

MARK ROBERTS MOTION CONTROL

FLAIR VIRTUAL PRODUCTION SYNC BOX



QUICK START GUIDE

QSG Product code: MRMC-2283-01 Product Covered: MRMC-2207-02

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Chapter 1 Quick Start

Overview

Thank you for using the Flair Virtual Production Sync Box from Mark Roberts Motion Control (MRMC). The Flair Virtual Production Sync Box is a device that receives the 3D data from Flair at the standard 50Hz update and interpolates the position when it gets a sync pulse and outputs the positions to up to 10 receivers.



This solves multiple issues to do with Data Multicast and IP Range issues as well as Getting exact sync between the 3D display system and the video camera source.

A tri-level sync signal is sent to the device, and it uses the last two received 3D positions to generate an updated position exactly timed to the received sync (it is actually extrapolated rather than interpolated) and this is immediately sent to the designated IP and Ports.

Safety

- Do not use around flammable gas. All electrical equipment can generate sparks that can ignite flammable gas.
- Keep Away From Pets And Children. The track and camera heads have powerful motors that can pinch, so take care not to get your hands trapped in the gears or cabling.



- Keep the equipment dry. The system has **not** been made weatherproof. Do not use with wet hands.
- Keep cables tidy. Use cable ties to keep them out of harm's way.



Flair Virtual Production Sync Box: Setup and configuration



Connect the Flair Virtual Production Sync box to the same network as that of Flair PC. Power up the sync box by supplying 5VDC IN.

Note

The Termination switch is related to FreeD sync pulses. If sync box Genlock is to be 'daisy-chained' with other devices, the switch should be in 'OPEN' position. If used as stand-alone device, the switch must be in 750hm position.

The device will normally get its IP from a DHCP server, and if a router is used, then that router can be used to bridge from the standard MRMC network subnet 192.168.1.XXX to the subnet of the 3D rendering system. Consult with a network specialist to configure as required. If no DHCP server is located, the device will adopt its default IP 192.168.1.221.

Once it has started, the Flair Virtual Production Sync Box shows data on a small display on the top of the unit, showing the Device IP and port as



well as listing a selectable recipient's IP address and port as well as the incoming sync frequency and the type of incoming data.



Flair would be configured to send to the Device's IP (default

192.168.1.221) and Port (default 55534). Do not use the "SYNC" mode of data export, use the default 50Hz output. The sync box currently supports Standard MRMC format Data, FreeD (Camera and Model Mover) as well as OSC format.

2 External Devices Setup										Show Unused I						sed Devic		
5			Ą	oply			Exit									Help		
Function	Mode	s	ier UD	PTOP	Port	Spee	d Da	ata Pa	rity St	ops				IP				Port
VTR1	Off	~ •	0	0	Com1	~ 38400	~ 8	~ N	~ 1	~[0	2	0	*	0	1	0	0
VTR2	Off	~ 0	0	0	Com1	~ 38400	~ 8	~ N	~ 1	~[0		0		0		0	0
Frame Out	Ott	~@	0	0	Com1	~ 38400	~ 8	~ N	~ 1	~[0		0		0		0	0
Timecode	TC Comparator	~ •	0	0	Com1	~ 38400	~ 8	~ N	~ 1	~[0		0		0		0	0
ata Output	FreeD	~0	۲	0	Com1	38400	8	N	× 1	-[192	. 1	68		1		221	55534

If the PC is connected to the network (This would be the INTIME network side of Flair that the RT unit and any axis boards are connected to) then the user should be able to log into the Configuration server on the sync box, simply by opening a browser and typing the IP address of the sync box (default of 192.168.1.221) into the address bar which presents the External Device setup screen.

Note: The Flair PC will not be able to connect by default, as the browser cannot access the INtime network. You can use another computer plugged into the INtime switch (black-box network switch) over Ethernet to configure this. Make sure this computer has an IP address that can talk



to the Flair Virtual Production Sync Box: By default, 192.168.1.XXX and subnet 255.255.255 0 should work – just ensure you don't use the same IP address as any other computer or Mark Roberts node board on the INtime network. IP conflict will prevent the sync box browser interface from loading, and there will be no warning on the box of such conflict.

•••	🕄 RT Sync Setup 🗙 🕂								
$\leftarrow \ \ \rightarrow \ \ G$	▲ Not Secure 192.168.1.221								
RT Syn	chronizer Configuration								
This IP is 192.16	8.1.221 Listening on Port 55534								
Destinations: 2	Send on sync pulse Set								
IP 1: 192.168.1.220 PORT1: 40002 Set Device 1									
IP 2: 192.168.1.222 PORT2: 40002 Set Device 2									
Save to Flash									
Configure IPv4:	Manually								
IP Address:	192.168.1.223								
Subnet Mask:	255.255.255.0								
Router:	192.168.1.221								
DNS Server:	:								
Search Domains:									

The number of external devices to send the data to can also be specified as well as their IP and Port numbers. After you have changed any given External device, you must press the (set) button before editing another. If you have set it up as desired, then this configuration can be saved to permanent memory using the "Save To Flash" button.

There are LEDs and a button on the device above and below the screen. The top left LED flashes when a sync signal is being detected, and the top right one flashes when Rt Data is being received by the device.

Button 1 switches between Send on Interlaced Signal (Valid with PSF and I type Tri Level) and Send on Progressive Signal. This is indicated on the



screen by the sync speed; it will be twice as fast as the frame sync when in interlaced mode. This is not valid when using a progressive signal as there is no field signal.



Holding the leftmost button for 5 seconds will switch between Send on Sync signal and Send on Data receipt. This is indicated by the frequency reading as "No Sync"

Button 2 and 3 will let you scroll forwards and backwards through the different destination IP and Ports.



Holding down button 4 for 5 seconds will reset the device. This is useful to reacquire an IP from the DHCP server as the device will boot up faster than most Routers and would have chosen its default IP before the router booted.

Note

When using this device with a network that has several computers, adding a router is recommended to isolate as many devices as possible from the Flair network. If there are not enough network ports on the 8-port switch, a router might need to be added.



Notes





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