

Mac Sound Studios New Jersey

Studio design, construction, and electrical wiring by:
Gordon M. McAlister

The Studio is made up of three fully air-conditioned and humidity controlled rooms.
All electrical wiring is Surge and EMI protected at power mains, all audio wiring is
Shielded and balanced lines.

All custom made furniture, instruments and electronic devices (Mac series) designed, produced, and
assembled by: Gordon M. McAlister



Main Room:

(Not Pictured)

Size 12' x 30' single wall construction
Fully insulated, carpeted and sound proofed
Double pane insulated window to control room
Includes Custom made Portable 4' x 4' x 8' Vocal Booth
Custom made Mic, Headphone, Speaker and Instrument patch bays (to control room)
Custom made Electrovoice 12"/ Quad piezo tweeter Stereo Monitors
Peavey TNT 100 amp (for Bass and Guitars)
Kirby Newark upright Acoustic Piano
Bruno Maxitone hollow body electric Guitar
Assorted Recorders and Ethnic Flutes (wind instruments)
Various Mic stands and Music stands
Assorted Gobos (room dividers)
5 Crown Mics (1 Crown "Planer Boundary" Mic)
Assorted Guitar / Bass Cases
Various balanced Mic and Instrument (audio) cables
Mutli volume control amplified headphone junction box and 5 Koss stereo headphones
*(This room will hold a full live rock band for recording with minimum
Transfer of sound to other rooms)*



Computer Control Room:

(Pictures Studioa and Studioe)

Size 4' x 6' single wall construction
Fully insulated, carpeted, and sound proofed
Custom made Instrument, Mic, Speaker, Headphone and Midi patch bay (to control room)
Realistic Minimus 7 Monitors (pair)
Audio Technica Mini Mic (allows communication with other rooms)
Custom made Pentium computer (Black)
(One of 3 Custom made Pentium computers networked through the home phone lines,



Computer Control Room (continued):

CD burning is done on another network computer in the home office)

Proton SVGA monitor (Black)

Canon Color Printer (Black)

IBM dot matrix graphic printer

Novatron MM10-X Mini Midi (touch Sensitive) Keyboard Controller

Roland RAP10, Digital Audio Recorder / Synth Sound Card

Dedicated Roland MPU401 Midi Controller Card

Various Midi merger, through, and switch patch boxes

Hauptage Video recording card and editing software

Software: Roland M.U.S.E. (Midi Recorder, and Score software)

Cubase Score 4.01 Software

Various patch editing software

(This room will allow editing (via midi) of all synth patches, control of all Synths Midi and or c/v (control voltage pre-midi gear), computer control of Midi Multi effect devices, Computer control of Multi track tape decks, Multi track digital recording, Video recording and editing)

Studio Control Room:

Size 8' x 12' double wall construction (each of the 8 walls are fully insulated)

(Room design is called a "Floating Live End / Dead End Room". The room is actually a Room with in a room with a 1" air gap between the walls, so no sound vibrations can be Transferred from the inside walls to the outside walls, so the inner room "floats" inside the Outer room. It is constructed with tuned sound absorption chambers in the front corners and Ceiling to absorb certain high and mid range frequencies, 3/4s of the front-end walls are Carpeted, and the floor is carpeted. The rear wall is an 7' x 7' acoustically tuned wall panel / absorption Chamber designed to kill any bass standing waves and or reverb reflections (the wall panel Itself can be played like a tuned bass xylophone) in effect the room is acoustically flat and reverb dead to allow flat frequency monitoring / mixing and therefore all reverb is added electronically. There is a double pain 3/4" & 1/2" Glass window for viewing into the main room. Note in picture "studiob" the window appears to be frosted, there is a large box temporarily mounted on the window side in the main room. This box is a Stereo "Color Organ" it is a 3D box with colored lights inside tuned to different audio frequencies (Remember the 60s) it is used to aid in stereo image placement during mixing, i.e. speakers for the eyes).

Two custom-made patch bays are located front left and right

Left goes to main room: Mic, Headphone, Speaker and Instrument patch bay.

Right goes to computer room: Instrument, Mic, Speaker, Headphone and Midi patch bay.

Custom made six sided wood tables and equipment racks (set up in a 3/4 Octagon arrangement)

The famous "Captain Kirk" (That Space Cadet Glow) Blue Sparkle Naugahide swivel barber chair.

