

YAMAHA

RMS50

RHYTHM SOUND MODULE



Superlative rhythm sound for the MIDI professional

To professional musicians — and all MIDI enthusiasts who take their percussion seriously — Yamaha presents the RM50 Rhythm Sound Module. One of the best-sounding, most versatile rhythm tone generators ever created, the RM50 packs a host of powerful features that will surely satisfy your need for the finest in MIDI percussion.

Front Panel



- AWM2 tone generation and a 22-bit D/A converter provide impeccable reproduction of high-caliber samples.
- Two-element voice architecture and a voice layering capability enable richer sound textures.
- High-quality programmable digital filters and a broad range of editable voice parameters give you full control over your sound.
- An on-board sound capacity of 1,128 voices and 128 rhythm kits offer an unprecedented range of sonic options.
- A data card slot doubles the user memory capacity, adding room for an additional 628 voices and 64 rhythm kits.
- Three wave card slots allow the use of waveform data released for a variety of instruments.
- An optional wave RAM area accepts waveforms copied from wave cards or dumped from MIDI samplers.
- A multi-channel MIDI driver lets you play different rhythm kits or voices on each MIDI channel.
- Key macro functions speed access to frequently-used editing and utility functions.
- Six trigger inputs and an audio-to-MIDI converter let the RM50 function as an electronic drum module.
- Stereo output plus six individual output jacks provide a full range of output options.

Rear Panel



Superb Rhythm Sound

Any pro musician who knows digital instruments will tell you that sound quality and realism count for more than a lot of sophisticated features. Well, the RM50 gives you both. It begins, of course, with Yamaha's second-generation Advanced Wave Memory tone-generation system. The acclaimed AWM2 technology takes 16-bit waveform data sampled at 48 kHz and converts it to audio using a high-resolution 22-bit D/A converter. The results are spectacular: sound which rivals — and often surpasses — the quality of the finest compact disc players.

The RM50 comes with 133 waveforms, including an assortment of rhythm instruments sampled under a variety of conditions. Three wave card slots let you use the additional data on the wide selection of wave cards released for the RY30, the SY77, and the SY55. Also, an internal expansion slot accepts an optional 0.5 megabyte memory board that you can use as a sample RAM area. This option allows you to copy data from wave cards or dump samples from MIDI sampling synthesizers for use in creating your own original voices.

```
UTL/WaveRAM/SampleDump
Mode = normal<
```

Advanced Voice Architecture

To its foundation of superior sound quality, the RM50 adds advanced features such as wave layering capability and programmable digital filters, plus an unprecedentedly broad range of editable voice parameters. For starters, a voice can consist of a combination of two waveform-based elements. The ability to layer waveforms lets you create rhythm sounds of stunning tonal complexity. You can combine elements in different proportions, such as the head and snare components of a snare drum, to create extremely realistic instrument simulations. Or you can create voices that alternately play two similar elements to reproduce, for example, the subtle differences between the right and left stick sounds of a drum roll.

```
U/Wave/Num [RM Lizard]
P 002:BDDryH <F
```

And that's not all. The RM50's wide range of editable voice parameters gives total control over even the most subtle nuances of the sounds it produces. It begins with the same basic set of parameters offered by Yamaha's renowned RY30 Rhythm Programmer, then adds an LFO, element-specific pitch EGs, a repeat delay function, and a number of new velocity curve settings. Also, in addition to new attack and release parameters, it features a punch setting that holds the attack level to emphasize a voice's onset. Never have you been given so much control over the detailed nuances of your rhythm sound!

Enormous Voice Capacity

One of the more outstanding features of the RM50 is its huge capacity for sound variety. Its internal memory alone holds 500 preset voices; 500 preset variations which let you edit parameters such as pitch, filter cutoff, and decay rate to suit your taste; and 128 fully editable user voices. And to help you put all these voices to work, it also gives you 64 preset and 64 user rhythm kits. In short, there's plenty of room for all the rhythm variety you'll ever need!

```
C01/Mode=rhythm kit
Kit :I-1 Rock 1 <
```

This tremendous internal data capacity is augmented by full expandability. In addition to three wave cards, the RM50 also accepts a data card that will hold 500 variations, 128 internal voices, and 64 rhythm kits, plus system setup data — effectively doubling the available user memory. And of course there's also a bulk dump function that lets you store the RM50's voice, rhythm kit, and system setup data in another MIDI device.

```
UTL/MIDI/Transmit bulk?
Type = all <
```

