#### MPX G2 SPECIFICATIONS

Input/Output Mono 1/4" 1meg $\Omega$  unbalanced, with analog soft clip-Instrument input:

> 24-bit A/D:

ping circuit and front panel input level control Minimum +2.2dBu for full scale, maximum +10dBu Levels:

Stereo, 1/4",  $50k\Omega$  unbalanced, with analog soft clip-Return Inputs: ping circuit and ganged level control on rear panel Minimum -10dBu for full scale; maximum +18dBu (for +4

nominal inputs); +18dBu with rear level pot at minimum A/D:

Main L and R Outputs: 1/4" TRS balanced (2), XLR 3-wire balanced (2) Nominal Level: Front panel adjustable to +4dBu Maximum Output Level: Balanced: +18dBu into 600Ω;

unbalanced: +21dBu into 100kΩ

D/A: 24-bit

**Send Output:** Mono, 1/4" unbalanced

Nominal Level: Software adjustable to +4dBu Maximum Output Level: +18dBu into 100kΩ

D/A: 24-bit

Audio Performance

20Hz to 20kHz; +1 to -1.5dB for Input to Send Frequency Response: +1 to -1.5dB for Return to Output

<0.01%, at 1kHz nominal output level; 0.01% at 1kHz THD+N:

Insert Returns to Main Output; 0.01% at 1kHz Input to Main Outputs

Dynamic Range:

-110dB minimum, Input to Send with Relay Bypass on; -120dB Input to Send with Noise Gate on; -97dB typical, Instrument to Main Outputs in Bypass

Sample rate: 44.1kHz Return Mix:

Footswitch:

Safety Compliance:

With Return Mix option selected, MPX G2 mixes the analog Aux inputs with the post converter output signal

Throughput delay w/out send/return loop: Input to Main Output <3ms, nominal

Internal Audio Data Paths

24-bit A/D, 24-bit D/A Conversion: DSP:

32 bits

Control Interface MIDI:

7-pin DIN connector for MIDI IN/powered bidirectional remote; 5-pin DIN connectors for MIDI THRU and OUT 1/4" TRS phone jack for 3 independent footswitches 1/4" TRS phone jack ( $10k\Omega$  min,  $100k\Omega$  max impedance)

Foot pedal: Remote Power In: 2.5mm barrel for 9VAC remote power

General

Dimensions (WHD): 19.0" x 1.75" x 13" (483 x 45 x 330mm) 19" 1U standard rack mount

Net: 7.2lbs (3.2kg); Shipping: 11lbs (4.98kg)

100-240VAC, 50-60Hz, 25W, 3-pin IEC power connector **Power Requirements:** Operating temperature: 32° to 104°F (0° to 40°C) Environment:

Storage temperature: -20° to 170°F (-30° to 75°C) Humidity: maximum 95% without condensation UL1419 and CSA 22.2 No. 1-94 (UL and C-UL marks); EN60065 (TUV-GS and CE marking per Directive

73/23/EEC)

EMC Compliance: FCC Class B; EN55022 Class B and EN50082-1 (CE marking per Directive 89/336/EEC)



MPX G2 Rear Panel

#### MPX R1 SPECIFICATIONS

23" x 8" x 3" (58.42 x 20.32 x 7.62 cm) Dimensions (WHD): Weight: 9.5 lbs (4.3 kg) All metal chassis, switches and expression pedal

Construction: 1/4" TRS jack supports up to 3 on/off switches; 1/4" TRS External control inputs:

jack for external expression pedal 1/4" TRS jack connected to two internal programmable Internal relays:

MIDI:

MIDI OUT/REMOTE: 7-pin DIN connector (compatible with standard 5-pin MIDI) provides phantom power and two-way MIDI communication with the MPX 1 or MPX G2 MIDI IN: standard MIDI IN can also be used to merge a second MIDI input stream when MIDI OUT/REMOTE is connected

