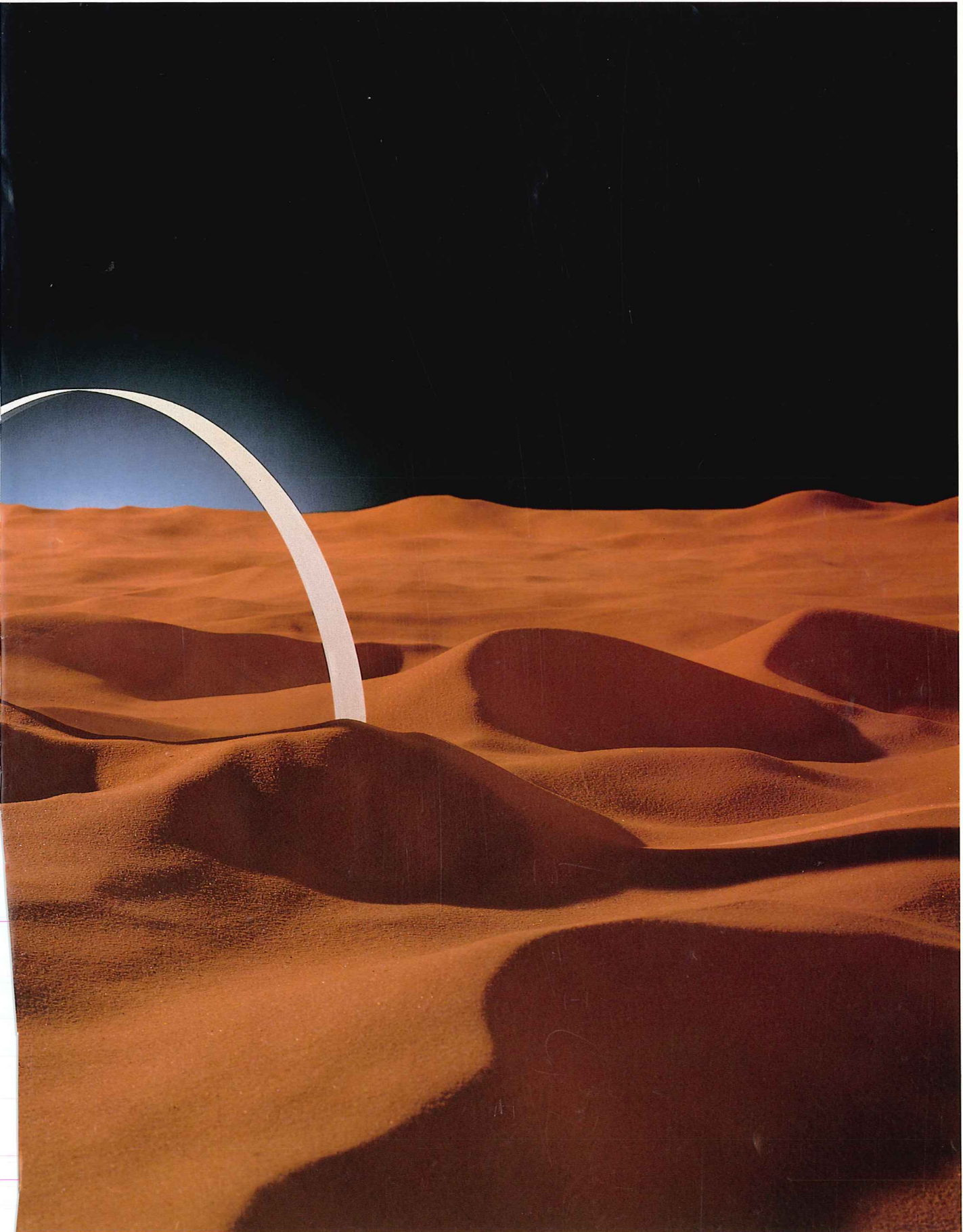
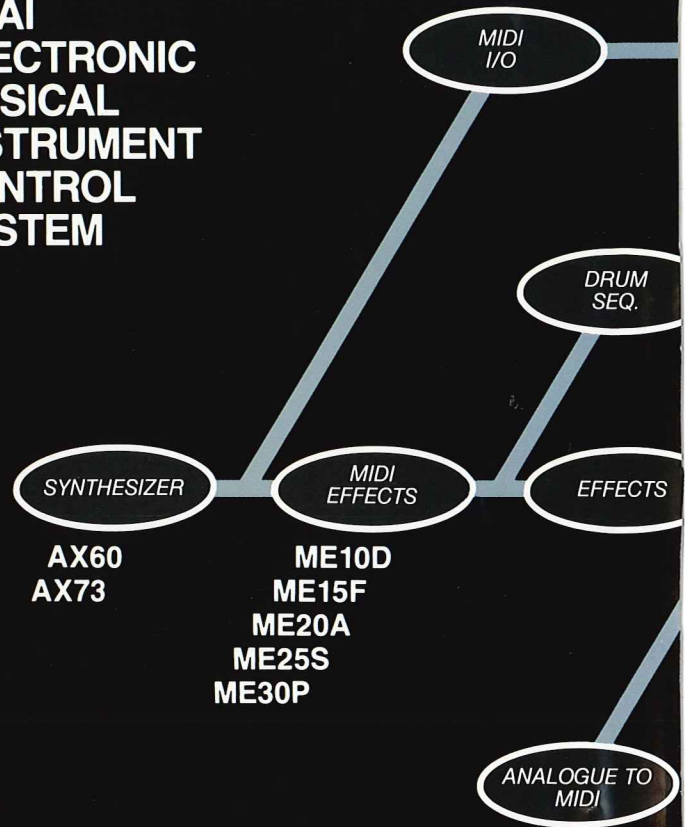


AKAI
professional



1986 Vol.2

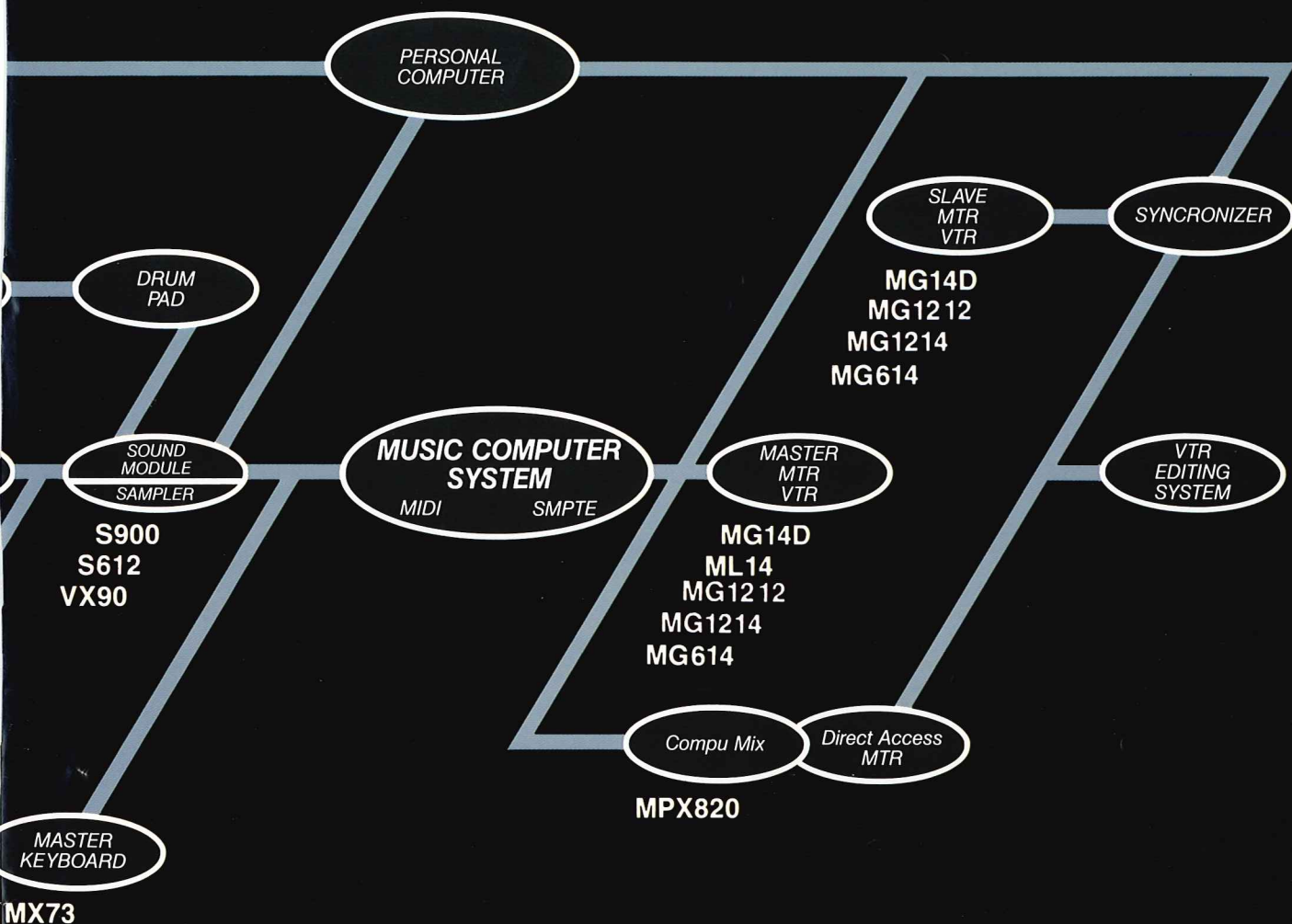
**AKAI
ELECTRONIC
MUSICAL
INSTRUMENT
CONTROL
SYSTEM**



**AX60
AX73**

**ME10D
ME15F
ME20A
ME25S
ME30P**

**ANALOGUE TO
MIDI**



AKAI—Looking Toward the Future

At AKAI we are always looking ahead toward the next step in the constant evolution of creative musical product design. We know that being a musician in today's complex music world requires that you have access to the latest and most innovative technological developments at all times. And to this end, we at AKAI are proud to present one of the most fantastic line ups of creative musical products ever assembled. A touch of tomorrow's technology for today's musician.

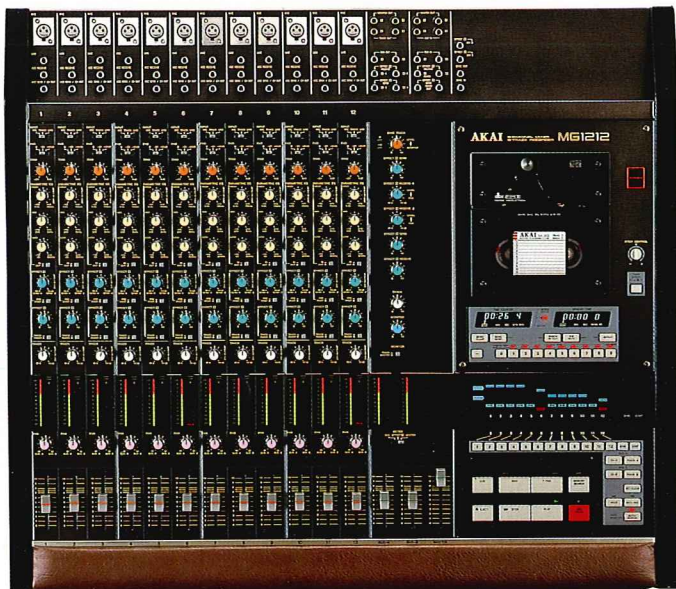
MG1212 SPECIFICATIONS

DECK SECTION

- Tape format ● 1/2 inch AKAI original cassette tape (MK20)
- Track format ● 14 track 12 channel (including 1 control track and 1 sync track)
- Tape head configuration ● SGX low noise crystal ferrite recording, playback head (1)
- Control head × 1 (Ferrite)
- Erase head × 1 (Ferrite)
- Tape speed ● 19cm/sec, 9.5cm/sec
- Tape speed accuracy ● ±0.2% Deviation (19cm/sec, 9.5cm/sec)
- Pitch control ● ±12% at normal tape speed
- Recording time ● 10 minutes (19cm/sec), 20 minutes (9.5cm/sec)
- Wow/Flutter (REC/PB) ● 19cm/sec 0.03% W•RMS, ±0.05% w/peak (EIAJ), ±0.05% peak (DIN/IEC weighted)
- 9.5cm/sec 0.04% W•RMS, ±0.06% w/peak (EIAJ), ±0.06% peak (DIN/IEC weighted)

MIXER SECTION (0dB = 0.775V r.m.s.)

