

The Rolling Stones — Electronic Extravaganza

*The Stones' adrenalized rock
is still state-of-the-art.*

Some 90,000 people turned out to see the opening show of the Rolling Stones' 1981 concert tour in Philadelphia on September 25th, the starting point for the Stones' first American tour in three years. Fans started arriving the night before in anticipation of the next day's concert in John F. Kennedy Stadium. On a sun-drenched afternoon, the first 90,000 fans jammed the stadium ready for a happening. And that's what they got. Mick Jagger, whip-thin and wired, decked out in scarlet and yellow, was strutting his stuff, shaking, jogging, jumping, and pumping his hips around the stage launching the tour off to a low-key, but promising, start to their 21-city, 42-date concert tour.

After 19 years together, the Stones are now drawing a new generation of teenage fans, plus devoted followers from the '60s. And those who could, managed to turn out for *the Rock Event* of the year. The Stones are an institution now, a living legend whose roots lie in the magic of the '60s and have transcended the '70s into the '80s.

The Stones' sprawling, custom-made stage provided an impressive backdrop for the group's adrenalized gyrations. The all-white stage designed by Robin Wagner, with proscenium arch by Japanese artist Kazuhide Yamazaki, was the largest mobile concert set ever built — some 65 feet wide, with a depth of about 55 feet, with 80-foot ramps extending right and left out into the audience.

The set was made up of four asymmetrical ellipsoidal shapes. At 17½ feet off the house floor, the central and largest section used 66 feet of curved I-beam track of customized aluminum constructed in place. This was flanked left and right by smaller

kidney shaped areas of customized scaffolding and was raked. These two sections were on wheels for ease of lighting load-in and could be constructed elsewhere and wheeled into place. Another smaller kidney-shaped area was upstage. No one area was the same shape or size as another. The stage raked from six feet downstage to 12 feet on the upstage. In addition, a central angular shape, measuring 32 feet by 16 feet by 7½ feet, with a round lip supported the drum kit and also housed all the Stones' personal gear. Covered by a scrim facade, it was on a track that could run some 50 feet from far left to far right and circle 360 degrees in both directions.

The Stones traveled with their own road crew to handle lights, sound, stage construction, and scaffolding support. Their entourage was comprised of 68 people for outdoor gigs and 52 for arenas and theatres. Showlites of Gardena, California, provided much of the manpower for technical support in setting up the facilities and overseeing the performances.

Lighting designer for the Stones' tour was Allen Branton who says, "The show combined the diverse styles of rock-and-roll flash-and-bang with some elements of dance lighting, with the effect on the all-white set like a lunar landscape." Branton, an experienced rock-and-roll LD, says, "I lighted this show differently than I had ever done any others."

Branton went on staff with the tour in mid-September with the first arena dates requiring lighting scheduled for the first of November, a lead time of only 1½ months. The show was really like three shows in one with different lighting requirements for the outdoor daylight concerts, outdoor daylight/dusk/night concerts, and indoor con-

certs. Lighting had to be approved by October fifth for San Diego's outdoor concert, and although the small rig would be used there, it contained some of the same elements of equipment as the big rig that would be used indoors. About 40 percent of the equipment overlapped or had dual usage. The same control boards and dimmers were used, as well as some of the same trussing and follow spots. The show traveled with their own gear, but rented Super Troupers locally for stadium shows. For stadiums, they used a total of 20 spotlights, 13 Supers, and seven of the tour's own Ultra Arc lights. The Ultra Arcs were mounted around the stage and on trusses and in the wings, while the Supers were used on the hydraulic scissor-type lifts out in the football fields. Branton says for the daylight concerts, "We used instruments normally found on film shoots and hit the stage with lots of white light."

