COYOTE

USER'S GUIDE

NOTICE

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COYOTE MANUAL

TABLE OF CONTENTS

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INTRODUCTION

The **COYOTE** is a unique new memory pro-grammer with a built in dissolve unit for three (3) projector shows.

The **COYOTE's** 900+ cue memory, intelligent alphanumeric display and special pro-gramming features such as **WAIT X, REPEAT X, SMOOTH** and **BLINK**, make this a truly professional unit.

The alphanumeric Display Line, shows the cue that has been entered, such as 001 32D ABC (CUE number 001, 32 second dis-solve, projectors A, B, and C). The dis-play line also indicates special conditions such as **SAVE, LOAD, VERIFY** or **STANDBY.**

The **COYOTE's** tactile response keyboard is flexible, color coordinated and labeled with both commands and codes. Simple to complex sequences can be programmed in leisure time; using **BLINK, SMOOTH, CUT, ALT, FAST ALT, FREEZE, ADD CUE, DEL CUE, REV Q,** and other AVL programming feat-ures. These effects can be recorded with Positrak for reliable playback through the all current AVL PROCALL 5 compatible products.

For those of you that have never used AVL equipment, we advise that you take the

time to read this manual before you pro-
gram a show. The COYOTE is an easy pro-
grammer to work with once you have an
understanding of its functions.

USING THE COYOTE AS A PLAYBACK UNIT

The COYOTE can be used as a dissolve unit
in place of a DOVE for shows programmed
with more than three (3) projectors. You
will notice the ASSIGN SCREEN button on
the keyboard, this is used like the
screen select switch on the front of the
DOVE.   The COYOTE will automatically
playback screen #1 but you can assign it
to playback screens 2 through 5. This is
done by pushing the ASSIGN button along
with the correct screen number.   To
change screen assignment press RESET and
CLEAR and make the necessary change.

When the COYOTE is being used for play-
back you can "daisy chain" the dissolve
units being used in the same manner as
you would DOVES. You might need to use a
"Y" cord to do this depending on which
screen the COYOTE is assigned to.

NOTE: The memory must be clear before
you ASSIGN SCREEN on the COYOTE.

MAG TAPE BYPASS MODE

NOTE: The COYOTE will automatically
            be in the MAG TAPE BYPASS con-
            dition. This allows you the
            following flexibility:

1.   Run a show that has the Data Trak on
     tape through the **COYOTE** and bypass
     loading the program into memory.

2.   LOAD a program directly into the
     memory, then run the taped show with
     a Data Trak allowing you to mix "-
     live" from the memory and "canned"
     from Data Trak.

PHYSICAL DESCRIPTION

This section will describe the physical
characteristics of the **COYOTE** and the
intended use for each.   The programmer
has three (3) areas; the **KEYBOARD**, DIS-
PLAY PANEL (located just above the key-
board), and the **REAR PANEL**.

KEYBOARD

The keyboard is the communication path to
the **COYOTE**.   The buttons are flexible and
the functions are color coordinated for
ease of operation.   A breakdown of the
colors and their functions is as follows:

RED:	**MEMORY, CUE, and MAG TAPE COMMANDS**
BLUE:	**PROJECTOR ACTION COM- MANDS**
GREEN:	**DIGITAL PAD**
YELLOW:	**PROJECTOR DESIGNATION** and DOVE EFFECTS

Each button is imprinted with the command
and the compatible PROCALL 5 code.

4

DISPLAY PANEL (LEFT)

Three LEDs (light emitting diodes) with the following functions:

20 CPS (RED) 20 CPS - Lights when the unit is operating at 20 cues per second. When LED is off the unit is operating at 10 cues per second.

AMP OK (GREEN) AMPLITUDE OK - Lights when the PLAY IN jack on the rear panel is receiving a good Mag Tape signal.

MT ERR (RED) MAG TAPE ERROR - Lights when an error has been detected in the MAG TAPE signal being received. A blinking lamp indicates that only one pass has been received. The LED remaining lit indicates that a cue was dropped.

DISPLAY LINE (CENTER)

The Display Line is the **COYOTE's** communication path to you, with 12 alphanumeric characters. It displays the cue you are presently programming or previews the next cue when in a RUN mode. It allows you to view the CUES and CODES while they are entered. The operating mode of the COYOTE is also displayed.

1. PROGRAMMING In this mode the display line may look like this:

001 32D ABCG

5

001 represents the CUE NUMBER. 32D is the CODE ENTRY and in this case represents a 32 second dissolve. ABC is the designation of the projectors. G at the end of the assignment area is GO and tells the COYOTE to enter the RUN mode.

2. DISPLAY   This mode indicates a special condition in the operation of the COYOTE. MEM SAVE and VERIFY are for memory to mag tape transfer; MEM LOAD, for mag tape to memory transfer. STANDBY and ASSIGN SCREEN indicate projector disconnect and screen selection respectively.

DISPLAY PANEL (RIGHT)

A, B, C, these three red light emitting diodes represent the projector assignments and lamp status. The LED will light when you program the COYOTE to turn the projector lamp on.

REAR PANEL

Facing the REAR PANEL the features from left to right.

DISSOLVE CABLES   Three-seven pin cables, labeled C, B, A to connect the projectors.

PLAY IN   The PLAY IN RCA jack is used for receiving all DATA information. e.g. to LOAD in pro-

6

gram information stored on mag tape, VERIFY or SAVE tapes and play DATA information through the COYOTE without entering it into memory.

REC OUT   The RECORD OUT RCA jack is used for all outgoing DATA information. e.g. to record for storage or program information in real time.

REM CUE   The REMOTE CUE jack is a KODAK female 5 pin. It is used to CUE and REVERSE CUE the COYOTE from a remote location. This connector is also the AUX RIGHT output.

POSITRAK ON/OFF   Positrak locks your program to the audio track and will automatically resync your show should any showtime mishap occur. This switch turns Positrak output and input, on or off.

SEQUENCE 2/3   In SEQUENCE 3 the COYOTE will access

all three projectors in this order A, B, C. In SEQUENCE 2 the **COYOTE** will access two projectors the A and C (left and right) only. The B (Center) projector can be accessed by assigning it independently with the command and projector designation (B).

POWER CORD & ON/OFF SWITCH
Always make sure the POWER switch is turned OFF before plugging the unit in.

115/220 SWITCH
This switch is located UNDER the unit and is used to select the proper line voltage of either 115 or 220 VOLTS AC. The unit can operate at 50 or 60 Hz with no switching required.