Blower Fans for air circulation (the equipment has a tendency to heat this room up) and Track Lighting.



Control Room Equipment List:

(Picture studiob)

Control Room Front center:

Mitec (German made) 12 in 4 out mixing board

(Each channel in has 2 effect sends and 4 bands of parametric EQ)



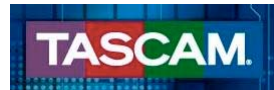
Control Room Front center (continued):

- Custom made speaker switch box
- Custom made Mic cue system for communication to other rooms
- AKG Mic on goose neck (for communication with other rooms)
- Custom made direct inject box (for Guitars and Bass to balanced Mic inputs)
- Main front monitor speakers, BIC Ventura 6 (pair)
- Shelf under table: Technical manuals and reference library



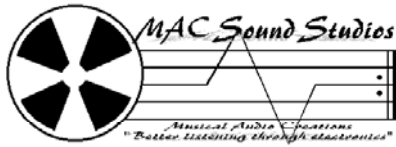
Control Room Front Left:

- Tapco 6200A - 6 in 2 out mixing board
(Each channel in has 1 effect sends and 2 bands of parametric EQ)
- Roland M120 Rack Mount 12 in 2 out line / keyboard mixer
(Each channel in has 2 effect sends)
- Fostex 3011 RCA jack patch bay
(May be hidden in picture)
- ART Multi Verb stereo midi controlled digital delay / pitch transposer / sampler, effect unit
- Alesis Midi Verb II Digital effects processor
- Ibanez DM 1000 rack mount Digital Delay Device
- Tape Storage and sheet music archive
- Assorted percussion toys (under the speaker).



Control Room Front Right:

- (Also see picture studio)*
- (Under the speaker)
- “Otto the skull” (headphone holder and former Guitar player who pissed me off)
- Univox (the old Korg Co. name) EC-80 analog tape loop echo chamber
- Shure Vocal Mic
- SynHance MTS One, Midi time code chase lock, midi to Multi track tape deck sync box
- Teac V-3RX Cassette Deck with DBX noise reduction
(Not shown as it was moved to home office to convert tape to MP3s)
- 2 Tascam PB-32R, RCA jack patch bays (in /outs for effects, mixer, and tape decks)
- 2 Tascam DX40, 4 channel DBX noise reduction units (for 1/2" 8 track deck)
- BBE 402 Maxie, stereo sonic maximizer.



Control Room Front Right (continued):

Symetrix 522 rack mount Stereo Compressor / Expander / Ducker / Limiter / Gate
Ashley Audio SC-63 Parametric EQ
Ibanez HD1000, rack mount Harmonics Digital Delay / Pitch Shift effect device
1 DBX II 124, 4 channel noise reduction unit (for 1/4" 4 track deck)
Tapco rack mount Stereo 10 Band Graphic EQ
Marantz 2240 stereo power amplifier



Control Room Right Wall:

(Also see picture studioc and studiog)

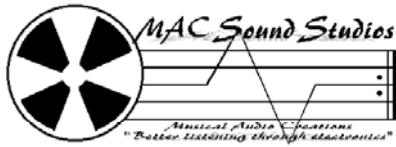
24" Brass Bar Wind Chime (maybe hidden in picture)
Year 1930 (no name) slide bar harp (this is one strange instrument)
CF Zimmerman Auto Harp
Tascam 38, 1/2" reel to reel 8 track tape deck
Teac A2340 1/4" reel to reel 4 track tape deck
Korg Polysix synthesizer
Custom made analog Multi effect processors (Mac 9001 & 9002)
Mac 9001, Phase shifter / Flanger / Noise gate / Auto Panner
Mac 9002, Parametric EQ / Envelope Follower / Dynamic Filter Follower / Chorus / Mixer / Auto Panner
Tape storage shelf (under table)
Custom made Mac FX9000 pedal board interface
Cry Baby Wah Wah pedal
Boss CS-3 Compression / Sustainer
Tube Works, Real tube overdrive unit
MXR Distortion + pedal
Ibanez Bi Stage Phaser pedal
Ibanez CS505 Stereo Chorus pedal
Morley Stereo volume pedal
Vibra slap percussion toy
Assorted tape deck cleaning and Guitar polishing chemicals



Control Room Rear Wall:

(Also see picture studiof)