MIDI THRU: can be set to pass MIDI from either MIDI IN

or REMOTE ports

9 VAC,1A wall transformer provided; 25-foot 7-pin DIN cable for phantom power via MPX 1 or MPX G2 Expression pedal: Vintage mechanical design, all steel construction, pro-

Display

rammable toe switch 3-digit LED indicates program number and tempo rate MIDI functions:

Relay mapping:

MPX functions:

MIDI bank and program select for up to 300 programs; Switches and pedal(s) can be individually set to transmit any controller. The status of each MIDI switch is indicated with a green LED. Tap tempo can be transmitted as MIDI Clock

Different relay states can be memorized for each of 990 MIDI program numbers. Relays can operate as on/off 1-4 or as two independent on/off

switches

When connected to an MPX G2 or MPX 1 (V2.0) via 7-pin cable, LEDs automatically display the following each time a new program is loaded: Program number; Master Bypass state; A/B program is loaded. Program name, what a pyeas state, it is state; Tempo rate; State of each effect block (Pitch, Chorus, EQ, Mod, Delay, Reverb on MPX 1; Gain, Chorus, Delay, Effect 1, Effect 2, EQ, Reverb on MPX G2); effect on=green, effect bypassed=red, effect not active=off.

The state of any active effect can be instantly changed by pressing its associated switch.

Dedicated switches control A/B and Tap.



MPX R1 Rear Panel

Trademarked names are used solely for the purpose of describing certain sound effects. All registered trademarks are the property of their respective manufacturers.



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### MPX G2 - the Ultimate Guitar Effects Rig

The MPX G2 incorporates the best features of a custom guitar rig in a single package with a radical new approach to guitar effects processing.



esigned for guitarists who care about their tone, the MPX G2 can be used with any amp. Two separate signal paths let you put effects anywhere you want – in front of your amp, in its effects loop – or both. The MPX G2 lets *you* choose where the effects go – 76 in all – as many as seven at once. And we've loaded it with the world's best guitar effects: analog distortion and overdrive, authentic recreations of vintage stomp boxes: Tube Screamer®, UniVibe®, Octavia®, Mu-tron III®, Cry Baby®, Phase 90®, Dyna Comp® and more, plus studio effects like JamMan™ (Lexicon's classic 20-second looper), Intelligent Pitch Shift, Tap Delay, Chorus, Flange, Rotary Speaker and Lexicon Reverb and Ambience.

Dynamic Gain<sup>™</sup>, Lexicon's new analog distortion technology, provides screaming overdrive and warm distortion tones which can be used as an analog stomp box in front of your amp, or as a stand alone preamp for direct recording or live performance.

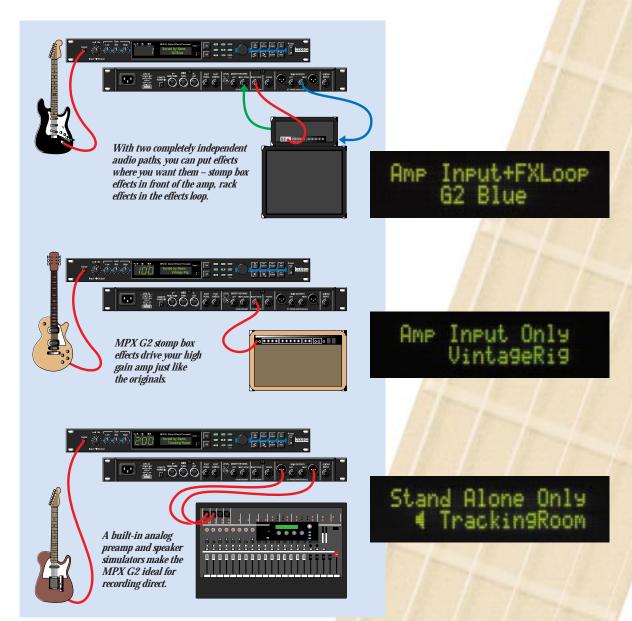
Not only is the MPX G2 loaded with authentic analog and digital effects, it also contains all of the *hardware* components needed in a custom guitar effects rig – all of the switching, routing and control devices that make everything work together. Add the MPX R1 MIDI Remote Controller for stomp box control of the

MPX G2, and tapping one footswitch can reconfigure the entire rig. Built-in features like a relay bypass and an analog noise gate give you pure guitar sounds when you want, and let you keep any high-gain amp totally under control. A built-in effects router lets you place MPX G2 effects in front of the amp or in its effects loop. We've even included dedicated tone controls and a built-in chromatic tuner.