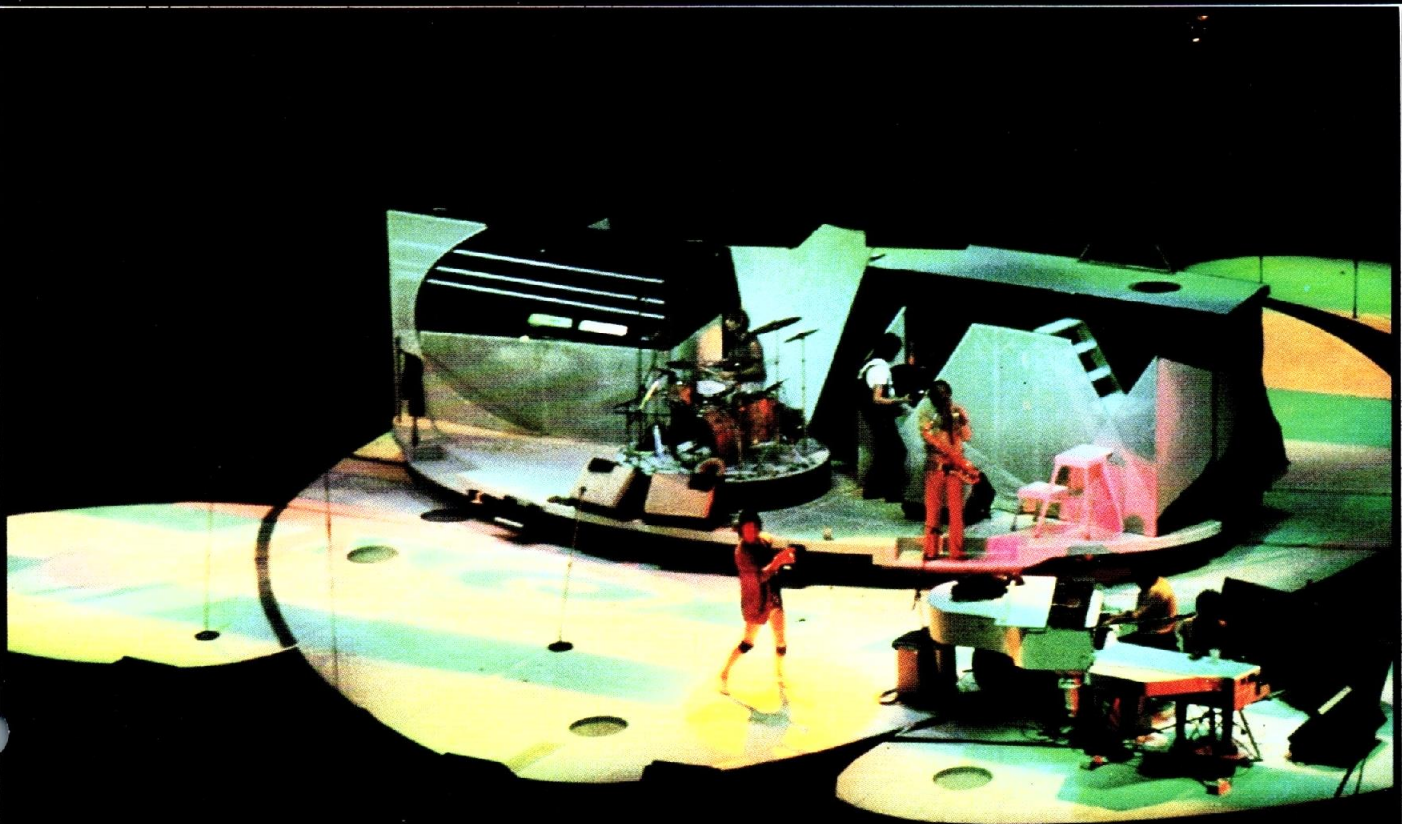
With the outdoor performances catering to 75-100,000 fans, some at quite a distance from the stage, the show had to be amplified to the point of exaggeration. The stadiums used a huge scaffolding frame for a set. Massive scrims, surrounding the stage with post-modernist pastel images of cars, guitars, and long-playing records, were constructed of 10,000 square feet of fabric, enough to outfit three clipper ships with complete sails. Fluttering silk banners streamed from the left and right of the scrims and reached some 150 feet out into the bleachers. So from the back of a stadium or coliseum, the panorama at the stage end was about 300 feet wide and 80 feet high — with the overall visual effect a general impression, not a specific view.

For the outdoor concerts, the small proscenium with the band was centered on

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Two of the many fine examples of painting the stage with projections.