Multi-channel MIDI Driver

The RM50 possesses a multi-channel MIDI driver that allows you to play a different rhythm kit in response to data received on each of the sixteen MIDI channels. You can also assign channels to play pitched voices, much like a conventional tone generator: the RM50 will remember one rhythm kit selection and one pitched voice setup for each channel. And, of course, your MIDI control options extend beyond simple note information, to include control of individual voice parameters using pitch bend, after-touch, and control change messages.

```
C02/Mode=pitched voice<
Vce :P-SE 49 BA KillB
```

Key Macro Function

The RM50 lets you record up to ten keystroke sequences, or "macros", that speed and simplify your access to the functions you use frequently. There's no need to run through the same lengthy key sequences over and over again: just press the MACRO key followed by another of the RM50's keys, and you're there in an instant!

```
KEY MACRO/Mode= record
Macro key = UTIL( 3)<
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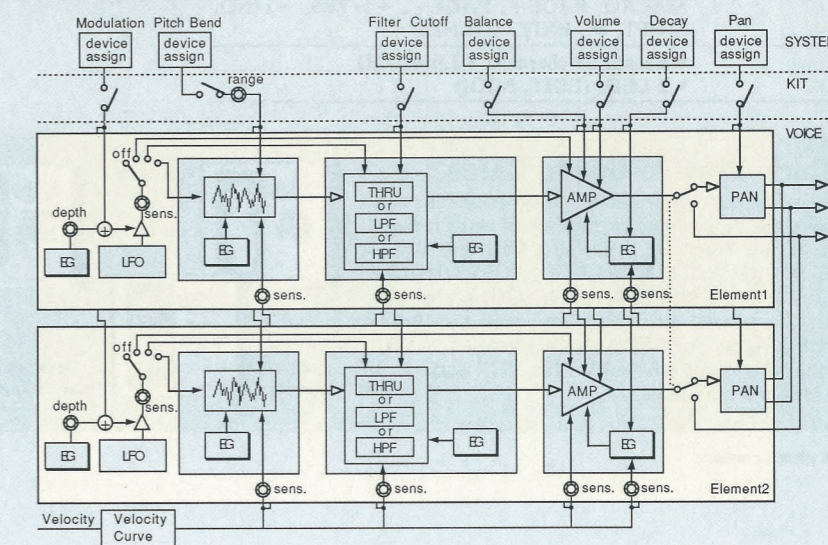
Features for Acoustic Drummers

The RM50 also possesses six audio trigger inputs and a built-in audio-to-MIDI converter that let you control its voices using analog controllers such as drum pads, pickups, or audio tape recorders. Each trigger can be assigned to play a note in the RM50 rhythm kit selected for one of the 16 MIDI channels. The RM50 also transmits the MIDI data for trigger signals from its MIDI OUT port, so that you can use its trigger inputs to control external tone generators as well.

The RM50 also features a click function that you can use as a handy practice metronome. This function can be set to play any of the RM50's voices, either independently or in sync with a MIDI sequencer. Together with the trigger inputs and the audio-to-MIDI converter, this click function helps to make the RM50 as useful to the acoustic drummer as it is to the MIDI system programmer.