300 presets fully exploit the capabilities of the MPX G2 and a DataBase feature allows you to quickly find programs designed for specific styles such as Rock or Blues, to find all of the programs using certain effects, such as Overdrive, or to find only programs suitable for stand alone operation. Complete editing control lets you customize presets or make new ones from scratch, design your own Soft Row parameters, copy effects into new programs, and put effects into any sequence or routing configuration you want.

#### Lots of Depth with a Simple Interface

Like all Lexicon processors, the MPX G2 gives you as much depth of control as you're ever likely to want, while keeping the details out of your way. Surface control of the MPX G2 is straightforward and intuitive, with lighted buttons indicating the state of the unit and alerting you to extra features available from the front panel – features like Tap tempo, effect bypass, parameter glide and program switching, as well as access to the most useful parameters of every program from a dedicated Soft Row button.

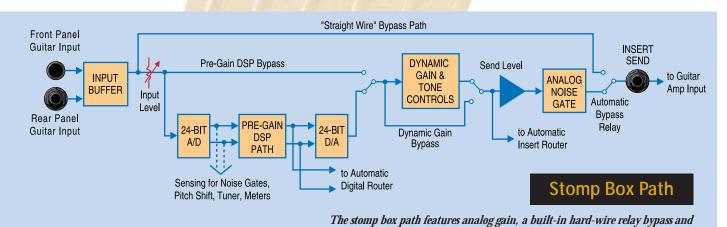


The MPX G2 is designed to work with any amp - or with no amp at all.

Presets are grouped for use in the effects loop of an amp, with an amp that has no effects loop, or direct to a console.



# The MPX G2 can be split in two for use with any amp – or used alone for direct recording



Customize Your Own Rig – We'll Wire it for You

Real-time metering of levels

is shown with a 7-segment

display representing each effect block. Overload is

indicated by a + symbol

at the top of each meter.

he MPX G2's analog Dynamic Gain<sup>™</sup> effects are dedicated to the stomp box path. The other 70

effects can be placed anywhere on either the stomp box or rack effects path, and each one of the 300 MPX G2 programs can have its own unique combination of effects, distributed on either path. Depending on which effects you've selected and where they're placed, the MPX G2 will automatically route around unnecessary analog circuits as well as A/D and D/A converters, optimizing the signal-tonoise ratio and dynamic range in every program.

Dedicated analog tone controls allow instant modification of the Gain effect in the current program. And a built-in meter array allows

you to simultaneously view guitar input level, main output levels, and the levels of all individual effect blocks. This lets you check levels throughout the entire effect chain, or track down overload in an individual effect.

### Put Stomp Box Effects in Front of your Amp

For most guitarists, the essential effects are the stomp boxes that go in front of your amp. Effects like Tube Screamer, Cry Baby wah, Dyna Comp, Octavia, Uni-Vibe and Mu-tron III became classics

because of the way they sound and feel when hooked up between a guitar and the front end of a great amplifier. The MPX G2 lets you experience these vintage effects with completely authentic versions placed directly between your guitar and the input to your amp. And we give you unique ways to control the noise that's the inevitable result of using stomp boxes with a high-gain guitar amp.

an analog noise gate - absolute requirements for any professional guitar effects system.