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the vast stage. From there, a thrust arrangement on the front of the stage raked down about three feet and thrust some 20 feet beyond the edge of the proscenium to the left and right. Ramps and runways extended out from this and were designed to give the Stones the ability to get close to as many people as they could. With this in mind, Branton felt that the lighting should be

more functional than artsy-craftsy, because the viewer seated 250 feet away wanted to be able to see the performance as well as someone sitting in the front row bleachers.

Many of the outdoor concerts began in the afternoons and ran into twilight and darkness. Branton says, "As the white light at the top of the show gave way to color, we added washes on the main stage area as the

natural light diminished. The scrims were all lit from underneath in the front with multiphase, similar to billboard lighting, so as the sun went down, the whole scene stayed lit." For the most part, Branton used his own expertise as a lighting designer to gauge the footcandle level, not relying on any specifics.

However, some of the shows were tele-

ROLLING STONES DIMMER ASSIGNMENT

DIMMER	FOCUS INFORMATION	COLOR
1	WASHES - CENTER EGG	ROSCOLENE 809/114 LUX
2	"	ROSCOLUX 120
3	"	" 121
4	"	" 122
5	"	ROSCOLENE 832
6	"	LEE 181
7	WASHES - STAGE LEFT EGG	ROSCOLENE 809/114 LUX
8	"	ROSCOLUX 120
9	"	" 121
10	"	" 122
11	"	ROSCOLENE 832
12	"	LEE 181
13	WASHES - STAGE RIGHT EGG	ROSCOLENE 809/114 LUX
14	"	ROSCOLUX 120
15	"	" 121
16	"	" 122
17	"	ROSCOLENE 832
18	"	LEE 181
19	WASHES - UPSTAGE ELEVATION	ROSCOLENE 809/114 LUX
20	"	ROSCOLUX 120
21	"	" 121
22	"	" 122
23	"	ROSCOLENE 832
24	"	LEE 181
25	WASHES - UPSTAGE AUDIENCE	ROSCOLENE 826
26	"	" 842
27	"	" 826
28	"	" 842
29	SHIN-BUSTERS - STAGE RIGHT	ROSCOLENE 809
30	" STAGE LEFT	" 809
31	" STAGE RIGHT	COLORMAX
32	" STAGE LEFT	"
33	RDS (2K) 5 PROJECTOR OVERLAP	PAINTED SLIDES
38	FOCUS UP THRU PLEXI PORTALS IN STAGE	ROSCOLENE 809
39	"	" 874
40	"	" 821
41	"	" 842
42	"	" 832
44	SHIN-BUSTERS	CLEAR
45	RANDOM BEAM PATTERNS - UPSTAGE	"
46	" DOWNSTAGE	"
47	" CENTER	"
48	CROSSING BEAM PATTERNS	"
49	"	"
50	"	"
52	DRUMMER	CLEAR
53	"	ROSCOLENE 809
55	"	" 842
60	DRUMMER	ROSCOLENE 809
61	"	" 832
62	"	ROSCOLUX 120
63	"	" 121
67	POOLS - RANDOM FOCUS	ROSCOLENE 817
68	"	CLEAR
69	GOBO PATTERNS - RANDOM FOCUS	ROSCOLENE 859
70	"	" 832
71	SCRIM PANELS ON AMP HOUSE - LEFT & RIGHT	ROSCOLUX 120
72	"	" 121
73	"	" 122
74	" CENTER	" 120
75	"	" 121
76	"	" 122
80	RDS SLIDE TURRET RELAY	N/A
81	AUDIENCE WASHES - LEFT (NOT SHOWN)	826/811/842
82	" RIGHT	"
83	" END	"
84	" FLOOR	"

FOLLOW SPOT COLOR:

1. 802
2. 842
3. 809
4. 832
5. 857
6. 823

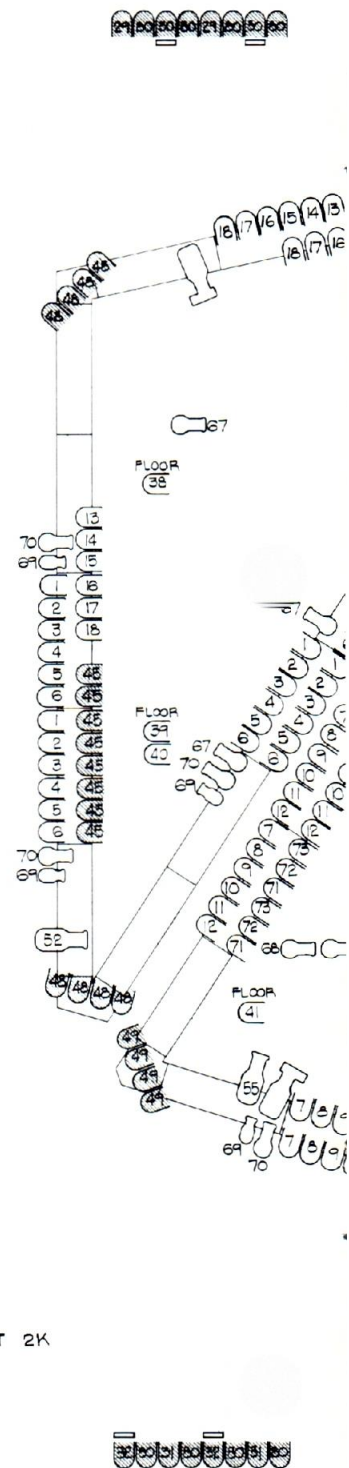
ALLEN BRANTON '81

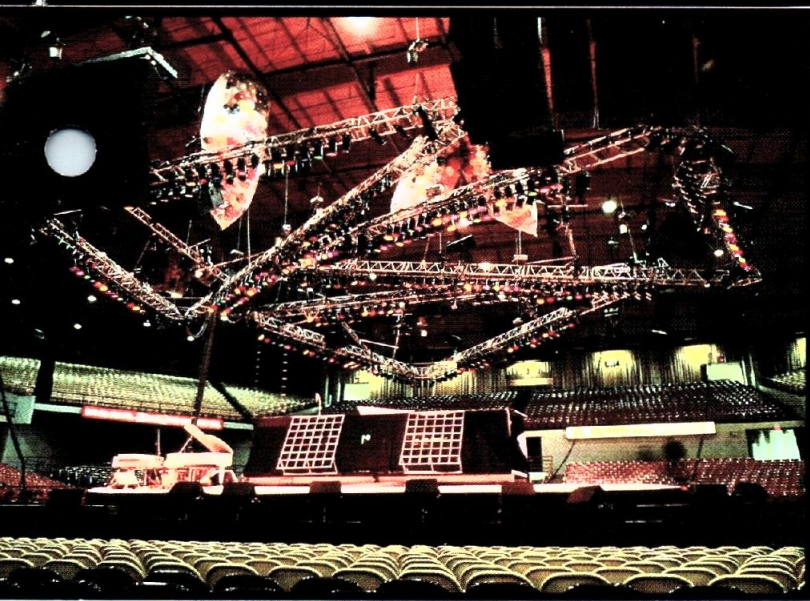
← DOWNSTAGE
UPSTAGE →



KEY:

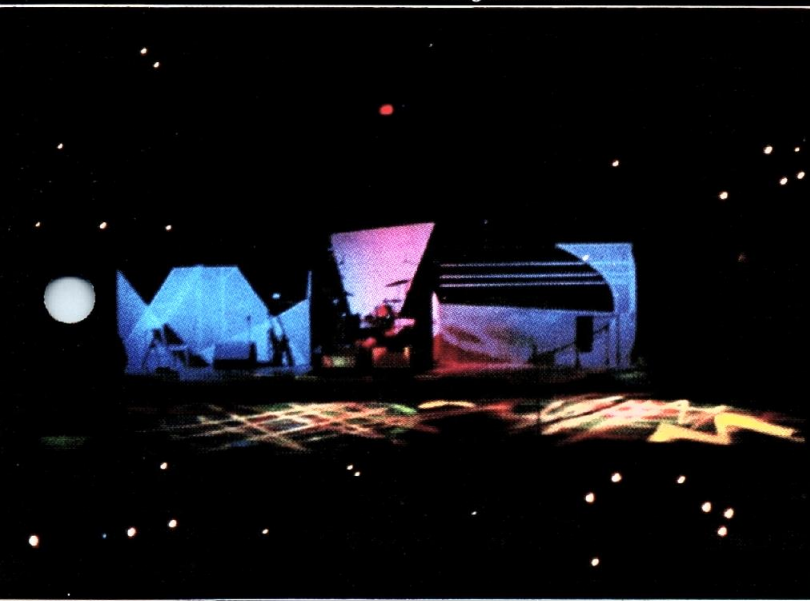
- PAR 64 MFL 1K
- AIRCRAFT PAR 600W
- AIRCRAFT PAR w/ 'COLORMAX'
- 6 x 12 LEKO 1K
- 6 x 18 LEKO 1K
- COLORTRAN 5° 1K
- RDS PROJ. w/SLIDE TURRET 2K
- ULTRA-ARC SHORT THROW
- SUPER TROUPER