HOOK UP

1.   Check that the power switch on the **COYOTE** is in the off position. (Red Dot showing).

2.   Set the 115/220 switch to the proper

voltage setting. NOTE: the **COYOTE** will sense 50 or 60 Hz and automatically compensate the dissolve curves for Ektagraphic projectors. SAV, QBC or Buhl Hilite projectors require special adapters made for the **COYOTE**.

3. Connect the three 7 pin dissolve cables from the back of your **COYOTE** to the three Kodak Ektagraphic projectors. Cable A to projector A (left or top), Cable B to projector B (center), and Cable C to projector C (right or bottom).

4. Plug the AC power cords from all three projectors and the **COYOTE** into the same AC receptacle, by using a multiple outlet extension cord or strip. This will eliminate phasing difficulties. It is very important to check that the AC outlets are wired properly using an AC receptacle tester.

5. Switch all projectors to FAN position on the rear of the projectors.

6. On the rear panel of the **COYOTE** set the sequence switch to three projectors.

7. Turn the **COYOTE** on, unit will display 001.

8. Place trays on projector, align and focus.

9. Now set trays to the positions you want as the home tray position.

Now you are ready to start programming.

PROGRAMMING THE COYOTE

With the slide projectors now in use by
the AV industry, we can do these 4 major
functions:

        1) turn the lamp on
        2) turn the lamp off
        3) forward the tray position
        4) reverse the tray position

With the technology of the microprocessor
computers and the versatility of the
COYOTE, you as a programmer will be able
to do much more with your projectors and
therefore improve the end results. For
best results we recommend using glass
mounted slides and the 80 slide universal
trays.

It is easy to program a cue (command)
into the **COYOTE**'s memory. The **COYOTE**'s
commands are English based Procall 5
(also used in programming the ROADRUNNER
EAGLE and GENESIS units) and the KEYBOARD
spells out the function with the CODE
above as it appears on the DISPLAY LINE.
An example: press ALT, then press the CUE
button and the A projector lamp is lit.
Also notice that the DISPLAY LINE shows
002, which indicates you are on cue #002.
In the center of the **COYOTE KEYBOARD** is a
decimal pad. Use this pad to enter any
number into the memory of the **COYOTE** as
you would a calculator. For example to

10

program a 32 second dissolve, press the
#3 and the #2, then DISS and now press
the CUE button. On the screen is a 32
second dissolve between the A and B
projector.   To program a WAIT of 5
seconds press the WAIT button, then the
#5 and press CUE.

Following page is an exercise which will
demonstrate most of the **COYOTE's**
functions.

Enter the CUES shown into the **COYOTE's**
memory by pressing the appropriate but-
tons and then the CUE button.   If you
have any questions about the terms used,
there is a GLOSSARY in the back of the
manual. The GLOSSARY has definitions and
the descriptions of the codes and com-
mands and what they mean to you in terms
of time and versatility. The best way to
learn is to use the computer and see how
easy programming can be.

CUE #	CODE	KEYBOARD ENTRY
001	CT	CUT
002	1D	1 DISS (DISSOLVE)
003	2D	2 DISS
004	3D	3 DISS
005	4D	4 DISS
006	6D	6 DISS
007	8D	8 DISS
008	16D	16 DISS
009	32D	32 DISS
010	HC	HARD CUT

011	AT	ALT (ALTERNATE)
012	1A	1 ALT
013	2A	2 ALT
014	3A	3 ALT
015	4A	4 ALT
016	6A	6 ALT
017	8A	8 ALT
018	16A	16 ALT
019	32A	32 ALT
020	FA	FAST ALT
021	G	GO
022	S	STOP
023	FZ	FREEZE
024	PF	P FWD (PROJECTOR FORWARD)
025	S10	SPEED 10
026	S20	SPEED 20
027	WX	WAIT X
028	RPX	REPEAT X
029	BG	BLINK GO
030	BS	BLINK STOP
031	SG	SMOOTH GO
032	SS	SMOOTH STOP

To get back to the beginning of this exercise there are many methods, the first is to press RESET and wait for projectors to Home. Second REV Q through the cues entered one at a time or by pressing the REV Q button and the RUN button at the same time. This allows you to reverse to a certain cue when that becomes necessary.

Now that you are back at the beginning, CUE each dissolve and watch the screen. You will notice two things: first, that you are required to press the CUE button

for each command, second, in SEQUENCE 3
the **COYOTE** will acess all three project-
ors in order A, B, C and then repeats the
pattern. In SEQUENCE 2 the **COYOTE** will
access two projectors the A and C (left
and right) projectors only. You can
still access the "B" projector by assign-
ing it independently with the command and
projector designation. In this manual,
we will use SEQUENCE 3.

INDEPENDENTS:

Special note should be given to Independ-
ents. Independents directly assign the
projector(s) on which a particular action
will take place rather than the normal
sequencing of projectors. The projectors
will always sequence in the normal manner
(A to B to C back to A etc) if not as-
signed independently.

The projector FORWARD command uses In-
dependents differently. When unassigned,
Projector FORWARD advances all three pro-
jectors. The Independent causes only the
assigned projector(s) to advance.

Enter these commands to review the normal
sequence.

	CONDITION	CUE	RESULT
1.	No lamps on	Press ALT	A lamp on.
2.	A lamp on	Press ALT	A lamp off,
			B lamp on.
3.	B lamp on	Press ALT	B lamp off,
			C lamp on.

4.   C lamp on   Press ALT C lamp off,
                                A lamp on
Enter these commands to use Independents
and FORWARD:

5.   A lamp on Press ALT BC   All   lamps
                                on
6.   All lamps Press P.FWD   All pro-
      on   jectors
                                advance
‚7.   All lamps Press P.FWD A Only pro-
      on   jectors
                                advance

Press HOME, all lamps will go to black,
trays will return to original position.

BASIC PROGRAMMING STEPS

Our intention in this section is to il-
lustrate some of the approaches to pro-
gramming, by covering most of the basic
kinds of entries. The best way to work
the exercises, is to review them with
whatever slides you have available.
Place them in the trays and enter the
commands as you proceed. If you reach a
section of the exercise that requires
different slides, take the time to change
them, so you can view the effects proper-
ly.

Before we start if there are cues in the
memory of the **COYOTE** you have to
RESET/CLEAR first. To do so, first press
RESET and wait until all the projectors
are home. If you do not, the projectors
will have established a new home point.

Now press and hold RESET, press CLEAR and release, that will clear the memory.

NOTE: If while programming you press CLEAR accidently, you can REV Q. Then CUE and the command will be there again. CLEAR does not wipe out the memory, only clears the DISPLAY LINE. But if you enter another cue on that line, it will replace what was previously in memory.

Now you are ready to program a RUN sequence. The difference between the sequence you programmed above and the RUN sequence, is that every command in the previous sequence required you to press the CUE button. The WAIT and the REPEAT had no function as they require a GO command to start.

