



SUPER DOVE

USER'S MANUAL

TABLE OF CONTENTS

INTRODUCTION	1
DESCRIPTION	1
MAIN NEW FEATURES	2
SAFETY INSTRUCTIONS	3
Preparation	3
Environmental Requirements	4
Location and Hookup	4
Servicing	5
LOCATION AND FUNCTION OF CONTROLS	6
Front Panel	6
Rear Panel	10
INSTALLATION INSTRUCTIONS	13
MESSAGE CENTER AND OPTION SELECTION	16
Option Selection	16
Option Descriptions	17
ERROR MESSAGES	30
ADDITIONAL INFORMATION	38
Changing a Fuse	38
APPENDIX A - CONNECTORS	40
APPENDIX B	44

AVL SUPER DOVE

INTRODUCTION

Congratulations on your purchase of an AVL SUPER DOVE. The SUPER DOVE brings you all the capabilities of previous Dove models and much more. The exciting new operation and convenience features are described in this manual.

DESCRIPTION

The AVL SUPER DOVE is a microprocessor based dissolve/playback unit. Each SUPER DOVE controls up to three slide projectors simultaneously. The SUPER DOVE receives its cues in digital format from either its internal RAM cartridge, a remote control, an AVL Show Manager, an AVL programmer (such as a Genesis) or directly from tape. These cues instruct the SUPER DOVE to dissolve projector lamps on or off, to advance or reverse the slide projectors, to load or execute loops, to establish maximum or minimum lamp values, or to operate the auxiliary contacts. The SUPER DOVE can execute all cues that can be programmed on any of AVL's programmers (with the exception of the Show Pro III's Aux 0 and Standby).

In addition, the SUPER DOVE has "DigiTrak" to provide bidirectional communication with an AVL SHOW MANAGER. It is over this channel that the SUPER DOVE receives show operation commands and status requests from the SHOW MANAGER, and reports status and error conditions to the SHOW MANAGER.

Key to the SUPER DOVE's convenience of operation is the new Message Center with its easy-to-read Liquid Crystal display(LCD). The Message Center offers a user friendly man - machine communication mechanism for selecting from the extensive menu of options as well as reporting status information and error conditions.

MAIN NEW FEATURES

- o Message Center
- o Selected options and projector tray position preserved during power off periods.
- o Show operation features and SHOW MANAGER compatibility.
- o Home Tray Sense connections independent of remote cue.
- o Projector Power Control option.
- o Lamp fail sense.
- o Improved Set-up capability.
- o More flexible Remote features including remote focus and single projector operation.

- o Random Access Slide Projector Control
- o Expanded Addressing Via PROCALL Channel Command
- o "Setup" Menu
- o Projector Power Down
- o Home Sense Switch
- o Show Manager Interface

SAFETY INSTRUCTIONS

Preparation:

- o Before operating the SUPER DOVE, read and understand all the following Safety Instructions as well as the Operating Instructions contained in this manual.
- o Heed all WARNINGS and FOLLOW ALL INSTRUCTIONS in this manual.
- o Retain the instructions for future reference.

Environmental Requirements:

Temperature: 0 to 45 degrees C (32 to 113 degrees F)

Humidity: 10 to 90 percent

Altitude: Sea Level to 12,000 ft.

Voltage: 90 to 110 volts A.C.)
108 to 132 volts A.C.) Selectable
198 to 242 volts A.C.)
216 to 264 volts A.C.)

50 to 60 Hertz

Location and Hookup:

- o Use a properly grounded three prong AC outlet which provides one of the suitable operating voltages.
- o Check that the voltage selector plug inside of the unit is set to the correct voltage setting before plugging in the unit.
- o The SUPER DOVE was designed to work properly with either 50 or 60 Hz.

- o Be sure that all of the slide projectors will accept the voltage available at the outlet. The voltage provided at the receptacles on the rear of the unit is the same as that at the outlet from which the SUPER DOVE is powered. Check with the projector manufacturer if in doubt.
- o The SUPER DOVE should not be used near water.
- o The SUPER DOVE should not be placed too close to, or directly over a heat source.
- o The SUPER DOVE should be positioned so that there is proper ventilation. Make sure air vents are not blocked.
- o The power supply cord should be routed so that it is not walked on or pinched by other items. If the cord should be damaged, be sure to replace it with a cord rated at 15 amps.

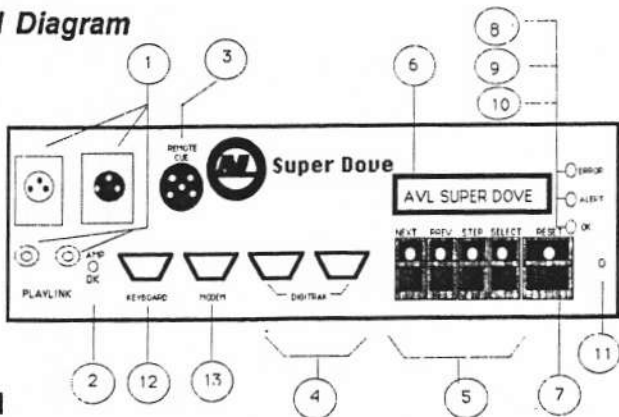
Servicing:

- o The user should not attempt to service the unit. Servicing should be performed only by a AVL Repair Center in the US and Canada or your authorized AVL dealer outside the US and Canada. Contact your dealer or call the AVL service department for an SRA # when any of the following have occurred.
 - Objects have fallen, or liquid has been spilled into the unit.

- The SUPER DOVE has been exposed to rain.
- The SUPER DOVE does not appear to operate normally or exhibits a marked change in performance.
- The SUPER DOVE has been dropped, or the cover or base damaged.