Arena lighting rig prior to start of show.

Long view of what could be seen from long distance.



Mick Jagger in mid-performance.



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dynamic range of light levels from one leko on Mick Jagger to full out on everything in between."

With the Stones' stage setup encompassing five different areas, Branton designed the lighting system so that the five basic areas could be isolated in different colors at different levels. The center shape could be one color with all the other stage areas in another color, or five different colors could be happening at once — a bit more interesting scene visually for the viewer who is sitting at a distance from the stage. Branton compares it to television and says, "If the focal point is the Stones, then the background is really secondary; yet it is almost primary for the person who's so far away he can't really see the Stones."

With the all-white set, color diffusion played a very important role in lighting the shows. "Basically we had six wash colors," says Branton. "It took 40k for color to wash the whole stage area in a color; focus was particularly tedious because it was almost like a horizontal eye in that we had to get very even coverage and a good blend on everything. I used three primary colors with the diffusion manufactured into the gel. The Roscolux 120 series was used for the red,

Color and light enhance the tension in the performance.

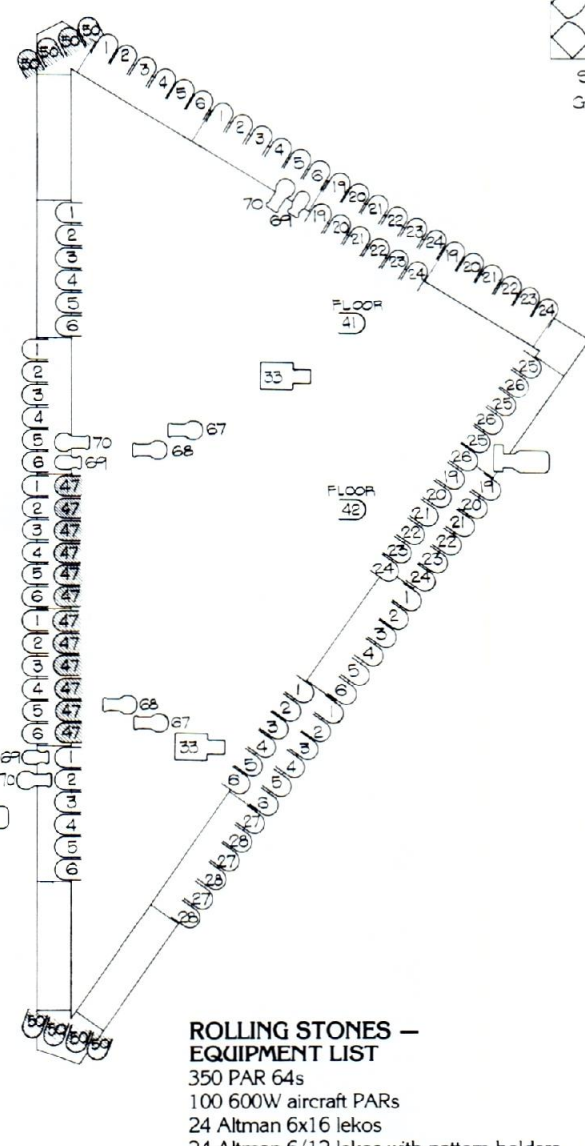
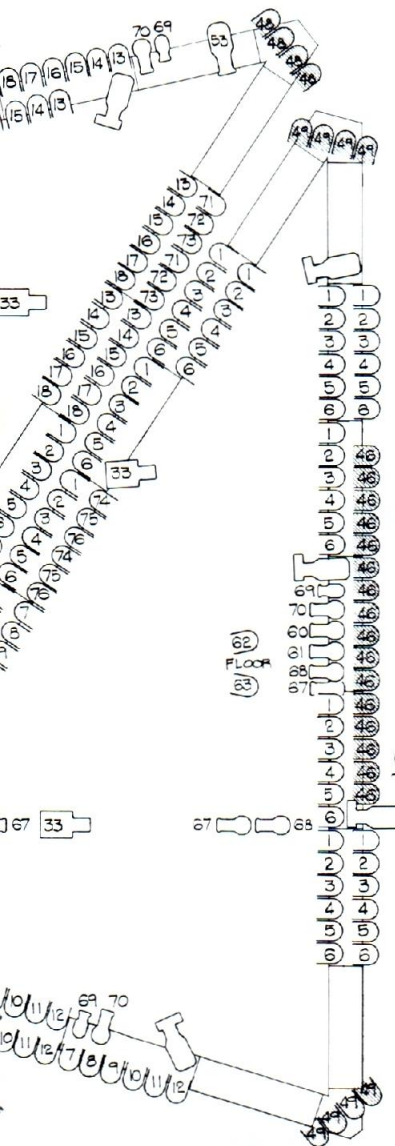