Enter the following commands:

CUE #	CODE		COMMANDS
001	2 D	G	2 DISS GO
002	W2		WAIT 2
003	2D		2 DISS
004	W2		WAIT 2
005	CT	S	CUT STOP

After entering the commands, press REV Q. The DISPLAY LINE shows that it is back on CUE #001 and projectors are HOME. In a RUN sequence, when you REV Q the **COYOTE** will reverse to the nearest GO. Which in this case was CUE #001. This is an example of a RUN sequence with WAITS. Press CUE and review your program on the screen.

15

EXPLANATION:

CUE #	COMMAND	DESCRIPTION ENTRY
001	2D G	2 Second dissolve on the A projector. The GO starts a run sequence.
002	W2	In the run sequence the wait stops the COYOTE from executing any cues for a period of two seconds before going to the next cue.
003	2D	This 2 second dissolve causes the A projector to fade down to black and advance the tray and the B projector to fade up.
004	W2	Again in the run sequence, it causes a wait period of 2 seconds before executing the next cue.
005	CT S	This CUT causes the B lamp to turn OFF and advance the projector turn ON the C lamp. The STOP ends the run sequence.

16

The next exercise shows a REPEAT sequ-
ence.

006	**1A** G	1 second alternate fades down the C pro-jector and fades up the A projector with-out a tray advance.
007	**W.9**	Wait of 9/10th of a second before execu-ting the next cue.
008	**RP8**	REPEAT cues 006 and 007 eight (8) times to create an anima-tion type sequence. Causing a fade from A to B to C projector etc. until all 8 repeats have occurred and you are on C pro-jector.

The REPEAT will begin at the nearest GO
and execute all the cues back to the RE-
PEAT. This will continue until all the
repeats are executed. The sequence re-
peated 9 times because the COYOTE runs
the sequence a first time and repeats 8
times for a total of 9.

NOTE: You will notice that we used WAIT
.9 here instead of WAIT 1, this is be-
cause we are running at 10 CPS and the
combination of .9 and .1 reading time is
enough to achieve the full dissolve.

Try changing the WAIT .9 at #007 to
change the tempo. To change a cue, press

CLEAR and enter the new command. Next
replace the 1 second ALT with a different
rate and increase the wait time.

The next exercise moves through a number
of visuals rapidly, and will demonstrate
another use of the REPEAT function. Make
sure you have the cues we have programmed
so far in the memory.

Now enter the following cues:

```
009        W.9        WAIT   .9
010        AT    C    AT C
011        HC    G    HARD CUT GO
012        W.35       WAIT .35
013        RPX        REPEAT X
014        HC    S    HARD CUT STOP
```

EXPLANATION:

009   W.9   Wait   9/10th   second
                      allows   the   previous
                      dissolve to finish.

010   AT C   ALT   C   brings   all
                      lamps to black.

011   HC G   Hard Cut brings the A
                      lamp on, the GO marks
                      the   begin   point   of
                      the REPEAT sequence.

012   W.35   Wait   .35   seconds
                      before REPEAT X.

013   RPX   Repeat   X   times,
                      resolved by returning

18

to #011 Press Cue, allow sequence to run desired number of passes. Press CUE, X will change to the number of passes completed.

014   HCxxS   Hard Cut on xx, Stop. The A, B or C lamp will be On, depending on the number of Repeats completed. To start the next exercise the B lamp should be on. If the A lamp is On, xx should be AB. This will bring A lamp down and B lamp On. If the B lamp is On, press Stop only. If the C lamp is On, xx should be BC. This will bring B lamp On and C lamp Off. Stop, ends the Run sequence.

REV Q back to cue #011 and press CUE, the sequence will run in real time.

This exercise shows how to FREEZE a dissolve in progress, so we can superimpose a title slide over it. Program the following commands, then REV Q., you should be at cue 015.

015   N   G   (NO OPERATION GO)

19

016	2D AC	2 DISS A C
017	CT B	CUT B

018	W.9	WAIT 9/10
019	FZ C	FREEZE C

EXPLANATION:

015	NO G	No operation Go, the No Op is used as a space holder. The Go starts the next sequence.

016	2D AC	2 second dissolve on A and C projector cause a superimposition on the screen. The A and C are independents and override the normal sequencing of projectors. In this case dissolve up both projectors.

017	CT B	Cut of B projector to black. Again an independent is used to direct the CUT to the B projector.

018	W.9	Wait of 9/.10 of a second is used to allow time for C projector to reach a level of light intensity.

20

NOTE: Total time before C projector is frozen is 1.1 second. Add the 9/10 WAIT with a 1/10 for the CUT on cue 017 and a 1/10 for the FREEZE command, that totals 1.1 second.

019   FZ C   Freeze to stop the 2 second dissolve (in cue #016) C projector from continuing to dissolve up.

To change the effect, have B projector fade down at the same rate as A and C projector fade up. REV Q to cue #016, press B then CUE. Use the STEP REV Q four times to end at cue 016. If you just press REV Q, you would be back on cue #015, because the program is in a RUN sequence.

Now that you are on cue #016; press B, press STEP and CUE together to advance one cue. Since the program is in RUN pressing only cue would start the sequence. To move forward one cue at a time in a run sequence press STEP and CUE together.

Cue #017 is no longer needed, because B is added to cue #016. Press DEL CUE-which erases the CUT B from memory and pushes all the cues in memory back of cue

#017 down one cue. Cue #018 is now cue #017 etc.

BLINKING:

BLINKING allows you to blink a projector or a series of projectors at 2 different rates with one Cue. To start the BLINK-ING you enter a BLINK GO command and select the lamps to dissolve up or down.

To stop the BLINKING you have to enter a BLINK STOP.

Here we will try the BLINK effect while dissolving down C and B projectors.

019	W1	WAIT 1
020	8D BC	8 DISS B C GO
021	BG	BLINK GO
022	WX	WAIT X (Wait for the lamps to dissolve off before resolving this cue.)
023	BS	BLINK STOP

After entering the commands press REV Q. You will be on cue #015 (nearest GO). Press CUE and watch the screen when the dissolve is completed press CUE to resolve the WAIT X on cue #022.

EXPLANATION:

| 019 | W1 | WAIT of 1 second to allow time of last effect to be seen. |

22

020	8D B C	8 second dissolve on B and C projector to
		fade to black. You will notice the C lamp faded down before B did. The C projector was frozen and did not require the same time to dissolve down.
021	BG	BLINK GO starts the B and C lamps blinking on and off while dissolving down.
022	WX	WAIT X is used to allow enough time for the dissolve to complete before the BLINK STOP is executed.
023	BS	BLINK STOP used to stop the blinking effect. Even though the lamps are not blinking we want to stop them before next effect begins. Otherwise, the next lamp up will start blinking.

