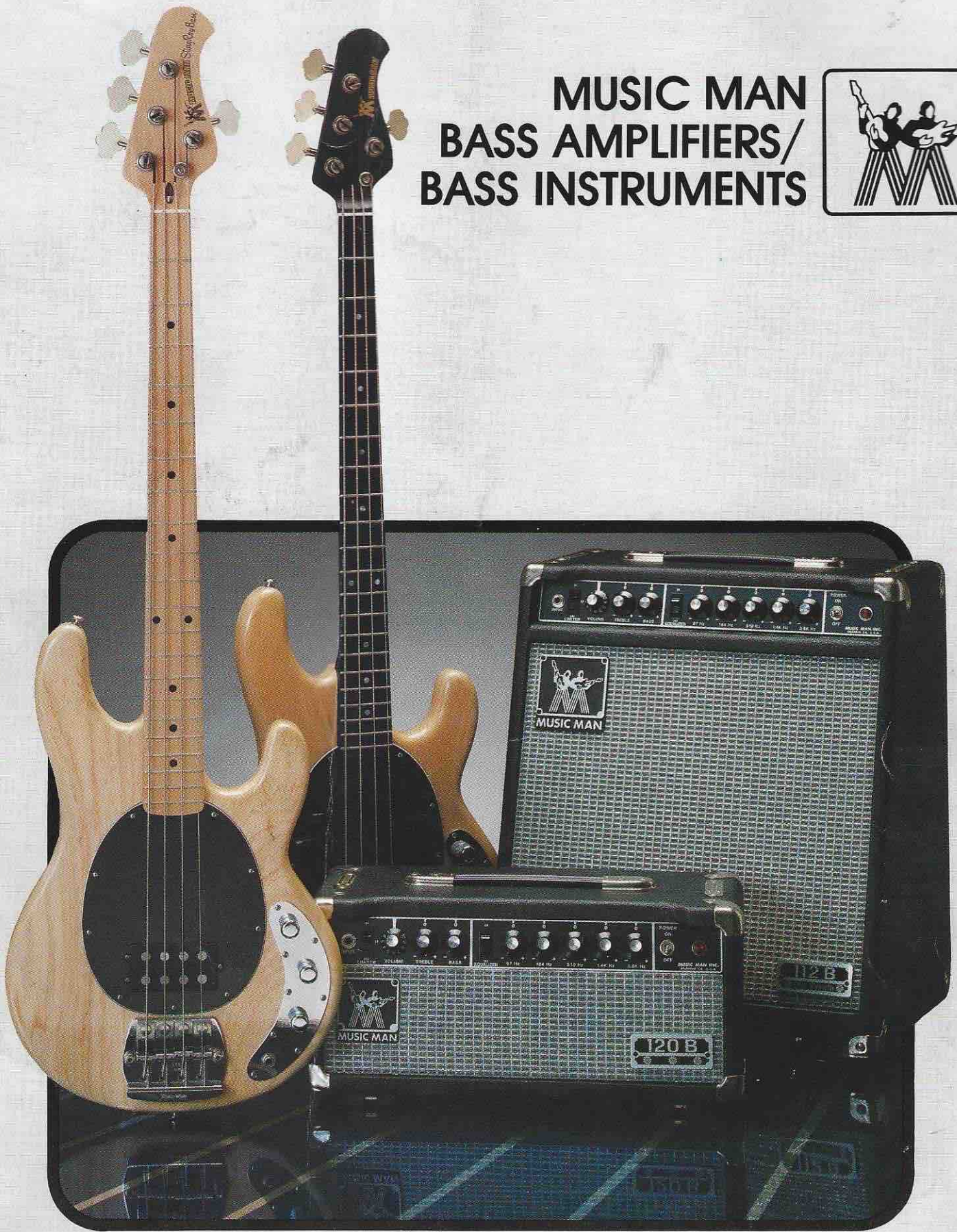
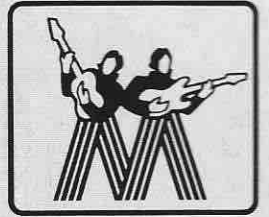


# MUSIC MAN BASS AMPLIFIERS/ BASS INSTRUMENTS



STERLING

# STING RAY BASS

The Music Man Sting Ray bass has established itself as one of the most popular basses in the world. The first of our new generation of instruments, we are especially proud that many top international artists have selected this instrument for their professional performances.

