

Kalypso & Zodiak VIDEO PRODUCTION SWITCHER	
Shot Box Option Instruction Manual	
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#### **Grass Valley Web Site**

The <u>www.thomsongrassvalley.com</u> web site offers the following:

**Online User Documentation** — Current versions of product catalogs, brochures, data sheets, ordering guides, planning guides, manuals, and release notes in .pdf format can be downloaded.

**FAQ Database** — Solutions to problems and troubleshooting efforts can be found by searching our Frequently Asked Questions (FAQ) database.

**Software Downloads** — Software updates, drivers, and patches can be downloaded.

# **Contents**

## **Shot Box Option**

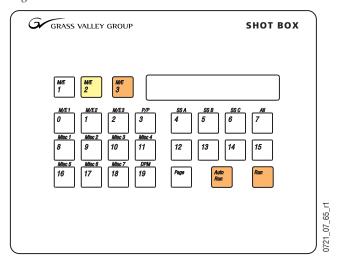
Introduction	
Features	
Installation	5
Cabling	7
Configuration	7
Operation	7
Reset Shot Box	7
Delegation Buttons	8
Page Button	8
Register Buttons	9
Run Buttons	9
Readout Display	9
Version Display	

# Shot Box Option

## Introduction

The E-MEM Shot Box (Figure 1) is a separate panel that is designed for rapidly recalling previously built effects.

Figure 1. Shot Box Control Panel



The Shot Box uses an Editor Port using the Editor protocol.

#### **Features**

- Single button delegation to M/E 1, 2, 3, or PGM/PST.
- Five pages of 20 registers allows access to all 100 registers.
- Register, page, and E-MEM readout display.
- Run and Auto Run controls.

## Installation

The dimensions in Figure 2 allow clearance for sheet metal and fasteners, and provide top plate overlap of approximately 0.6 in. (15 mm) on all sides. If the mounting surface is 0.75 in (19 mm) or less in thickness, the mounting nuts will not need to be countersunk (Figure 2). Refer to Figure 3 for exact screw placement and sheet metal dimensions.

Figure 2. Shot Box Cutout

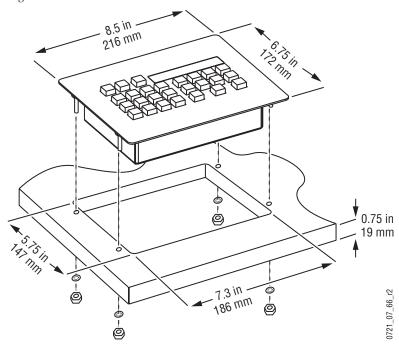
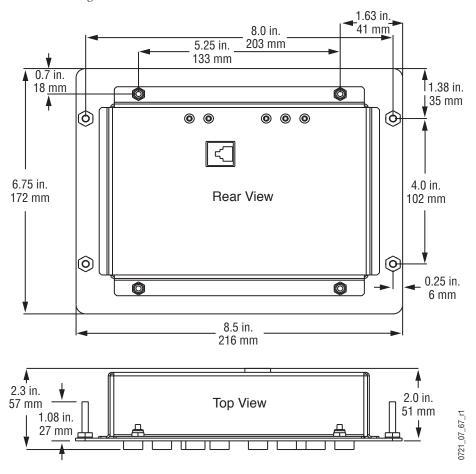


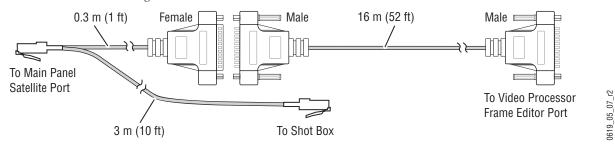
Figure 3. Shot Box Dimensions



#### **Cabling**

The provided cables connect the Main panel, Shot Box, and Video Processor frame as shown in Figure 4. Power passes from the Main panel to the Shot Box. To support power distribution, the short cable connects to the Main panel and the long cable connects to the Shot Box. If the Shot Box will be placed more than 3 m (10 ft) from the Main panel, an optional cable kit is available. Contact your local Thomson Grass Valley sales office for details.