Enter the following commands into memory:

| 024 | 8A ABC | 8 SEC ALT A B C |

025   BG   BLINK   GO   starts
                         flashing the lamps
                         every 1/10 second in
                         the following Sequen-
                         ce:

1st 10th   1 A goes off.
2nd 10th   1 A comes on and 1 B goes off.
3rd 10th   1 B comes on and 1 C goes off.
4th 10th   1 C comes on and 1 A goes off.
5th 10th   1 A comes on and 1 B goes off.

Continues until stopped.

If you blink only two of the projectors
on the screen the COYOTE will cause each
to be flashing on for 2/10th of a second
and off for 1/10th of a second, where the
first is on for 2/10th of a second, the
second projector on for 2/10th of a se-
cond (overlapping the first 1/10th after
the first comes on) then back to the-
first.

Enter the following cues into memory:

026   W8   WAIT 8
027   AT B   ALT B
028   8A AC   8 SEC ALT A C

In this example only the A and C project-
ors will be BLINKING as they dissolve
down. The A projector will come on for
1/10th of a second, 1/10th later the C
projector will come on, 1/10th later the
A will go off, 1/10th later the C will go
off and the A will come on, then back
through the cycle again until terminated

24

by a BLINK STOP.

EXPLANATION:

026   WAIT 8   WAIT 8 seconds for
                         the last sequence to
                         be on the screen and
                         then start this
                         sequence.

027   ALT B   The ALT on the B pro-
                         jector was used to
                         eliminate the B lamp
                         from flashing in this
                         sequence.

The BLINK command only blinks projectors
that are on or are dissolving up or down.
When the lamp dissolves completely off
the lamp will stop blinking. If the lamp
comes on again the blinking will start.

028   8A A C   An 8 second dissolve
                         alt on the A and C
                         projectors starts the
                         dissolve down. Using
                         one projector we can
                         set up a flashing
                         effect.

029   W8   WAIT 8
030   4A A S   4 ALT A STOP

In this case the A projector will be ON
for 2/10th of a second and OFF for 1/10th
of a second.

Running at 20cps (cues per second) will

give the same effects only faster.

```
031        S20 G        SPEED 20 GO
032        6A BC        6 ALT B C
033        W6           WAIT 6
034        BS           BLINK STOP
035        W.1          WAIT . 1
036        1D ABCS      1 DISS A B C STOP
```

EXPLANATION:

In this example we have B and C projector dissolve up in six seconds, while the A projector is at full intensity. All three projectors are flashing for six seconds and then stop. Wait a 1/10 of second then dissolve down all three projectors in 1 second and advance one.

The next effect is a three step animation that dissolves in and out again while blinking.

```
037        CT AC G      CUT A C GO
038        W1           WAIT 1
039        BG           BLINK GO
040        3D ABC       3 DISS A B C
041        WX           WAIT X
042        3D A         3 DISS A
043        WX           WAIT X
044        3D B         3 DISS B
045        WX           WAIT X
046        3D C         3 DISS C
047        WX           WAIT X Wait for the
                        lamp to go OFF
                        before resolving.
048        BS           BLINK STOP
```

26

EXPLANATION:

This exercise illustrates starting an animation sequence with the lamps off, dissolve the lamps on while blinking the three lamps. Time the animation to dissolve off at the series of WX cues, that dissolve the projectors off individually and stop the animation (BLINKING) with the last WX cue.

The BLINK GO can be used either before or after the dissolve for the controlled projectors. The difference depends on what you want the lamp status to be when you assign the BLINK STOP. The BLINKING projectors will always assume the status of the memory when the BLINK GO was assigned.

Go back and reverse the order of cues #039 and #040. Now A, B and C will come on after the BLINK STOP.

Dissolving while flashing an animation sequence can be programmed without a-BLINK command using the FAST ALT and RE-PEAT. FAST ALT is similar to BLINK with the exception that with FAST ALT it is necessary to repeat the cue the number of times you want it to flash on and off.

With FAST ALT, to do an intensity controlled dissolve you have to REPEAT the FAST ALT. To sue BLINK enter a dissolve and BG (BLINK GO), an intensity control-

led dissolve will occur with no further
commands from the **COYOTE** except to stop
the BLINKING.

050	S20 G	SPEED 20 GO
051	3D A C	3 DISS A C
052	FA	FAST ALT
053	FA A CG	FAST ALT A C GO
054	RPX	REPEAT X
055	HC A C	HARD CUT A C
056	HC A C	HARD CUT A C
057	WX	WAIT X
058	3D A	3 DISS A
059	W3	WAIT 3

EXPLANATION:

The two projectors are told to dissolve
on, and FAST ALT between the two, A a-
mount of times. When the light intensity
reaches full brilliance or whenever you
want the flashing to stop, terminate the
REPEATING by pressing CUE to resolve the
REPEAT X. After the repeat is complete,
the animation sequence will HARD CUT,
allowing the last slide to remain on the
screen.

The WAIT cue at #059 allows the dissolve
to finish and be ready to start a new
sequence. The lamps must be told to come
on all at the same time or go off at the
same time in order for the effect to work
properly.

FREEZING:

FREEZING a dissolve to control the brig-

28

htness of the lamp (and therefore the brightness of the slide) for looks, Supers or to create other special effects.

CODE	SCREEN	
060	3D A G	3 DISS GO
061	WX	WAIT X
062	FZ A	FREEZE A
063	1D B	1 DISS B (SUPER)
064	WX	WAIT X
065	1D	1 DISS (This can be another FZ if you wish to continue the dissolve at the

same rate.
066   WX

EXPLANATION:

The FREEZE is used to freeze the dissolve in progress, you assign a dissolve to the projector you wish to FREEZE, then waiting the amount of time to get the lamp to the proper intensity (if you use a WX you will be able to see the lamp fade to the point you want, then press CUE to resolve it) then assign the FREEZE.

To have the lamp continue in the same direction it was going when told to FREEZE, and at the same rate you can just assign it to FREEZE again (with projector assignment), actually telling it to release the FREEZE.

SMOOTH allows two new effects.   First the SMOOTH is a change in the way the

lamp of the projector is Ramped on and off. Without SMOOTH the lamp will ramp on faster at first to allow light to reach the screen faster and to make a smooth transition between the oncoming and the outgoing slides. With SMOOTH the lamp no longer has this fast start up and therefore has a smooth start up and follow through for the entire dissolve.