LOCATION AND FUNCTION OF CONTROLS

Front Panel Diagram



Front Panel

1. Play Link (RCA and XLR receptacles)

This is the data input to the Super Dove. Two of each of the jacks are provided to enable daisy-chaining to other Super Doves. Either standard RCA phone plugs or balanced XLR connectors can be used.

Amp L.E.D.

When lit, indicates the Super Dove is receiving a Magnetic Tape signal of adequate amplitude for processing.

Remote Cue Socket

This jack accepts standard Kodak Hand Controls to provide one of the following set of functions:

- cut, 2 second dissolve and reverse to previous slide
- cut, 2 second dissolve, reverse to previous slide, and projector focus.
- Projector forward, projector reverse, and projector focus.

DigiTrak Connectors

Two 9-pin D connectors to provide digital communication with A Show Manager.

Message Center Controls or Option Selection Controls

These buttons enable the user to make menu selections from the extensive list of SUPER DOVE options (described later in this manual). From left to right they are labeled: Next, Prev, Step and Select.

6. Message Center L.C.D. Panel

Backlit LCD panel for the display of option, status, and error information.

7. Reset

This button is used to either discontinue stepping through the menu or, if not in the menu to return all projectors to home tray position and turn the lamps off.

8. Error Indicator

When flashing indicates that the SUPER DOVE has detected an error of some type. The LCD panel will display 1 to 4 specific messages in sequence to identify the specific error or errors detected.

9. Alert Indicator

When flashing indicates that a SHOW MANAGER is controlling the running of a show.

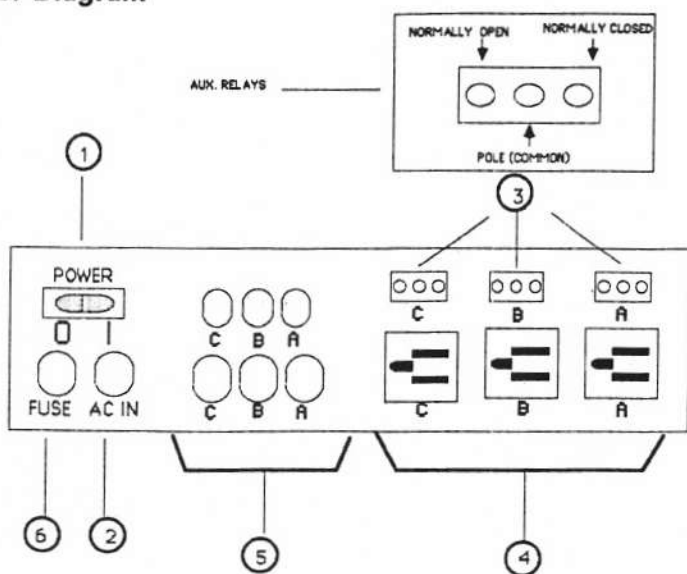
10. OK Indicator

When flashing indicates that the SUPER DOVE is operating in an error free mode.

11. L.C.D. Contrast Adjustment

This hole provides access to the LCD contrast adjustment pot. A small flat blade screwdriver can be used to adjust the contrast as desired.

Rear Panel Diagram



Rear Panel

1. Power Switch

This switch controls power to the SUPER DOVE and the AC outlets on the rear panel.

2. AC Power Cord

The power cord connects the SUPER DOVE to an appropriate AC outlet.

3. Auxiliary Contacts

Three auxiliary channels are available on the Super Dove. The auxiliary channels can be used to control a variety of external auxiliary equipment. Examples include, turning on or off a 16mm Projector, house lights or spot lights.

The auxiliary channel relays are rated at 28 volts AC/DC at 1 Amp max. The contact is a dry closure form C contact with all 3 points brought out to the connector so that either normally open or normally closed options are available.

The auxiliary channel relays will operate at all times the Super Dove's power switch is on and power is available at the AC power cord, regardless of projector power status.

Use of many of the devices that may be controlled requires a knowledge of their various interfaces. AVL recommends checking with the respective manufacturers for the accessories and procedures needed to perform the desired functions.

4. AC Projector Power Outlets

Three AC outlets are provided to supply power for each of the three projectors. These outlets are switched from the power switch, and when the "Auto Power" mode has been selected by the unit itself depending on Magnetic Tape and SHOW MANAGER inputs. Each handles a maximum of 400 watts.

NOTE: Changing the AC voltage plug on the SUPER DOVE has no affect on the voltage at the AC projector power outlets. This voltage will always be the same as that supplied by the AC outlet which provides power to the unit. Check the projector for the correct voltage before plugging it in.

5. Projector Dissolve Cords

These control cords plug directly into the rear of each projector. Each cord has two connectors at the projector end. One is terminated in either a 7 pin domestic Kodak or a 12 pin S - AV connector to control the projector's lamp on/off and projector forward/reverse functions. The second is terminated in either an 8 pin DIN connector on domestic units or a 6 pin DIN connector on S - AV. Refer to diagram on page.

6. Fuse

The fuse protects both the SUPER DOVE and the connected projectors from dangerous electrical faults. The proper fuse should always be used. NEVER attempt operation with a fuse of a higher rating, or with the fuse bypassed. At 100 or 120 volts an MDA-12 slow blow fuse should be used. At 220 or 240 volts an MDA-6 slow blow fuse should be used.

7. Shutter Control Fuse

A six-position dip switch located between Aux B and Aux C (marked Relay Contacts B and C) is used to connect the Super Dove auxiliary relays to SAV projectors' shutters. This is achieved by moving all six switches to the down position.