The Sting Ray offers the professional player tremendous flexibility to suit individual playing styles, action preferences, and string selections. Offered in both fretted and fretless models, the Sting Ray bass is meticulously crafted by hand, and precision machinery designed and built for each manufacturing function. And each is registered, with the serial number stamped on the bridge.

punchy—yet always clear. The Sting Ray has an extremely strong, clear mid-range sound that always cuts through, so the bass part won't be lost in the shuffle. Even with the treble fully rolled off and bass fully on, the sound retains its excellent definition, it's never muddy or thick. For studio work, the Sting Ray's distinctive tonality and built-in preamp allows you to plug directly into the recording board and, with very little, if any, EQ, get the right sound onto the tape.

The Sting Ray produces far more tonal variety than other basses when you pick the strings at different locations, yet the instrument is beautifully consistent in performance. Hot spots

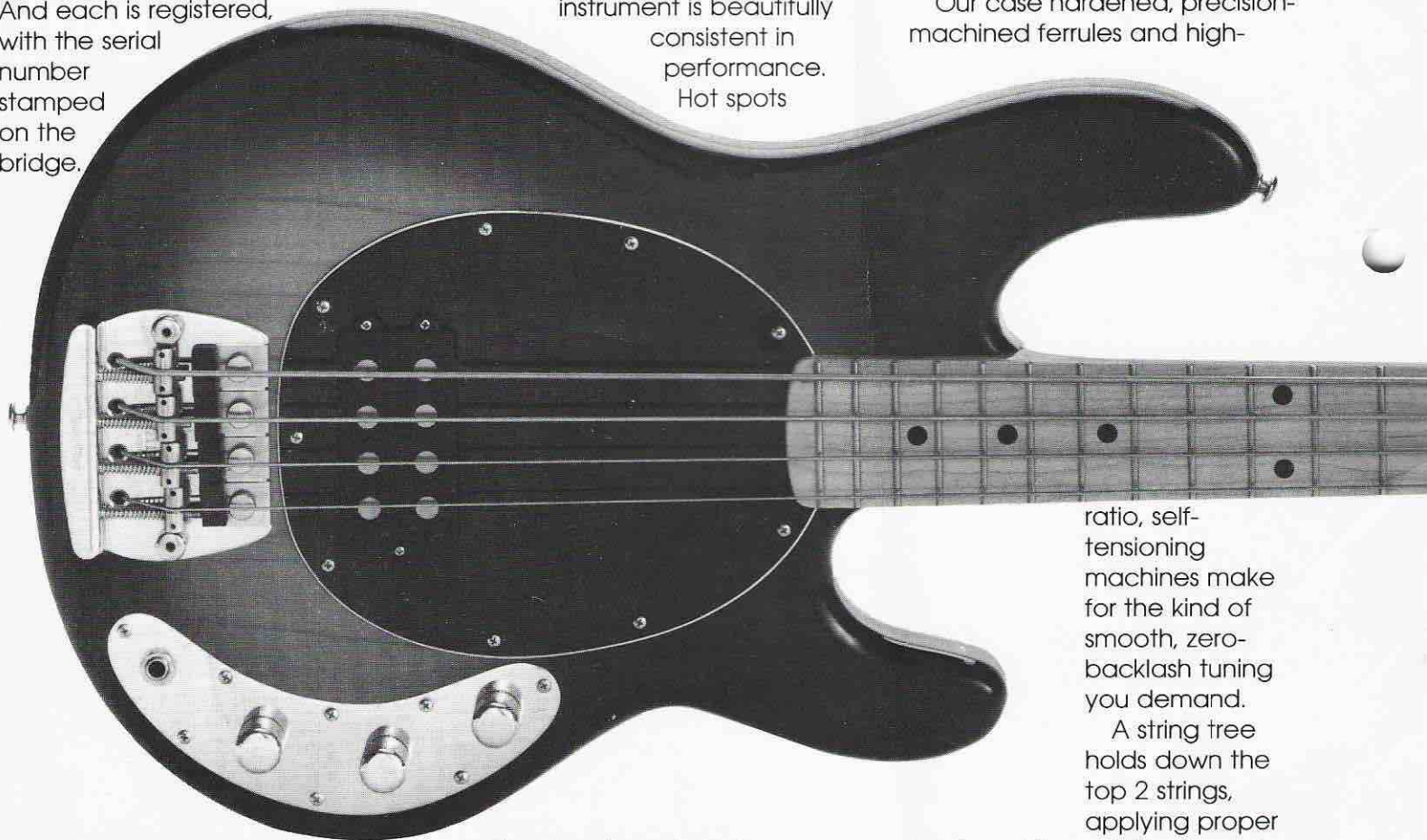
definition. It makes a dissonant sound more easily recognizable, while the unique headstock design reduces head weight and eliminates the need to support the neck as with ordinary instruments. The bass has superb physical balance, making it very comfortable to play.