- Inputs
 - MIC ● (5K Ω , Balanced)
Normal input level -60dB / -40dB / -20dB
Maximum input level -12dB / +7dB / +18dB
 - LINE ● (47K Ω , Phone jack)
Normal input level -21dB
Maximum input level +22dB
 - AUX ● (22K Ω , Pin jack) Normal input level -5.5dB
 - ACC RECEIVE ● (10K Ω , Phone jack) Normal input level -5.5dB
 - EFFECT A, B RECEIVE ● (22K Ω , Phone jack) Normal input level -21dB
 - BUS-IN ● (22K Ω , Phone jack) Normal input level -5.5dB
 - EFFECT A, MIX 1+2 ● (47K Ω , Phone jack) Normal input level -5.5dB
 - SYNC IN ● (47K Ω , Phone jack) Normal input level -21dB
- Total harmonic distortion ● 19cm/sec: 0.5% (EIAJ) 0dB
9.5cm/sec: 0.8% (EIAJ) 0dB
Maximum recording level 315Hz, +12dB (EIAJ) 19cm/sec, 9.5cm/sec
- Tape rewind time ● Approximately 120 seconds
- Dynamic range ● 115dB, 1kHz (19cm/sec, 9.5cm/sec)
- Noise reduction ● dbx TYPE-1
- Frequency response ● 50 - 20kHz (19cm/sec)
50 - 16kHz (9.5cm/sec)
- Signal to noise ratio ● 94dB (NAB A WTD), Reference 3% THD at 315Hz (19cm/sec, 9.5cm/sec)
- Cross talk (between neighboring channels) 55dB, 1kHz (19cm/sec, 9.5cm/sec)
- Erasure ● Better than 75dB, 125Hz
- Motor ● Frequency generator DC servo capstan motor × 1
DC coreless reel motor × 1
DC loading motor × 1
- Outputs
 - ACC SEND ● (120 Ω , Phone jack) Normal output level -5.5dB
 - MASTER OUT ● (120 Ω , Phone jack)
Normal output level -5.5dB
Maximum output level +8.5dB
Output Capability +17.5dB
 - TRACK OUT ● (120 Ω , Pin jack)
Normal output level -5.5dB
Maximum output level +1.5dB
Output Capability +17.5dB
 - MONITOR OUT ● (120 Ω , Pin jack)
Normal output level 0dB
Maximum output level +14dB (master monitor), +7dB (track monitor)
Output Capability +17.5dB
 - EFFECT SEND A ● (120 Ω , Phone jack)
Normal output level -5.5dB
Maximum output level +1.5dB (POST), -5.5dB (PRE)
 - EFFECT SEND B ● (120 Ω , Phone jack)
Normal output level -5.5dB
Maximum output level +1.5dB (FADER), -5.5dB (TRACK)
 - BUS OUT ● (120 Ω , Phone jack)
Normal output level -5.5dB
Maximum output level +1.5dB
 - SYNC OUT ● (120 Ω , Phone jack) Normal output level -5.5dB
 - HEADPHONE ● Maximum 100mV 8 Ω
- Signal to noise ratio ● MIC: Better than 55dB, LINE: Better than 60dB
- Trim adjustment range ● -20dB - 0dB
- Parametric EQ control ● HIGH: 1.5KHz ~ 15KHz ±15dB, MID: 350Hz ~ 5KHz ±15dB
LOW: 40Hz ~ 800Hz ±15dB
- Indicators ● Over load: Indicator lights up at 3dB under maximum level
Sync level -10: Indicator lights up at -15.5dB
0: Indicator lights up at -5.5dB
- Dimensions ● 856 (W) × 205 (H) × 752 (D) mm
- Weight ● 42.0kg



The Incredible Recording System that Revolutionized the Music Industry
The MG1212 12 Channel Mixer/14 Track Recorder is a complete, compact recording system that has become the most innovative and exciting creative tool in the recording industry. The AKAI MG1212 is the world's first 1/2 inch cassette 12 Channel Mixer/14 Track Recorder giving musicians all the features of a professional recording studio in a single compact unit that can be operated with the ease and simplicity of a home video recorder.

A 14 Track Recorder and Sophisticated Auto Locating System

The MG1212 utilizes a special AKAI 1/2 inch tape format to let you record 12 audio tracks (with dbx Type 1 noise reduction) as well as a sync track and an internal control track. The MG1212 features the specially developed Super GX multitrack Glass Crystal Ferrite head for high performance and durability. AKAI's exclusive Lambda loading system assures outstanding tape

to head contact. The smooth transport and shuttle system give you the best possible tape handling and sound performance. In addition, the MG1212 has a full function computer-assisted autolocator that performs multi-point search to cue, repeat playback, auto punch-in/punch-out, playback mute, and much more, all with absolute precision. The real time digital tape counter counts in increments of 1/10 of a second for maximum accuracy. Both the tape count and memory count appear on brilliant blue FL displays for high visibility.

Flexible 12 Channel Mixing Console and Computerized Patching

The MG1212 has a full function 12 channel mixing console with truly professional signal processing capabilities. Features include a 3-band parametric EQ, a 12 segment LED bar graph meter, two effect sends, insert points, an XLR balanced MIC input, an adjustable level trim and pad, a track monitor, and pan, on every channel. On top of this, the MG1212 has a computer assisted channel/track selector and switching matrix that makes patching fast and easy. Flexible routing capabilities allow you to quickly set up complex patches for track bouncing, editing, or mixdown, with the simple push of a few buttons, thus eliminating the usual confusing tangle of patch cords. The MG1212, with its advanced features and many convenient time-saving functions, opens up an incredible new experience in the art of sound recording.

MG1214 SPECIFICATIONS

DECK SECTION

- Tape format • 1/2 inch AKAI original cassette tape (MK20)
- Track format • 14 tracks/12 channel (including 1 control track and 1 sync track)
- Head configuration • Super GX recording/playback head (1)
 - Control head (1), Erase head (1)
- Tape speed • 19 cm/s and 9.5 cm/s
- Tape speed deviation • $\pm 0.2\%$ (19 cm/s, 9.5 cm/s)
- Pitch control • $\pm 12\%$ (of standard speed)
- Recording time • 10 minutes (19 cm/s) or 20 minutes (9.5 cm/s)
- Wow and flutter • 19 cm/s: 0.03% (W•RMS) $\pm 0.05\%$ Peak (DIN/IEC Weighted)
 - 9.5 cm/s: 0.04% (W•RMS) $\pm 0.06\%$ Peak (DIN/IEC Weighted)
- Distortion • 19 cm/s: 0.5%, 0dB (315 Hz third harmonic distortion)
 - 9.5 cm/s: 0.8%, 0dB (315 Hz third harmonic distortion)
- Max recording level • (315 Hz) + 12 dB 19 cm/s, 9.5 cm/s
- Tape rewind time • Approx, 120 seconds
- Dynamic range • 115 dB, 1 kHz (19 cm/s, 9.5 cm/s)
- Noise reduction • dbx Type 1
- Frequency characteristics • 19 cm/s: 50 Hz ~ 20 kHz, 9.5 cm/s: 50 Hz ~ 16 kHz
 - SN ratio • 94 dB (NAB A-WTD, 315 Hz, 3% third harmonic distortion)
 - Cross talk • (Between neighboring channels) 55 dB, 1 kHz (19 cm/s, 9.5 cm/s)
 - Erasure ratio • More than 75 dB (125 Hz)
- Motor configuration • Capstan: FG servo DC motor (1)
 - Real motor: Coreless DC motor (1)
 - Loading motor: DC motor (1)
- Synchronizer jack • D-SUB 15 pin (SMPT E)

MIXER SECTION (0 dB = 0.775 V r.m.s.)

- Inputs
- Mic • (5 K Ω , balanced XLR)
 - Standard input level: -60 dB / -40 dB / -20 dB
 - Maximum input level: -12 dB / +7 dB / +18.0 dB
- Line • (47 K Ω , phone jack)
 - Standard input level: -21 dB
 - Maximum input level: +22 dB
- Aux • (22 K Ω , pin jack) Standard input level: -5.5 dB
- Acc receive • (10 K Ω , phone jack) Standard input level: -5.5 dB
- Effect A, B receive • (22 K Ω , phone jack) Standard input level: -21 dB
- Bus in • (22 K Ω , phone jack) Standard input level: -5.5 dB
- Effect A, mix 1+2 • (47 K Ω , phone jack) Standard input level: -5.5 dB
- Sync in • (47 K Ω , phone jack) Standard input level: -21 dB
- Outputs
- ACC send • (120 Ω , phone jack) Standard output level: -5.5 dB
- Master out • (120 Ω , pin jack)
 - Standard output level: -5.5 dB
 - Maximum output level: +14.5 dB
 - Output capacity: +17.5 dB
- Track out • (120 Ω , pin jack)
 - Standard output level: -5.5 dB
 - Maximum output level: +1.5 dB
 - Output capacity: +17.5 dB
- Monitor out • (120 Ω , pin jack)
 - Standard output level: 0 dB
 - Maximum output level: +17.5 dB (MASTER MONITOR) + 7 dB (TRACK MONITOR)
 - Output capacity: +17.5 dB
- Effect send A • (120 Ω , phone jack)
 - Standard output level: -5.5 dB
 - Maximum output level: +1.5 dB (POST) / -5.5 dB (PRE)
- Effect send B • (120 Ω , phone jack)
 - Standard output level: -5.5 dB
 - Maximum output level: +1.5 dB (FADER) / -5.5 dB (TRACK)
- Bus out • (120 Ω , phone jack)
 - Standard output level: -5.5 dB
 - Maximum output level: +14.5 dB
- Sync out • (120 Ω , phone jack) Standard output level: -5.5 dB
- Headphone • Maximum: 200 mV/8 Ω
- S/N ratio and Noise level • MIC: -126 dB equivalent input noise (Single input) LINE: 60 dB
- Trimmer adjustment range • -20 dB - 0 dB
- Parametric equalizer • HIGH: 1.5 kHz ~ 15 kHz ± 15 dB
 - MID: 350 Hz ~ 5 kHz ± 15 dB
 - LOW: 40 Hz ~ 800 Hz ± 15 dB
- Indicators • Over load: lights up at -3 dB from the maximum level of the input amplifier
 - SYNC LEVEL: -10: lights up at a level of -15.5 dB
 - 0: lights up at a level of -5.5 dB
- Dimensions • 856 (W) \times 205 (H) \times 752 (D) mm
- Weight • 42.0 kg

12 CHANNEL MIXER/ 14 TRACK RECORDER MG1214



The Revolution Moves On with the Advanced New MG1214

The engineers at AKAI have combined all of the latest advancements in both audio and video technology to develop the incredibly advanced new MG1214 12 Channel Mixer/14 Track Recorder. The MG1214 opens up a world of exciting possibilities with its SMPTE sync capabilities. A synchronizer jack allows for quick and easy connection of the MG1214 to almost every popular SMPTE synchronizer for synchronous recording with other audio or video machines. The MG1214 also contains a number of important electronic design changes including improved signal to noise performance, an improved MIC input circuit, and a more powerful monitoring circuit. The MG1214 truly answers the musician's dream for a powerful, yet simple to use personal recording system.

A State-of-the Art Multitrack Recorder and Programmable Auto Locator

The MG1214 utilizes the special AKAI 1/2 inch tape format as well as the Super GX Glass Crystal Ferrite Head to let you record 12 audio tracks as well as a sync track and an internal control track. AKAI's exclusive Lambda Loading Mechanism gives optimum tape to head contact, and an ultra-low mass loading roller assures the lowest possible modulation noise. The highly stable transport design as well as the use of dbx Type 1 raise the performance specifications of the MG1214 well beyond that of conventional professional audio machines. The MG1214 also contains a computerized multi-function auto locator with super features. The nine location memories let you perform multi-point search to cue, repeat playback, auto punch-in/punch-out, playback mute, and much more. These advanced features greatly help to facilitate the recording process.

Powerful Computerized Patching

The MG1214 has a built-in, computerized channel/track selector that lets you route any channel signal to any desired track with the simple push of a button. It's that easy. The need for cumbersome and time-consuming patching has been eliminated allowing you more time to spend on creative editing and mixing. The 12 Channel Mixer is packed full of all the features you would expect to find in a professional quality mixer including balanced XLR MIC inputs, adjustable level trims and pads, smooth 3-band parametric sweep type EQs, two independent effect sends (each with a stereo return) on each channel, insert points, in-line track monitors, multi-colored 12 segment LED bar graph meters, and new smooth linear response faders. The MG1214, with its simple push button operation, flexible effects routing, and professional audio quality, puts the spontaneity and magic back into the art of making music.



MG 614 SPECIFICATIONS

DECK SECTION

- Track system ● 4 track (one way)
- Play back channel ● 4 channel + sync
- Recording channel ● 4 channel + sync
- Heads ● 4 track REC/PB × 1
4 track ERASE × 1
- Motor ● Capstan (FV SERVO DD motor)
- Reel drive (DC motor)
- Cam drive (DC motor)
- Tape ● C-cassette CrO₂ tape
- Track output ● Output load impedance: More than 10KΩ
Maximum output level: +12dBV
- Frequency response ● 9.5cm/s: 30Hz ~ 20KHz, 4.75cm/s: 40Hz ~ 13KHz
- Noise reduction ● dbx TYPE I (switchable)
- Distortion ● 1.0% (1KHz 0VU)
- S/N ratio ● 60dB (EIAJ), 90dB (EIAJ dbx on)
- Cross talk ● 70dB (1KHz, dbx on)
- Erasure ratio ● 70dB (1KHz)
- Tape speed ● 9.5cm/s, 4.75cm/s
- Pitch control ● ±10%
- Wow/Flutter ● 0.04% (peak WTD)
- Recording time ● 15 minutes (C-60 tape, 9.5cm/s)
- Fast winding time ● Approximately 90 seconds (C-60)

MIXER SECTION (0dB = 1V)

Inputs

- Mic ● (1KΩ, balanced XLR)
Normal input level - 67dBV
Maximum input level - 16dBV
- Mic / Line ● (100KΩ, Phone jack)
Normal input level - 60dBV ~ 10dBV
Maximum input level +15dBV
- Aux ● (22KΩ, Phone jack)
Normal input level - 10dBV
- Acc receive ● (68KΩ, Phone jack)
Normal input level - 10dBV
- Effect receive ● (220KΩ, Phone jack)
Normal input level - 20dBV

Outputs

- Monitor out ● (100Ω, pin jack)
Normal output level - 10dBV
- Track out ● (100Ω, pin jack)
Normal output level - 10dBV
- Acc send ● (100Ω, pin jack)
Normal output level - 10dBV
- Effect send 1 + 2 ● (100Ω, Phone jack)
Normal output level - 10dBV
- S/N ratio ● MIC: Input to line output 68dB (IHF)
LINE: Input to line output 72dB (IHF)
- Indications ● OVER LOAD: 20dB above normal input level
- Parametric EQ ● HIGH: 800Hz ~ 10kHz ± 15dB
LOW: 40Hz ~ 1.5kHz ± 15dB
- Frequency response ● LINE: 20Hz ~ 20kHz ± 1dB
MIC: 20Hz ~ 18kHz ± 1dB
- Distortion ● 0.05% (1kHz, normal level) / Cross talk ● 65dB (1kHz)
- Dimensions ● 470 (W) × 157 (H) × 556 (D) mm / Weight ● 14.5kg



The New Computer-Assisted Personal Multitrack Recording System

The MG614 is a compact, computer-assisted 6 Channel/4 Track recording system that sets a new standard in personal creative recording technology. It uses standard CrO₂ cassettes and has many of the sophisticated and time-saving convenience features of its big brother the MG1214, including a built-in computerized channel/track selector, and a multi-function auto location system. In addition, an incredibly flexible push-button patching system and track buss allow the MG614 to handle up to a ten channel mix (4 track playback and 6 additional channel inputs) with independent control of every channel.