An analog hard-wire relay bypass lets you literally unplug effects that aren't in use — leaving just you, your guitar and your amp. An analog noise gate is located at the final stage of the stomp box path — the last stop before the signal leaves the MPX G2 to enter your amp. Because the sensing for the noise gate is at the *input* of the MPX G2, you can set the threshold of the gate very low — much lower than the noise level at the output. This lets you play a wide range of dynamics without triggering the gate. In fact, the gate is factory preset to be a manual gate that you can turn on and off with your guitar's volume control. When you want silence, just turn your volume off. Otherwise, play on with no compromise to touch, tone or sustain.

#### Put Rack Effects in the Effects Loop

Connecting the MPX G2 Insert Returns to your amp's effects loop Sends lets you place classic rack effects like delays, reverb, pitch shift and EQ in your

Insert Mode: Parallel or Mix only Analog Dry Path from Dynamic Gain Main ALITOMATIC Outputs Post Bypass Level Pre-Gain ROUTER → AUTOMATIC DSP DIGITAL Post Level 24-BIT **ROUTER** STEREO Guitar Amp GAIN DSP NOISE Effects Loop  $\rightarrow \otimes \rightarrow \oplus$ SPEAKER EFFECTS Post Level **SIMULATOR** (mono) Post Bypass Level Sensing for Noise Gates Diatonic Harmony, Meters ack Effects Path Insert Mode: Parallel or Mix only Analog Dry Path

The rack effects path lets you put studio effects like reverb, delay, pitch shift and EQ after the Gain. A digital noise gate in front of the rack effects allows delay and reverb tails to ring out naturally.

guitar amp's effects loop. A digital noise gate at the beginning of the audio path lets you control noise without muting the tails of post gain effects like delays and reverbs.

#### **Direct Recording**

The MPX G2 is the most complete direct recording processor available for guitar. Its built-in, fully programmable, analog preamp delivers a wide range of dynamic tone. A complete set of programs, carefully crafted for stand alone applications includes an Amp Collection, of more than 20 different amps, each with the clarity and dynamics that can only be delivered by analog circuitry. Equally stunning are the Studio Spaces and Studio Effects programs. Studio Spaces make use of Lexicon's world class reverb and ambience algorithms to give you a collection of virtual recording rooms that put air and space around your guitar — either while you're tracking, or during mix down. This is like adding several live tracking rooms and a few vintage reverberators to your studio. You get **Tracking** Room, Acoustic Room, Jazz Club, Solo Room, Rhythm Rooms, Tape-delayed Plate, a PCM 60 **Room** and **Gated Verb**, as well as a program that lets you vary the position of a close microphone in front of a high-gain amp. Studio Effects are a collection of classic studio effects for recording guitar tracks.

Each of these programs has an appropriate amp variation built in, but you can easily copy any of the sounds from the Amp Collection into any of the Studio Spaces or Studio Effects. What's more, using the MPX G2's built-in analog speaker simulator, you can use any external preamp or processor as the tone source for any of these recording treatments.

#### **Better Noise Gates**

Guitar amps are designed to add gain and distortion to an otherwise clean and quiet signal. Cranking up the gain is like increasing the magnification power of a microscope - little things get much bigger, and even the quietest effect will become noisy. While you're playing through an effect, the noise is masked by the guitar (a sound we all know and love), but when you stop playing, the stage level of the noise can be a distraction.

A standard analog noise gate, inserted between the last stomp box and the input to the guitar amp, is at the noisiest point on the signal path, and its threshold has to be set higher than the noise level for it to be effective. This means that the gate interferes

with playing dynamics - it won't respond to light playing, it cuts off sustaining notes prematurely, etc.

Because the sensing for the MPX G2's analog noise gate is located at the input of the MPX G2, the threshold can be set much lower than the noise level at the output, letting you play a much wider range of dynamics without triggering the gate.

A second noise gate (this one is digital) is located in front of the rack effects path and is controlled by the same sensing as the analog gate. The digital gate will silence any noise generated by the guitar amp's preamp. The analog and digital gates combined, provide up to 120dB of attenuation - more than enough to tame even the loudest of stage amps.

