Easykey automated mixer/keyer

Miranda's compact Easykey automated digital A/B video mixer also provides a powerful downstream keying mode.

A/B video mixing

In A/B video mixer mode, *Easykey* is designed to operate as an automated master control mixer, with A and B program inputs fed by an external router.

The mixer is also suitable for post-production tasks, such as telecine color correction, using a hard wipe to compare images after color adjustment.

Easykey's compact size also makes it highly suitable for field mixing applications. On-location editing can be performed using field VTRs with pre-read, such as Sony's DNW-A220P, in either two or three machine edit configurations.

Easykey-RCP remote control panel

Easykey can perform mixing by horizontal and vertical wipes, as well as by cuts and fades. The fade rate and wipe softness are fully adjustable.

A full preview of the next mix transition is provided on a separate preview output. The standard preview is SDI and this can be replaced with an optional analog composite preview output. *Easykey* is highly suited to automated operation with RS422, RS485 and RS232 serial control interfaces. The unit can also be controlled by programmable GPIs and analog faders.

Features

- A/B mixer or downstream keyer
- Full group A/B audio mixing plus full group voice-over (or two group voice-overs) with optional *Easysound* digital audio mixer
- Multi-group A/B mixing and voice-overs with *Easysound Stand-alone* option
- Autotransitions for cut, fade and horizontal/vertical wipes (mixing mode only)
- Adjustable wipe softness
- Fade to black
- Linear and additive keying using separate/external key sources or self-keying (minimum 12-bit processing)
- Clip, gain and transparency adjustment
- Serial control by RS422, RS485 or RS232 plus programmable GPIs and analog faders
- Integral proc-amp
- Multi-channel remote control system

Audio mixing

A powerful digital audio mixing capability is provided by *Easykey* with the optional *Easysound* audio mixer.

In A/B mixing mode, *Easysound* provides full group A/B audio mixing plus a full group voice-over (or two stereo pair voice-overs).

The audio mixer can de-embed a full group of audio from any of the four groups within the A and B program inputs. Alternatively, the mixer can accept two AES/EBU stereo pairs per program input.

The program audio can be mixed with up to two AES/EBU stereo pairs for voice-overs. The audio mix is output as four AES/EBU stereo pairs, and two pairs can be embedded into any one of the program output's four groups.

The audio mixing capabilities of *Easykey* can be enhanced to handle multi-lingual, multi-group audio mixing and cinematic multi-channel surround sound, including 5.1 audio, with the use of *Easysound Stand-alone*. This 1RU audio mixer extender has audio mixing capabilities similar to the standard *Easysound*, and adds a further group of A/B audio mixing and voice-overs when used alongside an *Easysound* integrated within *Easykey*.

Downstream keying

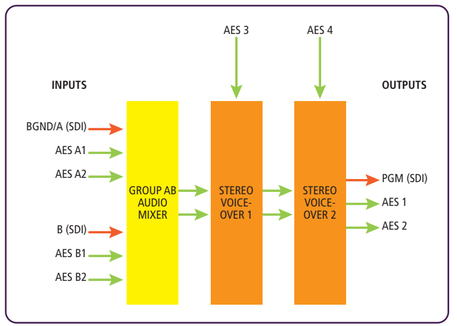
In downstream keying mode, *Easykey* is ideal for operation with character generators, stillstores, and other graphical devices, where there is a requirement to insert fill and key signals into SDI.

Easykey can perform linear and additive keying using separate/external key sources or self-keying. The key processor has independent clip, gain and transparency controls (minimum 12-bit processing).

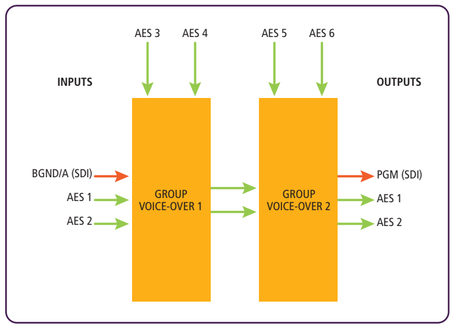
A fade to black is available in both mixing and downstream keying modes.

In downstream keying mode, the *Easysound* audio mixer can provide two full group voice-overs via four stereo pair AES/EBU inputs. The audio mix is output as four AES/EBU stereo pairs and a full group of embedded audio.

The *Easysound* option for *Easykey* is configured by loading a GPI script file via the unit's front panel floppy disk drive.



Automated mixer mode: A/B audio mixing plus two stereo voice-overs



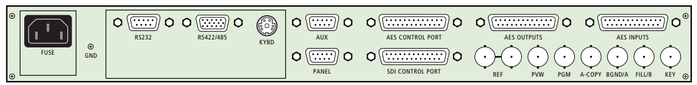
Downstream keyer mode: two group voice-overs

Multi-channel remote control

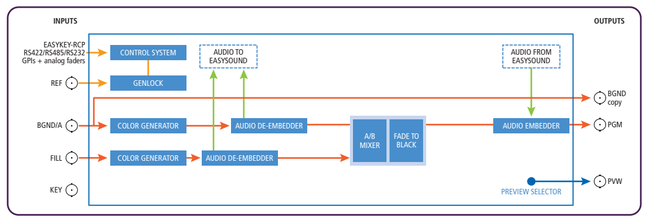
The *Easykey-RCP* remote panel provides control of mixing, or keying, and audio mixing using 'audio follow video'. The panel is 3RU high, 1/4 19" rack frame wide, and is designed to be fitted into a desk or rack mounted.

