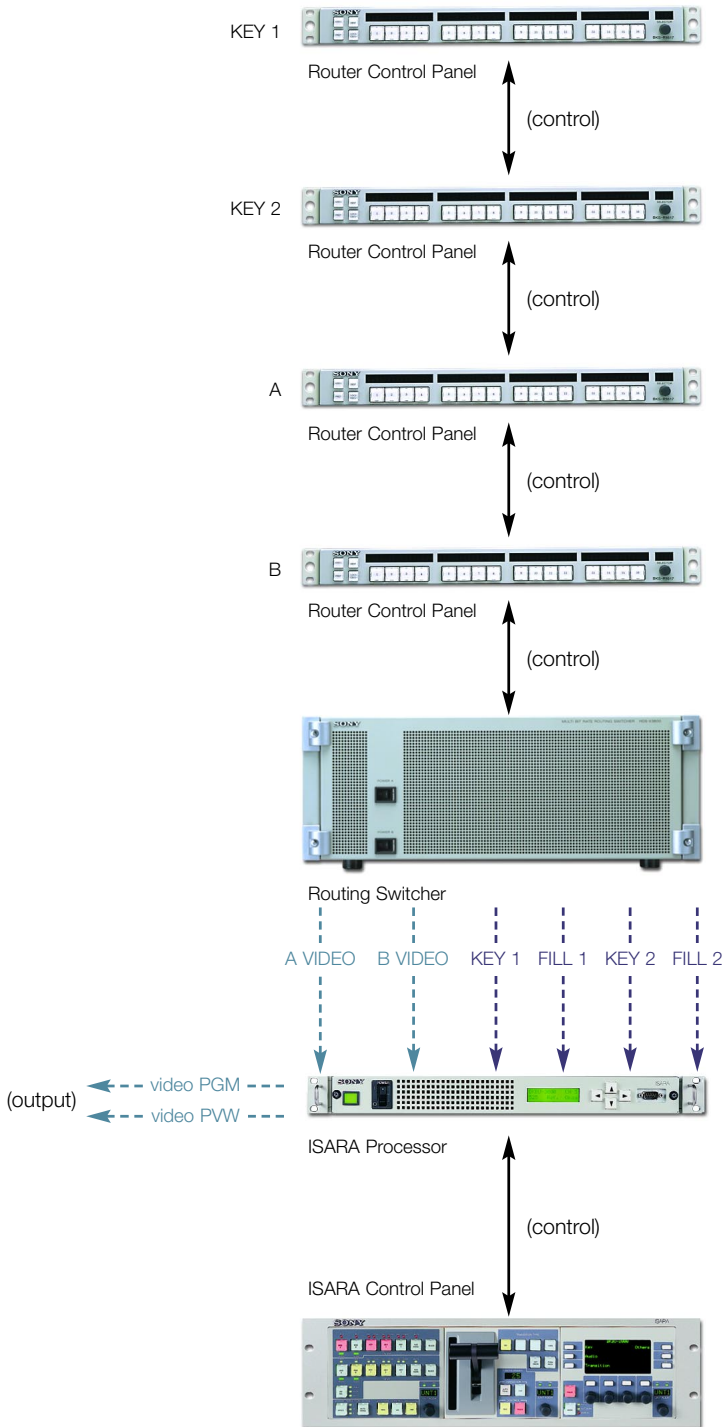
Wipe pattern display

System error log

Addressing/control of other processor units

ISARA

BKBU-2000 PROCESSOR SPECIFICATIONS



BKBU-2002 | BKBU-2003 | BKBU-2004

General

Power requirements	AC 100 to 240V +/-10%, 50/60 Hz
Power consumption	120 Watts
Operating temperature	41° to 104°F (5° to 40° C); 50° to 95°F (10° to 35° C) for operation within specifications
Dimensions	16-3/4 W x 1-3/4 H 19-3/4 D (425 x 43x 500 mm)
Weight	11 lbs., 7 oz. (5.2 kg)

Video Inputs

A/B Inputs	SDI Serial Digital video, BNC type x2
Key V Inputs	SDI Serial Digital video, BNC type x2
Key F Inputs	SDI Serial Digital video, BNC type x2
Reference Video Input	SDI Serial Digital video, BNC type x1
Auxiliary Input	SDI Serial Digital video, BNC type x1

Audio Inputs/Outputs

A/B inputs	Embedded on SDI Video A/B Inputs
Aux/Voiceover input	Shared on 26-pin High-Density & 1/2
Aux Outputs	On 26-pin High-Density Connector

Video Outputs

On-Air	SDI Serial Digital video, BNC type x1
Next	SDI Serial Digital video, BNC type x1
Clean	SDI Serial Digital video, BNC type x1

System Interface

Control Panel	Shared on 26-pin Density & 1/2
Automation	Shared on 26-pin Density & 1/2
S-BUS	BNC type x1
Ethernet	R J-45 interface
GPI inputs	8 GPIs shared on 26-pin Density & 1/2
GPI outputs	16 GPIs shared on 26-pin Density & 1/2

Supplied Accessories

Installation manual (1)	Operation manual (1)
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Ordering Information

Video/Audio Processor	BKBU-2000
Cuts Module	BKBU-2002
Transition Module	BKBU-2003
System Module	BKBU-2004
Panel Chassis	BKBU-2005
MACRO Software	BZBUISARA1

Options

Logo Inserter	BKBU-2006*
Push-Back Zoom	BKBU-2007*

*Available Summer 2001

SONY

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