Casiotone MT-31 Mini keyboard (great organ sounds)
Custom made rolling equipment rack
Moog Rogue Mono synthesizer
Yamaha QY 10 Notebook midi polyphonic synthesizer / sequencer
Yamaha RX15 Digital Rhythm Programmer (drum machine)



Control Room Rear Wall: (continued)

Roland MKS-100 Digital Midi sampler
Yamaha TX81Z rack mount polyphonic FM tone generator
Boss RPD 10, ½ rack Digital Panning delay
Yamaha FB01 ½ rack polyphonic FM tone generator
Korg KMX122, 12 in 2 out line / keyboard mixer
(Each channel in has 2 effect sends)
Paia 6710 dual (stereo) Limiter
Paia 6710 Vocoder
Mac M12216 custom made patch bay (for effects, mixer, and drum voices)
Korg MR16 Midi Rhythm Sound unit (16 drum and percussion samples)
Sound Workshop 242C Stereo Reverb unit
DeArmond 1602 volume pedal
Assorted Mic stands and music stand
Popper Stopper Mic wind screen
Audio Technica Mic shock mount
Crown CM200 Vocal Mic
Custom made "Circular saw blade" chime
Seashell wind chime
Assorted audio, Mic, and instrument patch cords / cables
Custom made 8" Jansen / Piezo studio monitors (pair)
Paiste 400 18" Crash / Ride cymbal and stand
Copper Cowbell
Audio Technica AT816 Vocal Mic and boom stands
2 Realistic Cardioio Condenser Mics and boom stands
Zildjian 20" Ride cymbal
2 Sampler file disk storage boxes
Mac 101 Custom made midi to control voltage converter
Korg KMS-30 Midi Synchronizer
Roland MC202 Micro Composer analog synthesizer / sequencer
Yamaha TX7 FM expander / tone generator (DX7 in a box, no keyboard)
Roland MSQ 100 digital keyboard recorder / sequencer
Roland MSQ 700 digital Multi track keyboard recorder / sequencer
Korg KMT-60 Midi thru box
Korg Poly 800 polyphonic digital synthesizer
Roland Alpha Juno 2 touch sensitive keyboard synthesizer
Pro mark Rebounder drum pad (converted to control voltage synth trigger)
Realistic DTR-40 Cassette recorder (for patch and software dumps)
Mac 1000 custom-made computer controlled digital keyboard system (for patchable synth)
Korg Guitar tuner
Mac 8990 custom made control voltage joystick controller
3 assorted Koss stereo headphones (1 quadraphonic)
Assorted synthesizer and instrument patch cords / cables
Custom-made 1.5 octave bass pedal unit (interfaces to Mac 1000 keyboard system)
Roland synthesizer expression pedal
1 Roland patch change pedal
1 Roland sustain pedal
Octave synthesizer expression pedal
Mac FC100 custom made switch pedal board (controls effect in/out, patch changes, and MSQ units)
Assorted percussion toys (shakers, rattles, rainmaker, tambourine)



Control Room Rear Wall: (continued)

Fender Stratocaster electric guitar and stand

Ovation Custom Balladeer acoustic / electric Guitar and stand

Gibson Les Paul "Recording" Bass Guitar and stand



Control Room Left Wall:

(Also see picture studioh and studioi)

Ibanez Custom 6 string electric Guitar and stand

Custom made brass key chime

Custom made 3 triangle chime

Casio CZ101 mini midi polyphonic keyboard synthesizer

Yamaha CS01 Mini analog synthesizer with breath controller

Casio VZ8M Midi digital rack mount polyphonic synthesizer

The Cat by Octave Mono analog synthesizer

Pro Rhythm Mini synthesizer and drum pad trigger

(Under table)

Mac SX 4000 series 4 voice patchable synthesizer

(Front panel controls are hard wired and switchable, rear panel is fully patchable with patch cords.

2-SX4700, SX4701, SX4800 each unit contains: 2VCOs, 1 Multi mode VCF, 1 VCA / Ring modulator, 1 gated timed delay LFO / Sample and Hold, White and Pink Noise Generator, 1 ADSR & 1 AR envelope generators, 1 Control Voltage Inverter / Buffer. SX 4708 Keyboard / pedal / midi interface controller and Audio Mixer. Mac A/B control voltage pedal system).

Studio and equipment construction began in the summer of 1979 and was completed to this stage by the summer of 1992.