A Professional Quality Multitrack Recorder and Computerized Auto Locator

The MG614 will record up to 4 audio tracks, one of which can be switched to simultaneously record a special sync track. The extra sync track lets you synchronize MIDI instruments and sequencers to a sync signal without tying up precious audio tracks. You can select either the standard 4.75cm/sec tape speed, or the faster 9.5cm/sec speed for extended high frequency response. The use of dbx Type 1 gives you increased headroom and wider dynamic range for exceptional sound clarity and definition. Audible hiss is virtually eliminated and distortion is incredibly low. In addition, the MG614 has a built-in, multi-function auto locator that allows you to perform multi-point search to cue, search and record, search and play, repeat playback, and much more. There are also special func-

tions for auto monitor during playback, and to rehearse punch-in recording. These convenience functions along with the computerized auto location system will assist you to make the recording process faster, simpler, and more enjoyable.

A Powerful 6 Channel Mixing Console and Sophisticated Patching System

The creative possibilities with the MG614's flexible mixing capabilities and versatile signal routing system are absolutely astonishing. Each channel offers input selectors, adjustable trim pads, a 2-band parametric sweep type EQ that allows you to tailor any frequency from 40Hz to 10kHz ± 15dB, two independent effect sends (each with a stereo return), pans, buss matrix, and a smooth noise-free fader. There are also two XLR balanced MIC inputs for professional compatibility. Now the creativity starts to flow. The computerized programmable channel/track selector lets any channel be connected to any track input with the simple push of a button. From here, a newly developed switch matrix patch system lets you route signals in almost every conceivable way for monitoring, track bouncing, or mixdown. This marvelously simple push-button patch system entirely eliminates the need for a jungle of patch cords allowing you more time to work on creative recording and mixing. The MG614 is the world's first compact cassette multitrack recording system to offer features that are so advanced and operation that is so simple.

MG14D SPECIFICATIONS

- Tape format • 1/2 inch AKAI Original cassette tape (MK20)
- Track format • 14 tracks/12 channels (including 1 control track and 1 sync track)
- Head configuration • Super GX recording/Playback head (1), Control head (1), Erase head (1)
- Record level calibration • 0dB referenced to 200 nWb/m of tape flux
- Tape speed • 19cm/s and 9.5cm/s
- Tape speed deviation • $\pm 0.2\%$ (19cm/s, 9.5cm/s)
- Pitch control • $\pm 12\%$ (of standard speed)
- Recording time • 10 minutes (19cm/s) or 20 minutes (9.5cm/s)
- Wow and flutter • 19cm/s: 0.03% (W.RMS), $\pm 0.05\%$ Peak (DIN/IEC Weighted)
9.5cm/s: 0.04% (W.RMS), $\pm 0.06\%$ Peak (DIN/IEC Weighted)
- Distortion • (315Hz, third harmonic distortion, dbx ON)
19cm/s: 0.5% 0dB, 9.5cm/s: 0.8% 0dB
Sync track: 1.5% (dbx OFF)
- Max. recording level • (315Hz, 3% third harmonic distortion, dbx ON) +12dB (19cm/s, 9.5cm/s)
- Tape rewind time • Approx 120 seconds
- Dynamic range • (dbx ON) 115dB, 1kHz (19cm/s, 9.5cm/s)
- Noise reduction • dbx Type 1
- Frequency characteristics (dbx ON) • 19cm/s: 50 ~ 20kHz, 9.5cm/s: 50Hz ~ 16kHz
- Sync track (dbx OFF) • 19cm/s: 50Hz ~ 10kHz, 9.5cm/s: 50Hz ~ 8kHz
- SN ratio • 94dB (NAB A-WTD, 315Hz 3% third harmonic distortion, dbx ON)
Sync track: 58dB (dbx OFF)
- Cross talk • (dbx ON, between neighboring channels) 55dB, 1kHz (19cm/s, 9.5cm/s)
Sync track to Audio track 1, 70dB, 1kHz (19cm/s, 9.5cm/s)
- Erase ratio (dbx ON) • 75dB (125Hz), SYNC track 52dB (dbx OFF)
- Motor configuration • Capstan: FG servo DC motor (1), Reel motor: Coreless DC motor (1)
Loading motor: DC motor (1)
- Synchronizer jack • D-sub 25 pin (for SMPTE)
- Locator jack • D-sub 15 pin (for ML14)
- Remote jack • 8 PIN/DIN (for RC-X3, RC-X9)
- INPUT
- Unbalanced input • (RCA connector \times 12) Input impedance 50K ohms
Standard input level -10dBV
Maximum input level +15dBV
- Balanced input • (XLR connector \times 12) Input impedance 10K ohms
Standard input level +4dBs
Maximum input level +23dBs
- Sync input • (1/4" JACK \times 1) Input impedance 50K ohms
Standard input level -10dBV
Maximum input level +15dBV
- OUTPUT
- Unbalanced output • (RCA connector \times 12) Output impedance 100 ohms
Optimum load impedance more than 10K ohms
Standard output level -10dBV
Maximum output level +15dBV
- Balanced output • (XLR connector \times 12) Output impedance 100 ohms
Optimum load impedance more than 10K ohms
Standard output level +4dBs
Maximum output level +23dBs
- Sync output • (1/4" jack \times 1) Output impedance 100 ohms
Optimum load impedance more than 10K ohms
Standard output level -10dBV
Maximum output level +15dBV
- Dimensions • 482.6(W) \times 225(H) \times 430(D)mm
(EIA Rack mount/5U)
- Weight • 26.0kg



ML14 SPECIFICATIONS

- Operation keys • Tape mechanism control: Play, F-Fwd, Rwd, Stop, Rec pause, Cue, Memory search, Anti-Rec
- Sync and control: Control Rec/P.B
Sync Rec/P.B
- Tape Monitor: Auto/Manual
- Rec selector (TRACK 1 ~ 12): Rec/P.B
- Locator control: Manual input 10 Keys (0 ~ 9), Key, Delete
Auto memory (1 ~ 9)
Memory all clear (0)
Minus search, Memory search, Clear, Store, Punch in-out, P.B mute, Repeat, Region, Reset, Capture, Absolute
- Reset switch
- Display • Time counter 5 digit FLD
Memory time 5 digit FLD
- Memory back-up • One week
- External jack • D-sub 15 pin (for MG14D)
- Dimensions • 482.6(W) \times 56(H) \times 132(D)mm
(EIA Rack mount/3U)
- Weight • 2.0kg



A Compact SMPTE Compatible 14 Channel Multitrack Recorder

The MG14D Rack Mountable 14 Track Recorder is a high-performance durable rackmount unit ready to stand up to the rigorous demands of multitrack recording. The MG14D represents a new direction in recording versatility with its compact rack-mountable design and SMPTE compatibility. It utilizes the same high quality Super GX multitrack recording head as used in the MG1214 as well as an improved loading mechanism to give you the same professional performance and operational features found on the MG1214. Bar graph meters display the precise signal level on each recording track.

A Versatile Production Tool

The MG14D has 12 audio tracks as well as a sync track and an internal control track. With the use of SMPTE time code it is possible to synchronize your audio and video machines together as well as your MIDI based instruments and sequencers. With SMPTE compatibility the MG14D can be used as a production tool for video, film, and sound effects assembly as well as a tool for creative music production in the recording studio. Combined with the matching ML14 Programmable Auto Locator the capabilities expand into those of a full-fledged professional SMPTE based recording system capable of handling the most demanding work.

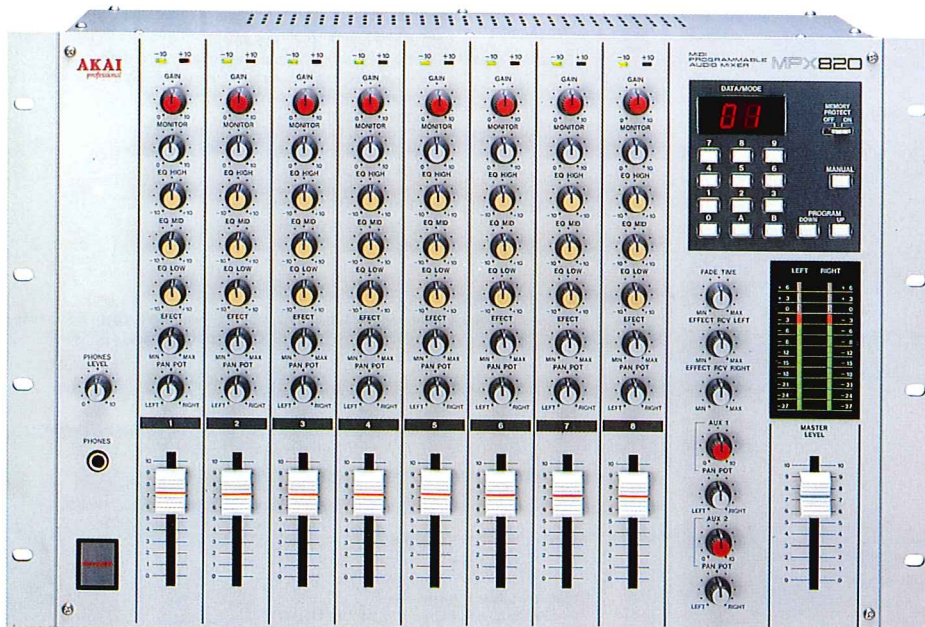
An Intelligent Auto Locator for Remote Control of the MG14D

The ML14 represents the state-of-the art in auto locating technology. All transport controls along with record and playback status can be controlled and viewed from the ML14. In addition to providing you with total remote control of the MG14D, it will add an exciting dimension to the operating capabilities. Simple push-button operation of the ML14 Auto Locator's controls yields such sophisticated computer-assisted functions as memory search, punch-in/punch-out, playback mute, repeat, and more. A ten key program pad lets you manually enter values into one of the memories for later recall. The memories in the ML14 will be retained for as long as one week. The memory time and the time count are displayed on a highly visible 5 digit FL display.



MPX820 SPECIFICATIONS

- Frequency response (Mic/Inst/Line) ● 20Hz ~ 20kHz, +0.5 ~ -0.7 dB
- T.H.D. ● 0.04% at 20Hz ~ 20kHz, +20dBm out
- E.I.N. ● -128dBm maximum
- Output noise ● 1 millivolt all faders down, master fader full up, all pans centered
- Max. Gain ● Mic - 70 dBm
- Inst - 35 dBm
- Line - 20 dBm
- Crosstalk ● 70 dB at 1 kHz
- Channel E.Q. ● Hi 10kHz shelving ±15 dB
- Mid 1.5 kHz peaking Q-0.5 ±15 dB
- Low 100Hz shelving ±15 dB
- Inputs ● Channel 1-8: XLR Mic - 55 dBm to - 20 dBm 2.5KΩ
- 1/4" Inst - 35 dBm to - 6 dBm 100KΩ
- 1/4" Line - 10 dBm to + 10 dBm 10KΩ
- AUX 1-2: 1/4" Mic - 50 dBm to - 15 dBm 2.7KΩ
- 1/4" Inst - 30 dBm to - 1 dBm 47KΩ
- 1/4" Line - 5 dBm to + 15 dBm 10KΩ
- Effects return: 1/4" + 15 dBm (Max input) 50KΩ
- Outputs ● Main Left and Right 1/4" + 20 dBm 150Ω
- Monitor (post E.Q. and fader) 1/4" + 20 dBm 150Ω
- Effects (post fader) 1/4" + 20 dBm 150Ω
- Channel patches ● Send/Return 1/4" Stereo Line Level 400Ω send/50KΩ return
- Programmable Features ● All Levels, Sends, Pans, AUX's: 0.03dB resolution
- E.Q.S. (Hi, Mid, Low): 0.12dB resolution
- Fade Time: 40 milliseconds to 30 seconds
- Memory: 99 sets of front panel settings
- Battery backup 10 years
- Time for tape backup 2.2 minutes
- MIDI function ● Program change
- Displays ● Left and Right mains: 12 segment LED ladder - 27dB to +6dB (3dB incr.)
- Channels 1-8: 2 segment LED ladder - 10dB to +10dB
- Faders ● 60mm
- Dimensions ● 482.6(W) x 310(H) x 203(D)mm (EIA Rack mount/7U)
- Weight ● 10.5 kg



An Advanced Computer-Assisted MIDI Compatible Mixing Console

The challenge of a new recording technology has been met. The MPX820 is an impressive eight channel console that stores all front panel functions including levels, sends, returns, aux inputs, pans, and 3 band EQ into its 99 internal memory locations for instant recall. Program changes can be selected from the front panel, by MIDI signal, foot-switch, or from sync tones on tape. The fade time between two different settings is programmable from 40 milliseconds to 30 seconds allowing you to automate fades, pans, and EQ settings.

Impeccable Audio Performance

The sonic performance of the MPX820 is unmatched by any similar console, programmable or not. Thanks to AKAI's minimum signal path design the audio signal actually passes through fewer op-amp stages than in a traditional mixer.

Operational Ease of Use

Operation of the MPX820 is fast and easy. After all, that should be the goal for every computer-assisted console. Simply set up the front panel settings however you desire, and record the settings in one of the 99 memory locations for later recall. The MPX820 can even be interfaced to a computer for developing programs that let you edit and display the MPX820 panel settings on a computer screen.

Maximum Performance Flexibility

The MPX820 is the ideal choice as a mixer for a MIDI based keyboard system or as a programmable mixing console in the recording studio. Several MPX820s can be slaved together through MIDI to offer additional channels of automated mixdown so no task is too large to handle. With the MPX820 you can now perform live mixes on stage which were previously possible only in the studio. And in the studio, you can free your hands up to do more than ever before. However you choose to use the MPX820, it will offer you an exciting new sense of performance flexibility in your music creation.