### Stomp Box Control of All MPX G2 Effects



With a single cable connection to an MPX R1, loading each MPX G2 program is like loading a different custom pedal board rig.

#### Additional MPX R1 Features

A single cable provides two-way communication with the MPX G2. Each numbered switch can be programmed to send: up to eight MIDI Program Change messages (each on its own channel), up to 16 MIDI Control Change messages

(each on its own channel) and the on/off state of both relays. An additional MIDI Input allows other MIDI messages to be merged with the R1/G2 message stream and several additional jacks allow connection of an external expression pedal and as many as three additional footswitches.



### Analog Distortion and Overdrive, Authentic Vintage Effects and Lexicon Reverb

he MPX G2 contains a "Hall of Fame" assortment of cool guitar effects: analog distortions and overdrives, vibey phasers, vintage wahs, compressors, tape-style echoes, chorus, flangers, pitch shifters and world class Lexicon reverbs and ambience. 76 effects in all, organized into seven types (one for each of the Effect buttons on the front panel). Any active effect can be bypassed just by pressing the front panel button.

Gain

All classic overdrive and distortion pedals are analog and so are our seven Gain effects.

Six of these are designed to be used as stomp boxes — in front of a guitar amp, where they'll deliver the same kick as the classics that inspired their design. We've even included a "Feel" control for the Overdrive effect that lets you dial in the amount of sag associated with different types of batteries and power supplies. A fully-featured, programmable recording Preamp lets you dial in tones from super clean to modern high gain, and a built-in analog speaker simulator puts on the finishing touch with 16 cabinet variations. All seven Gain effects can be tweaked with dedicated front panel tone controls.



Effect 2

Under these buttons is a collection of vintage effects including UniVybe, Red Comp, Orange Phaser, Wah (Type "C" or "V"), Octabuzz, Tremolo and Sweep Filter — each faithful to

the sound, feel and vibe of the original. Other essential effects include Pitch Shifter, Diatonic Harmony, Detune, Auto Panner and Volume Pedal.



No guitar rig would be complete without chorus and flangers. We include a

multivoice stereo chorus, stereo and mono flangers, as well as rotary and other time-based modulation effects.

We've packed in all kinds of Delay stereo and mono delay effects: ultra clean digital delays, warm echoes, ducking delay, auto looper and a JamMan<sup>™</sup> phrase looper. (Maximum delay time for JamMan and mono effects is 20 seconds; 10 seconds for stereo effects.) Delay times can be set rhythmically with the Tap button, or set with time values. A special Feedback Insert allows other effects to be placed inside the delay's feedback loop (a studio secret used to create some classic delay textures).



A tone tool box for polishing and shaping your sound. These include stereo and mono parametric equalizers (1, 2, 3 and 4-band) as well as a crossover and frequency splitter.



A full suite of Lexicon's classic stereo reverberation and ambience effects. Each Reverb effect:

Hall, Chamber, Plate, Ambience and Gate creates a unique spatial aura. Dedicated processing resources allocated to the reverb effects guarantee that you can always load any reverb into any program, regardless of which other effects are loaded.

#### **Effect Ordering and Routing**

The MPX G2 provides extremely flexible effect ordering and routing within each program. Ordering and routing of the effect blocks is completely independent in each program. Effects can be placed in any order, simply by "dragging and dropping" them on a simple visual map.