INSTALLATION INSTRUCTIONS

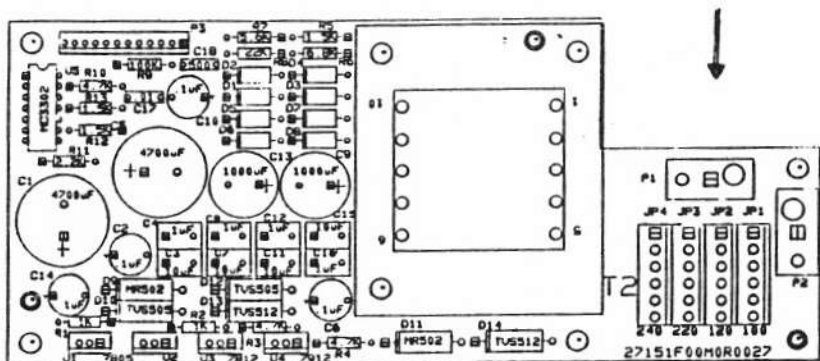
The process of installing a Super Dove is an easy one. The steps are described below.

1. Turn the power on/off switch to the OFF position before plugging the power cord into an AC outlet. Check that the outlet is properly wired with a 3 prong receptacle. An AC tester such as AMP or Ideal #61-035 may be useful. Proper operation requires a voltage between 90 and 132 volts AC or between 198 and 264 volts AC, either 50 or 60 HZ. The SUPER DOVE and its connected projectors require up to 1200 watts. For 100 or 120 volt operation this could require 12 amps, and for 220 or 240 volt operation 6 amps.

- Check that input to the voltage setting for the unit is correct. The voltage selector switch is located on the right side of the unit. If the selector is not in the correct position, change it by first removing the fuse (in the center of the switch) using a flat-blade screwdriver, then rotate the selector using a coin, and finally, replace the fuse.

Some older units do not have an externally accessible selector switch. To check the voltage setting on these units, carefully remove the 4 screws (2 on each side) that hold the cover to the base. The voltage selector plug is located on the power supply board. This is on the right hand side of the unit when viewed from the front. There are 4 positions labelled:

- 100 (volts)
- 120 (volts) Domestic units shipped on this setting
- 220 (volts)
- 240 (volts) Overseas units shipped on this setting



Location of Voltage Selector Plug

A six position shorting block will be located in one of the 4 positions. If not already at the desired voltage, move the plug. Then replace the cover. If you are uncertain of the voltage at the selected outlet, check the voltage before damaging the unit. The Super Dove will sense 50 or 60 HZ and automatically compensate for the connected frequency.

3. Suitably position the projectors and the SUPER DOVE. A 3 tier vertical stand has been found very convenient. The SUPER DOVE has three projector cords with each having either an Ektagraphic 7 pin male plug and an 8 pin DIN plug, or an S - AV 12 pin male plug and a 6 pin DIN plug. Insert the A plugs into the receptacles of the top projector, the B plugs into the center projector, and the C plugs into the bottom projector. If your projector is not equipped with an internal 0 tray position switch, the home tray sense feature will not operate. Now plug the three projector AC cords into the corresponding AC outlets on the rear of the Super Dove. Place ektagraphic projector power switches in fan position. Place S - AV power switch on and lamp switch in external position.

The set up just described is for a standard three projector stack; other configurations are possible. Specific set up procedures should be supplied by the producer of the show.

4. If a Kodak Hand Control is to be used for manual operation, plug it into the front panel socket labeled "Remote Cue".

5. Connect any auxiliary equipment via one of the three plugs labeled "relay contacts" on the rear of the SUPER DOVE.
6. Plug the Super Dove power cord into the AC power outlet.
7. Apply power to the SUPER DOVE. After two seconds the following run message is briefly displayed "AVL SDOVE 1.x(C)".

Any additional start-up procedure required is accomplished via the Message Center and the Option Selection controls described in the next section.

MESSAGE CENTER AND OPTION SELECTION

The Message Center consists of the 16 character single line LCD display on the front panel of the SUPER DOVE and the 4 push buttons below it. The LCD displays menu selections accessed by the buttons labeled: Next, Previous, Step and Select. When not in the menu or error mode, the Message Center displays the software mode (SHOW PRO or PROCALL), SUPER DOVE screen number, and whether the unit will automatically switch from SHOW PRO to PROCALL or vice versa depending on the incoming Magnetic Tape signal (steady M in MODE) or if the user must manually select such a change (flashing M in MODE).

Option Selection

Option selection on the SUPER DOVE simply involves locating the desired menu and then selecting which of the possible options is desired. The locating and selecting of the menus is accomplished via the following buttons:

- Next displays the next available menu
- Prev displays the previous menu
- Reset cancels the menu selection process

When the proper menu is displayed, the cursor will flash on the option currently selected. To select a different choice the following buttons are used:

- Step "steps" the cursor through the choices available within that menu. (Note that the option is not changed until selected)
- Select selects the choice currently highlighted by the cursor and stores it in non volatile memory

Option Descriptions

SUPER DOVE offers 14 menus in all. These menus are described below in the order in which they are displayed by the Message Center.

1. SCREEN 1 2 3 4 5

Locate the screen number of your choice using the "Step" button, then press "Select". The SUPER DOVE will now respond to cues received for the selected screen.

2. CHANNEL A B C D

PROCALL UX 1.50 and higher in conjunction with a CX-120 quadruples the number of AVL controllers that can receive command information over a single cue line. The Super Family of controllers (Super Dove, Super X-15, Super Switcher, and Room-Mate) no longer require the CX-120 to respond to PROCALL XP cues. A menu has been added to select the PROCALL XP channel address for the Super Dove. Always use channel A for PROCALL X1 and PROCALL 5 programs.

3. UNIT NUMBER 01

This information is only used by the SUPER DOVE when it is connected to a SHOW MANAGER. If the unit is not connected to a SHOW MANAGER this value may be ignored. Values between 01 and 30 are valid. When the cursor is on the units digit, each time the Select button is pushed the unit number will be increased. When the cursor is positioned on the tens digit, pushing the Select button will increase the tens digit and reset the units digit to 0.