## THE NECK

Every part of a bass is important, but certainly the neck has the greatest impact on the feel and action of a fine instrument. From the tip of the headstock to the last fret, Music Man necks are built for playing.

## TUNING MACHINES

Our case hardened, precision-machined ferrules and high-



With Music Man, you not only get your money's worth, you get a musical instrument of enduring quality for a lifetime of proud ownership.

The Sting Ray is so versatile you can get almost any sound you want—from crisp, to a full, round bass, from warm and mellow to bright, biting, and

or dead spots are held to a minimum through careful neck design. Regardless of where you play on the neck or what type of strings you use, the harmonics "pop out" and the sound is never dull. The Sting Ray is much easier to play in tune than most basses, a fact attributable to its superior clarity and

ratio, self-tensioning machines make for the kind of smooth, zero-backlash tuning you demand.

A string tree holds down the top 2 strings, applying proper tension at the nut. The tree also shortens the effective string length between the nut and tuning post, reducing the tendency for unwanted sympathetic vibrations. There are two reasons why the tuning key for the first string is placed on the opposite side of the headstock. (1) it gives better overall balance

to the bass, and (2) it permits the string to be shorter, further minimizing the chance of sympathetic vibration between the nut and the string post.

The nut itself is crafted from rock-hard melamine, precision notched to match the angle of the strings. This combination of design factors reduces the tendency for the instrument to go out of tune. By allowing extra wood thickness, we add plenty of strength to the critical junction of the headstock and the neck.

### FRETS

There are 21 nickel-silver frets which allow the instrument to be played to "E." Many of the round-wound and stainless steel strings that are popular today cause accelerated fret wear, which the nickel-silver alloy has been chosen to prevent.

### THE BODY

Designed for maximum playing comfort, the lightweight, laminated ash or poplar body has a double cutaway that

allows full access to all frets. Improved, deep-recess strap buttons provide positive grip on the strap and avoid enlarged strap holes for increased security.

### BRIDGE

Strings pull through the rear of bridge and are routed to force the saddles against the bridge in a way that maximizes sustain and eliminates unwanted vibration. The heavy tooled-steel bridge has two 1/4" bolts that fasten to brass inserts in the body, as well as four heavy-gauge wood screws that further improve tone and increase sustain. The bridge saddles are made of stainless steel to resist corrosion and rust. In addition, there are 2 allen screws

per saddle for individual height, and a third for individual string length. All screws are recessed within the saddle to avoid interference with picking or muting styles, and the entire bridge assembly is designed to eliminate rough edges and increase playing comfort.

