



Which routing switch do you need?

					
	M-SAFESWITCH-2	M-SAFESWITCH-2L	Safe Switch 3G	Safe Switch-L 3G	SW803 3G
Frame system	Vision (3U)	Vision (3U)	Indigo (2U, 1U, DTB)	Indigo (2U, 1U, DTB)	Indigo (2U, 1U, DTB)
Product type (NB. Software apps run on MARBLE-V1 media processor hardware)	Software app	Software app	Card	Card	Card
Main use	Manual or automatic clean and intelligent switching	Manual or automatic clean and intelligent switching	Manual or automatic clean and intelligent switching	Manual or automatic clean and intelligent switching	Small matrix
Switch configuration	2 x 1 and 2 x 1 (dual channel product with two independent switches)	2 x 1 and 2 x 1 (dual channel product with two independent switches)	2 x 2	2 x 2	8 x 3
Input preference	Primary input (Source A) unless error condition detected	Primary input (Source A) unless error condition detected	User defined	User defined	
Number of video inputs	4 (NB. Any of the inputs can be routed to the two independent switches)	4 (NB. Any of the inputs can be routed to the two independent switches)	2	2	8
Number of video outputs (max)	3 (NB. Any output can be routed to either switch or to any input. One output is fixed as IP, other two can be IP or SDI)	3 (NB. Any output can be routed to either switch or to any input. One output is fixed as IP, other two can be IP or SDI)	2 of Output 1 and 1 of Output 2	2 of Output 1 and 2 of Output 2	1 of Output 1 and 1 of Output 2 and 1 of Output 3
Input loop-throughs				2	
Works with SDI (3Gb/s, HD and SD)	●	●	●	●	●
Works with IP (ST 2022-6, ST 2022-7, ST 2110-10, ST 2110-20 and ST 2110-21)	●	●			
Video formats supported	31 (625i, 525i, 720p50, 720p59.94, 720p60, 1080i50, 1080i59.94, 1080i60, 1080p23.98, 1080p24, 1080p25, 1080p29.97, 1080p30, 1080p50, 1080p59.94, 1080p60, 1080PsF23.98, 1080PsF24, 1080PsF25, 1080PsF29.97, 1080PsF30, 2048x1080p23.98, 2048x1080p24, 2048x1080p25, 2048x1080p29.97, 2048x1080p30, 2048x1080PsF23.98, 2048x1080PsF24, 2048x1080PsF25, 2048x1080PsF29.97, 2048x1080PsF30)	31 (625i, 525i, 720p50, 720p59.94, 720p60, 1080i50, 1080i59.94, 1080i60, 1080p23.98, 1080p24, 1080p25, 1080p29.97, 1080p30, 1080p50, 1080p59.94, 1080p60, 1080PsF23.98, 1080PsF24, 1080PsF25, 1080PsF29.97, 1080PsF30, 2048x1080p23.98, 2048x1080p24, 2048x1080p25, 2048x1080p29.97, 2048x1080p30, 2048x1080PsF23.98, 2048x1080PsF24, 2048x1080PsF25, 2048x1080PsF29.97, 2048x1080PsF30)	8 (625i, 525i, 720p50, 720p59.94, 1080i50, 1080i59.94, 1080p50, 1080p59.94)	8 (625i, 525i, 720p50, 720p59.94, 1080i50, 1080i59.94, 1080p50, 1080p59.94)	12 (625i, 525i, 720p50, 720p59.94, 720p60, 1080i50, 1080i59.94, 1080i60, 1080p50, 1080p59.94, 1080p60, DVB-ASI)
Inputs and outputs can be any mixture of SDI and IP	●	●			
Inputs and outputs can be mixture of ST 2022 and ST 2110	●	●			
Includes IP gateway functionality (IP to SDI or SDI to IP)	●	●			
Includes IP to IP translation functionality (network address translation, unicast to multicast address translation, setting firewall restrictions etc.)	●	●			
Fault conditions available to automatically trigger switch	10 (input missing, input video standard incorrect, active video black, active video frozen, video error, network error, audio all selected missing, audio any selected missing, audio all selected silent, audio any selected silent) NB. Use tick boxes to select which of the 16 audio channels are affected by the audio missing and audio silence fault conditions	10 (input missing, input video standard incorrect, active video black, active video frozen, video error, network error, audio all selected missing, audio any selected missing, audio all selected silent, audio any selected silent) NB. Use tick boxes to select which of the 16 audio channels are affected by the audio missing and audio silence fault conditions	18 (input missing, input video standard incorrect, EDH missing, EDH full field error, EDH active picture error, line CRC error, audio group 1 missing, audio group 2 missing, audio group 3 missing, audio group 4 