

Facility Technical Description

The theater contains 587 comfortable seats with excellent site lines to the stage from every location. The Palm technical equipment includes a full fly with 38 linesets, 288 dimmed lighting circuits and state of the art performance sound equipment. Through a partnership with the Telluride Film Festival, the Palm features wide screen cinema with dual 35mm projectors, a large format digital projector and surround sound.

The 30,000 square foot theater is comprised of: a 3,332 sf stage, an orchestra pit / thrust stage at 410 sf, 5,490 sf in the first and second floor lobbies, 3,795 sf in the first floor house with 418 seats, 150 seats in the 1,568 sf balcony, 962 sf in the dressing / makeup rooms, 3,467 sf in the scene shop / back stage storage, 1,206 sf in a music / rehearsal room and 9,770 sf of circulation and misc. support spaces.

I. Seating:

The house main seating includes three sections: House Left with 46 seats, House Center with 160 seats and House Right with 45 seats. The house rear (loges) seating area contains 138 seats. The Balcony has 198 seats.

There are four handicap accessible seats in the house main seating area: B-2, E-1, K-2 and M-113. The handicap accessible seats are located along isles and have swing-up armrests to facilitate entry and exit from the seats. There is a handicap ramp along the east (house-right) side of the theater that is accessed from the east entrance. The balcony may be accessed via the elevator, which is located around the corner to the left of the west main entrance. Patrons wishing to remain in a wheelchair may utilize the wing seating areas at either level.

II. Stage, Wings and Performance Support Spaces:

The Palm stage measures 35'-7" in depth by 76'-4" in width and is 3,332 square feet. A Thrust Stage / Pit Cover can be set up in various configurations at the stage level or the main audience floor level. The full thrust projects 9'-3" from the stage wings into the house and measures 410 square feet in area. The Proscenium is 45' wide by 24' high.

Scene shop measures 1,240 square feet in area and is equipped with a basic assortment of power and hand tools useful in set construction.

The makeup and dressing rooms measure 962 square feet in area and are located off the stage-right theater entrance. The single makeup room is equipped two sinks, and continuous mirrors and a vanity top that wraps around the north and east walls. There is a single restroom located off of the make up room with additional restrooms and showers available nearby. The two dressing rooms are accessible off of the makeup room and are identical in size. The dressing rooms are equipped with chairs and six rolling costume racks.

Loading / scene storage measures 1,883 square feet in area and also serves as a back-stage passage. A tri-level 1,355 square foot steel storage structure with ten individually locking spaces is located in the hallway upstage of the upstage wall.

The Box Office has two windows facing the exterior and a single window facing the lobby.

Snack Bar and Snack Storage area measures 498 square feet. The snack bar is equipped with a large capacity popcorn maker, soda fountain and two cash registers. There is a southeast facing exterior patio adjacent to the concession booth allowing patrons to step outside during intermission in warmer months.

The Music / Rehearsal room measures 1,207 square feet in area and is located on the second level, directly above the makeup and dressing rooms. This room is used during school days for Intermediate School music instruction. The room is acoustically isolated from the adjacent balcony level seating.

The main level lobby measures 3,438 square feet in area and is large enough to accommodate the full seating capacity of the main house. Restrooms are located adjacent to the entrance to the Intermediate School wing and are shared with the classrooms. Double lock-off doors isolate the classroom wing during non-school hours.

The balcony lobby is 2,052 square feet in area and has a second set of restrooms located adjacent to the second level Intermediate School entrance.

III. Stage Rigging and House Draperies:

Shaded lines represent dedicated battens. High trim on the single battens is 48'-9". High trim on the five electric battens is 46'-3"

LINE #	USE	DISTANCE FROM PROSCENIUM	CAPACITY
	Proscenium Wall		
	Fire Curtain	0'-4"	
1	Grand Valance	1'-1"	1200
2	Main Curtain	1'-9"	1200
3	Border 1	2'-3"	1200
4	Leg 1	2'-9"	1200
5	Projection Screen	3'-5"	1200
6	Orchestra Shell 1	4'-5"	1200
7	Electric 1	5'-5"	1600
truss	Film Audio Truss	7'-5"	2000
8		8'-9"	1200
9	Border 2	9'-2"	1200
10	Leg 2	9'-10"	1200
11	Electric 2	10'-10"	1600
12	Orchestra Shell 2	12'-2"	1200
13		13'-2"	1200
14		14'-3"	1200
15		14'-9"	1200
16	Border 3	15'-5"	1200
17	Midstage Traveler (Leg 3)	16'-1"	1200
18	Electric 3	17'-1"	1600
19		18'-1"	1200
20		18'-9"	1200
21		19'-5"	1200
22		20'-1"	1200
23	Border 4	22'-1"	1200
24	Leg 4	22'-9"	1200
25	Electric 4	23'-9"	1600
26		24'-9"	1200

27		25'-5"	1200
28		26'-1"	1200
29		26'-9"	1200
30	Border 5	27'-5"	1200
31	Leg 5	28'-1"	1200
32	Electric 5	29'-5"	1600
33		30'-9"	1200
34		31'-5"	1200
35		32'-1"	1200
36	Blackout Drape	32'-9"	1200
37		33'-5"	1200
38	Cyclorama	34'-1"	1200

IV. Orchestra Pit / Thrust Stage / Pit Cover:

The orchestra pit is 410 square feet in area and will accommodate approximately 19 musicians plus a conductor.