Another special feature of the Sting Ray Bass is that it has an individual mute for each string. These mutes are located just forward of the bridge saddles. Each is equipped with a thumb screw which adjusts the tension of the mute pad against the string. This allows you to change the degree of string damping to obtain different sustain characteristics.

### PICKUPS

A single hum-cancelling, high-output pickup is tri-mounted to give a full range of vertical and tilt adjustments. The pickup uses powerful Alnico-V magnets for high output, and tightly-wound, impregnated coils for less

feedback. This wide-response pickup provides maximum sustain and a "fat" or full sound. Together with the built-in preamp, Music Man pickups provide adequate level to drive any bass amp or separate instrument preamp to full output.

### PREAMP

The Sting Ray's integral, battery-powered preamplifier makes separate tone controls (one for treble and one for bass) possible while eliminating interaction between tone and volume controls.

The low impedance output of the preamp isolates the tone controls and pickups from the cord capacitance and enables you to use longer cords without

a loss of treble response (highs) or signal level. It also provides greater compatibility with effects boxes than is presently available on most conventional guitars. Another advantage of the preamp is its high output level, which is more than double that of basses without a preamp. This allows you to get maximum sound levels out of your amplifier with an excellent signal-to-noise ratio. The low impedance and high output level means you can plug directly into any mixing console and get the right sound, whether recording or playing live.

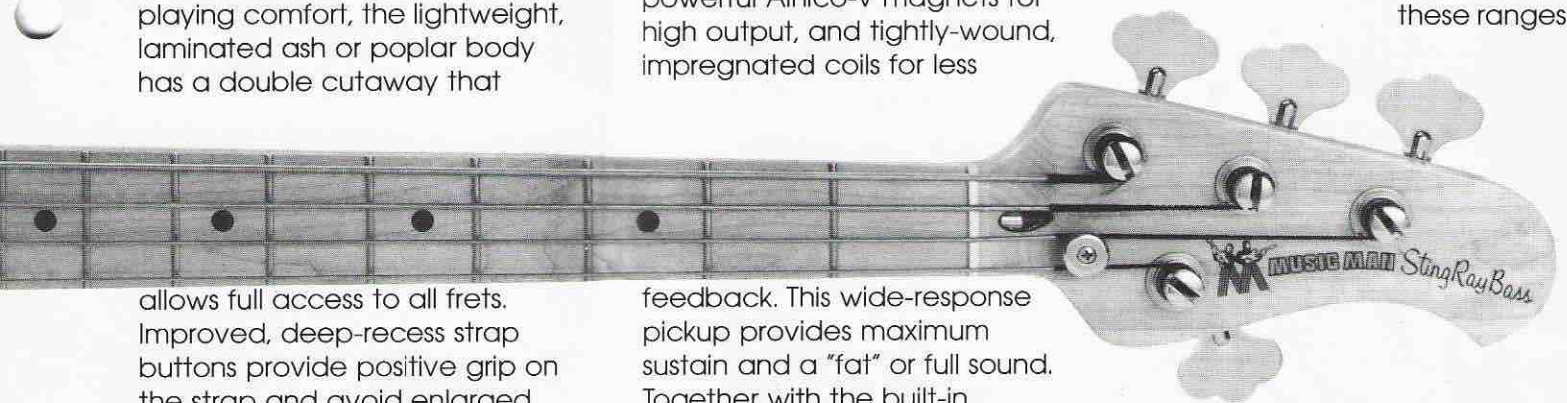
The tone controls work in the principle of active EQ (equalization). Without a preamp, EQ would be accomplished through passive filters which work by subtracting various ranges from the tonal spectrum. Music Man's active EQ gives you the ability to subtract and boost these ranges.

### OUTPUT JACK

The preamp output is brought to a standard phone jack designed to hold any phone plug securely and turn off the preamp when you unplug the cord. The preamp's power consumption is extremely low, however, and a battery's life is essentially its shelf life (normally 2 to 3 years depending upon type).