.Second, in SMOOTH the lamp will no longer come to full brilliance on an oncoming dissolve when you tell it to go off before it has reached its full intensity or all the way off when you are doing a dissolve off and tell it to come on again. This now allows you to do a ripple dissolve effect of what is termed a continuous dissolve effect.

EXAMPLE: If you do a 4 SEC ALT and a WAIT 2 SEC than another 4 SEC ALT and another 2 SEC WAIT etc. the effect that will occur on the screen will be one-where the lamp stats on with a 4 second dissolve and after 2 seconds will change directions and begin to dissolve OFF then after 2 seconds begin to dissolve ON again and so on. To return back to normal dissolve, program a SMOOTH STOP.

```
067        SG           SMOOTH GO
068        4A ABCG      4 SEC AT A B C GO
069        BC           BLINK GO
070        W2           WAIT 2 SEC
071        RP12         REPEAT 12 TIMES
```

EXPLANATION:

30

In this example you will see the dissolve never reaches full brilliance on the screen and has a rippling effect and a Blinking at the same time.

NOTE: Whenever you press STEP by itself, this will execute an ESCAPE. ALL action will stop and the status of the projectors will take the status at the time of the escape.

Our last cue to program is a HOME cue to return all projectors to home tray position.

This section illustrated the basic approach to programming and the COYOTE features of Blink, Smooth, Freeze and Independents. The next section will deal with transferring the program from COYOTE memory to mag tape.

STORING COYOTE PROGRAMS ON MAG TAPE

After you have created a program in memory, you will want to store that program on mag tape. There are two methods for storing the program. One method is designed to let you reload the COYOTE with the same information that was in the original program or directly from a ROADRUNNER. The second method is to create a show tape for real time playback. In either case, you must be at cue #001 to Store the whole program or at the cue number that begins the section you wish to store.

Below are outlined the basic set ups for both procedures and an explanation of the differences.

SET UP FOR STORING PROGRAMS ON MAG TAPE:

To set up for storing the memory, you will need a tape reorder, a good quality audio tape and two RCA phono cables.

1. Connect one end of one RCA cable to the "RECORD OUT" jack on the Rear Panel of the **COYOTE** and the other end to the "line input" of your tape recorder.

2. Connect the other RCA cable to the "PLAY IN" jack on the **COYOTE** and to the corresponding "line output" jack on the tape reorder. **NOTE:** Some tape decks allow an input signal to go directly out the "line output", this causes the **COYOTE** to return to MAG TAPE BYPASS, and makes it impossible to process the information. If the AMP LED on the Display Panel stays on after connecting the second RCA cable, remove the cable and connect only one at a time.

3. Press Clear to adjust the input levels of the tape recorder to between +1 and +3db.

4. Press Reset to return the Display Line to the first cue.

5. After Resetting, you will press one of the following commands depending on

the type of store you want to create. As
soon as you press MEM SAVE the **COYOTE**
will start saving the memory onto tape.
Therefore, you want to have your tape
recorder running when you press MEM SAVE.

METHODS OF STORING THE PROGRAM:

1. **MEM SAVE** This method will SAVE the
program just as it appears in the **COYOTE**
memory. When a SAVE tape is played back
into the **COYOTE** it will fill the same
amount of cue space. After pressing MEM
SAVE the Display Line will read SAVE and
start to read the cues as they are saved
onto the tape. This method also codes
the tape to automatically return to the
MAG TAPE BYPASS condition after the prog-
ram is loaded into the memory.

1A. **MEM VERIFY** Once you have saved your
memory with the SAVE method, you can
VERIFY to confirm that what you recorded
on the tape is the same as what is in
memory (program). Return the tape to the
starting position of the SAVE on that
tape. Press the MEM VERIFY button and
VERIFY will be displayed at cue #001.
Start the tape reorder and watch the cue
numbers count down. If the **COYOTE** stops
before it reaches the end of the program,
you have a bad cue at that point. The
red MT ERR LED will light and the Display
Line will display the Cue # and BAD. If
this happens, start the SAVE routine
over.

2. Show Tapes for Real Time Playback

This method will store the program for
playback and can be synchronized to the
audio track. By pressing Cue the **COYOTE**
will send out the correct Data and timing
for each cue or Run sequence. Positrak
is also sent out with the Data.

Positrak is digital information that is
generated constantly to continually up-
date the projector status. This informa-
tion is layed down between cues as in the
following diagram:

P = Positrak   Q = CUES
PPPQQPPPPQQPQPQQQQQQQQPPQQQQPQPQPQPQPPQQQ-
QPQQQPPPPQQQQQPPPPP

When the **COYOTE** has no cues going out,
the entire signal will be Positrak. When
running at 20 cps and cues are constantly
going out there will be no Positrak until
a break in the program data is reached.

LOADING PROGRAMS INTO THE COYOTE:

Loading existing programs from compatible
AVL computers into **COYOTE** memory can be
accomplished two ways. Any program that
was stored on mag tape with the SAVE-
method will be coded so it can be loaded
directly into the "Play In" jack on the
Rear Panel without further instruction to
the **COYOTE**.

MEM LOAD   For programs that were stored
as show tapes, you will have to tell the
COYOTE to load the program by turning off

34

the MAG TAPE BYPASS. This is done by pressing MEM LOAD, LOAD will be displayed at cue #001. The COYOTE will have to be reset to MAG TAPE BYPASS, by pressing STEP (ESC). The exception is tapes with a Home cue, this will set the cue counter to 001, display the first cue and return to MAG TAPE BYPASS.

MARRYING THE PROGRAM TO THE SOUND TRACK:

To synchronize the program to the sound-track, you can press the CUE button at the appropriate time. However, for you to make an adjustment to the starting time of that sequence requires you to do the following:

1. Search for the starting point on tape.

2. Rerecord over the section without erasing the previous section.

3. Pressing the Cue button to try to resync the section.

4. Having to resync, if any changes have been made to memory.

An easier way to sync the program to the soundtrack is to use the AVL SYNCHRONIZ-ER. The SYNCHRONIZER is used in place of the CUE button. Every time you press the sync button a 1000Hz tone is produced and put on tape. When the tape is played back into the SYNCHRONIZER, a 1000Hz tone is received and the SYNCHRONIZER remote

35

cues the **COYOTE.** The advantages of using the SYNCHRONIZER are:

1. Ease of syncing the soundtrack.

2. Ease of editing a high speed run sequence without losing the start point.

3. Ease of editing the starting point of the run sequence.

4. You always will have first generation data track tapes.

EQUIPMENT SETUP:

1. Using one of the open tracks on your tape deck, connect "line in" to the RECORD jack on the SYNCHRONIZER using an RCA cable. Connect another audio cable between the tape deck "line out" and the PLAY jack on the SYNCHRONIZER. **NOTE:** Recommended set up of tape; audio is-channel 1 and 2, channel 3 for the sync tone and channel 4 for the Data Trak.