4. SET LP:ABC PF PR

Cursor is positioned using the Step button. Pushing the select button while the cursor is positioned on A, B, or C will cause the projector's lamp to change state. Projectors' trays can be moved forward or reverse by positioning the cursor over PF for forward or PR for reverse and hitting the select button. Leaving this menu will automatically return the projectors to their positions on entry and extinguish all lamps. If data is present the data will override the set up function. Set up will not function when data is present on the Mag Tape inputs.

5. POWER AUTO ON

In the "auto" power mode, the Super Dove will check that all lamps are at the glow level before removing power from the projectors. If any of the projector lamps are not at the glow level, power will not be removed. Select AUTO to automatically turn power to the projectors off when:

- no lamp status changes or forward or reverse tray cues have been received for 5 minutes.
- no tape cues at all have been received for 2 min.
- 10 seconds after all the projectors have sensed home tray position following a home cue that occurred while any projector was in a loop load mode. This allows a programmed power down with any AVL software that includes the loop feature(Procall 5, X1, XP, Show Pro). To program power down enter a loop load command that names at least one of the projectors for each Dove you wish to power down. If the next command programmed is a home cue, the projectors will go home, then power down.
- Power to the projectors will be restored when any cue causes a lamp status change or a tray movement, Reset is pushed, the menu selections for Set-up or Home Tray Position are stepped, or any cue is received when the no cues received time out caused the shut down.

Select ON to maintain power to the projectors as long as the power switch is turned on.

6. EKTA SAV SIMDA

Select the type of projector in use to allow for best possible dissolve curve.

- EKTA - Standard US (III E, E2, and models in these series or their equivalent - Elmo, Telex, etc.)
- S-AV - Standard European (S - AV 2050, S - AV 2000 and models in these series or their equivalent.)
- SIMDA - The Super Dove can control random access slide projectors made by Simda. This feature requires AVL's Simda Adapter in addition to the Release 1.4 (or higher) firmware. The adapter is available in two versions; one is for use with a domestic Super Dove and the other is for use with an SAV Super Dove.

Interfacing to the projector is quite simple. First, connect the cables from the Super Dove to the Simda Adapter and connect the cables from the Simda adapter to the Projector. Finally, on the Simda projector set the mode switch to Simda mode.

7. MT XFR AUTO MAN

The SUPER DOVE has the capability to determine whether the incoming Magnetic Tape signal is in the PROCALL format or the SHOWPRO format and automatically transfer to the proper routines to interpret whichever format is received. To make use of this capability select AUTO, to disable this feature select manual. In the manual mode the unit will always remain in the language selected in item 8, and ignore cues received in the other language.

8. MTIN P5/X SHOPRO

Select initial language to use on power up; P5/X for PROCALL or SHOWPRO for SHOWPRO.

9. REM FOCUS NO YES

Select YES to provide the ability to focus one projector at a time from the Hand Control. The projector to be focused is selected by turning its lamp on with a 'cue' from either the Hand Control or a programmer. A lamp turned on by use of the Set Up menu is not considered to be on. This feature requires that the projector have the remote focus feature and requires an EC-3 Hand Control. When selected, the FWD button on the Hand Control will give a Cut for a short tap, and a 2 Second Dissolve for a longer push. The REV button will give a sequential reverse, which extinguishes the current up projector, reverses the previous projector in the sequence, and then brings that projector up. The FOCUS will adjust the lens of the up projector.

Select NO when the remote focus is not required. This will provide a 2 Second Dissolve for a push on the FWD button, a Cut for the REV button, and a sequential reverse for the FOCUS. This selection will function properly with either an EC-2 or EC-3 Hand Control. (Note: This mode of operation is identical to the Dove X and Dove X2)

[NOTE!! Some older models of Kodak projectors with the remote focus feature have a type of motor that is incompatible with the approach used by AVL to adjust focus. All Ektagraphic series built since 1983 are suitable for remote focus control by the SUPER DOVE. This includes the Ektagraphic III series and the model S-AV 2050. The Carousel series 4000 and 5000 and all previous series were built with the different motor and their focus CANNOT be adjusted by the SUPER DOVE. If these older projectors have been serviced since 1983, the focus motors may have been updated. If in doubt, projectors may be checked by removing the bottom plate and inspecting the focus motors worm gear. Motors with a black worm gear may be used with the remote focus feature, and those with a white worm gear may NOT be used unless the focus motor is replaced.]

10. SEQUENCE 1 2 3

The Sequence 1 function is used for manual operation of a single projector from the SUPER DOVE. The FWD button will cause the A projector to advance to the next slide and show the slide located at that position. The REV button will cause the A projector to reverse one position and show that slide. Additionally, if the projector has the remote focus feature and an EC-3 Hand Control is used, the FOCUS button will adjust the A projectors lens. This is independent of the option selected for Remote Focus.

The Sequence 2 or 3 function is used in either SHOWPRO or PROCALL when cues are entered through the remote cue socket by means of a Kodak hand control. When in the sequence 2 mode, only 2 projectors, the ones labeled A and C are used in this manual operation. In the sequence 3 mode all 3 projectors participate in the execution of manually entered cues.

Additionally, when operating in the Version 5 mode of PROCALL, the sequence 2 or 3 option should be selected to match the 2 or 3 projector sequencing option of that language.

The SEQUENCE menu setting now automatically updates the ACTIVE menu. SEQUENCE 1 causes only projector A to be ACTIVE. SEQUENCE 2 causes only projectors A and C to be ACTIVE. SEQUENCE 3 causes projectors A, B, and C to be active. These automatic settings can be overridden through the ACTIVE menu. The operation of the SEQUENCE and ACTIVE menus is as described above regardless of whether the entries are made directly on the Super Dove's message center or through the Show Manager's.