COMPACT EFFECTORS

EX SERIES



The AKAI EX Series consists of compact effectors that are perfect for all types of multi-track mixing. They are also excellent for use in sound reinforcement. The standard input/output level and optimum load impedance for all models is $-10\text{dB}/10\text{k ohms}$ or greater; the same as the effect send/receive level for general mixers. So, it is easy to set the level for effect sending and receiving during the mixing process. Of course, the effects can be turned on and off using foot switches.

EX65D DIGITAL DELAY

The EX65D is a full function digital delay unit with Feedback, Range, Rate, Width, and Delay level controls. The EX65D provides a maximum delay time of 1,024 milliseconds. The dry sound and effected sound (positive or negative phase) can be combined. When two units are used, synchronization of modulation is possible.

EX70C COMP/GATE

The EX70C is equipped with a compressor that has a maximum compression of 32dB and easy to use gate functions. There are sync terminals for both functions, so two units can be used for stereo processing.

EX75N NOISE REDUCTION

The EX75N is equipped with an expander which can expand input signals at ratios from 1:1 to 1:8 and a noise reduction function using a low-pass filter to attenuate hissing and other high frequency noise.

EX80E ENHANCER

The EX80E uses a harmonic generator to bring the upper harmonics forward in the mix to give you a brighter and clearer sound. It can also be used to restore the high frequencies that are lost while dubbing or to bring out the details of an instrument or voice whose sound is buried in the overall mix.

EX85P PARAMETRIC EQUALIZER

With the EX85P, equalization is possible for four bands with center frequencies of 40Hz (LO), 60Hz~5kHz (MID LO), 100Hz~10kHz (MID HI), and 12kHz (HI). The levels can easily be varied by $\pm 14\text{dB}$ (LO and HI) and $\pm 18\text{dB}$ (MID LO and MID HI).

EX SERIES SPECIFICATIONS

EX65D

- Input • Impedance 470k ohms
Nominal input level $-35 - 0\text{dBv}$
- Output • Impedance 2k ohms
Optimum load impedance 10k ohms or greater
Nominal output level $-35 - 0\text{dBv}$
- Frequency response • Direct: 10Hz ~ 60kHz (+1, -3dB)
Delay: 20Hz ~ 16kHz (+1, -3dB)
- Residual noise • -90dBv (IHF-A)
- Delay time • 1 ~ 1,024m seconds
- Delay time range • 2, 8, 32, 128, 512m seconds
- Modulation rate • 0.1Hz ~ 10Hz
- Distortion • Direct: 0.05%, Delay: 0.1%

EX70C

- Input • Impedance 1M ohms
Nominal input level -10dBv
Maximum input level 8dBv
- Output • Impedance 300 ohms
Optimum load impedance 10k ohms or greater
Nominal output level -10dBv
Maximum output level 8dBv
- Frequency response • 10Hz ~ 50kHz
- Residual noise • -82dBv (IHF-A, input max.)
- Comp: Attack time • 0.2 ~ 40m seconds
- Release time • 40m seconds ~ 1.5 seconds
- Threshold input level • $-42 - 6\text{dBv}$
- Ratio • 2:1 ~ 20:1
- Maximum compression • 32dB
- Gate: Decay time • 5m seconds ~ 1.5 seconds

EX75N

- Input • Impedance 1M ohms
Nominal input level -10dBv
Maximum input level 8dBv
- Output • Impedance 300 ohms
Optimum load impedance 10k ohms or greater
Nominal output level -10dBv
Maximum output level 8dBv
- Frequency response • 10Hz ~ 30kHz
- Residual noise • -92dBv (IHF-A, ratio 1:1)
- Threshold level • $-50 - 10\text{dBv}$
- Ratio • 1:1 ~ 1:8
- Attack time • 0.3m seconds or less
- Decay time • 0.1 ~ 2 seconds
- Lowpass filter • 200Hz ~ 5kHz (6dB/oct)

EX80E

- Input • Impedance 470k ohms
Nominal input level $-35 - 0\text{dBv}$
- Output • Impedance 2k ohms
Optimum load impedance 10k ohms or greater
Nominal output level $-35 - 0\text{dBv}$
- Frequency response • Direct: 10Hz ~ 60kHz (+1, -3dB)
High pass: 1 ~ 5kHz (Harmonics effect)
- Residual noise • -79dBv (IHF-A, mix volume max.)
 -108dBv (IHF-A, mix volume min.)
- Filter • 1 ~ 5kHz (-12dB/oct)
- Harmonics generator • Half wave clip type
- Distortion • Direct: 0.01%

EX85P

- Input • Impedance 1M ohms
Nominal input level -30dBv
Maximum input level 8dBv
- Output • Impedance 300 ohms
Optimum load impedance 10k ohms or greater
Nominal output level -10dBv
Maximum output level 8dBv
- S/N • 85dB (Flat)
- Frequency response • 10Hz ~ 30kHz
- Residual noise • -95dBv (IHF-A, FLAT)
- EQ • Low: 40Hz (Fixed)/ $\pm 14\text{dB}/Q=0.5$
Mid low: 60Hz ~ 5kHz/ $\pm 18\text{dB}/Q=1 - 6$
Mid hi: 100Hz ~ 10kHz/ $\pm 18\text{dB}/Q=1 - 6$
Hi: 12kHz (Fixed)/ $\pm 14\text{dB}/Q=0.5$

EX65D, EX70C, EX75N, EX80E, EX85P Dimensions • 210(W) x 44(H) x 158(D) mm

An Advanced Computer-Assisted MIDI Compatible Mixing Console

The challenge of a new recording technology has been met. The MPX820 is an impressive eight channel console that stores all front panel functions including levels, sends, returns, aux inputs, pans, and 3 band EQ into its 99 internal memory locations for instant recall. Program changes can be selected from the front panel, by MIDI signal, foot-switch, or from sync tones on tape. The fade time between two different settings is programmable from 40 milliseconds to 30 seconds allowing you to automate fades, pans, and EQ settings.

Impeccable Audio Performance

The sonic performance of the MPX820 is unmatched by any similar console, programmable or not. Thanks to AKAI's minimum signal path design the audio signal actually passes through fewer op-amp stages than in a traditional mixer.

Operational Ease of Use

Operation of the MPX820 is fast and easy. After all, that should be the goal for every computer-assisted console. Simply set up the front panel settings however you desire, and record the settings in one of the 99 memory locations for later recall.

Maximum Performance Flexibility

The MPX820 is the ideal choice as a mixer for a MIDI based keyboard system or as a programmable mixing console in the recording studio. Several MPX820s can be slaved together through MIDI to offer additional channels of automated mixdown so no task is too large to handle. With the MPX820 you can now perform live mixes on stage which were previously possible only in the studio. And in the studio, you can free your hands up to do more than ever before. However you choose to use the MPX820, it will offer you an exciting new sense of performance flexibility in your music creation.

MPX820 SPECIFICATIONS

- Frequency response • 20 Hz ~ 20 kHz
- T.H.D. • Less than 0.1% at +10dBm out
- S/N EIN • -128 WTD
- Crosstalk • -70 dB at 7 kHz
- Inputs (at 0dBm out) • Channels: Mic - 70 dBm
Inst - 35 dBm
Line - 20 dBm
- Aux 1, 2: Mic - 50 dBm
Inst - 30 dBm
Line - 15 dBm
- Channel in 0 dBm
- Effect RCV - 5 dBm
- Max output level • 20 dBm
- Channel EQ • Hi 10 kHz \pm 15 dB
Mid 1.5 kHz \pm 15 dB
Low 100 Hz \pm 15 dB
- Programmable Features • Fade Time: 40 milliseconds to 30 seconds
Memory: 99 sets of front panel settings
Battery backup
Tape interface
- MIDI function • Program change
- Displays • Left and Right mains: 12 segment LED ladder - 27 dB to +6 dB (3 dB incr.)
Channels 1-8: 2 segment LED ladder - 10 dB to +10 dB
- Feders • 60 mm
- Dimensions • 482.6(W) x 310(H) x 203(D) mm (EIA Rack mount/7U)
- Weight • 10.5 kg

FULLY PROGRAMMABLE

8 CHANNEL MIXER

MPX820



A Compact SMPTE Compatible 14 Channel Multitrack Recorder

The MG14D Rack Mountable 14 Track Recorder is a high-performance durable rackmount unit ready to stand up to the rigorous demands of multitrack recording. The MG14D represents a new direction in recording versatility with its compact rack-mountable design and SMPTE compatibility. It utilizes the same high quality Super GX multitrack recording head as used in the MG1214 as well as an improved loading mechanism to give you the same professional performance and operational features found on the MG1214. Bar graph meters display the precise signal level on each recording track.

A Versatile Production Tool

The MG14D has 12 audio tracks as well as a sync track and an internal control track. With the use of SMPTE time code it is possible to synchronize your audio and video machines together as well as your MIDI based instruments and sequencers. With SMPTE compatibility the MG14D can be used as a production tool for video, film, and sound effects assembly as well as a tool for creative music production in the recording studio. Combined with the matching ML14 Programmable Auto Locator the capabilities expand into those of a full-fledged professional SMPTE based recording system capable of handling the most demanding work.

An Intelligent Auto Locator for Remote Control of the MG14D

The ML14 represents the state-of-the art in auto locating technology. All transport controls along with record and playback status can be controlled and viewed from the ML14. In addition to providing you with total remote control of the MG14D, it will add an exciting dimension to the operating capabilities. Simple push-button operation of the ML14 Auto Locator's controls yields such sophisticated computer-assisted functions as memory search, punch-in/punch-out, playback mute, repeat, and more. A ten key program pad lets you manually enter values into one of the memories for later recall. The memories in the ML14 will be retained for as long as one week. The memory time and the time count are displayed on a highly visible 5 digit FL display.

RACK MOUNTABLE

14 TRACK RECORDER

MG14D

AUTO LOCATION SYSTEM

FOR MG14D

ML14

MG14D SPECIFICATIONS

- Tape format • 1/2 inch AKAI Original cassette tape (MK20)
- Track format • 14 tracks/12 channels (including 1 control track and 1 sync track)
- Head configuration • Super GX recording/playback head (1), Control head (1), Erase head (1)
- Record level calibration • 0dB referenced to 200nWb/m of tape flux
- Tape speed • 19cm/s and 9.5cm/s
- Tape speed deviation • $\pm 0.2\%$ (19cm/s, 9.5cm/s)
- Pitch control • $\pm 12\%$ (of standard speed)
- Recording time • 10 minutes (19cm/s) or 20 minutes (9.5cm/s)
- Fast winding time • Approx 120 seconds
- Wow and flutter • 19cm/s: 0.03% (W.RMS), $\pm 0.05\%$ Peak (DIN/IEC Weighted)
9.5cm/s: 0.04% (W.RMS), $\pm 0.06\%$ Peak (DIN/IEC Weighted)
- Distortion • (315Hz, third harmonic distortion, dbx ON)
19cm/s: 0.5% 0dB, 9.5cm/s: 0.8% 0dB
Sync track: 1.5% (dbx OFF)
- Max. recording level • (315Hz, 3% third harmonic distortion, dbx ON) + 12dB (19cm/s, 9.5cm/s)
- Dynamic range • (dbx ON) 115dB, 1kHz (19cm/s, 9.5cm/s)
- Noise reduction • dbx Type I
- Frequency Response • 19cm/s: 50Hz ~ 20kHz, 9.5cm/s: 50Hz ~ 16kHz (dbx ON)
Sync track: 19cm/s: 50Hz ~ 10kHz, 9.5cm/s: 50Hz ~ 8kHz (dbx OFF)
94dB (NAB A-WTD, 315Hz 3% third harmonic distortion, dbx ON)
Sync track: 58dB (dbx OFF)
- Cross talk • (dbx ON, between neighboring channels) 55dB, 1kHz (19cm/s, 9.5cm/s)
Sync track to Audio track 1, 70dB, 1kHz (19cm/s, 9.5cm/s)
- Erasure ratio • 75dB, 125Hz (dbx ON) Sync track 52dB (dbx OFF)
- Motor configuration • Capstan: FG servo DC motor (1), Reel motor: Coreless DC motor (1)
Loading motor: DC motor (1)
- Synchronizer jack • D-sub 25 pin (for SMPTE)
- Locator jack • D-sub 15 pin (for ML14)
- Remote jack • 8 PIN/DIN (for RC-X3, RC-X9)
- Inputs
- Unbalanced input • (RCA connector $\times 12$) Input impedance 50k ohms
Nominal input level -10dBv
Maximum input level +15dBv
- Balanced input • (XLR connector $\times 12$) Input impedance 10k ohms
Nominal input level +4dBs
Maximum input level +23dBs
- Sync input • (1/4" jack $\times 1$) Input impedance 50k ohms
Nominal input level -10dBv
Maximum input level +15dBv
- Outputs
- Unbalanced output • (RCA connector $\times 12$) Output impedance 100 ohms
Optimum load impedance more than 10k ohms
Nominal output level -10dBv
Maximum output level +15dBv
- Balanced output • (XLR connector $\times 12$) Output impedance 100 ohms
Optimum load impedance more than 10k ohms
Nominal output level +4dBs
Maximum output level +23dBs
- Sync output • (1/4" jack $\times 1$) Output impedance 100 ohms
Optimum load impedance more than 10k ohms
Nominal output level -10dBv
Maximum output level +15dBv
- Dimensions • 482.6(W) \times 224(H) \times 430(D) mm
(EIA Rack mount/5U)
- Weight • 23.0kg

ML14 SPECIFICATIONS

- Operation keys • Tape mechanism control: Play, F, Fwd, Rwd, Stop, Rec pause, Cue, Memory search, Anti-Rec
- Sync and control: Control Rec/P.B
- Sync Rec/P.B
- Tape Monitor: Auto/Manual
- Rec selector (TRACK 1-12): Rec/P.B
- Locator control: Manual input 10 keys (0-9), Key, Delete
Auto memory (1-9)
Memory all clear (0)
Minus search, Memory search, Clear, Store, Punch in-out, P.B mute, Repeat, Region, Reset, Capture, Absolute
Reset switch
- Display • Time counter 5 digit FLD
Memory time 5 digit FLD
- Memory back-up • One week
- External jack • D-sub 15 pin (for MG14D)
- Dimensions • 482.6(W) \times 56(H) \times 132(D) mm
(EIA Rack mount/3U)
- Weight • 2.5kg



