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## **MAV-70 Shuttle Box**

## **USER MANUAL**

## Please note:

## MAV70XG1 Video Server requires:

Decoder Board –2.60 or higher SYSMain Board – 2.60 or higher

## **MAV70 Video Server requires:**

**Decoder Board – 2.60 or higher SYSMain Board – 2.60S or higher** 

# **BZA820 Software Application must be:** Version 2.01 or higher

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### 1. REVISION HISTORY

Rev. 3.1 070703 Added statement on cover advising the video server must have Decoder and SYSMain Board versions of 2.60 or higher.

Rev. 3.2 072903 Changed cover to list video server requirements and software application.

Rev. 3.3 010804 Added DNF Controls Limited Warranty.

## Getting Started . . .

### 2. PRODUCT DESCRIPTION

The MAV-70 Shuttle Box adds jog and shuttle wheel capability to facilitate control of the MAV-70 Video Server.

The Shuttle Box automatically switches controls between the automation control system and the Shuttle Box.

#### a. STANDARD FUNCTIONS

PLAY STOP REWIND FAST FORWARD JOG/SHUTTLE MODE SELECT JOG & SHUTTLE with the WHEEL

#### b. REAL-TIME STATUS INDICATORS

The MAV's status response is read by the Shuttle Box and the status indicators are updated to reflect the current state of the VTR.

PLAY STOP/STILL REWIND/REVERSE FAST FORWARD/FORWARD JOG MODE SELECTED

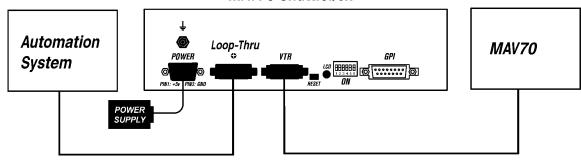
### 3. INSTALLATION

- a. Plug one end of a standard 9-conductor, RS422 serial cable into the 9-pin connector on the rear of the MAV-70 Shuttle Box labeled "MAV-70." Plug the other end of the cable into the 9-pin REMOTE connector on the MAV-70.
- b. Plug the 9-pin D-female connector on the POWER SUPPLY into the male 9-pin connector on the rear of the Shuttle Box.
  - Plug the AC connector into a wall outlet, 90 VAC 265 VAC, 50-60 Hz.
- c. Connect the automation system to the 9-pin female connector, on the back of the MAV-70 Shuttle Box, labeled "Loop-Thru," using a standard 9-pin, RS422 Serial Cable.

Installation is completed.

## **Connection Diagram**

#### MAV70 Shuttlebox



### 4. OPERATION

Select the desired transport function by pressing the appropriate switch on the front of the Shuttle Box. The display shows: "MAV-70 Shuttle Box"

#### SHUTTLE BOX OPERATION

The Shuttle Box automatically determines whether the Shuttle Box or automation system gets control of the MAV-70 using the following rules:

- a. Normally, the automation system is always in control over the MAV-70.
- b. When any function switch is pressed on the Shuttle Box or the Wheel is moved, the LOOP-THRU is turned off, disabling the automation system. The Shuttle Box now has control of the MAV-70. After the selected function is executed or after a 2.5-second delay, the LOOP-THRU is again turned on, allowing the automation system to control the MAV-70.
- c. When the LOOP-THRU is turned on, the Shuttle Box monitors communications between the MAV-70 and the automation system. The MAV's status response is read by the Shuttle Box and the status indicators are updated to reflect the current state of the VTR.

### Reference . . .

### 5. SPECIFICATIONS

### Physical -

#### a. FRONT PANEL

6 Status LEDs Play, Stop, Rewind, FFwd, Jog

1 Power LED

3 Direction LEDs Indicates direction of Jog/Shuttle

Switches Play, Stop, Rewind, Fast Forward, Jog, Shift, Reset

Display 2-Line LCD, back lit with adjustable contrast

Jog/Shuttle Wheel Size 19" x 5" x 1-3/4" (Rackmount)

7"x 5"x 1 1/2" (Table Top)

Weight 2 lbs.

#### b. REAR PANEL CONNECTORS

MAV-70 RS422 9-Pin D-type connector, female (DB9-F)

Power: 5-volt D.C., 500 ma. 90-265 VAC, 50/60 Hz converter

supplied (Rack Mount or Tabletop)

GPI 15-pin D-type connector, female (DB15F)

Switch Input: SPST contact closure, momentary Status Output: Open collector, sink 50mA.