11. TRAY AUTO ON OFF

The SUPER DOVE has the capability to use the 0 tray position switch built into many slide projectors to verify the projector tray position whenever a home cue is encountered or the Reset switch is pressed. One of three possible options may be selected.

If AUTO is selected, the SUPER DOVE will determine at the time power is turned on if the switch is connected. The switch is open at 0 tray position and closed otherwise, and the unit can not electronically tell an open switch from an unconnected one. If the unit finds a closed switch on power up the 0 tray position switch exists and is connected. If the unit detects an open switch on power up, a tray forward command is issued. The Super Dove will reverse to its original position after forwarding. If a closed switch is detected, the switch exists and is connected and the SUPER DOVE will use it in future operations. If a closed switch is not found, the switch does not exist or is not connected and no attempt to use it will be made.

If ON is selected, use of the switch will be attempted whether it is connected or not.

When "auto" or "on" has been selected, power on, reset from the front panel, or a home cue will cause the Super Dove to check the operation of the home sense switch on the active projectors. Improper operation of a home sense switch is indicated with the following error message:

0 SWITCH FAIL

This is an informational message which can be cleared by pressing the Select button on the Super Dove's message center.

If OFF is selected, use of the 0 tray position switch will not be attempted.

12. HOME POINT 0 1

This feature allows you to automatically compensate for the fact that there is never a slide in slot 0. Many older shows are programmed to start on slot 1.

Select 0 and the tray will remain at the 0 position after a Home cue or a reset.

Select 1 and the tray is always returned to the 0 position, then automatically advanced one position following a Home cue or a reset.

13. POSITRAK ON OFF

When operating in the PROCALL mode the Positrak feature resyncs projector tray position and lamp status automatically from status information transmitted whenever time permits between programmed cues. It is necessary that the tape was recorded with Positrak on at the programmer or that Positrak be currently on at the programmer when receiving data directly from a programmer. Select ON to cause this digital update data interwoven with your program cues to keep projector trays and tapes exactly where they should be throughout your show.

Select OFF to disable the Positrak feature.

When operating in the SHOWPRO mode all cues are transmitted in a Positrak like format and the on or off selection has no meaning. Positrak can only be disabled at the programmer.

14. CYCLETRAK ON OFF

The Cycletrak feature senses a projector advance or reverse. The SUPER DOVE uses this information in two ways. If a forward or reverse command is given and the unit does not detect the proper projector response the internal record of tray position will not be updated and the unit will continue to execute the desired tray movement. Secondly, the unit can determine the projectors readiness for a subsequent move and make additional moves as soon as the projector is ready. Thus full advantage is taken of the ability of some projectors to move at a faster rate of speed.

Select ON to enable the Cycletrak feature or select OFF to disable the Cycletrak feature.

15. A B C ACTIVE ABC

By selecting some projectors to not be active, the user can avoid extraneous error messages indicating that an unused projector has experienced a lamp or tray movement failure. The Step switch will position the flashing cursor among the left set of A, B, and C characters. When the Select button is pressed, the state of the projector currently flashing will be changed to the opposite state (active to inactive or vice versa). The right set of A, B, and C characters display which projectors are currently active. This option only affects error message reporting. All other functions are not affected.

The SEQUENCE menu setting now automatically updates the ACTIVE menu. SEQUENCE 1 causes only projector A to be ACTIVE. SEQUENCE 2 causes only projectors A and C to be ACTIVE. SEQUENCE 3 causes projectors A, B, and C to be active. These automatic settings can be overridden through the ACTIVE menu. The operation of the SEQUENCE and ACTIVE menus is as described above regardless of whether the entries are made directly on the Super Dove's message center or through the Show Manager's.

16. LAMP FAIL ON OFF

Select ON to enable the external lamp failure detection feature.

Select OFF to disable the external lamp failure detection feature.

ERROR MESSAGES

In addition to its use in communicating the users desired option selections, the LCD also provides the user with specific error information once the flashing red LED has alerted him to the presence of an error. While the messages have been designed to be as self explanatory as 16 characters will permit, a brief explanation of each follows:

MT BAD CUE LOST The unit has recognized an input that has the characteristics of a cue, but there were too few or too many pieces of data, or the calculated check value did not match the received check value. This message will be cleared when a full cycle of Positrak cues have been received and the status has been corrected. Note: a bad cue will be displayed regardless of screen #. Since it is not possible to accurately determine the screen number of a bad cue, all Super Doves should sense this bad cue.

MT SIGNAL POOR While operating in a mode that uses multiple passes of the same cue data at least one, but not all passes were found to be acceptable. This is a warning that signal deterioration may be occurring. This message will clear after a brief time unless troublesome cues continue to be received.

DOWN LOAD FAILED SHOW PRO transmits a software update to older model DOVES to accomplish the loop functions. While the SUPER DOVE does not need this update, it does read it. An error in this update occurred, and while it will have no effect on SUPER DOVE operation it is indicative of a signal input problem. This message is only cleared by a power down of the SUPER DOVE.

PROJ A LAMP FAIL The system has detected a projector lamp failure on the projector A. The message will clear when the lamp is replaced or the projector is marked as inactive.

PROJ B LAMP FAIL Same for projector B.

PROJ C LAMP FAIL Same for projector C.

PROJ A TRAY FAIL The unit has detected a failure in some phase of tray forward or reverse operation on projector A. This might be the loss of control - or - a jammed tray (only sensed after a failure to home with 0 tray feature in use). The message will be cleared when the problem is corrected or the projector is marked as inactive.