### FINISH

A handsome and durable finish is applied to the neck and body. The choices of glossy finishes are: natural, sunburst (a 3-color burst), white, and black.



# STING RAY—GRAPHITE NECK -CUTGLASS

The problems of the traditional wooden neck have plagued instrumentalists for decades—necks vulnerable to variations in atmospheric conditions, temperature, and humidity in addition to lack of strength, rigidity, and resistance to vibration. The search for a more perfect neck for the solid body instrument has resulted in a variety of answers, all with their own distinctive shortcomings. Aluminum, for example, is rigid and lightweight, but cold to the touch and sensitive to temperature change. It wasn't until the development of carbon graphite for the aerospace industry that the ideal material finally became available.

Carbon graphite is a fiber known for its inherent strength and rigidity as well as its stability under extreme variations of climate and temperature. Its strength eliminates the need for the truss rod that prevents warping in a wooden neck. Wooden necks also vary in

weight due to the inconsistent density of wood. Graphite necks are made by a molding process where consistency is controlled and the neck made hollow, thus effectively controlling the weight and offering a better balanced instrument.

This new bass is an exceptionally comfortable instrument to play, combining the advantages of revolutionary carbon graphite technology with the excellent definition of Music Man's classic Sting Ray bass. Graphite necks manufactured under a patent licensed to Music Man exhibit a rigidity that resists sympathetic

vibrations with the strings that are largely responsible for loss of sustain and the annoying dead spots that hamper all solid body instruments made with wooden necks.

Perhaps the greatest single advantage of graphite is the improvement in tonal characteristics. Harmonics with the Sting Ray Graphite are much stronger and take on a bell-like quality. The response is smooth up and down the neck. In fact, the same note may be played with a different string on a different fret position with a remarkable similar tone, giving the instrument "presence" and a more balanced tone.

For the professional musician who constantly strives for optimum clarity and range, the Sting Ray Graphite establishes a new standard of excellence.



# SABRE BASS

The Sabre bass offers tremendous flexibility to suit individual playing styles, action characteristics, and string selections. Incorporating many of the same quality features described with the Sting Ray, the Sabre bass is meticulously crafted to provide exceptional tonal range and control. As with the Sting Ray, each is registered, with the serial number stamped right on the bridge. The instrument body is also contoured to fit most players for greatest comfort. If the player takes a little time to master the various controls, he will obtain a variety of sounds not available on other instruments.

## BRIDGE

The bridge is a heavy die-casting. The unique Music Man string offset design allows the strings to pull through the lower end of the bridge casting where they are offset to force the saddles against the bridge, resulting in a rigid, vibration-free assembly that yields maximum sustain. The diecasting has a recessed well that houses the 4 individual bridge saddles and eliminates side-slipping. A second well in the bottom of the bridge is imbedded in the body and is designed to transmit the string tension to the end grain of the wood, anchoring the bridge to the body and further increasing sustain. The bridge saddles are made of stainless steel to resist corrosion and rust. In addition, there are two stainless steel screws per saddle for individual height, and a third for individual string length. All screws are recessed within the saddle to avoid interference with picking or muting styles, and the entire bridge assembly is designed to eliminate jagged or rough edges.

## PICKUPS

Two hum-cancelling, high-

output, shielded pickups are precisely mounted for lead and rhythm sounds. The pickups are tri-mounted to give a full range of vertical and tilt adjustments. Both pickups are individually sized to compensate for their positions along the diverging strings and thus locate the magnetic pole pieces directly beneath their respective strings.

The pickups use powerful Alnico-V magnets for high output and hand-wound lacquered coils for less feedback and better hum rejection. These wide-response pickups provide maximum sustain and a "fat" or full sound. Together with the built-in preamp, Music Man pickups provide adequate levels to drive any bass amp or separate instrument preamp to full output.