missing, active video black, Ancillary Timecode missing, Ancillary Timecode frozen, active video frozen, channel 1 audio silence in selected group, channel 2 audio silence in selected group, channel 3 audio silence in selected group, channel 4 audio silence in selected group)	18 (input missing, input video standard incorrect, EDH missing, EDH full field error, EDH active picture error, line CRC error, audio group 1 missing, audio group 2 missing, audio group 3 missing, audio group 4 missing, active video black, Ancillary Timecode missing, Ancillary Timecode frozen, active video frozen, channel 1 audio silence in selected group, channel 2 audio silence in selected group, channel 3 audio silence in selected group, channel 4 audio silence in selected group)	
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Available delay before fault condition auto triggers switch	Switch tolerance of up to ten frames on all fault conditions, plus additional 1-120 seconds on video black, video frozen and audio silence	Switch tolerance of up to ten frames on all fault conditions, plus additional 1-120 seconds on video black, video frozen and audio silence	2-120 seconds on active video black, ancillary timecode frozen, active video frozen and audio silence	2-120 seconds on active video black, ancillary timecode frozen, active video frozen and audio silence	
User can decide what constitutes a fault separately for each input	●	●	●	●	
Decides which feed to select based on which contains the most significant fault condition	●	●	●	●	
Checks other input is free of that fault before switching	●	●	●	●	
Corrects timing difference between inputs of up to one frame with full framestore synchroniser	●	●	●	●	
Corrects timing difference between inputs which is more than one frame by delaying earliest arriving input	● (by up to ten frames in one frame steps – plus additional 60 frames available for Source B to match long Source A delays)	● (by up to ten frames in one frame steps – plus additional 60 frames available for Source B to match long Source A delays)	● (by up to 25 frames in one frame steps)	● (by up to 25 frames in one frame steps)	
Video delay on output	Up to ten frames (adjustable in one frame steps)	Up to ten frames (adjustable in one frame steps)			
Reference timing	From any SDI input, or from Vision frame dual references (SD Black & Burst or HD tri-level syncs) or PTP	From any SDI input, or from Vision frame dual references (SD Black & Burst or HD tri-level syncs) or PTP	From any SDI input or from SD Black and Burst or HD tri-level syncs	From any SDI input or from SD Black and Burst or HD tri-level syncs (with reference loop)	From any of the four main board SDI inputs or from SD Black and Burst or HD tri-level syncs
Loss of reference protection (with drift lock)	●	●	●	●	
Reference redundancy with user options for timing source priority	●	●			
EBU R 103 legaliser on each output	●	●			
Passes entire video stream including embedded audio and data	● (when SDI or ST 2022 – no audio or data in ST 2110-20)	● (when SDI or ST 2022 – no audio or data in ST 2110-20)	●	●	
Internal test pattern generator (with 13 test patterns)	●	●			
Number of presets	16	16			15
Hands-on control panels available	VisionPanel and SBB-4	VisionPanel and SBB-4	VisionPanel and SBB-4	VisionPanel and SBB-4	SW808 Controller, VisionPanel and SBB-4
SNMP control	Complimentary	Complimentary	Available for purchase	Available for purchase	Available for purchase
GPI inputs and outputs			6 bi-directional GPIs	12 bi-directional GPIs	5 GPI inputs and 1 GPI output
Relay bypass protection	● (VR07 option when used with SDI)	● (VR07 option when used with SDI)	● (RM64 option)	● (as standard)	
Fibre output (for SDI over fibre)	● (NB. IP only over fibre)	● (NB. IP only over fibre)	● (RM57 option)		
Frame slots used	2	2	1	2	2
Routing switches in frame (max)	20 in 3U (NB. Dual channel product)	20 in 3U (NB. Dual channel product)	12 in 2U	6 in 2U	6 in 2U
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