F2B, VMF-2, VM-2

# Video Mixers and Faders

# **Manual Version 2.11**



BURST ELECTRONICS INC

ALBUQUERQUE, NM 87109 USA

(505) 898-1455 VOICE

(505) 890-8926 TECH SUPPORT

(505) 898-0159 FAX

www.burstelectronics.com



Hardware, software and manual copyright by Burst Electronics. All rights reserved. No part of this publication may be reproduced or distributed in any form or by any means without the written permission of Burst Electronics.

## **Video Mixers and Faders**

### Introduction

Burst Electronics manufactures a series of Mixers and Faders. They include a single input Fade-to-Black unit, a 2 channel A to B Mixer, and a 2 channel A to B Mixer/Fader.

## **Model F2B Fade to Black**

The F2B Fade to Black module is a single input

device. The video input fades to black (7.5 IRE) through the action of a fader bar. The active portion of video is stripped away leaving sync, color burst and black. The output is dc clamped to zero volts. The F2B is 12 Vdc powered with a wall module that is provided.



Options Available: PAL

## **Model VMF-2 Mixer/Fader**

The VMF-2 Video Mixer/Fader will accept two

synchronous (genlocked) inputs and smoothly fade between them. Another feature is the ability of the VMF-2 to fade the "A" channel to Black. These



actions are controlled by the fader bar.

#### Connections

Interconnect the VMF-2 Head End unit with the Remote Control Unit (RCU) using the RJ11 cable attached to the RCU. Burst Electronics supplies a 3' (1 meter) cable. This cable may be lengthened to a maximum of 25' (8 meters).

Connect the two video sources to the two inputs, A & B. The sources must be synchronous (genlocked) for a smooth transition from A to B. The output is fed to a monitor, VTR, etc. If the application is for Channel A Fade to Black only, then no B input is required.

There are internal 75 Ohm terminations for each input channel. If you want the input unterminated (HiZ), first remove the two screws holding the front panel on the Head End unit. Remove the front panel and slide the top cover forward about two inches. Remove the jumper from the appropriate input (labeled W2 for channel "A", W1 for channel "B"). Replace the top cover and front panel.

Power is supplied by a 12 Vdc 500 mA wall module (included). Any 12 Vdc source may be used (camera battery pack or equivalent). The center pin for the power supply is negative.

## VMF-2 Operation

The VMF-2 will fade from A to B, B to A, or A to Black. The operation can be done manually via the RCU's fader bar or automatically via the **TAKE** pushbutton or remote GPI trigger.

## A to B, B to A Fade

Preset the fader bar to A. Select **MANUAL** Mode with the top pushbutton of the RCU, the Red LED will be on, indicating manual operation. Also, select **A TO B** on the **MODE** switch of the RCU, the Green LED will be on. Sliding the fader bar will now fade from channel A to channel B, and from channel B to channel A.

#### A to Black

Preset the fader bar to A. Select **A TO BLK** on the **MODE** switch, the Red LED is on. Operation of the fader bar will now fade channel A to Black, and from Black to A. This operation strips the active video from the signal leaving behind the sync, color burst and black. No B input is required for A to Black operation.

## **Take Mode**

Select **AUTO** on the **MODE** switch. The speed of the **TAKE** is now controlled by the position of the fader

bar. The range is from about 0.15 seconds to 5 seconds. Select the speed you desire by adjusting the position of the fader bar. Upon hitting the **TAKE** pushbutton (or activating a GPI), the action (be it A to B, B to A, or A to Black) will occur at your preset speed.

Options Available: PAL, Y/C (S-VHS, Hi8)

### Model VM-2 Video Mixer

As with the VMF-2, this unit requires both inputs (A & B) be

synchronous (genlocked). This unit fades between channel A and channel B. The fade speed ranges from 0.15 seconds to 5



seconds. The adjustment for this timing is set by the Control knob on the front panel. Turn the knob clockwise for a faster fade rate, counter-clockwise for a slower fade rate. The **TAKE** switch controls the fade from either channel A to B, or from channel B to A. Flip the **TAKE** switch towards the channel you wish to fade to. The LED will indicate which channel is currently being displayed.

The 3.5mm rear panel connector is for remote control. To select channel A, connect **RING** to **TIP**; channel B is **RING** to **SLEEVE**.

Options Available: PAL, Y/C (S-VHS, Hi8)

## Specifications (All Models)

Input/Output 1 Volt Standard Video

Input Termination 75 Ohms 1% (jumper selected)

Output Impedance 75 Ohms 1% BNC (4 pin MiniDIN on VMF-2Y/C & VM-2Y/C)

Output Protection Open or Short, infinite duration Black Output Sync, Color Burst &

7.5 IRE Setup (0 IRE for PAL)

DC Powered 11 to 14 Vdc

Power 120 VAC 60 Hz, 12 Vdc

500 mA UL Listed Wall Module (included, center negative)

### Model F2B

Bandwidth: 10 MHz @ 0.5 dB

Differential Gain: 0.1%
Differential Phase: 0.1°
S/N: 60 dB

Size: 2.5W x 6.0D x 1.8H inches

Power: 12 Vdc @ 125 mA (center negative)

#### Model VMF-2

Bandwidth: 10 MHz @ 0.5 dB

Differential Gain: 0.1%
Differential Phase: 0.1°
S/N: 60 dB
Cross talk: 60 dB
GPI Connector: RCA

Size (Head End): 4.1W x 5.5D x 1.5H inches Size (RCU): 2.5W x 6.0D x 1.8H inches

Power: 12 Vdc @ 200 mA (center negative)

#### Model VM-2

Bandwidth: 10 MHz @ 0.5 dB

Differential Gain: 0.1%
Differential Phase: 0.1°
S/N: 60 dB
Cross talk: 60 dB

Remote Connector: 3.5 mm 3 conductor Female

(3.5 mm 3 conductor Male

included)

Size: 4.1W x 5.5D x 1.5H inches

Power: 12 Vdc @ 130 mA (center negative)