## SELECTOR SWITCH

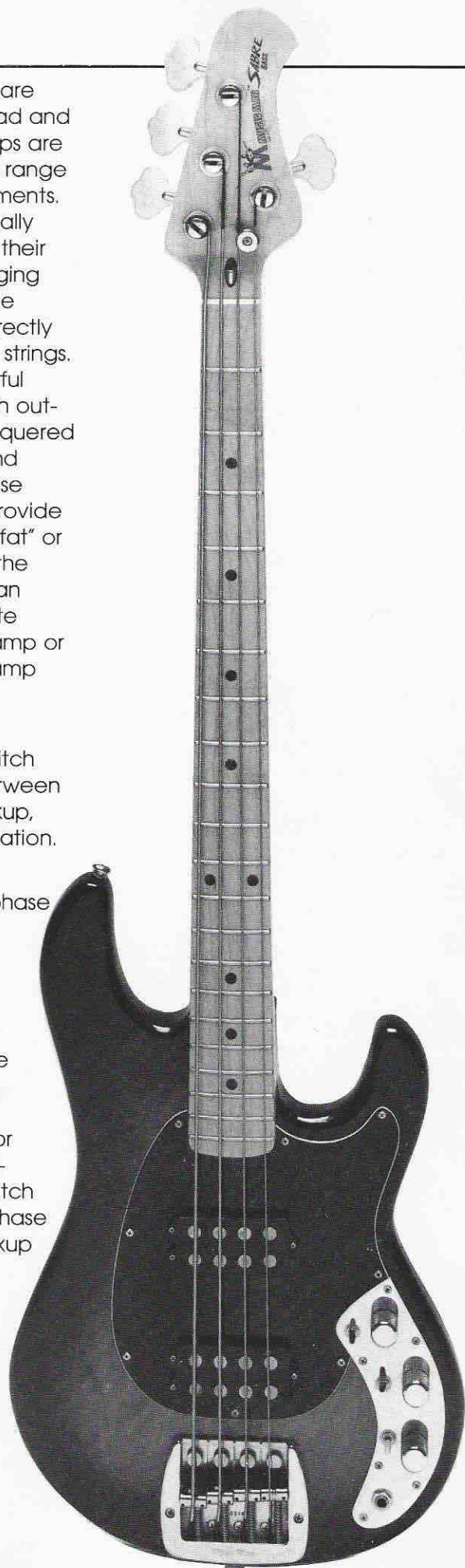
The pickup selector switch allows you to choose between the lead and rhythm pickup, or to use them in combination.

## PHASE SWITCH

Described simply, the phase switch puts the lead and rhythm pickups out of phase with one another so that a positive pulse from one is cancelled by a negative pulse from the other. This results in a thin, bright sound. On many basses the pickup selector switch must be set in mid-position for the phase switch to function. The Sabre's phase switch works with the pickup selector in any position.

## FINISH

As with the Sting Ray, a handsome and durable finish is applied to the neck and body. The choices of glossy finishes are: natural, sunburst (a 3-color burst), white, and black.



# BASS AMPLIFIERS

## SERIES 120

Portability is the key to these powerful solid state amplifiers that offer outstanding performance in a compact, wedge-shaped cabinet designed to project clean, crisp sound up and away from the floor.

The low-noise preamp features a selectable soft limiter to increase sustain and reduce distortion, as well as soft clipping circuitry for a warmer sound when the amp reaches full output. There are boost and cut shelving-type treble and bass controls with flat settings in the center, and a five-band equalizer that offers center frequencies spaced evenly across the spectrum for a smooth, natural sound. The circuitry is of an active, low-noise design that remains appreciatively quieter, especially in the "cut" position, than circuits of active gyrator design.

The volume control, which acts as two controls in one, simultaneously varies output

volume and input sensitivity, allowing a wide range of input levels while maintaining an optimum signal-to-noise ratio.

The rear panel includes a line level preamp output and a power amp input (along with the speaker output jack) for use as an effects loop or with recording, sound reinforcement mixers, as well as for bi-amping or slaving amps together.