vised, and in those situations, Branton maintained 75 or 100 (and sometimes up to 150) footcandles. Branton continues, "The Super Troupers were inconsistent from place to place; we had to set them up pretty far away, so we didn't have all the sight line bothered in the middle of the concert fields. But from the beginning, I really lit that show as if it were a television

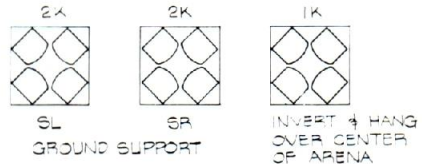
show —flat and colorful, not bland, but not very 'contrasty.' With the lights flat and bright, we could maintain a maximum level on all the Stones, not just a focus on Mick Jagger. Occasionally, we would switch to typical rock-and-roll techniques, so if Keith Richards or Ronnie Woods played a particularly important solo, we would dump the follow spots on everyone else or take them

to a darker color and isolate the lead performer." For the outdoor shows no memory cues were used. Branton did use them, however, for the indoor shows. There Branton used the crew's large rig to help produce a show that was more theatrical. He says, "We were able to do more complex cueing and more contrasting pictures; and there was a more

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PICHEL SKY-TRACKERS



SHOWLITES CREW

- Eric Pearce (owner)
- Kieran Healey
- David Davidian
- Gary Mardling
- Guy Forester
- Rolf Solstad
- Dave Verow
- Others on the crew included: Joe Brannon, Ed Kish, Mike Weisman (riggers); Roy Lamb (stage manager); Kiskey Wyatt (production manager); and Michael Ahern (production coordinator).



ROLLING STONES — EQUIPMENT LIST

- 350 PAR 64s
- 100 600W aircraft PARs
- 24 Altman 6x16 lekos
- 24 Altman 6/12 lekos with pattern holders
- 2 Colortran 5° lekos
- 2 Colortran 10° lekos
- 8 Ultra-Arc short throw follow spots
- 3 Pichel Industries Sky Trackers
- 8 ColorMax color changers
- 8 2K RDS projectors with slide turret
- Additional 160 PARs for audience light
- Alderham 805 and Kliegl Performer II.2

Rolling Stones
Indoor Arena
Format '81
Designed by
Allen Branton

1/4" = 1'-0"

Drawing by
Andy Branton



blue, and green. We experimented with adding diffusion to the yellow primary, Rosco 809. That was a mainstay to our looks. Besides the four primaries, we used a real hot pink Roscolene 832 and congo blue Roscolux 59, a wonderful, almost iridescent, almost purple color. It was great in the center theatrical section, providing a nice ethereal glow that blended with virtually every other wash color."