6 CHANNEL MIXER/
4 TRACK RECORDER

MG614

MG614 SPECIFICATIONS
DECK SECTION

- Tape format • C-cassette CrO₂ tape
- Track format • 4 track (one way)
- Play back channel • 4 channel + sync
- Recording channel • 4 channel + sync
- Head configuration • 4 track recording/play back head (1)
4 track erase head (1)
- Motor configuration • Capstan: FG servo DD motor (1)
Reel drive: DC motor (1)
Cam drive: DC motor (1)
- Track output • Output load impedance: 10k ohms or greater
Maximum output level: +12dBv
- Tape speed • 9.5cm/s, 4.75cm/s
- Pitch control • ±10%
- Wow and flutter • 0.04% (peak WTD)
- Recording time • 15 minutes (C-60 tape, 9.5cm/s)
- Fast winding time • Approx 90 seconds (C-60)
- Frequency response • 9.5cm/s: 30Hz - 20kHz, 4.75cm/s: 40Hz - 13kHz
- Noise reduction • dbx (switchable)
- Distortion • 1.0% (1kHz 0VU)
- S/N ratio • 60dB (EIAJ), 90dB (EIAJ dbx ON)
- Cross talk • 70dB (1kHz, dbx ON)
- Erasure ratio • 70dB (1kHz)

MIXER SECTION (0dB = 1V)

- Inputs
- Mic • (1k Ω , balanced XLR \times 2)
Nominal input level - 67dBv
Maximum input level - 16dBv
 - Mic/Line • (100k Ω , phone jack \times 16)
Nominal input level - 60dBv - 10dBv
Maximum input level + 15dBv
 - Aux • (22k Ω , phone jack \times 2)
Nominal input level - 10dBv
 - Acc receive • (68k Ω , phone jack \times 4)
Nominal input level - 10dBv
 - Effect receive • (220k Ω , phone jack \times 2)
Nominal input level - 20dBv
- Outputs
- Monitor out • (100 Ω , RCA jack \times 1)
Nominal output level - 10dBv
 - Track out • (100 Ω , RCA jack \times 1)
Nominal output level - 10dBv
 - Acc send • (100 Ω , phone jack \times 2)
Nominal output level - 10dBv
 - Effect send 1+2 • (100 Ω , phone jack)
Nominal output level - 10dBv
- S/N ratio • Mic: Input to line output 68dB (IHF)
Line: Input to line output 72dB (IHF)
- Indications • Over load: 20dB above nominal input level
- Parametric EQ • Hi: 800Hz - 10kHz \pm 15dB
Low: 40Hz - 1.5kHz \pm 15dB
- Frequency response • Line: 20Hz - 20kHz \pm 1dB
Mic: 20Hz - 18kHz \pm 1dB
- Distortion • 0.05% (1kHz, nominal level)/Cross talk • 65dB (1kHz)
- Dimensions • 470(W) \times 157(H) \times 556(D) mm/Weight • 14.5kg



The New Computer-Assisted Personal Multitrack Recording System

The MG614 is a compact, computer-assisted 6 Channel/4 Track recording system that sets a new standard in personal creative recording technology. It uses compact CrO₂ cassettes and has many of the sophisticated and time-saving convenience features of its big brother the MG1214, including a built-in computerized channel/track selector, and a multi-function auto location system. In addition, an incredibly flexible push-button patching system and track buss allow the MG614 to handle up to a ten channel mix (4 track playback and 6 additional channel inputs) with independent control of every channel.

A Professional Quality Multitrack Recorder and Computerized Auto Locator

The MG614 will record up to 4 audio tracks, one of which can be switched to simultaneously record a special sync track. The extra sync track lets you synchronize MIDI instruments and sequencers to a sync signal without tying up precious audio tracks. You can select either the standard 4.75cm/s tape speed, or the faster 9.5cm/s speed for extended high frequency response. The use of dbx noise reduction system gives you increased headroom and wider dynamic range for exceptional sound clarity and definition. Audible hiss is virtually eliminated and distortion is incredibly low. In addition, the MG614 has a built-in, multi-function auto locator that allows you to perform multi-point search to cue, search and record, search and play, repeat playback, and much more. There are also special functions for auto monitor during playback, and to rehearse punch-in recording. These convenience functions along with the computerized auto location system will assist you to make the recording process faster, simpler, and more enjoyable.

A Powerful 6 Channel Mixing Console and Sophisticated Patching System

The creative possibilities with the MG614's flexible mixing capabilities and versatile signal routing system are absolutely astonishing. Each channel offers input selectors, adjustable trim pads, a 2-band parametric sweep type EQ that allows you to select any frequency from 40Hz to 10kHz \pm 15dB, two independent effect sends (each with a stereo return), pans, buss matrix, and a smooth noise-free fader. There are also two XLR balanced MIC inputs for professional compatibility. Now the creativity starts to flow. The computerized programmable channel/track selector lets any channel be connected to any track input with the simple push of a button. From here, a newly developed switch matrix patch system lets you route signals in almost every conceivable way for monitoring, track bouncing, or mixdown. This marvelously simple push-button patch system entirely eliminates the need for a jungle of patch cords allowing you more time to work on creative recording and mixing. The MG614 is the world's first compact cassette multitrack recording system to offer features that are so advanced and operation that is so simple.



GX912 SPECIFICATIONS

- Track system • Compact cassette stereo
- Motors • FG servo direct drive motor for capstan drive x 1
DC motor for reel drive x 1
DC motor for mechanism drive x 1
- Heads • Super GX head for recording x 1
Super GX head for playback x 1
Erase head x 1
- Wow and flutter • 0.025% (WRMS), 0.04% (DIN)
- Distortion • 0.5% (Metal)
- Frequency response • Metal: 20Hz to 21,000Hz ± 3dB
Chrome: 20Hz to 20,000Hz ± 3dB
Normal: 20kHz to 19,000Hz ± 3dB
- S/N • Metal: 60dB (measured via tape with peak recording level)
Dolby C type NR ON: Improves up to 15dB at 500Hz, 20dB at 1kHz to 10kHz
Dolby B type NR ON: Improves up to 5dB at 1kHz, 10dB above 5kHz
- Input • Line in: 70mV/47k ohms
- Output • Line out: -10dBV/1k ohm
Phones: 1.3mV (8 ohms)/83.2 ohms
- Power Requirements • 120V, 60Hz for USA and Canada
220V, 50Hz for Europe except UK
240V, 50Hz for UK and Australia
- Dimensions • 482.6(W) x 105(H) x 372(D)mm (EIA Rack mount 2U)
- Weight • 7.0kg

MS200 SPECIFICATIONS

- Speaker system • 2 way: woofer (13cm cone type) tweeter (2.5cm soft dome)
- Impedance • 4 ohms
- Input rated • 80 watts
- Maximum • 200 watts
- Sensitivity • 89dB (1m/1 watt)
- Frequency response • 60Hz - 23kHz
- Character switch • Point Source, Normal, Enhance
- Dimensions • 170(W) x 270(H) x 182(D)mm
- Weight • 4.2kg



A High Performance Stereo Cassette Deck for Studio Use

The new GX912 Master Mixdown Cassette Deck incorporates the latest design advancements to meet the challenge of the most demanding studio applications. The use of the Super GX 3-Head System offers extended frequency response and dynamic range while also enabling monitoring through the playback head during recording. A Closed Loop Double Capstan System ensures optimum tape-to-head contact and smooth tape transport at all times. At the heart of the GX912 is a microcomputer which controls the entire transport mechanism for precise and flawless performance everytime.

Superb Operating Control

Operational ease is another feature that makes the GX912 welcome in the studio. Intro Scan, Quick Memory Search, Instant Program Location System, and other functions are all easily accessible at the feather-touch of the front panel push-buttons or from the wireless remote control. The FL display gives you a bright, highly visible readout of the current status of all important operational settings. The digital electronic tape counter shows the elapsed time, as well as the index position, and the time remaining. The GX912 fits into a 2U standard 19 inch rackmount for fast and simple installation.

A High Performance Studio Reference Monitor

The AKAI MS200 Monitor Speaker has been designed for superb and accurate music reproduction in any studio, listening room, or monitoring environment. The MS200 is the only monitor which lets you select from three different characteristic response modes. The point source mode gives you a crisp, full-range tight sound with all frequencies in-phase and time coherent. The 2-Way mode offers a flat response with clarity and definition far superior to any other compact monitor. The special enhance mode offers an improved response of both the high and low frequency sounds making it ideal for monitoring music with an unusually wide frequency bandwidth.

The Most Powerful and Extensive Digital Samplers Ever Designed

The Dawning of a New Era in Digital Sampling

For those who wish to venture into the aura of the twilight, AKAI's Digital Samplers will take you to the extreme limits of sonic realism and as far beyond as you dare to explore. Whether you're looking for a Sampler with the best cost performance, or simply the Very Best Sampler, AKAI has them both.



S900 SPECIFICATIONS

- System • Digital sampling
 - Sampling frequency: 7.5kHz ~ 40kHz (MIN ~ MAN)
 - Sampling time: 11.75sec. ~ 63.3sec. (MIN ~ MAX)
 - Voice: 8 Voice
 - Range: 6 Octave
- Storage • Built-in Floppy disk drive
 - Memory capacity: 1M byte
 - Memory Medium: 3.5 inch (2DD)
 - Both side, Double track,
 - Double density
 - Internal memory: 750K byte
- Multi sampling • 32
 - Edit • Scanning (One shot, Looping, Alternating)
 - A.D.S.R. (Velocity-Attack, Velocity-Release)
 - Velocity cross fade
 - Velocity switch
 - Positional cross fade
 - Attack pitch offset (-Velocity)
 - LFO (delay, rate, depth)
 - Filter (Key tracking, Velocity)
 - Sample merge
- Communication • RS232C or equivalent
- External jack • MIDI (IN, OUT, THRU)
 - REC trigger x 1
 - Mic input/REC/P.B. trigger x 1
 - Line input/REC/P.B. trigger x 1
 - Line output x 8
 - Stereo output x 2 (L, R)
 - Mix output x 1
 - Voice output x 1 (13 PIN/DIN)
- Dimensions • 482.6(W) x 132.6(H) x 410(D)mm
(EIA Rack mount/3U)
- Weight • 10.8kg



Clarity and Brilliance that are Undistinguishable From the Original

The S900 8 Voice MIDI Multiple Point Sampler gives you creative power and expressive control that surpass any other digital sampling device ever designed. With features such as 32 sampling points, frequency response up to 20kHz, a maximum of 63 seconds of sampling time, and a fast disk drive, it is bound to become the new standard against which all other samplers will be compared.

Sampling Simplicity

Capture the magic of any sound fast and easy on the S900 Multiple Point Sampler with unsurpassed digital clarity. The 32 multi-sample points let you reproduce any sound across a wide 6 octave range with its original timbre and resonances for stunning realism in sound quality and expression. Then add continuous looping of the sampled sound or alternate looping which plays the digitally sampled sound back and forth to animate it and give it a sense of breath.

The Ultimate in Creative Editing

AKAI has pioneered the development of a special new sound contouring technique to let you perform velocity cross fades, positional cross fades, velocity switching, and much more to create the most absolutely astounding realism. With these same editing effects you can go to the other sonic extreme as well to create the most bizarre and unusual sounds you've ever heard in your life. And if this isn't enough, the AKAI S900 8 Voice MIDI Multiple Point Sampler lets you do even more: mix and merge sampled sounds to create unusual and unique hybrid sounds, layer sounds for complex overdubs or stereo playback, add LFO modulation, filtering, and envelope shaping. The easy to use rotary edit wheel makes editing both pleasurable and fun. For further editing manipulation, the sampled sound can also be processed through an AKAI polyphonic synthesizer.

MIDI Mono Mode Multitracking and Sampling Percussion

The S900 allows you to control different sounds on separate MIDI channels so that when combined with a MIDI sequencer,

exciting MIDI mono mode multitracking and overdubbing are possible. You can control up to eight different voices simultaneously and have immediate access of up to 32 completely different sampled sounds, greatly expanding the capabilities of any recording or live performance setup. With an additional option, the S900 can also be used as the ultimate 12 bit Sampling Percussion Instrument with its full sampling time and powerful editing capabilities.

The Art of Sonic Perfection

The 20kHz frequency response, incredibly long sampling time, wide dynamic range, and low noise and distortion all assure you of the finest crystal clear sounds. To maximize the performance capabilities of the S900 Multiple Point Sampler, AKAI has produced a comprehensive library of professional studio recorded disks for the S900. A fast 3.5 inch built in disk drive lets you store or load sounds quickly and easily. Put the sounds of sonic perfection into your music with the AKAI S900 8 Voice MIDI Multiple Point Sampler—The new standard in high quality digital sampling.

Max sample 9.89 - 63.353

An Upgraded Version of the S900 Featuring High Quality Sound, Efficient Operation, and the Highest Standard in 12 bit Digital Sampling.

sound of acoustic instruments such as piano and strings. The 40 character x 2 line Liquid Crystal Display and the intuitive operating system allow for easy editing and control of the S950—thus retaining one of the S900's most important features. You can create a variety of your own beautiful high quality sounds with the S950 editing functions.

The S950 Offers Numerous Editing Functions Far Beyond the Powerful Functions of its Predecessor the S900

The S950 provides a variety of editing functions including looping, alternate looping, reverse, and start and end point setting. In addition, the S950 performance Crossfade Looping, Positional Crossfades, and Splice Crossfades. Crossfade looping will give your loops a smooth seamless transition between loop points and will eliminate looping glitches. Positional crossfades open up a new realm of creative expression by allowing you to make smooth transitions between sounds according to the note. And splice crossfades allow you to merge two different sounds together by crossfading over a period of time. There is also an Auto Locate Start Point function that will search for the starting point of a sampled sound and check to see if there is noise or silence at the beginning, thus helping you to edit precisely timed transient attacks. A Pre-Trigger Recording Function will capture a portion of the sound prior to the actual trigger point so that the attack transients of sounds are not cut off. And a unique and powerful "Time-Stretch" function allows you to change the length or a sample or a section of a sample without changing the pitch! All of these editing functions can be performed fast and easily giving you more editing power than ever before.