PROJ B TRAY FAIL Same for projector B.

PROJ C TRAY FAIL Same for projector C.

PROJ A COMP FAIL The unit has detected both a lamp failure and a tray failure on projector A. The likely cause is that the projector is not connected to the unit or the power has been turned off. The message will be cleared when the problem is corrected or the projector is marked as inactive.

PROJ B COMP FAIL Same for projector B.

PROJ C COMP FAIL Same for projector C.

TRAYS NOT HOME

The SUPER DOVE saves tray position information in its non volatile memory. When power was turned on the tray position information showed the trays were not home. This might be expected following recovery from a brief power failure during a show, and it is this feature that allows the show to proceed from the point of power loss. The message can be cleared by doing a Home cue or a reset, or by pushing the Select button while not in the middle of the option selection process. Some examples of situations where this message will be seen are:

A) If a momentary power failure occurs during a show, the Super Dove will inform you that on power up (after a power failure) its currently stored tray position is other than home. The Super Dove can only sense whether a tray is home or not home, not exact tray positions. If the trays had not been manually moved during the power failure, you may continue with your show safely.

B) At the end of a show you have powered down your Super Dove and packed it for transportation. During set up for your next show, when the Super Doves are powered up, the TRAYS NOT

HOME message is seen. This occurs because the Super Dove still knows where the trays were the last time it was used. Hit reset to return the internal memory to tray position 0. Home tray sense will insure the trays are at 0, resyncing internal memory with actual tray position.

TRAY STATUS LOST There is a possibility that a power loss during a home or reset operation involving a search for the 0 tray position as indicated by the projectors internal switch that the SUPER DOVE may have saved an erroneous value of tray position. When power is restored, the unit recognizes this situation and reports it with this message. The message may be cleared by doing a home or reset with the 0 tray position switch still connected, or by pressing the Select button while not in the middle of the option selection process, or by manually setting all the trays to their 0 tray position.

DIGITRAK ERROR When connected to a SHOW MANAGER, this messages indicates that a message received over the Digital Link did not adhere to all of the requirements established for such transmissions.

CONFIGURATION ERR The SUPER DOVE is assembled from a group of multifunction modules. The program checks that the proper set of modules is installed in the unit. If the proper set of modules is not found, this message is displayed. This message should never be seen by a user unless he has made internal changes in the hardware or the intra module cables, or an internal malfunction requiring service has occurred.

A 0 SWITCH FAIL When "auto" or "on" has been selected in the "tray" menu, power on, reset from the front panel, or a home cue will cause the Super Dove to check the operation from the home sense switch on the active projectors. Improper operation of a home sense switch on Projector A is indicated with this message. This is an informational message which can be cleared by pressing the "select" button on the Super Dove's message center.

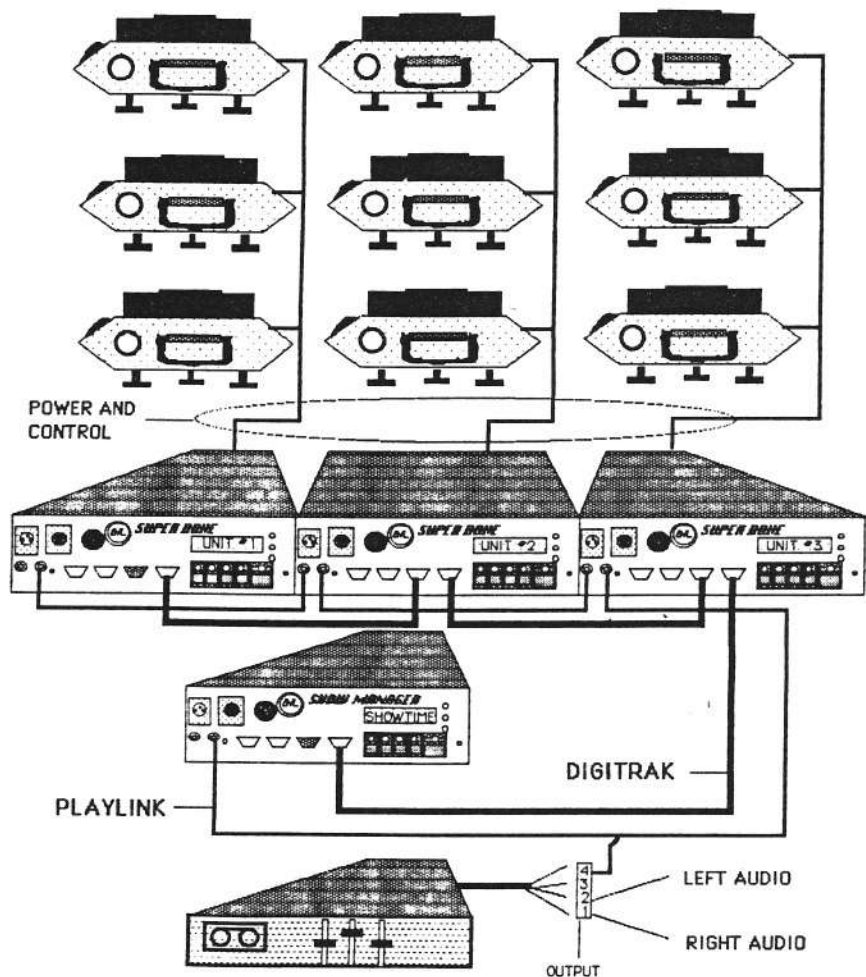
B 0 SWITCH FAIL Same for projector B.

C 0 SWITCH FAIL Same for projector C.

OPERATION

The Super Dove can be used alone for a 1 screen, 3 projector show or as a building block for a multi-screen presentation. If you are running a show with more than 3 projectors, the screen layout of the projectors should be included with the producer's slide trays. Information regarding how many projectors are used per screen and whether they are butted together, separated, or overlapped should also be provided by the producer.