The StageRight thrust stage / pit cover consists of aluminum framed deck panels with 1 ½" thick plywood decking supported by heavy-duty aluminum legs and braces.

Not shown at right are configurations with the stage notch filled (partial pit) or no cover (full pit). Other arrangements are possible as well.

The default set up is for a full-thrust (second drawing from top). Changes to the configuration require (ideally) four stage hands to execute and may not be done without the oversight and approval of the Technical Director .

V. Acoustics and Sound Reinforcement:

The Palm has excellent acoustics for a wide variety of performance types. Robert Mahoney Associates created the acoustical design for the theater. Acoustical considerations defined the volume and shape of the theater, reflective surfaces, materials used in the structure and for finishes as well as sound transmission levels allowed between adjacent spaces. The design of the mechanical systems was also carefully overseen by RMA to ensure adequate ventilation and climate control without introduction of mechanical noise.

The house is equipped with [acoustic draperies](#) that store in concealed spaces either side of the stage at both levels. The draperies are deployed to soften the acoustics during events using amplified sound.

The theater is equipped with a [StageRight Opus-II acoustic shell](#) consisting of seven tower sets and two collapsing ceiling panels flown on line set numbers six and twelve. The shell towers and ceiling panels have an off-white laminate finish. The ceiling panels have integral halogen lighting controlled by the performance lighting system. The

shell can be set up either half-depth (8' from proscenium) or full depth (16' from proscenium).

The multi-mode sound reinforcement system is based on a Biamp Audia Digital Audio Platform™. The system includes 48 line-level microphone circuits throughout the theater with control / mixing positions at back of house and from the control / projection room. Line-level cables provide a return path for mixed output to the amplifiers. House speakers include four Electrovoice QRX-112/75BL mounted in L/Cx2/R clusters, one Electrovoice QRX-218S subwoofer, and two Electrovoice QRX-112/75 PA stage monitors. These are in addition to the film surround speakers.

Stage Sound Rack / mini-mixer: The Stage-Right sound rack (SR-Rack) is located on the stage next to the southeast stage access door. The SR-Rack provides access and control for two wireless microphones; four hardwired auto-mic inputs (located either side of the proscenium) and a CD player.

Microphones include:

- two AGK WMS-4000 handheld wireless microphones and receivers,
- four AGK WMS-4000 lapel wireless microphones with two additional receivers,
- two Shure BETA 58A Dynamic Supercardioid mics
- four 20' Ameriquad microphone cables
- two Ultimate MC-97 mic stands

A two-channel **Production Intercom** system provides intercom to wall mounted stations at the main theater entrances (4), the makeup / dressing rooms (3), the box office (1), the control / projection room (1), the followspot room (2), the catwalks (4), the SR and SL pin-rails (2), the stage (4), the pit (2) and the grid (1). The Palm currently has three wired headsets.

A stage manager's rack and theater paging system will be installed the first half of 2005.

VI. Performance Lighting:

Dimming Circuits: Total of 288 20A dimming circuits controlled by 144 ETC dual, status reporting dimming modules.

Lighting Control: ETC Expression-III 400 Control Console with dual CRT monitors and ETC Remote Focus Unit (RFU) wired with 50' cord. Architectural lighting controlled with programmable LED push button panels located at theater entrances, on stage, the control room, the follow spot room and cat walks. Full control with lockout of remote stations provided with a Unison ULCD-P touch screen that may be connected at several stage locations, at the house control position and in the projection / control room.

Lighting Circuits: There are five electric battens located on lines 7, 11, 18, 25 and 32. There are 9 multi-pin, six circuit drops located on the SR and SL pin rails. Additional circuits are spread throughout the stage area and catwalks.

Follow Spots: Two Lycian 1209 Midget HP followspots are located in the followspot room at the grid level.

Generic House Plot: The [Generic House Lighting Plot](#) is the default plot for the Palm. Changes to the default plot require prior approval of the [Technical Director](#) and the default plot must be restored before return of the rental deposit.

Company Switch: A company switch is not currently available. Equipment upgrades planned for 2005 include a 400 amp switch for lighting and a 200 amp switch for sound.

VII. Projection / Control Room:

The theater is equipped with state of the art film projection and Dolby surround systems. The projection / control room measures 476 square feet in area. There are two Century 33mm film projectors, Christie X10 digital projector along with associated sound processing and film handling equipment. The projection screen measures 17' high by 40' in width. The screen is suspended from lineset #5 and the front film speakers are mounted on a truss that is raised and lowered with winch motors. The setup for showing a film normally requires about 15 minutes.

The ETC Expression-III 400 lighting control console is normally located in the projection / control room. The Unison architectural lighting control can be connected in the control room as well, allowing total control of the performance and architectural lighting systems from a single location.