The MPX G2 allows you to "drag and drop" effects in

#### Editing

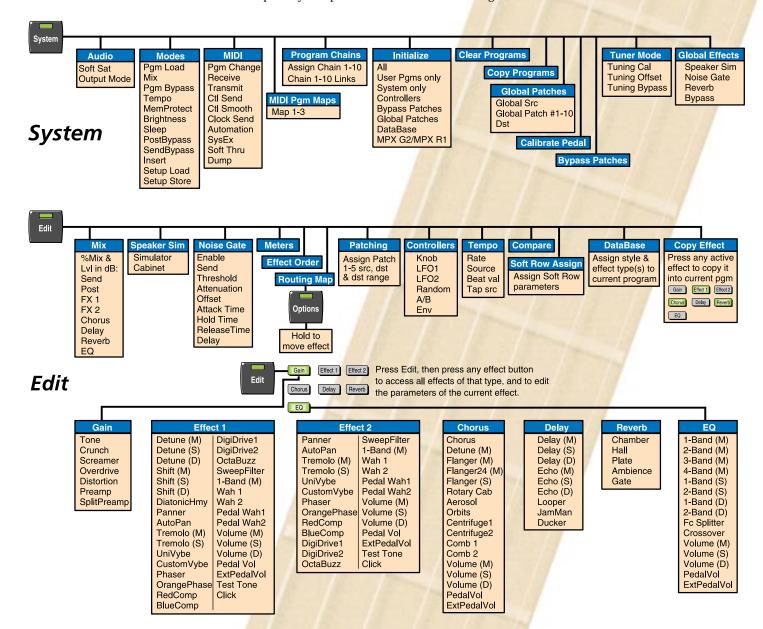
Editing MPX G2 programs is simple. A front panel Soft Row button takes you directly to the most useful parameters of each program. The front panel System and Edit buttons give you access to all of the controls you need to completely reconfigure your system or to create completely new programs.

#### **Patching System**

The ability to dynamically control effect parameters is an essential aspect of creating great sounding, useful programs. Aside from the controls built into certain effects, the MPX G2 patch system provides an assortment of controllers that can be assigned to any effect parameter (up to five per program). These controllers include LFOs, A/B Glide and Tempo.

#### **MIDI Implementation**

In addition to standard bulk data dump and load functions, the MPX G2 provides MIDI control of A/B and Tap, as well as all effect parameters. Tempo parameters synchronize to incoming MIDI clock, or the MPX G2 can transmit its own MIDI clock based on front panel Tap tempo. And all MPX G2 internal control sources (LFO's, pedals, etc.) can be transmitted as MIDI Continuous Controller messages.



## Plug and Play Programs for Stage and Studio

ith easy effect bypass, a programmable toe switch, Tap-controlled tempo and A/B glide, MPX G2 programs are very flexible - and we've packed them with so many features, you won't have to load a new program whenever you want to change gears. You'll find that you can play one program for an entire tune - maybe even an entire set.

The 250 factory programs are designed to cover a wide variety of performance situations and to serve as

a starting point when you want to create your own programs. Programs are organized into three groups – for use with amps that have an effects loop, amps that don't have a loop, and for direct recording or use with a power amp and guitar cabs.

Each group is broken down into smaller sections, with programs designed to capture well-known effects, different playing styles, signature sounds of classic amps, and a collection of studio effects for recording.

#### Amp Input & FX Loop (Programs1-99)

Designed with effects in both the stomp box path and the rack effects path, these include groups of programs organized to work as custom effects rigs (like Vintage Rig, Pitch Rig, Tremolo and

Filter Effects), analog gain effects to be used as stomp boxes in front of your amp, and a complete Effects Collection of single effects (like Univybe, Octabuzz and Blue Comp) to use as building blocks for your own programs.



#### Top Nineteen (Programs 1-19)

G2 Blue **Guitar Solo** Cordovox **Power Chords** Vybe/Flange

**AnotherBrick EnvFilter LP TremoWah** JamMan VH Rig

**Rotary Cab** Little Wing **TechnoChords Pedal Swell** 

**Unchained** Stomp! OctaWah

Kiss the Sky

Slide Comp

#### **Amp Input Only** (Programs 100-149) A complete set of programs designed to be used with

amps that don't have effects loops, these give you

access to a wide variety of stomp box and studio effects, including a complete set of Analog Gain programs and a classic FX Collection.