In most cases, 3 projectors are used per screen. The following diagram illustrates a 9 projector single screen set up. This set up requires 3 SUPER DOVES, 9 projectors, a tape deck, an amplifier, speakers, and interconnect cables.



To properly set up your configuration, follow the procedures described in this manual under the section entitled Operation.

ADDITIONAL INFORMATION

Changing a Fuse

The fuse is accessible from the rear of the unit. Simply remove the blown fuse, replace it with a 12 AMP fuse when operating at 100 or 120 volts, or a 6 AMP fuse when operating at 220 or 240 volts. ALWAYS UNPLUG the Super Dove from the AC outlet BEFORE attempting to replace a fuse.

A second fuse (older units do not have this fuse) is located in the voltage selector switch. This fuse protects the unit's power supply. It should be replaced with a 0.5 AMP fuse.

Shutter Control - SAV Models Only

To enable shutter control on SAV Super Doves:

- 1) Locate the six-position dip switch on the rear panel.
- 2) Move all the switches to the down position.

To enable shutter control on SAV equipped Super Doves that do not have a dip switch on the rear panel:

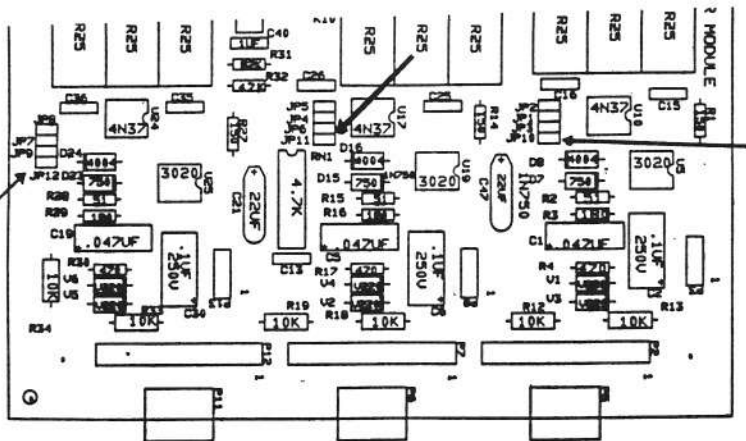
- 1) Remove top cover

- 2) Locate jumpers JP10, JP11, and JP12 near the back of the unit, directly behind the relays on the projector board.

Jumpers are supplied with the Super Dove, they are shipped attached to one of the two pins on each of the aforementioned locations. Move each jumper so that it connects the two pins at each location.

- 3) Connect the two white moxley inline connectors (one male / one female) in the wiring harness in the back of the unit.

- Note: The auxiliary relays are not functional and should not be connected when shutter control is in use.



Location of Shutter Control Jumpers

Show Manager Interface

Remote Hand Control

In configurations where several Super Doves are linked to a Show Manager, manual operation of one of the Super Doves can be realized through the Show Manager. The Show Manager's remote cue connector inputs will be digitally sent to a selected Super Dove. More information on this feature can be found in the Show Manager's User Guide.

Option Setup

The following Super Dove options can be set via the Show Manager:

```
POWER    AUTO ON
EKTA    SAV SIMDA
MT XFER  AUTO MAN
MTIN    P5/X SHOPRO
REM     FOCUS NO YES
SEQUENCE    1 2 3
TRAY    AUTO ON OFF
HOME    POINT 0 1
POSITRAK  ON OFF
CYCLETRAK ON OFF
A B C    ACTIVE ABC
LAMP    FAIL ON OFF
```

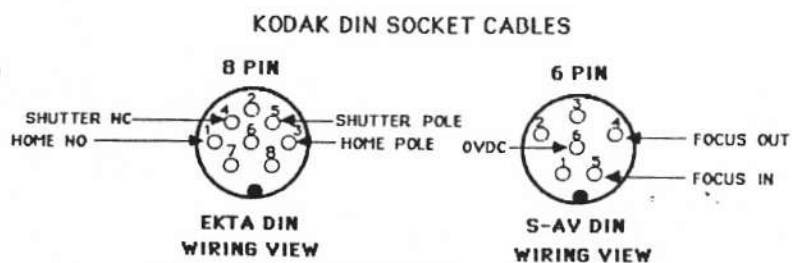
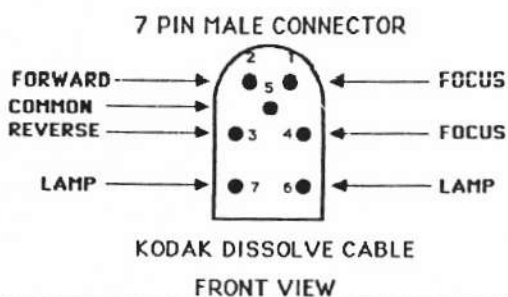
APPENDIX A - CONNECTORS

If the mating connectors supplied with the unit are lost or if additional ones are desired they are:

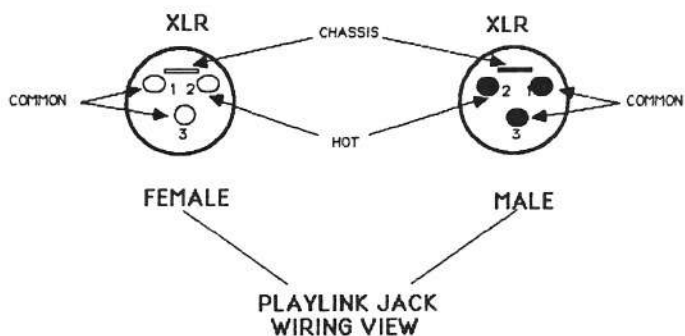
For Digitrak the mating connectors are 9 pin D sub-

miniature. One such set of parts is the AMP 747904-2 male and the AMP 747905-2 female, which come with solder cups. Other types come with insulation displacement terminals, but require a specialized tool to attach the wires. Such connectors are generally available from most electronic supply house or retail outlets such as Radio Shack.