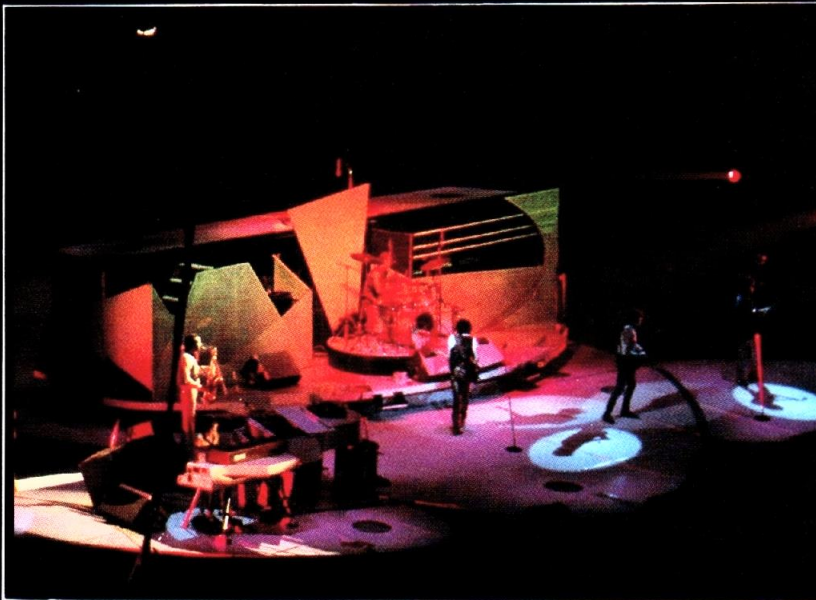
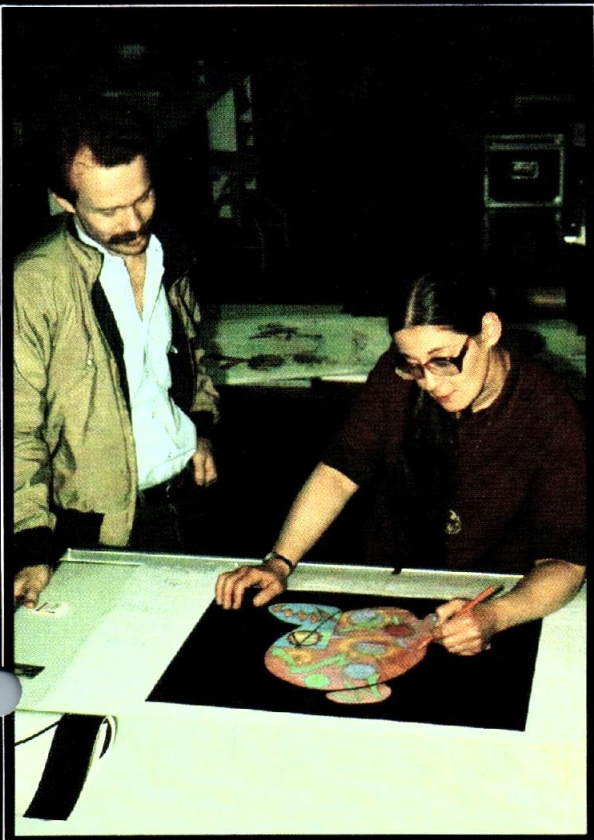
Blending in well with Branton's painterly palette on the white set were custom projections designed by Andrea Tawil of The Great American Market, whose images floated on the giant scrims. Altogether, Tawil produced five custom patterns (steel) and 28 painted glass slides for the Stones. Four of the custom patterns were used in lekos and the other in a Scene Machine with a rotating prism in front of the lens.

The stage was so large that five projectors were needed to cover it — all were locked into position at a fixed height above stage. Tawil's painted slides were in sets of five that worked together, with the extra slides used as singles to be projected on the amplifier stack, a large box-like shape in the center of the stage. According to Tawil,

The indoor tour carried 14 projectors. Six

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Allen Branton and Andrea Tawil review final drawings for projections.



Multiple projections used to isolate and give texture to the STONES.



Set of production slides - with some inspiration from Kandinsky.