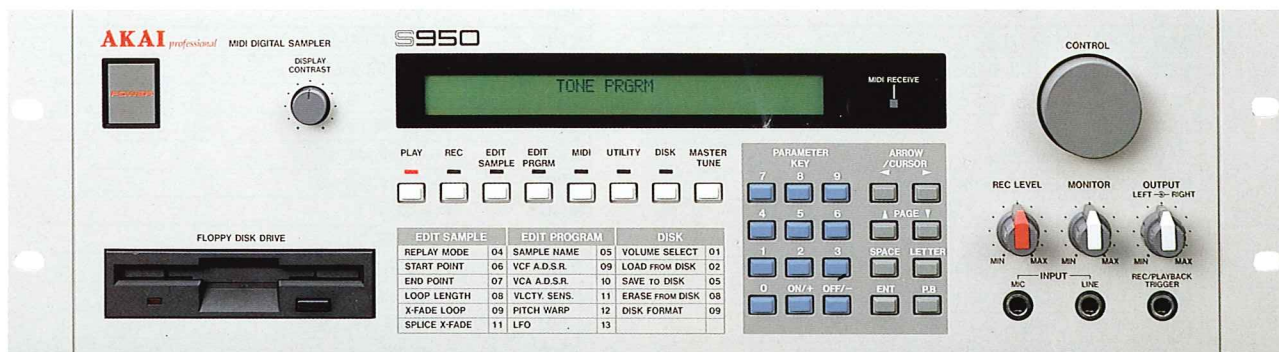
The S950 has an Analog VCF controlled by an ADSR Envelope that allows you to "contour" the sound. And you can even use the S950 to perform standard synthesis by loading one of the synth waveforms from the operation guide disk. By mixing synthesized waveforms with sampled sounds it is possible to create entirely new sound combinations. The S950 can also be driven by a MIDI drum machine or sequencer and be used as a powerful electronic percussion sound generator module. And the ME35T Audio/MIDI Trigger parameters can be edited from the S950 front panel with parameter information being displayed on the S950's large LCD.

A 48kHz Sampling Rate and up to 99 Multisamples Allow You To Reproduce the Beautiful Sounds of Acoustic Instruments.

Sampling technology has recently advanced very rapidly and the musical expectations of digital samplers have also increased. Now there is a new 12 bit sampler that gives you the performance power you need—the S950. It is based after the popular S900, retaining the best features, offering upgraded specifications, and adding a host of new features and capabilities. The S950 is ready to meet the demands of today's musician. The S900 feature that created a sensation among musicians is continued in this machine—the "natural sound". The sampling rate has been increased from 40kHz to 48kHz and the number of multisamples have been increased from 32 to 99. The frequency response of the S950 matches the specifications of DAT and the S950 yields excellent results when recording the natural

Expand the S950 With A Wide Variety of Options

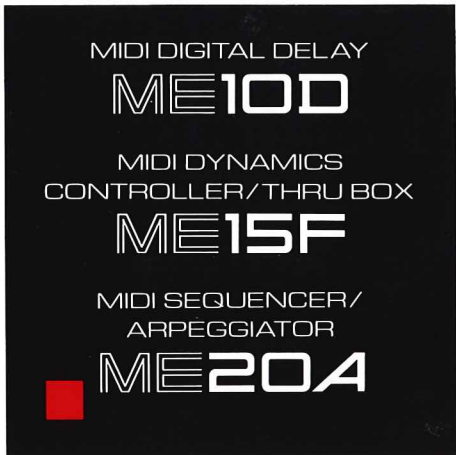
The S950 comes with 750k Bytes of internal memory for up to 63.35 seconds of sampling time. The memory may be expanded up to 2.25 Megabytes by adding up to two EXM006 Memory Expansion Boards. The 2DD/2HD internal disk drive gives you a wide variety of storage and loading options including complete compatibility with the large number of S900 sound libraries. It is even possible to load S1000 sound library disks into the S950. The S950 has the powerful capability to load disks while you are playing which greatly increases its power as a live performance instrument. A number of interface options allow you to connect the S950 with hard disks, DATs, and CD players. The ATARI SUPRA/CD DAT Interface IB-105 allows you to connect the ATARI SH-204 (20 Megabyte hard disk), SH-205 (20 Megabyte hard disk), and the SUPRA 20 and 30 Megabyte hard disks. You can also perform digital-digital transfers from a CD or DAT player. The S950 supports sampling rates up to 48kHz so you can utilize the maximum capabilities of a DAT player.



S950
MIDI DIGITAL SAMPLER



< SPECIFICATIONS > • Sampling resolution: 12 bit linear • Sampling frequency: 7.5kHz ~ 48 kHz • Sampling time: 9.89 ~ 63.35 seconds • 8 voices • 6 octave range • Internal memory: 750k byte (1.5 Megabytes with one EXM006 installed/2.25 Megabytes with two EXM006s) • External memory: 2HD/2DD selectable disk drive installed. IB-105 allows interfacing with an ATARI/SUPRA hard disk • Multi Sampling: 99 points • Edit: Scanning (one shot, looping, alternating), A.D.S.R. (VCA, VCF), Velocity (loudness, attack, filter, release), Velocity Switch, Positional Crossfade, Pitch Warp, LFO (delay rate, depth), Filter (key tracking, velocity, A.D.S.R.), Sample merge • Communication: RS232C or equivalent • Front Panel Connectors: MIC INPUT x 1, LINE INPUT x 1, REC/PB TRIGGER x 1 • Rear Panel: MIDI IN x 1, MIDI OUT x 1, MIDI THRU x 1, LINE OUT x 8, STEREO OUT x 2 (L ch., R ch.), MIX OUTPUT x 1, VOICE OUTPUT x 1 (13 PIN, DIN), OPTIONAL INTERFACE BOARD SLOT x 1, RS232 Connector x 1 • Dimensions: 482.6(W) x 132.6(H) x 425(D)mm (EIA 3U rackmount) • Weight: 10.4 kg • Accessories: Sound library SL581—SL583, Operation Guide Disk



ME10D SPECIFICATIONS

- Connector ● Input: MIDI (DIN/5P) × 1
Output: MIDI (DIN/5P) × 1
Thru: MIDI (DIN/5P) × 1
- Function control ● Power: ON/OFF
Delay: ON/OFF
Thru: ON/OFF
Program change: ON/OFF
Octave (Delay sound): DOWN/NORMAL/UP
Delay time: 0 to 1 sec. (MIN to MAX)
Dynamics 1 to 127 steps
(Delay sound velocity)
- Power requirements ● 120V, 60Hz for USA and Canada
220V, 50Hz for Europe except UK
240V, 50Hz for UK and Australia
- Front panel ● EIA Rack mount/1U
Dimensions ● 482.6(W) × 45.7(H) × 120(D)mm (19.0 × 1.8 × 4.7 inches)
Weight ● 1.8kg (4.0 lbs)

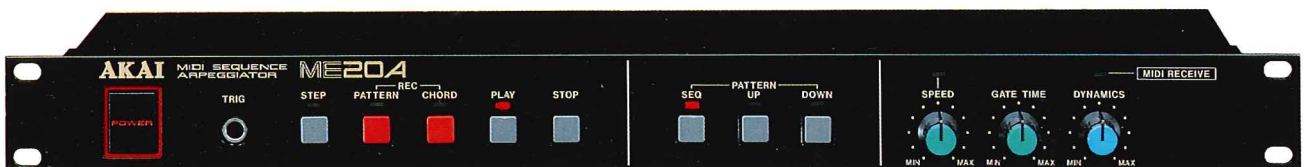
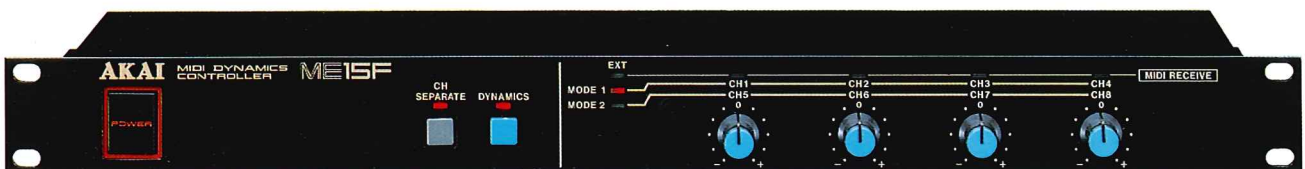
ME15F SPECIFICATIONS

- Connector ● Input: MIDI (DIN/5P) × 1
Output: MIDI (DIN/5P) × 5
- Function control ● Power: ON/OFF
Separate: ON/OFF
Dynamics: ON/OFF
Mode: 1/2 (For Velocity control channel assign)
Velocity controls × 4
- Power requirements ● 120V, 60Hz for USA and Canada
220V, 50Hz for Europe except UK
240V, 50Hz for UK and Australia
- Front panel ● EIA Rack mount/1U
Dimensions ● 482.6(W) × 45.7(H) × 120(D)mm (19.0 × 1.8 × 4.7 inches.)
Weight ● 1.8kg (4.0 lbs)

ME20A SPECIFICATIONS

- Connector ● Input: MIDI (DIN/5P) × 1
Output: MIDI (DIN/5P) × 1
Thru: MIDI (DIN/5P) × 1
Foot switch: Standard phone jack × 1
- Function control ● Power: ON/OFF
Step
REC: Pattern/Chord
Play
Stop
Pattern: SEQ/UP/DOWN
Speed: MIN to MAX (Step pulse interval/30msec. to 2,000msec.)
Gate time: MIN to MAX (1 to 127/127 steps)
Dynamics: MIN to MAX (1 to 127/127 steps)
- Memory capacity ● Chord patterns 128
Max. capacity 957 monophonic notes
- Power requirements ● 120V, 60Hz for USA and Canada
220V, 50Hz for Europe except UK
240V, 50Hz for UK and Australia
- Front panel ● EIA Rack mount/1U
Dimensions ● 483.6(W) × 45.7(H) × 120(D)mm (19.0 × 1.8 × 4.7 inches)
Weight ● 1.8kg (4.0 lbs)

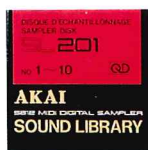
These MIDI Digital Effect Devices offer unique processing capabilities to your MIDI system. Expand and enrich your sound with the MIDI Digital Delay, MIDI Dynamics Controller/Thru Box, and the MIDI Sequencer/Arpeggiator. These MIDI effect units are ideal for use both on the stage and in the studio.



AKAI SOUND LIBRARY

A Sensational Library of Sounds
for S612

Disk No	Side	Description
1	A	ORCHESTRA HIT #1
	B	ORCHESTRA HIT #2
2	A	ORCHESTRA HIT #3
	B	STRINGS HIT
3	A	FULL STRINGS #1 (Gliss/up)
	B	FULL STRINGS #2 (Gliss/down)
4	A	VIBRAPHONE #1
	B	VIBRAPHONE #2
5	A	FLUTE #1
	B	FLUTE #2
6	A	TIMPANI
	B	ROLLING TIMPANI
7	A	GLOCKENSPIEL
	B	HARP (Single tone)
8	A	MARIMBA #1
	B	MARIMBA #2
9	A	CEMBALO #1
	B	CEMBALO #2
10	A	PAN FLUTE
	B	RECORDER



SL201
ORCHESTRA
ENSEMBLE

Disk No	Side	Description
11	A	ACCENT #1 (E.G./E.B./Dr.)
	B	ACCENT #2 (E.G./E.B./Dr.)
12	A	RHYTHM #1
	B	RHYTHM #2
13	A	RHYTHM #3
	B	RHYTHM #4
14	A	RHYTHM #5
	B	RHYTHM #6
15	A	CLOSED HI-HAT
	B	OPEN HI-HAT
16	A	CRASH CYMBAL #1
	B	CRASH CYMBAL #2
17	A	BASS DRUM
	B	BIG BASS DRUM
18	A	LOW TOM TOM
	B	FLOOR TOM TOM
19	A	HI TOM TOM
	B	MID. TOM TOM
20	A	SNARE DRUM (w/Gate Echo)
	B	SNARE DRUM (w/Digital Reverb)



SL202
DRUMS

Disk No	Side	Description
21	A	MIXED CHORUS #1 (Yeah)
	B	MIXED CHORUS #2 (Portament up/down)
22	A	MIXED CHORUS #3 (Bon)
	B	MIXED CHORUS #4 (Bon)
23	A	MIXED CHORUS #5 (Uh)
	B	MIXED CHORUS #6 (Ah)
24	A	MALE CHORUS
	B	FEMALE CHORUS
25	A	CELLO & VIOLA
	B	VIOLIN & VIOLA
26	A	STRINGS #1 (Vi. & Viola)
	B	STRINGS #2 (C.Bass & Cello)
27	A	HARP #1 (Gliss/down)
	B	HARP #2 (Gliss/up)
28	A	TRUMPET
	B	TENOR SAXOPHONE
29	A	TROMBONE
	B	FULL BRASS SECTION (Tr./T.Saxp./Trb.)
30	A	MANDOLIN #1 (Tremolo)
	B	MANDOLIN #2 (Tremolo)



SL203
CHORUS &
ENSEMBLE

Disk No	Side	Description
31	A	BELL TREE #1
	B	BELL TREE #2
32	A	SLAP BASS #1
	B	SLAP BASS #2
33	A	ELECTRIC BASS #1
	B	ELECTRIC BASS #2
34	A	DISTORTION GUITAR #1
	B	DISTORTION GUITAR #2
35	A	ELECTRIC GUITAR #1
	B	ELECTRIC GUITAR #2
36	A	CUTTING GUITAR (Major chord)
	B	CUTTING GUITAR (Minor chord)
37	A	CONGA
	B	BONGO
38	A	FLEXATONE
	B	TAMBOURINE
39	A	WOOD BLOCK #1
	B	WOOD BLOCK #2
40	A	PERCUSSION #1
	B	PERCUSSION #2