2. Set level to 0db on the VU meter. To obtain a constant tone from the SYNCHRONIZER, switch to the NORMAL position and press the SYNC button with the tape recorder in record mode.

3. Switch synchronizer to pulse position.

4. Switch the audio channels of the tape deck to simulsync or sync mode in order to have the sync pulse respond at

36

the same moment as you hear the sound
track. It is recommended that you press
the sync button before the actual time.
This allows you to edit the wait time
between the sync pulse and the first com-
mand.

5. Note that every time you hit the
SYNC button the COYOTE will run the se-
quence and continue until a stop is en-
countered.

6. Now, return to cue #001 and start
the tape deck with channel 3 in record,
press the sync button each time you want
to start a cue or sequence.

7. Editing a late sync pulse on the
show tape requires rerecording the sync
pulse earlier. It is simpler to record
the sync pulse early and insert wait cues
in the memory to correct the time. The
cues in memory could look like this:

```
001 N G          NO OP WITH A GO
002 W.2          WAIT 2/10
003 CT G         CUT. GO
004 W.4          WAIT 4/10
005 RP5          REPEAT 5 TIMES
006 1D S         1 DISSOLVE, STOP
```

Cue #002 is added to delay the action by
2/10 second. If more or less time is
needed add or subtract time to cue #002.

8. For reviewing a section, it is rec-
ommended that you write down the cue #
and the tape counter reading for each

sync pulse. Then you can REV Q the
COYOTE and rewind the tape deck to the
correct tape reading. Also switch the
audio channel back to normal from
simulsync. Press the play button the
deck to review or edit that sequence.

9. After you have synced the show it is
a simple matter to record the data on
channel 4. First switch channels 1, 2
and 3 into simulsync, channel 4 is in
record mode.

10. Press play button on tape deck and
the data is automatically recorded on
tape with Positrak.

12. Programming note: The COYOTE has a
crystal controlled clock and the computer
generated waits are extremely accurate.
It is therefore recommended not to have a
high speed run last more than 30 seconds.
Because the tape deck may not run at same
speed each time. Also you should not
CUE, less than 1/2 second between cues
with sync pulses, use wait cues if less
than a half second is needed. If you
don't know the amount of time needed,
program WAIT X.

PLAYBACK OF THE DATA TRAK:

Now that the show has been recorded on to
tape in real time, you will want to check
that the show is in sync with the sound
trak, and that all cues have been record-
ed properly on tape.

1. All projectors are on their home tray position.

2. Plug channel 4 of tape deck "line out" into "PLAY IN" jack of the COYOTE.

3. Start the tape, when data is being received the green LED will light indicating that amplitude is OK. If the red LED marked MT ERR (mag tape error) flashes, that indicates only one pass of data is being received, if the LED latches on, this indicates a cue has been dropped.

NOTE: If a COYOTE program is to be run from the memory of a SHOW PRO 5, it will be necessary to save the program using the SAVE procedure. The information must then be loaded into a ROADRUNNER or an EAGLE (using VERSION 5) in order to make a compatible MAG TAPE DUMP. The reasons for this step are:

1. The SHOW PRO 5 will not accept a SAVED program.

2. The SHOW PRO 5 will interpret any wait commands put out by the COYOTE as 2 second waits.

MERGING TWO OR MORE PROGRAMS WITH POSITRAK:

In show situations two or more programs may be loaded into the same trays. If for some reason two producers are used, we can assume that their shows were programmed to begin on tray position number

39

one. When the shows are run the second production's Positrak information will reset the trays to the incorrect position. In order to prevent this from happening the following steps must be carried out.

1. Program all shows with a SYNCHRONIZER. Use channel 3 of the deck to record the sync tape.

2. Load the first section into the COYOTE's memory. (This can be either canned or live).

3. Run to the end of memory and record the Positrak information only.

4. Reset the COYOTE, and wait until all the projectors are home, then RESET and CLEAR the memory.

5. LOAD the data of second show into the COYOTE's memory.

6. Reset to cue #001, then run the portion of Positrak that was just recorded, off of the first section, into the PLAY IN of the COYOTE. Note that projectors go to the correct tray position by the shortest route.

7. Now that memory and Positrak information are loaded into the COYOTE (and if you have used a SYNCHRONIZER while programming), it will be easy to adjust the Positrak information to the new tray positions.

8.   Recording new Positrak information with the DATA on to tape requires the following steps:

A.   Connect the data channel (4) "line in" of the tape deck to **COYOTE** RECORD OUT jack.

B.   Place this data channel (4) of tape deck into the record/pause mode.

C.   Plug sync channel (3) "line out" into SYNCHRONIZER PLAY jack.

D.   Plug SYNCHRONIZER CUE OUT into REMOTE CUE of **COYOTE**.

E.   Set channel (4) levels on tape deck.

F.   Press play on tape deck and the DATA plus the new Positrak information will be automatically layed down on tape for you.

9.   Additional sections can be added to the program by repeating steps 4 through 8 again.

GLOSSARY OF TERMS

A   Projector designation for
                     top or left projector.
                     See INDEPENDENTS.

ASSIGNMENT   Designates which project-
                     ors are to go on/off. This
                     is done by selecting A, B,
                     or C.

AT   ALTERNATE or ALT Visually
                     like a CUT on the screen,
                     except there is NO tray
                     advance.   See FAST ALT,
                     DISSOLVE ALT.

ADD   CUE   ADD   CUE   allows you to
                     "open up" the memory to
                     insert a cue into your
                     program by moving all cues
                     down one cue number in the
                     COYOTE memory.

AUX   AUX is an auxiliary. The
AX   COYOTE has one AUX built
                     in, AUX right.   The AUX
                     can be used to turn on a
                     16mm projector, house
                     lights, or for any pur-
                     pose. The AUX is a logic
                     level output of 5 volts,
                     which will trigger an
                     auxiliary box for a
                     momentary contact closure.

42

This AUX function requires an AVL **COYOTE** AUXILIARY BOX. AUX LEFT can be programmed for a TRAVLER or DOVE.

B   Projector designation for the center projector. See INDEPENDENTS.

BLINK   BLINKING allows you to
BG   flash a projector or a
BS   series of projectors at 10 or 20 cues per second. The BLINK command allows the lamps to flash while dissolving up or down, while lamp intensity is frozen, or while the lamp is on. To program a BLINK, requires a lamp command and BLINK with a GO. To stop a BLINK requires a BLINK STOP.

C   Projector designation of right or bottom projector. See INDEPENDENTS.