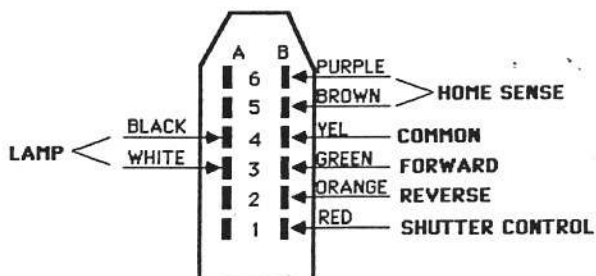
For the Auxiliary relay connectors the mating connector is a type MSTB 1,5/3 - ST - 5,08 (order no. 17 57 02 2) manufactured by Phoenix Terminal Blocks Inc., P.O. Box 4100, Harrisburg, Pa., 17111



APPENDIX A CONNECTORS



12 PIN MALE CONNECTOR



APPENDIX B

SUPER DOVE COMPATIBLE PROGRAMS

The Super Dove can play back all shows programmed on:

- o Genesis PROCALL VER 5, X1, and XP1, and all versions of Show Pro
- o Eagle II PROCALL VER 5, X, and XP1
- o Road Runner PROCALL VER 5 and X
- o Standard Eagle PROCALL VER 1 through 5
- o Golden Eagle PROCALL VER 1 through 5
- o Coyote
- o Fox
- o Chipmunk
- o FX2
- o PDs 2/3
- o Show PRO 5
- o Show PRO III*

* If AUX 0 and Standby have been programmed with SHOW PRO III, these commands will not play back on the above equipment.

INDEX

A B C ACTIVE ABC	28
AC Power Cord	11
AC projector power outlets	12
Alert indicator	8
Amp L.E.D.	7
Auxiliary Contacts	11
Changing a fuse	38
CHANNEL A B C D	18
Compatible programs	44
Configuration diagram	37
CONFIGURATION ERR	35
CYCLETRAK ON OFF	28
Description	1
Diagrams	
Configuration	37
dissolve cord	42
dissolve wiring	43
Front panel	6
playlink wiring	43
Rear panel	10
remote cue	42
Shutter control jumpers	39
voltage selector plug	14
DigiTrak connectors	7
DIGITRAK ERROR	34
Dissolve cord diagram	42
Dissolve wiring diagram	43
DOWN LOAD FAILED	31
EKTA SAV SIMDA	20
Error indicator	8
Error messages	30
CONFIGURATION ERR	35

DIGITRAK ERROR	34
DOWN LOAD FAILED	31
MT BAD CUE LOST	30
MT SIGNAL POOR	30
PROJ x COMP FAIL	32
PROJ x LAMP FAIL	31
PROJ x TRAY FAIL	31
TRAY STATUS LOST	34
TRAYS NOT HOME	33
x 0 SWITCH FAIL	26, 35
Front panel	6
Alert indicator	8
Amp L.E.D.	7
DigiTrak connectors	7
Error indicator	8
Front panel diagram	6
L.C.D contrast adjustment	9
Message center controls	7
Message center L.C.D.	8
OK indicator	8
play link	6
Remote cue socket	7
Reset	8
Fuse	13
HOME POINT 0 1	26
Installation instructions	13
Voltage selector plug	14
L.C.D contrast adjustment	9
LAMP FAIL ON OFF	29
Main new features	2
Message center	16
Message center controls	7
Message center L.C.D.	8

MT BAD CUE LOST	30
MT SIGNAL POOR	30
MT XFR AUTO MAN	21
MTIN P5/X SHOPRO	22
Next	16
OK indicator	8
Operation	36
Option descriptions	17
A B C ACTIVE ABC	28
CHANNEL A B C D	18
CYCLETRAK ON OFF	28
EKTA SAV SIMDA	20
LAMP FAIL ON OFF	29
MT XFR AUTO MAN	21
MTIN P5/X SHOPRO	22
POSITRAK ON OFF	27
POWER AUTO ON	19
REM FOCUS ON YES	22
SCREEN 1 2 3 4 5	17
SEQUENCE 1 2 3	23
SET LP:ABC PF PR	19
TRAY AUTO ON OFF	25
UNIT NUMBER 01	18
Option selection	16
Next	16
Prev	16
Reset	16
Select	17
Step	17
Play link	6
Playlink wiring diagram	43
POSITRAK ON OFF	27
POWER AUTO ON	19

Power switch	10
Prev	16
PROJ x COMP FAIL	32
PROJ x LAMP FAIL	31
PROJ x TRAY FAIL	31
Projector dissolve cords	12
Rear panel	10
AC power cord	11
AC projector power outlets	12
Auxiliary contacts	11
Fuse	13
Power switch	10
Projector dissolve cords	12
Rear panel diagram	10
REM FOCUS ON YES	22
Remote cue diagram	42
Remote cue socket	7
Reset	8, 16
Safety instructions	3
Environmental requirements	4
Location and hookup	4
Preparation	3
Servicing	5
SCREEN 1 2 3 4 5	17
Select	17
SEQUENCE 1 2 3	23
SET LP:ABC PF PR	19
Shutter control	
location of jumpers	39
SAV only	38
Step	17
TRAY AUTO ON OFF	25
TRAY STATUS LOST	34

TRAYS NOT HOME	33
UNIT NUMBER 01	18
Voltage selector plug	14
x 0 SWITCH FAIL	26, 35