Music Man Series 120 bass amplifiers deliver 80 watts R.M.S. into 8 ohm loads or a full 120 watts R.M.S. into 4 ohm loads. Featuring complete short circuit and thermal overload protection, the power amp is designed as an easily-removable module for quick servicing in the field.

The 120 bass amplifier series packs a heavy-duty 12 or 15-inch Music Man (or optional Electro-

Voice EVM™) loudspeaker in a compact acoustic suspension enclosure incorporating a welded steel chassis, plated hardware, and a lock-jointed solid pine cabinet.

## SERIES 100

One-hundred watts R.M.S. of vacuum tube power combine with wide equalization and balanced direct line out in the popular 100 series of bass amplifiers from Music Man.

The low-noise preamp contains soft clipping circuitry for a warmer sound when the amp reaches full output. Boost and cut shelving-type treble and bass controls with flat settings in the center are complemented with a quasi-parametric mid-range stage that features a boost and cut control as well as a frequency control to vary the



center frequency and help create different voices for the instrument.

A five-band equalizer offers center frequencies evenly spaced across the spectrum for a smooth, natural sound. The circuitry is of an active, low-noise design that remains appreciatively quieter, especially in the "cut" position, than circuits of active gyrator design.

The volume control, which acts as two controls in one, simultaneously varies output volume and input sensitivity, allowing a wide range of input levels while maintaining an optimum signal-to-noise ratio.

An active true balanced output (which can be unbalanced as well) is provided from either a TRS quarter-inch jack at line level or microphone level via a floating XLR connector. This line out signal can be either PRE EQ (useful as a direct instrument signal) or POST EQ (useful for

slaving other amplifiers).

Music Man Series 100 bass amplifiers deliver 100 watts R.M.S. of vacuum tube power to drive either 4 or 8 ohm loads. Featuring a unique self-balancing design, the power amp will run cooler, be less sensitive to tube tolerance, and produce more power output per tube than most other tube-type amplifiers.

As with all professional quality Music Man amplifiers the 100 Series Bass amplifiers feature heavy-duty plated hardware and lock-jointed, solid pine cabinets.

## ENCLOSURES

Music Man Bass Amp Heads are suitable for use with several professional quality Music Man

speaker systems, such as the Music Man 115BX. This enclosure is a ported bass reflex type, with one heavy-duty Music Man or optional Electro-Voice EVM™ 15" speaker. The 115BX can be used with either keyboard or bass and is power rated at 100 watts. Music Man also offers sealed acoustic suspension type enclosures, including the 412B. This enclosure features four heavy-duty Music Man speakers and is excellent for use with keyboard or bass. The 412B is power rated at 300 watts. These enclosures are constructed of lock-jointed solid pine with heavy-duty plated hardware.



# SPEAKER ENCLOSURES



Music Man RH Series speaker enclosures combine the properties of a front-loaded system and a reflex horn to provide a full range of sound. These cabinets come in four basic configurations:

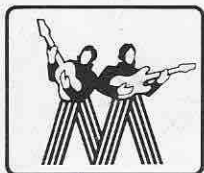
**The 210 RH** is the most compact, with two specially designed 10-inch Music Man or optional Electro-Voice EVM™ speakers to offer high performance in a compact size.

**The 212-RH** is the best general purpose cabinet. It performs well in both bass and keyboard applications and is available with either two Music Man or Electro-Voice EVM™ 12-inch speakers.

**The 115-RH** cabinet also performs well with bass and keyboards and offers the musician the sound of a Music Man or optional Electro-Voice EVM™ 15-inch speaker.

**The 118-RH** is a high output, wide range unit designed for coverage of large areas. The 118-RH contains one 18" Electro-Voice EVM™ speaker, and can be stacked in pairs as with all speakers in the RH Series, for much higher output levels and better coverage.

The RH Series cabinets all feature lock-joint construction, heavy duty hardware, and the attention to detail for which Music Man is famous.



**MUSIC MAN, INC.**

*The Sound of Success*

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