SL204
RHYTHM
SECTION

Disk No	Side	Description
41	A	BOTTLE
	B	QUIJADA
42	A	THUNDER (LIGHTNING)
	B	RAIN DROPS
43	A	SOUND OF WATER #1
	B	SOUND OF WATER #2
44	A	DOOR #1
	B	DOOR #2
45	A	RIFLE SHOT
	B	MACHINE GUN SHOT
46	A	BRAKE (Car)
	B	IGNITION START
47	A	ELECTRIC DRILL
	B	OCEAN WAVE
48	A	COW
	B	THRILLER (Screaming)
49	A	FLOG VOICE
	B	LAUGHING
50	A	DOG BARKING
	B	CAT MEOW



SL205
EFFECTS

Disk No	Side	Description
51	A	SHINOBU #1
	B	SHINOBU #2
52	A	SHAKUHACHI #1
	B	SHAKUHACHI #2
53	A	SHAMISEN #1
	B	SHAMISEN #2
54	A	KOTO #1
	B	KOTO #2
55	A	KOTO #3 (Gliss/up)
	B	KOTO #4 (Gliss/down)
56	A	BIWA #1
	B	BIWA #2
57	A	HIRADAIKO
	B	SHIMEDAIKO
58	A	CHANCHIKI RHYTHM #1
	B	CHANCHIKI RHYTHM #2
59	A	SHOU #1
	B	SHOU #2
60	A	FURIN #1
	B	FURIN #2



SL206
SOUNDS OF
JAPAN

Disk No	Side	Description
61	A	GRAND PIANO #1
	B	GRAND PIANO #2
62	A	ELECTRONIC PIANO #1
	B	ELECTRONIC PIANO #2
63	A	ROCK GUITAR CHORD
	B	CLASSICAL GUITAR #1
64	A	KILLER BASS
	B	DOUBLE BASS
65	A	TENOR SAX
	B	VIBES
66	A	GIRLS' VOICE
	B	BASS FLUTE
67	A	POLY BRASS
	B	FRENCH HORNS
68	A	VIOLINS AND VIOLAS
	B	JAZZ LICK
69	A	BROKEN GLASS
	B	HARMONICA
70	A	ARMAGEDDON
	B	ELEPHANT CRY



SL207
L.A. STUDIO 20



S612 SPECIFICATIONS

- Sampling method ● 12-bit sampling
- Sampling frequency ● 4kHz ~ 32kHz (MIN ~ MAX)
- Sampling time ● 8,000 ~ 1,000msec (MAX ~ MIN)
- Frequency characteristics ● Recording: 25Hz ~ 12.5kHz (-3dB bandwidth)
- Playback: 25Hz ~ 20kHz (-3dB bandwidth)
- Voice ● 6 voices
- Range ● 5 octave
- Function control ● Power: ON/OFF
- REC LEVEL: MIN ~ MAX
- MONITOR LEVEL: MIN ~ MAX
- REC MODE: NEW/OVERDUB
- EDIT: SCANNING/memory start (0 ~ 100) memory end (0 ~ 100)
- SCANNING MODE/ONE SHOT, LOOPING, ALTERNATING
- MANUAL SPLICE (0 ~ 100)
- KEY TRANS/SEMITONE STEP
- TUNE/±100 cent
- LFO/SPEED (MIN ~ MAX)
- DEPTH (MIN ~ MAX)
- DELAY (0 ~ 10)
- OUTPUT/FILTER (LOW ~ HIGH)
- DECAY (0 ~ 10)
- LEVEL (0 ~ 10)
- MIDI: MONO/POLY, CHANNEL UP/DOWN
- DATA: SAVE/VERIFY/LOAD
- DISPLAY: REC LEVEL/MIDI CH (0 = OMNI ON, 1 ~ 9 = OMNI OFF) I/O (SAVE/LOAD)
- INPUT (0dB = 0.775V r.m.s.)
- Input sensitivity/impedance ● MIC: -63dB/5.6KΩ (standard phone jack)
- LINE: -27dB/47KΩ (standard phone jack)
- Output ● LINE: 2.8V-P-P/MONO (standard phone jack) × 2
- 1 ~ 6 voice separate output
- VOICE: 1.4V P-P (exclusive jack)
- 1 ~ 6 voice separate output
- MIDI ● IN/OUT/THRU (5P. DIN)
- Interface ● Exclusive sampler disk drive (MD280) connector
- Exclusive DC8V power supply jack
- Power consumption ● 40W
- Dimensions ● 482.6 (W) × 90.1 (H) × 379 (D) mm (Including largest projection)
- Weight ● 6.0kg



The Magic of 12 Bit Sampling

The S612 is the first truly professional and affordable 12 bit 6 voice polyphonic digital sampler. By utilizing a 12 bit sampling format, and a sampling frequency of up to 32kHz, the S612 represents a significant advance in sound quality over older 8 bit machines. The S612 lets you capture and store virtually any sound you can imagine. By simply connecting up the S612 to any MIDI keyboard, sequencer, or computer, you can polyphonically reproduce the most incredibly realistic sounds you've ever heard.

Simple and Easy Editing

In addition to its superior sound quality, the S612 gives you numerous ways to edit and tailor a sound once it has been stored in the internal memory. You can set the starting and ending point of any sound, or you can layer one sample on top of another for rich and unusual effects. A looping

function lets you continuously repeat a segment of the sampled sound. The alternating function will continuously play a loop forward, and then in reverse, to create infinite sustains with rich and realistic animation. The S612 also has a one-shot playback capability, which when combined with the optional audio trigger kit, allows you to trigger digitally sampled sounds from any audio signal such as from a drum track on tape. In addition, the S612 lets you further manipulate the sound by adding LFO and envelope modulation for realistic enhancement or drastic alteration of the sound. Further editing of the sound is possible by simply connecting it up to an AKAI synthesizer to add additional envelope shaping, filtering, modulation, and more.

Disk Drive Sound Storage

The MD280 is a compatible disk drive for the S612 that uses 2.8 inch disks allowing

you to store a sampled sound on each side of a disk. Since disks can be stored and loaded is just a matter of seconds, you can have virtually instant access to an entire library of sounds starting with the hundreds of digitally sampled sounds currently available. And this is only the beginning. Since you can sample any sound you desire, there is no limit to the creative possibilities with the S612 and the MD280.

The Sensation of Sonic Realism and Total Expressive Control

Now you have the capability of reproducing virtually any sound imaginable with sparkling clarity, definition, and vivid dynamic expression. The S612 will respond to MIDI pitch bend, modulation, and velocity dynamics to give you the utmost in expressive control. Expand your musical horizons and experience the sensation and magic of digital sampling with the S612 from AKAI.



MD280 SAMPLER DISK DRIVE

- MD280 SPECIFICATIONS ● Storage capacity / 1 tone per side (128KB, total for A & B sides)
- Number of track / 1 track (spiral)
- Storage medium / 2.8-inch disk ● Longevity of medium / 2000 passes ● Power requirements / DC 8V 400mA (supplied from S612 sampler)
- Operating temperature range / 20% ~ 80% (no condensation) ● Dimensions / 482.6 (W) × 90.1 (H) × 206 (D) mm (rack mounted EIA/2U type)
- Weight / 3.7kg ● Standard accessories / Operator's manual, replacement felt, head cleaner applicator



A Versatile Polyphonic Synthesizer with Split Keyboard Capabilities
 The AX60 MIDI 6 Voice Split Programmable Synthesizer is the superb choice as a flexible all-purpose keyboard. Whether on the stage, in the studio, or at home, the AX60 has features that you will truly appreciate. Any of the 64 internal sounds can be quickly and easily edited using the AX60 front panel sliders. Or you can load up your own personal library of sounds that you have stored on cassettes. Four different split modes make it easy to play two parts or to control MIDI sound modules and digital samplers. A five mode arpeggio, key transpose switch, and unison switch are all at your creative command. In addition, the AX60 has a SAMPLER input so you can process your digitally sampled sounds as you would any analog synthesizer patch. You can add filtering, modulation, stereo chorusing, envelope shaping, and much more. If you need a synthesizer with versatile features, be sure to check out the AX60. We're sure you'll be impressed.

AX60 SPECIFICATIONS

- Key • 61 key 5 octave c-c scale (split keyboard)
- Voice • 6 voice
- Tone generator • VCO (voltage controlled oscillator)
- Internal memory • 64 sound program (8 banks of 8 programs)
8 split preset
- External memory • Cassette interface
- Parameters • LFO Section: LFO select (VCO, VCF, VCA)
WAVE form (∩, /, \, □, RND)
Depth control
Speed control
Delay control
- VCO Section: Octave (2', 4', 8', 16', 32')
WAVE form (∩, /, \, □, ∩+1)
Pulse width control
Speed control
EG depth control
Sampler ON/OFF
Noise ON/OFF
A-B balance control
- VCF Section: Cutoff frequency control
Resonance control
Key follow control
VCO modulation control
HPF control
EG polarity + / -
- EG Section: Attack control
Decay control
Sustain control
Release control
Depth level control
EG destinations (VCF EG, VCA EG, VCA GATE)
- Functions • Master level control
Master tune control (±50 cent)
Auto tune ON/OFF
Split ON/OFF
Split mode (0-6, 2-4, 4-2, 6-0)
Split balance control
Chorus (1, 2, OFF)
Arpeggio ON/OFF
Arpeggio (5 mode)
Arpeggio hold ON/OFF
Arpeggio speed control
Unison (upper, lower, off)
Wheel (upper, lower)
Key transpose ON/OFF
Edit recall ON/OFF
Compare ON/OFF
Write
Set
MIDI (1 - 16ch)
Memory protect ON/OFF
- Wheel • Pitch bend/Cut off frequency wheel, Pitch bend range control
Modulation wheel, Modulation depth control
- External jack • MIDI (IN, OUT, THRU)
Tape (load/in, save/out)
Sampler input (13 pin/DIN)
Sustain pedal jack
Arpeggio EXT sync jack
Audio output (U/L MIX/Left, Right)
Headphone jack
- Dimensions • 1,000(W) × 110(H) × 346(D)mm
Weight • 11.0kg



AX73 SPECIFICATIONS

Key • 73 key 6 octave c-c scale (Key velocity)

Voice • 6 Voice

Tone generator • VCO (Voltage controlled oscillator)

Internal memory • 100 Sound programs

External memory • Cassette interface

Parameters • VCO Section: Octave (2', 4', 8', 16')

WAVE form (∧, ∨, ▽, ▹, ▸, ▹+∨)

PULSE width control

PWM speed control

EG depth control

Sampler ON/OFF

Noise ON/OFF

A-B balance control

VCF Section: Cutoff frequency control

Resonance control

Key follow control

VCO modulation control

EG depth and polarity

KEY velocity

HPF control

EG Section: EG Destinations select (VCF, VCA, VCF=VCA, VCA GATE)
(2 independent EGs) Attack

Decay

Sustain

Release

VCA Section: Level

Velocity

LFO Section: LFO select (VCO, VCF, VCA)

WAVE form (∧, ∨, ▽, ▹, ▸, RND)

Speed

Depth

Delay

Chorus (OFF, 1, 2)

Key assign (POLY, UNISON)

Bend: VCO (-1 OCTAVE ~ +1 OCTAVE)

Cut off frequency (MIN ~ MAX)

Modulation depth (MIN ~ MAX)

MIDI channel (1 ~ 16)

MIDI split (OFF, 0-6 upper, 6-0 lower)

MIDI split point

Functions • Edit control section: Value control volume

Value up/down key

Edit recall on/off

Compare on/off

Edit

Write

Bank

Bank

Tenkey (Bank, Program, Parameter, Select)

BWD verify key

FWD load key

0 save key

Master level control

Master Tune control (±50 cent)

Auto Tune ON/OFF

Key Transpose ON/OFF

Memory protect ON/OFF

LCD Contrast volume

Wheel • Pitch bend/cut off frequency wheel

Modulation wheel

Display • LC Display, LED

External jack • MIDI (IN, OUT, THRU)

Sampler IN (13 PIN/DIN)

Sustain pedal jack

Program up jack

Audio output: Left, Right (MONO)

Head phone jack (stereo)

Tape (load/IN, save/OUT)

Dimensions • 1,152(W) × 110(H) × 346(D)mm

Weight • 15.0kg



A Rich Sounding Analog Synthesizer and Master keyboard

The AX73 MIDI 6 Voice Velocity Split Synthesizer stands alone in its class as a full featured synthesizer with unmatched versatility. Its 100 internal programs are packed with some of the hottest and most sought after sounds available. And of course you can customize your own sounds as well and build up an unlimited library of programs on cassette tapes. The 6 octave keyboard is velocity sensitive to let you express both subtle as well as explosive nuances. You can even split the keyboard and use it as a master keyboard to control MIDI sound modules or digital samplers. The sound and processing capabilities of the AX73 are so extensive that we added a SAMPLER input to let you process digitally sampled sounds through the AX73 to add filtering, stereo chorus, envelopes, modulation, and much more. In fact, the AX73 is the ideal synthesizer and master keyboard to use with your sampler.