## c. MAV-70 RS422 SERIAL CONNECTOR 9-Pin D-Type, Female

Pin#	1	Frame Ground	6	Receive Common
	2	Receive A 🗲	7	Receive B 🗲
	3	Transmit B →	8	Transmit A 🗲
	4	Transmit Common	9	Frame Ground
	5	Spare		

## d. LOOP THRU RS422 SERIAL CONNECTOR 9-Pin D-Type, Female

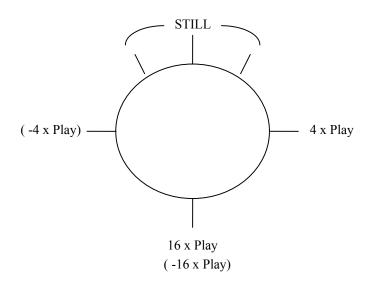
Pin#	1	Frame Ground	6	Transmit Common
	2	Transmit A→	7	Transmit B ->
	3	Receive B 🗲	8	Receive A 🗲
	4	Receive Common	9	Frame Ground
	5	Snare		

## e. GPI (KEYPAD) INTERFACE CONNECTOR 15-Pin, D-Type, Female (DB15-F)

Not used.

### SHUTTLE WHEEL SPEEDS

**NOTE-** ( ) represents Shuttle Reverse speeds



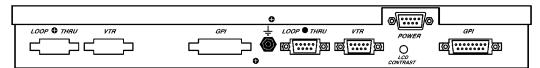
### 6. HOUSING CONFIGURATIONS

## Rackmount, Front & Rear View

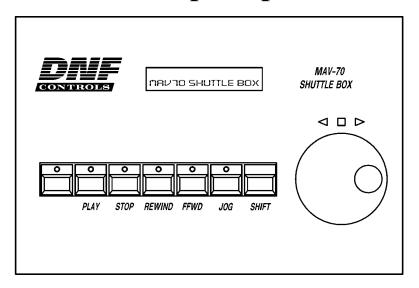
FRONT PANEL



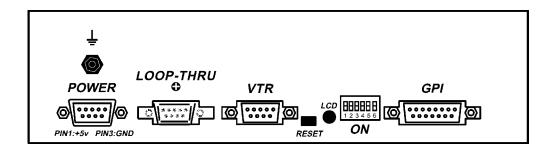
REAR VIEW



## **Table Top, Top View**



## Table Top, Rear View



### 7. DNF CONTROLS LIMITED WARRANTY

DNF Controls warrants its product to be free from defects in material and workmanship for a period of one (1) year from the date of sale to the original purchaser from DNF Controls.

In order to enforce the rights under this warranty, the customer must first contact DNF's Customer Support Department to afford the opportunity of identifying and fixing the problem without sending the unit in for repair. If DNF's Customer Support Department cannot fix the problem, the customer will be issued a Returned Merchandise Authorization number (RMA). The customer will then ship the defective product prepaid to DNF Controls with the RMA number clearly indicated on the customer's shipping document. The merchandise is to be shipped to:

DNF Controls 12843 Foothill Blvd., Suite D Sylmar, CA 91342 USA

Failure to obtain a proper RMA number prior to returning the product may result in the return not being accepted, or in a charge for the required repair.

DNF Controls, at its option, will repair or replace the defective unit. DNF Controls will return the unit prepaid to the customer. The method of shipment is at the discretion of DNF Controls, principally UPS Ground for shipments within the United States of America. Shipments to international customers will be sent via air. Should a customer require the product to be returned in a more expeditious manner, the return shipment will be billed to their freight account.

This warranty will be considered null and void if accident, misuse, abuse, improper line voltage, fire, water, lightning or other acts of God damaged the product. All repair parts are to be supplied by DNF Controls, either directly or through its authorized dealer network. Similarly, any repair work not performed by either DNF Controls or its authorized dealer may void the warranty.

After the warranty period has expired, DNF Controls offers repair services at prices listed in the DNF Controls Price List. DNF Controls reserves the right to refuse repair of any unit outside the warranty period that is deemed non-repairable.

DNF Controls shall not be liable for direct, indirect, incidental, consequential or other types of damage resulting from the use of the product.

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