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were 1000 watt used for the custom pattern and revolving prism. Eight were 2000 watt — the first ones in the U.S. from RDS in Japan. Of those, five were used for the large looks. The others were for singles and for insurance — a spare to protect the integrity of the large looks." Tawil's projections were inspired by Kandinsky and Kazu graphics to tie in with the mood of the Stones' performance.

Branton was present at all 42 shows and called the follow spots and ran the computer board during the portion of the show that it was used. He used a Kliegl Performer II modified with some additional chips so that it would have certain features not on other Performers — so it became a Performer II.2. With this board, Branton could do more complex sequencing and chasing. With the new chip added, the time/fade function was changed from a one-step function to a three-step function plus time-up/time-down and delay. "So by adding that extra feature, I was able to compensate for weird dimmer curves and have the smoothest of cross fades and blends," adds Branton. "I wanted to have a portion of the show run totally unlike the rest of the show in that there would be no bumps or flashes, no lighting techniques that are more typical of the rock-and-roll show."

Although Branton added elements of theatricality to the show, the basic hardware and fixtures used were rock-and-roll type. About 500 fixtures were used altogether, with the dimmer capacity also at 500. The lights were hung on a truss system that was asymmetrical like the stage for purposes of perspective. The distance between the truss and downstage was 32 feet and only 20 feet at the upstage level. In addition to the nearly 500 lighting instruments, the truss held five projectors plus eight follow spots.

Showlights is set up on the Alderham system with 1k to one instrument dimmer per circuit. They created an interface between the Alderham board and the Performer II for the Stones' tour. There were exceptions to the 1k setup, and some 2k projectors were ganged together on some 5k dimmers. But according to Branton, "It was mostly 1k per circuit dimmer per circuit. I love that equipment. I can't imagine having done that show with anything else, because it allows you such flexibility."

Branton, working with Kieran Healey also of Showlites, decided from the outset on continuity from show to show. They broke the show down into segments according to how the lights would be used. Apart from the opening and closing of the show, there were three major parts of the show that called for different types of lighting. The first segment of the Stones' performance was comprised of their newer songs from their

past album or two, plus a few numbers they enjoyed including a reggae tune. About a third of the way through the show, the whole thing broke radically from that formula and that signaled the theatrical portion of the show with such numbers as "Time is on my Side," "Waiting on a Friend," and "Can't Always Get What You Want." Everything in this segment of the show was computerized and executed on memory with slow fades and a static, mellow feel. Visually and scenically, these were the most picturesque moments according to Branton. "It almost bordered on the ethereal," says Branton.

For the third part, the last five numbers of the show, the audience went wild listening to Stones' numbers from the '60s and '70s, such as "Honky Tonk Woman" and "Jumping Jack Flash." As the music carried itself so well in this part, there was not much support needed from the lighting standpoint.

For club and arena performances, house lighting was also used. McManus associates' Rick Jobson and Rob Morganstein hung a lighting system, totally separate from the big rig, to light the audience in multicolor, much as would be done for a rock-and-roll television show. This truss was suspended over the audience with 160 instruments. That way, during the last four or five numbers of the show, when Mick Jagger usually asked for the house lights to be turned on so the audience could see themselves and Jagger could see his audience, specific areas could be lighted. As the crew feared they would not get consistent results from house lights because so many of them were mercury vapor, or not on dimmers, or couldn't be cued, they budgeted their own house lighting system. Since so much of that part of the show was spontaneous, Branton says, "We made a deal with Jagger that if he was going to go to a certain area of the stage or ramp, that he make it obvious enough what direction he was taking and stay long enough so we could play some lights on him."

Fireworks by the Pyro-Technics Corp. capped the climax of the Stones' performance — outdoors only. Five minutes of lights and explosions were enough to convince dedicated concert goers that the show was over.

With a blaze of bright color and the electric presence of Mick Jagger, the most talked about rock event of the '80s is over. Will the Stones roll again...and when? □

Editor's Note: During several of the Stones' performances, television cameras were taping the whole show. Since the lighting was so unique and specialized just for the cameras, we felt that this was a story unto itself. We will be covering this aspect in a subsequent issue.