AKAI PARAMETER REFERENCE AX73		
VCO	VCF	EG
001 VCO OSC	001 VCF CUTOFF	001 EG ATTACK
002 VCO OSC	002 VCF CUTOFF	002 EG ATTACK
003 VCO OSC	003 VCF CUTOFF	003 EG ATTACK
004 VCO OSC	004 VCF CUTOFF	004 EG ATTACK
005 VCO OSC	005 VCF CUTOFF	005 EG ATTACK
006 VCO OSC	006 VCF CUTOFF	006 EG ATTACK
007 VCO OSC	007 VCF CUTOFF	007 EG ATTACK
008 VCO OSC	008 VCF CUTOFF	008 EG ATTACK
009 VCO OSC	009 VCF CUTOFF	009 EG ATTACK
010 VCO OSC	010 VCF CUTOFF	010 EG ATTACK

AKAI PARAMETER REFERENCE AX73		
VCA	KEYBOARD	MIDI
011 VCA LEVEL	011 KEYBOARD	011 MIDI CHANNEL
012 VCA LEVEL	012 KEYBOARD	012 MIDI CHANNEL
013 VCA LEVEL	013 KEYBOARD	013 MIDI CHANNEL
014 VCA LEVEL	014 KEYBOARD	014 MIDI CHANNEL
015 VCA LEVEL	015 KEYBOARD	015 MIDI CHANNEL
016 VCA LEVEL	016 KEYBOARD	016 MIDI CHANNEL
017 VCA LEVEL	017 KEYBOARD	017 MIDI CHANNEL
018 VCA LEVEL	018 KEYBOARD	018 MIDI CHANNEL
019 VCA LEVEL	019 KEYBOARD	019 MIDI CHANNEL
020 VCA LEVEL	020 KEYBOARD	020 MIDI CHANNEL





Unlimited Expansion with this Powerful 6 Voice Polyphonic Sound Module
 The VX90 is the perfect synthesizer sound module for anyone building a MIDI based music system. Whether you are a keyboard player or are interested in computer control, you can start with only one VX90 and build up your system to as large as you desire. The VX90 has 100 internal sound programs that are some of the most powerful and exciting sounds you've ever heard. Since all parameters on the VX90 are totally programmable, you can create your own sounds as well and store them on cassettes to build up a library of programs, all of which are completely compatible and interchangeable with any other VX90 unit. And naturally the VX90 responds to all MIDI pitch bend, modulation, velocity, and program change signals as well giving you unprecedented dynamic and expressive control. In addition, the VX90 sets a new standard in digital sampling programmability and expression with the unique SAMPLER input for processing digitally sampled sounds through the VX90. The VX90 is a truly compact sound module that is powerful, flexible, and easy to control making it the ideal tool for creating exciting new musical sounds.

VX90 SPECIFICATIONS

- True voice range • 24 ~ 120 (C₁ ~ C₃)
- Voice • 6 Voice
- Tone generator • VCO (Voltage controlled oscillator)
- Internal memory • 100 Sound program
- External memory • Cassette Interface
- Parameters • VCO Section: Octave (2', 4', 8', 16')
- WAVE form (∧, ∨, ▽, ▹, ▸)
- PULSE width
- PWM speed
- EG depth
- SAMPLER ON/OFF
- Noise ON/OFF
- A-B balance
- VCF Section: Cut off frequency
- Resonance
- Key follow
- VCO modulation
- EG depth and polarity
- Key velocity
- HPF
- EG Section (2 independent EGs): EG Destinations select (VCF, VCA, VCF = VCA, VCA gate)
- Attack
- Decay
- Sustain
- Release
- VCA Section: Level
- Velocity
- LFO Section: LFO select (VCO, VCF, VCA)
- WAVE form (∧, ∨, ▽, ▹, ▸, RND)
- Speed
- Depth
- Delay
- Key assign (poly, unison)
- Bend: VCO (-1 octave ~ +1 octave)
- Cut off frequency (MIN ~ MAX)
- Modulation depth (MIN ~ MAX)
- MIDI channel (1 ~ 16)
- Functions • Edit control section: Value control slider
- Value up/down keys
- Edit recall on/off
- Compare on/off
- Edit
- Write
- Bank
- Tenkey (bank, program, parameter select)
- BWD verify key
- FWD load key
- 0 save key
- Master level control
- Master Tune control (± 50 cent)
- Auto Tune ON/OFF
- Key Transpose ON/OFF
- Memory protect ON/OFF
- LCD Contrast Volume
- Display • LC Display, LED
- External jack • MIDI (IN, OUT, THRU)
- Sampler IN (13 PIN/DIN)
- Audio output: Left (MIX), Right
- Head phone jack
- Tape (load/IN, save/OUT)
- Sustain pedal jack
- Dimensions • 482.6(W) × 88.1(H) × 367(D)mm (EIA Rack mount/2U)
- Weight • 6.0kg





A Master Keyboard for Total MIDI Control
 The MX73 is a full 6 octave 73 note, velocity sensitive keyboard with an extensive array of MIDI performance and control parameters. It has an internal memory capable of storing as many as 100 different programs to give you maximum control in any performance situation. The MX73 gives you control of functions such as master level, tune request, key transpose, split point, program number, and much more. There are four programmable control sliders and switches so you can assign which function you wish each slider and switch to control and later recall the same set up for further editing at the touch of a button. A ten key pad is available for selecting bank numbers and slider parameters. The value of the various parameters are displayed on the LCD readout which has a contrast adjustment for proper viewing from any angle. The MX73 also has inputs for four foot switches and volume control pedals which can be assigned to any parameter on any MIDI channel you wish. Total performance control of your entire MIDI system is now a reality.

MX73 SPECIFICATIONS

- Key • 73 Key c-c scale 6 octave (Key Velocity)
- Internal memory • 100 Programs
- External memory • Cassette interface
- Functions • Master level
 - Tune request ON/OFF
 - Key transpose
 - Programmable control change sliders
 - Programmable control change switches
 - Programmable parameters
 - Wheel, Bend, MIDI/ch 1~16, Prog No., Split point, Octave shift, Poly/Mono, Omni On/Off, Control Vol select, Control SW select, Vol No. set, SW No. set, Sustain On/Off select
 - Bank select ON/OFF
 - Value UP, DOWN
 - Ten Keys: Bank number select, Parameter select I, II, III, IV select VOL, SW
 - BWD, FWD Key
 - Edit
 - Ext control ON/OFF
 - Write
 - Tape (Save, Verify, Load)
 - LCD Contrast Volume
- External jack • MIDI out x 2 (DIN/5P)
 - External control out x 1 (DIN/5P)
 - Tape (IN/load, OUT/save)
 - Program up Jack
 - Sustain pedal jack
 - Control in (1~4) for foot switch
 - (1~4) for foot volume
- Display • LC display • LED
- Dimensions • 1,152(W) x 110(H) x 346(D)mm
- Weight • 13.0kg





ME25S SPECIFICATIONS

- Functions • Power ON/OFF
 Bank select
 SPLIT
 Parameter
 Bank/Parameter up, down
 Copy
- Programmable parameter • MIDI channel, Split point, Program change
 Octave shift, Wheel
- Internal memory • 64 bank
- External jack • MIDI IN × 1 (DIN/5P)
 MIDI OUT × 2 (DIN/5P)
 MIDI THRU × 1 (DIN/5P)
 Foot switch × 1 (1/4 inch jack)
- Dimensions • 482.6(W) × 45.7(H) × 120(D)mm
 (EIA Rack mount/1U)
- Weight • 1.8kg

ME30P SPECIFICATIONS

- Functions • Power ON/OFF
 Bank Select
 Output Channel assign
 Input Channel select
 Check mode ON/OFF
- External jack • MIDI IN × 4 (DIN/5P)
 MIDI THRU × 8 (DIN/5P)
 Foot switch × 1 (1/4 inch jack)
- Internal memory • 15 bank
- Dimensions • 482.6(W) × 45.7(H) × 120(D)mm
 (EIA Rack mount/1U)
- Weight • 1.9kg



Convert Your MIDI Keyboard Into a Split Keyboard

The ME25S Programmable Note Separator is a MIDI keyboard splitter that has numerous uses and applications far beyond those that are readily apparent. Its 64 internal memory banks will memorize the MIDI channel, split point, program change, octave shift, and modulation wheel settings. The main function of the ME25S Programmable Note Separator is to convert a non-split keyboard into a split keyboard or even into a multi-split keyboard. Imagine the possibilities of being able to control several synthesizers from one keyboard. And you can use splits for other uses as well. For example, you can use one section of the keyboard to play on, and another section of the keyboard to select programmable effect changes. The ME25S can also be used as a sequential program changer, an octave transposer, key overlayer, and numerous other functions limited only by your imagination.

Total MIDI Patching Flexibility From a Compact Unit

For today's complex MIDI system a programmable MIDI patchbay becomes essential. The ME30P is a highly sophisticated device allowing you to route up to four MIDI INPUTS to any of the eight MIDI THRU outputs in almost any configuration you could desire. Up to 15 different sets of patches can be programmed and instantly recalled at the press of a button, a footswitch, or by a MIDI program change command. And since MIDI THRU outputs are used, you can assign up to eight MIDI THRU outputs from one MIDI INPUT. This will allow you to create the perfect star network on each of your patch presets and thus avoid undesirable MIDI delays. In addition, the ME30P Programmable MIDI Patch Bay has a special check mode to let you quickly test that all MIDI outputs are properly connected.

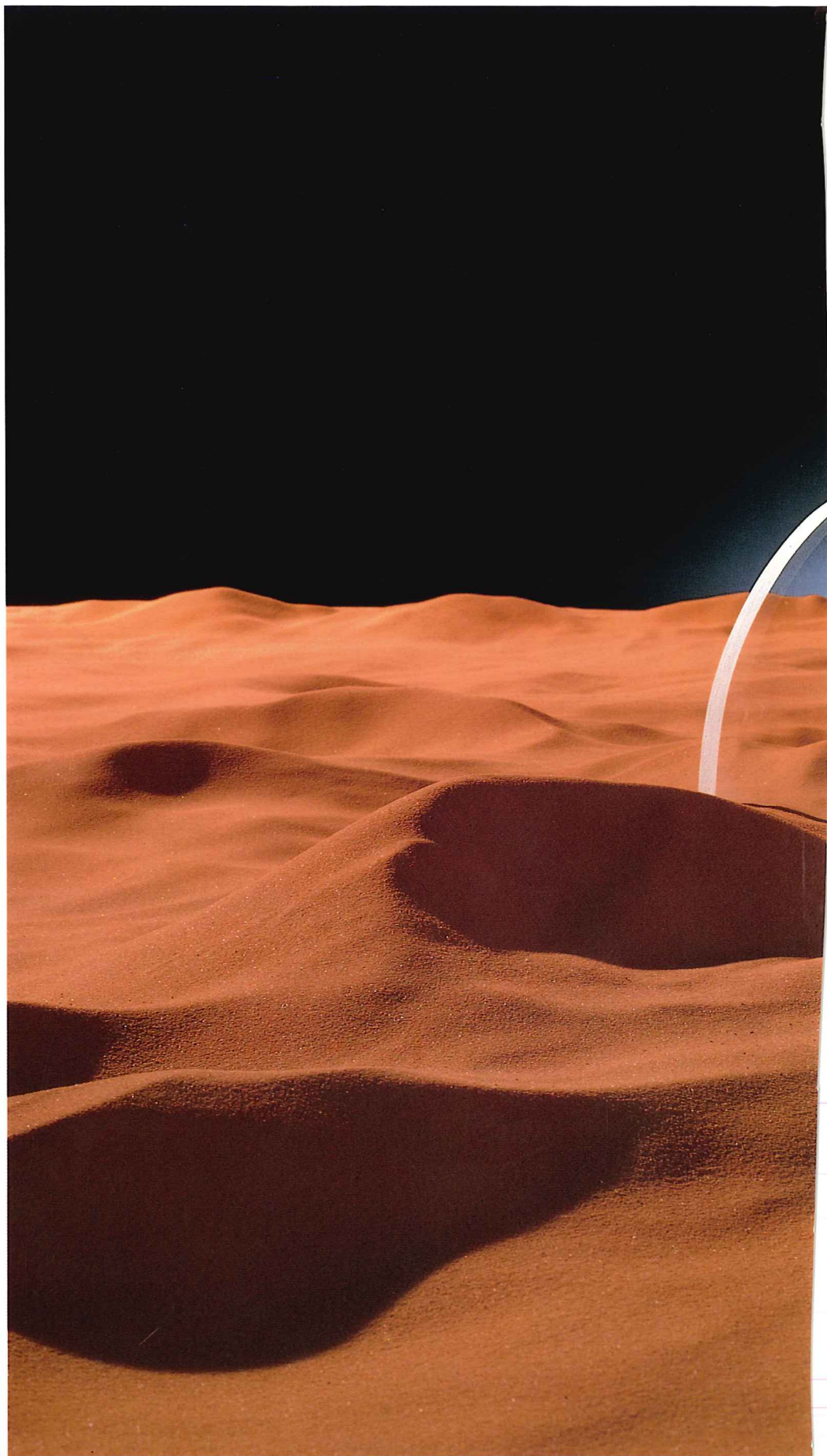
ACCESSORIES

PS-X80	FOOT SWITCH
DD-X25	MIDI CABLE (2.5m)
DD-X50	MIDI CABLE (5.0m)
DD-X5013	13 PIN DIN CABLE (5.0m)
SD-X14	STAND FOR ML14, MPX820
SD-X12	STAND FOR MG1212, MG1214
RC-X9	REMOTE CONTROL UNIT (WIRELESS)
RC-X3	REMOTE CONTROL UNIT (WIRED)
BL100	BLANK DISK (2.8 INCH SAMPLER DISK)
FC-X80	FLIGHT CASE (AX80)
FC-X60	FLIGHT CASE (AX60)
FC-X12	FLIGHT CASE (MG1212, MG1214)
DC-X80	DUST COVER (AX80)
DC-X12	DUST COVER (MG1212, MG1214)
SC-X80	SOFT CASE (AX80)
HC-X80	SEMI-HARD CASE (AX80)
ASK40	APPRECIATION SERVICE KIT
FC-X73	FLIGHT CASE (AX73, MX73)
SL501 ~	SOUND LIBRARY
BL350	BLANK DISK (3.5 INCH MICRO FLOPPY DISK/MF2DD)
PCL100	OPTIONAL AUDIO TRIGGER KIT/INPUT × 8 (S900)

For improvement purposes, specifications and design are subject to change without notice.

dbx TYPE I
NOISE REDUCTION * dbx is a trademark of dbx Incorporated.

MIXER/RECORDER
MASTER DECK
MONITOR SPEAKER
SAMPLER
SOUND MODULE
SYNTHESIZER
MASTER KEYBOARD
MIDI EFFECTS
SOUND LIBRARY



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