CLEAR   Pressing CLEAR, will clear the display line but will not destroy the memory. CLEAR can be used to change a cue in memory. See RESET and CLEAR.

CUT   This command turns the
CT   lamp ON or OFF instane-

43

ously. If the lamp is ON,
CUT will turn the lamp OFF
and advance the tray 1. If
the lamp is OFF, CUT will
bring the lamp ON. When
sequenced to cross from
one visual to another. A
cut will turn the ON lamp
off and the OFF lamp on.
The projector with the
lamp going off will do a
tray advance.

CUE   Used to command the COYOTE
to execute a command from
memory or enter a cue into
memory. If hand cuing or
remote cuing the COYOTE,
CUE will move one cue at a
time or start a RUN seq-
uence if the cue has a GO
embedded with it.

DELETE CUE   Deletes (removes) the cue
DEL CUE   that is being viewed and
closes up the memory.

DISSOLVES   DISSOLVES this command
1D   turns the lamp ON or OFF
2D   in a designated amount of
3D   time (in seconds) creating
4D   a fade effect (ex. 2D is a
6D   2 second dissolve). To
8D   create a cross fade or
16D   dissolve from one visual
32D   to another using 2 or more
projectors. Again, the
projector with the going

44

off will advance tray when
the lamp is completely·
off.

DISSOLVE
ALTERNATES
1A to 32A

Visually identical to DIS-
·SOLVES, without a tray ad-
vance. Dissolve rates are
the same, but the
ALTERNATE command is used.

ESCAPE
ESC (STEP)

Stops the program when in
a RUN mode. ESCAPE is
also used to stop a SAVE
and to clear LOAD and VER-
IFY if entered by mistake.
See STEP.

FAST ALTERNATE
F.ALT
FA

Same dissolve time as a
HARD CUT without a tray
advance. A FAST ALERNATE
used at 20 cues per second
(20CPS) allows solo flash-
ing and blinking effects.

FREEZE

Like the SHOW PRO V,
EAGLE, and ROADRUNNER, the
COYOTE has the ability to
stop any dissolve alter-
nate alternate in progress
and hold the lamp intensi-
ty. FREEZE also allows
the lamp(s) to continue
the dissolve in the same
direction at the same
rate, or change direction
at the same or a different
rate. NOTE: Only Dis

solve Alternates should be
used with a FREEZE.

GO   Used in the "projector
G   area" of the DISPLAY LINE,
              to designate one of the
              following:
              (1) To mark the beginning
                   of a REPEAT sequence.
              (2) To initiate a RUN se-
                   quence when running
                   manually out of memory
                   using a CUE or a re-
                   remote cue to control
                   the COYOTE.
              (3) As a reference point
                   when programming a
                   long sequence to be
                   accessed quickly with
                   the REVERSE CUE but-
                   ton.

HARD CUT   A HARD CUT was designed
H.CUT   with two things in mind;
HC   move images faster, and
              create sharper, harder im-
              age change on the screen
              A HARD CUT works by clos-
              ing the gate of the slide
              projector shutting off the
              light before the lamp is
              turned OFF. Advancing the
              tray to the next image,
              allowing that projector to
              be ready to be turned ON
              again with the next slide.
              When HARD CUT's are used
              to make a transition

between 2 visuals the
abruptness of the change
is much crisper than a CUT
(this can be used to cre-
ate the flicker of oldtime
movies when moving through
many visuals rapidly).

HOME

Programmable return to the
beginning of the program.
HOME can be entered into
the program to return the
COYOTE to the first cue
(001). **HOME** brings the
lamps down, returns the
memory to cue #1 and the
trays to their original
starting position by the
shortest route. When HOME
is used in a RUN sequence
the program will continue
to run and start over at
cue #1 and continue the
program until a STOP com-
mand is reached.

INDEPENDENTS

The **COYOTE** will cycle
through projectors from A
(top or left), to B (Cen-
ter), to C (bottom or
right) without making any
projector selection. With
the INDEPENDENT function
this normal sequence can
be overridden and the
projectors can be accessed
in any order with the
proper projector designa-

47

tion.

LEISURE TIME   LEISURE TIME programming
allows you to edit the
program as you go, also
using the X programming
functions such as WAIT X
or REPEAT X. The COYOTE's
900+ cue memory makes it a
LEISURE TIME PROGRAMMER.

LOOP   A DOVE effect which will
playback through a COYOTE.
This effect is not pro-
grammable by the COYOTE.

LOAD   Allows external cues to be
loaded into the memory of
the COYOTE from mag tape
or directly from the EAGLE
However, when you use LOAD
to load a program the
COYOTE will NOT automatic-
matically return to the
normal MAG TAPE BYPASS
mode and you will have to
tell the COYOTE to return
to MAG TAPE BYPASS by
pressing the RESET button.
It is NOT necessary to use
LOAD to reload a COYOTE
program that was stored
with the SAVE method. The
COYOTE codes the tape and
recognizes the stored in-
formation as a LOAD. The
COYOTE also codes the end
of the SAVE to tell it to

48

automatically return to the MAG TAPE BYPASS mode after completing the LOAD.

NO OPERATION
N

This denotes no operation and will appear on the display line when a GO or STOP is entered without any other command. To clear N from the display line pressing the CLEAR button.

PROJECTOR
FORWARD
P.FWD
PF

Used in conjunction with a projector assignment will move the tray forward one position without changing the lamp status. PRO-JECTOR FORWARD designation without projector assign-ment will move all trays forward ONE position.

RESET

By pressing the RESET but-ton all projectors return home and lamps off. RESET has the same definition as HOME.   HOME is programma-able and RESET is not.

RESET and
CLEAR

RESET and CLEAR   By pres-sing both buttons simul-taneously, allows you to clear ALL cues from the memory.   NOTE: Use this command with caution. Make certain you have sto-red the information or

49

that you do NOT, in fact,
want the information.

REVERSE CUE   When pressed, this button
REV Q   will move the program
                  (memory) in the REVERSE
                  direction: (1)To the pre-
                  vious cue if not in a RUN
                  mode. (2)To the previous
                  GO in a RUN mode. The
                  COYOTE will move the trays
                  to the proper location and
                  update the lamp status.
                  See STEP and RUN.

REPEAT   Used to repeat a series of
RPxx   cues that start with a GO
                  embedded with the first
                  cue. The xx equals number
                  of times to be repeated.
                  The REPEAT cue has zero
                  cue time.There are no lim-
                  its to the number of cues
                  or type of cues in a RE-
                  PEAT. REPEAT can be used
                  to repeat a sequence from
                  1 to 255 times and will
                  allow up to 10 consecutive
                  (nested) RP commands to be
                  used. Bear in mind that if
                  you have a sequence repea-
                  ted 23 times the sequence
                  will actually happen 24
                  times due to the one time
                  the sequence occurred dur-
                  ing the set up. This also
                  applies to REPEAT X.