Figure 4. Shot Box Cables and Connections



## **Configuration**

Shot Box control of the system is configured the same as editor control.

- Go to the Ports & Device Definition menu (accessed via Eng Setup, Ports & Devices) and assign an Editor device to the Video Processor frame port you attached the Shot Box cable to. Its settings should be 38.4k Baud, Odd Parity.
- 2. Activate editor control by going to the External Device Enables menu (accessed via Extern Device, Enables) and turn on the Editor Controls Switcher button.
- **3.** If necessary, reset the Shot Box (see below).

# **Operation**

### **Reset Shot Box**

When the Video Processor frame is reset or powered off and on, it can lose communication with the Shot Box (the Editor Interface state may turn off). The Shot Box panel must be reset to restore communication. The Shot Box can be reset by cycling power to the unit, or via keystrokes on the panel.

#### To Reset the Shot Box from the Panel:

- 1. Press **Page** to enter the page selection mode.
- **2.** Press and hold the **Run** and **Auto Run** buttons simultaneously until the readout display goes blank.
- **3.** Release the **Run** and **Auto Run** buttons.

#### **Delegation Buttons**

The three buttons to the left of the display delegate the Shot Box panel to  $M/E\ 1$ ,  $M/E\ 2$ , or  $M/E\ 3$ , as labeled, or to Master E-MEM. When one button is illuminated, that M/E is subject to control. When all three buttons are off, the panel is delegated to Master E-MEM. These buttons are mutually exclusive, such that pressing one button turns off any other currently selected button, and pressing a currently selected button turns it off, delegating the panel to Master E-MEM.

Following standard system operating procedures, when the Shot Box is delegated to Master E-MEM with Auto Recall off, the Enable buttons on the Master E-MEM panel control what E-MEM levels are affected by a Shot Box register recall. When Auto Recall is on, the levels affected can vary with each Shot Box register recall, depending on what levels were enabled when the effect was learned.

#### **Page Button**

The **Page** button is used to gain access to five pages of 20 registers for each of the three M/Es and PGM/PST. Each page is accessed by pressing the **Page** button, then selecting the page number (**0** - **4**).

Table 1. Page Button Registers

Buttons Pressed		Registers Accessed
Page	0	0 - 19
Page	1	20 - 39
Page	2	40 - 59
Page	3	60 - 79
Page	4	80 - 99
	1	

The **Page** button is also used for resetting the panel and displaying versions.

#### **Register Buttons**

The 20 register buttons (labeled 0-19) correspond to the E-MEM registers selected for the delegated bank and page. Pressing one of these buttons selects that register for use. If **Auto Run** is on, the register will also run automatically.

#### **Recalling Registers**

To recall a different register from the same page range, simply press the **0-19** Shot Box button for the desired register.

To recall a register from a different page range, first specify the page and then the register number (Table 5).

Figure 5. Examples of Recalling Registers from Different Pages

Register	<b>Button Presses</b>
5	Page, 0, 5
15	Page, 0, 15
25	Page, 1, 5
79	Page, 3, 19
80	Page, 4, 0

Once a page is selected, subsequent registers can be recalled from that page range with a single Shot Box register button press.

#### **Run Buttons**

The **Run** button runs the selected Master E-MEM register, just like pressing a **Run** button on the Main panel. The **Run** button on the Shot Box does not light for the duration of the effect, as the **Run** button does on the Main panel (the Editor protocol does not support this). Instead, the **Run** button lights for one second to indicate the command has been sent.

The **Auto Run** button works the same as on the Main panel. When on, E-MEMs will run automatically when recalled from the Shot Box.

### **Readout Display**

The Shot Box Readout display shows which bank and page is currently selected, and which register was last selected from the shot box panel.

## **Version Display**

Software and hardware versions can be reported on the Shot Box Readout display. Microcontroller code (M), PLD code (P), and the board hardware assembly (H) are shown.

#### **To Display Versions:**

- 1. Press **Page** to enter the page selection mode.
- 2. Press the M/E 3 button. The versions will appear on the character display (for example, M1.0 P1.0 H1.0)
- **3.** Press the **0** button to return to normal Shot Box operating mode.