One or more *Easykey-RCP* panels can be connected to multiple *Easykeys* with the *Intelligent Panel Router*, which comprises a PC with control software plus one or more routing modules.

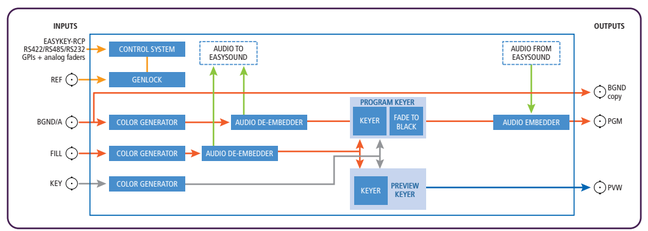
Up to four routing modules can be linked to create a maximum of 128 ports. Each port can be connected to either an *Easykey* or an *Easykey-RCP*. For example, a 16 port routing module can be connected to 14 *Easykeys* and two *Easykey-RCPs*. A single *Intelligent Panel Router* can be used to control *multiple* Easykeys and *Logostores* simultaneously.



Easykey rear panel



Easykey A/B mixer mode



Easykey keying mode

Easykey technical specifications

Video inputs	➤ Background/program A, fill/program B and key inputs. ➤ Proc-amp/color field generators on each video input. ➤ All component SDI 270 MHz to SMPTE 259M-C BNC (625/525 compatible).
Video outputs	➤ Program, preview and background copy outputs. ➤ Copy feed fully equalised and regenerated ➤ All component SDI 270 MHz to SMPTE 259M-C BNC. ➤ Optional analog composite preview output.
Video mixing	➤ Cut, fade and wipe (horizontal and vertical with variable softness in A/B mixer mode) transitions plus fade to black. ➤ Linear and additive keying using separate/external key sources or self-keying (minimum 12-bit processing) in keyer mode.
Keying capabilities	➤ Cut, fade and fade to black transitions plus clip, gain and transparency adjustment
Audio mixing	➤ Optional *Easysound* digital audio mixer (embedded and AES/EBU) provides full group A/B audio mixing plus full group voice-overs (mixer mode) or two group voice-overs (keyer mode). ➤ Multi-lingual, multi-group audio mixing and cinematic multi-channel surround sound, including 5.1 audio, can be performed with *Easysound Stand-alone*.
References	➤ +/- one line (SDI reference) or +/- 7 lines (analog black and burst reference)
Bypass	➤ Optional MBP-002 mechanical bypass allows background/program A input (bgnd/A) to pass unaffected in event of power supply failure.
Diagnostics	➤ Remote monitoring information is provided by the EDH output option.
Physical	➤ 1 RU 19" rack mount frame ➤ Operating temperature 0-40˚C ➤ Weight 7.0 Kg (15.4 lbs) ➤ Power: 90-240V, 60Hz or 50Hz, 50W ➤ Cooling air (forced) from side ➤ CE and UL approved
Processing	➤ 10-bit 4:2:2 SDI
Remote control	➤ Manual control via *Easykey-RCP* remote control panel system. ➤ Automation control via RS422, RS485 or RS232. ➤ Programmable GPIs (9) and analog faders (7).

Easykey ordering information

Easykey	**SDI mixer/downstream keyer**
Options	
CPV-001 [1]	➤ Analog composite preview output
MBP-002	➤ Mechanical by-pass
EDH-001	➤ EDH output option
ES2	➤ *Easysound* digital audio mixer (embedded and AES/EBU)
ES2-SA	➤ *Easysound Stand-alone* audio mixer extender
EMB-001	➤ Embedded audio mixing module for ES2-SA
Easykey-RCP	➤ Remote control panel
RMF-002	➤ 3RU 19" rack mount frame for *Easykey-RCP*
RMF-002-BP [2]	➤ Blank panel for RMF-002 (quarter frame width)
RMF-002-2BP [2]	➤ Blank panel for RMF-002 (half frame width)
IPR-001 [3]	➤ *Intelligent Panel Router* PC plus control software
IPR-200-8	➤ 8 port routing module for IPR-001
IPR-200-16	➤ 16 port routing module for IPR-001
IPR-200-32	➤ 32 port routing module for IPR-001

[1] Ordering CPV-001 will replace the standard SDI preview output

[2] Blank panels are required when one, two or three *Easykey-RCP* panels are fitted into the RMF-002 frame (frame holds four *Easykey-RCP* panels)

[3] Requires one or more IPR-200-8/IPR-200-16/IPR-200-32 modules. Also requires a VGA monitor for configuration (option IPR-VGA)