50

CAUTION: With the use of nesting, it is possible to create sequences with millions of cues or wait periods of hours.

REPEAT X
RPX

Like the WAIT X, the REPEAT X allows you to determine the number of times the sequence has to repeat while you are in the RUN mode and viewing the sequence as it will appear in your show. You simply enter the RPX into the program, start the sequence running and when the correct number of repeats have gone by you press the CUE button to move on to the next part of your program. The COYOTE will resolve the X to the appropriate number of times the sequence repeated. (ex. RPX becomes RP23). **NOTE:** When you press the CUE button to resolve the RPX, the COYOTE will finish the sequence in progress before moving on.

REPEAT 0

REPEAT UNTIL TERMINATED Used when an undetermined number of REPEATS is desired. The RP0 can be resolved by pressing the

CUE button or a REMOTE
cue. This command will be
most useful for "live"
portions of your program
when the length of a
sequence is not pre-
determined.

RUN   RUN has two functions:
(1)By holding down the RUN
and CUE button, this func-
tion allows you to move
through your program
rapidly in the forward di-
rection with the cues num-
bers moving past on the
DISPLAY LINE at 20 CPS.
To stop, remove your fing-
er from the CUE button. In
this mode the **COYOTE** will
run at 20 CPS and not stop
if a STOP is incurred or
wait for any WAIT cues.
The lamp status will be
maintained and tray posi-
tion will be updated at
the speed of the projec-
tor.

(2)By holding down the RUN
and REV Q button, you will
be able to move rapidly in
the reverse direction and
see the cue numbers moving
past on the DISPLAY LINE
at 10 CPS. To stop, re-
move your finger from the
REV Q button. The trays

and lamp status will wait until you have stopped moving to update to the present status.

MEM SAVE   Allows you to SAVE the contents of the **COYOTE** memory onto mag tape for storage. SAVE will save the program in the ROAD-RUNNER/EAGLE format but will not be able to be loaded into a SHOW PRO V.

SEQUENCE   The order in which projectors are accessed. With the **COYOTE**, you have a choice of either SEQUENCE 2 or SEQUENCE 3. In SEQUENCE 3 the **COYOTE** will access all three projectors in this order A, B, C. In SEQUENCE 2 the **COYOTE** will access the A and C projectors (left and right) only. **NOTE:** You can still access the "B" projector by assigning it independently with the command and projector designation (B). To switch *from* SEQUENCE 2/3 there is a switch on **the** back of the **COYOTE** marked SEQUENCE 2/3.

SPEED 10   Normal running speed for
S10   the COYOTE is 10 CUES PER
              SECOND (CPS).   The SPEED
              10 is used to decrease the
              speed from 20 CPS to 10
              CPS.   The **COYOTE** will be
              at 10 CPS in the following
              conditions: When   first
              LOADED, when ALL CUES are
              RESET and CLEARED or when
              you do a HOME.

SPEED 20   Used to increase the run-
S20   ing speed to 20 CPS.   The
              COYOTE has the capability
              of running at 10 CPS or 20
              CPS (cues per second).   At
              10 CPS (normal run speed)
              the **COYOTE** waits 1/10th of
              a second between the time
              one cue is issued till the
              next cue is issued.   To
              run at the higher speed of
              20 CPS, you must tell the
              COYOTE by entering a speed
              change   into   the   program.
              Likewise, if you wish to
              return to 10 CPS you must
              Again program this change.
              At   20   CPS   the   **COYOTE**
              wastes 1/20th of a second
              between the time one cue
              is issued until the next
              cue is issued.   Either of
              these cues can be used at
              any point in the program.

STEP   STEP can be used in three
(ESCAPE)   ways:
                    (1)   STEP   CUE   Steps
                    through   the   program   one
                    cue   at   a   time   in   the
                    FORWARD   direction   each
                    time   you   push   the   CUE
                    button while holding down
                    the   STEP   button.   The
                    projectors will respond to
                    each   cue   as   it   is
                    executed.

                    (2)   STEP   REVERSE · CUE
                    Steps through the pro-
                    gram   in   the   REVERSE
                    direction   one   cue   each
                    time the REV CUE button is
                    pressed while holding down
                    the STEP button.

                    (3)   STEP by itself will
                    stop   any   action   that   is
                    being carried out by the
                    COYOTE.   While in the RUN
                    mode   pressing   STEP   will
                    stop   the   COYOTE   at   that
                    point in memory. If in
                    LOAD, SAVE or VERIFY mode
                    pressing STEP will return
                    you   to   MAG   TAPE   BYPASS
                    mode.

STOP   Used   in   the   "projector
S   area" of the DISPLAY
                    LINE, to mark the end of a
                    RUN sequence.

SMOOTH
DISSOLVE
SG
SS

SMOOTH allows you to do one of two (or both) things. First the SMOOTH is a change in the way the lamp in the projector is ramped on and off. Without SMOOTH the lamp will ramp on faster at first to allow light to reach the screen faster and to make a smooth transition between the oncoming and the outgoing slides. With SMOOTH the lamp no longer has this fast start up.

Second, in SMOOTH the lamp will no longer come to full brilliance on an oncoming dissolve when you tell it to go OFF before it has reached its full intensity or all the way OFF when you are doing a dissolve OFF and tell it to come ON again. This now allows you to do a ripple dissolve effect or what is termed a continuous dissolve effect.

STANDBY

Will bring down the lamps of all projectors that are ON and the display line will display STANDBY. The projectors will still respond to advances and

reverses and keep track of the lamp and tray status. To return to the normal lamp status, press STANDBY again.

VERIFY   Allows you to verify the information that has been SAVED (using the SAVE method) onto mag tape for storage before clearing the program from memory.

WAIT TIMES   Waits are computer gener-
WAIT   ated timings that allow
W.05   timing out action sequen-
W.1   ces precisely to accommo-
W.15   date your specific de-
W.2   signs. These times are--
                   entered into the program
W9.90   in the form of wait times
W9.95   ranging from .05 seconds
                   to 9.95 seconds in
                   increments of .05 seconds.
                   If a time of 10 seconds or
                   longer is needed, use
                   additional wait cues to
                   accommodate the longer
                   time.

WAIT X   Used when the proper timing of a sequence has not been determined before programming. The WX cue is entered into the pro-gram and resolved during the running of that part-icular section. When the

COYOTE sees the WX it starts timing out the wait, until you press the CUE button. The **COYOTE** resolves the WX to the nearest 1/20 of a second and enters that time in the X slot of the memory.

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