#### FX Collection (Programs 120-139)

Univybe Octave Fuzz Phaser **EnvFilter** C-Wah:

**Blue Comp** Vintage Trem IPS TapeSlap **Space Echo** Octabuzz

**OrangePhase Gray Flange** RedComp S/H Pedal V-Wah

**Modern Trem Tap Echo Env Wah StereoChorus Classic Detune** 

#### A Program Example

The very first program in the box, G2 Blue is an example of the versatility of a single program. Designed to be used with the MPX R1, it loads with a slow Univybe (the classic dreamy swirl effect that players like Hendrix and Trower are known for) in front of the amp, and a volume pedal in the effects loop to let you change loudness without affecting your tone. Volume changes are smooth as silk, with no zipper noise as you sweep the pedal.

When you depress the toe switch, the

Univybe and volume pedal are bypassed and, at the same time, a little reverb is added, a Wah (modeled on a vintage Cry Baby) is turned on, and an analog boost is added to the signal flowing into the guitar amp input. The analog boost adds some extra kick so the wah tones really speak up. The toe switch lets you go back and forth between Hendrix-style rhythm playing and aggressive wah riffing in the same program — and you never have to take your foot off the pedal

But wait, there's more. This program also

contains a Gain effect that's bypassed when the program loads. When you want to take a solo over the top, one button push lets loose a Screamer analog overdrive. More magic is programmed into the A/B switch. In this program, we've programmed a B version to include tape echoes and more reverb decay. And you can press Tap twice to set the delay time.

All of these variations are designed into the first program - and there are 249 more ready to load, as well as 50 spaces for programs of your own design.

#### Stand Alone (Programs 150-250)

The Stand Alone programs are designed to be used with the MPX G2 connected directly to a mixer or power amp. The programs include signature sounds from artists (like **Jimmy P...** and **Satch...**), the essential sounds from specific songs (like **Kiss the Sky**) and a selection of playing styles from **Surf** to **Techno**. An **Amp Collection** contains amp tones that range from vintage to modern and everything in between, each with the clarity and dynamics



that can only be delivered by analog circuitry. A suite of **Studio Spaces** gives you a collection of virtual recording rooms, and our Studio Effects give you the classic studio guitar track effects.

#### Amp Collection (Programs 180-199)

TransChorus1 AmericanClean British 60's Little Amp AmericanOD British 70's TransChorus2 **Phone Filter** British 80's Jazz Bright **VibroCab AmericanGain** AmericanMod Roadhouse Jazz Dark Cordovox Acoustic **Taxmania** ModernHiGain **Rotary Cab** 

#### Studio Spaces (Programs 200-209)

**TrackingRoom** RhythmRoom R **Acoustic Room MicPlacement** Jazz Club Tape->Plate Solo Room PCM 60 Room RhythmRoom L **Gated Verb** 

#### Studio Effects (Programs 210-219)

**Classic Detune EnvFilter LP** Comp + Chrs **Dual Delay** Stereo Phaser **EQ** Delay Env AutoPan **Analog Echo** InfiniteEcho **Env AutoWahs** 

#### Instant Gratification -**Endless Inspiration**

It's everything you want, and there's nothing else like it – analog distortion, vintage stomp boxes, studio effects, separate audio paths, relay bypass, analog and digital noise gates - all in one plug and play unit that works the way you want it to. With its balanced mix of stage and studio effects, familiar controls and programs designed to light your fire, the MPX G2 will take you as far as you want to go - with no compromise in authentic tone and feel.

or over twenty-five years, Lexicon has **\Gamma** been the leader in digital audio reverberation and effects. With more experience than any other digital manufacturer, it might seem surprising that we would introduce a processor with analog gain and effects. You might expect us to stay all digital, all the time. The fact is, Lexicon's primary commitment is to bringing you the tools you need to do your best work

whatever the technology - and, for guitar, that means both analog and digital effects.

The Custom Shop line is dedicated to raising the standard for guitar gear - giving you

> access to the customized rigs that dreams are made of. From the way it sounds to the way it feels, the MPX G2 delivers on this promise

We sweat the details so you can do what you do best - now get out there and play!