```
UTL/Sys/Click/Sw
on <:P-SD 108 SS Count
```

Voice Structure



Voice List

*-BD	RM AirHd RM Tight DR Kikin DR Hard DR Boom DR Danc1 DR Danc2 DR Danc3 DR Danc4 DR Jazz1 DR Maple DR Pop1 DR Byter DR LoCal DR Beef DR Clean DR Click DR Fuzzy DR Kinta DR Punch DR Round DR Slap1 DR Slap2 DR Solid DR Stud1 DR Stud2 DR Thump DR Woof DR Arid DR Hugu DR Live JZ Lite JZ DbHd1 JZ DbHd2 JZ Loose JZ Hard JZ Swing JZ Swang JZ Smith RM Big RM Pow RM Boo RM Def RM Lizr RM Crnch RM Piles RM Open	FX Klang FX Hell FX IYF FX Trash FX Zilla FX Atom FX Futur FX TNT FX Cicad FX Delay	JZ Brsa1 JZ Swpa1 JZ Brsb1 JZ Swpb1 EL Down JZ Brsa2 JZ Swpa2 JZ Brsb2 JZ Swpb2 JZ Swsh2 FX Ugly FX Pain RM Bunn RM Crank RM Karim RM Obese RM Diet RM Tubby RM Custr RM Basic DR Kindl DR M.O.R DR Met1 DR Brass DR Steel DR Rim2 DR Tite1 DR Tite2 DR Maple DR Real1 DR Norm DR 400 DR Marly DR Danc1 DR Danc2 DR Danc3 GT HiFab GT Short GT LoFab GT Sucks DR Arid1 DR Arid2 DR Arid3 GT EatIt GT Whip GT Tasty GT Anvil GT Stape DR Real2 GT Erake GT Fable JZ Playr JZ Cool	AN 919 AN 818 AN 929 AN 828 EL Power EL Simm FX Tech FX 9Roll FX Ugly FX Pain FX Undys FX Igor FX Spit FX Sneez FX Cough FX Bakup FX Ruff FX Jam FX Spew FX Hack SS Ambi1 SS Ambi2 SS Dryer SS Dry SS Count	DR Danc4 DR Jaz1 DR Jaz2 DR Jaz3 DR Jaz4 RM Bop1 RM Bop2 RM Bop3 RM Bop4 RM Met1 RM Met2 RM Met3 RM Met4 RM Met5 RM Met6 RM Klip1 RM Klip2 RM Klip3 RM Klip4 RM Wet1 RM Wet2 RM Wet3 RM Wet4 RM Hard1 RM Hard2 RM Hard3 RM Hard4 RV Atom1 RV Atom2 RV Atom3 RV Atom4 RV Hugu1 RV Hugu2 RV Hugu3 RV Hugu4 RV Stik1 RV Stik2 RV Stik3 RV Stik4 RV Stad1 RV Stad2 RV Stad3 RV Stad4 RV Ambi1 RV Ambi2 RV Ambi3 RV Ambi4	GT Tite1 GT Tite2 GT Tite3 GT Tite4 AN Sine1 AN Sine2 AN Sine3 AN Sine4 EL Simm1 EL Simm2 EL Simm3 EL Simm4 EL Phew1 EL Phew2 EL Phew3 EL Phew4 FX Hurt1 FX Hurt2 FX Hurt3 FX Hurt4 FX Cyn1 FX Cyn2 FX Cyn3 FX Cyn4 ET Buru1 ET Buru2 ET Buru3 ET BStik FX Wack1 FX Wack2 FX Wack3 FX Wack4 FX Rvrs1 FX Rvrs2 FX Rvrs3 FX Rvrs4 FX Flng1 FX Flng2 FX Flng3 FX Flng4 FX Solo	HH RYPd1 HH RYCI2 HH RYOp2 HH RkCIR HH RkCI HH RkQrt HH RkHlf HH RkOpn HH RkPed HH AmCls HH AmOpn HH AmPed HH VxCls HH VxOpn HH TecC1 HH TecC2 HH TecC3 HH TecO1 HH TecO2 HH Pitch HH Stand HH AnCl1 HH AnOp1 HH AnCl2 HH AnOp2 RD Medi1 RD EdgCp RD Bell RD Flat RD Rock RD RckBl RD Jazz1 RD Jazz2 RD Long RD Medi2 RD Sizzl RD FxBel RD FxRid CR Crsh1 CR Crsh2 CR Dark1 CR High1 CR Dark2 CR High2 CR Rock1 CR Rock2 CR Choce	CS Spls1 CS Spls2 CS Spls3 CH Chin1 CH Ride CH Short CH Chin2 CH Gong CH Strok FX Big1 FX Gong FX Elekt FX Revrs FX Tecko PC Yoru3 PC Yoru4 PC Bott1 PC Bott2 PC Bott3 PC Bott4 PC Clap1 PC Clap2 PC AnaMu PC Snap PC MeloB PC Metal PC PopM1 PC PopM2 PC PopM3 PC PopM4 PC Tekd	LP Mute1 LP Heel1 LP CgHi2 LP CgLo2 LP Slap2 LP Mute2 LP Heel2 LP Cow1 LP Cow2 LP Cow3 FX Gung FX Scene FX Stab FX Gongy FX Robot FX R2D2 FX RvCrns FX Guiro FX Shak1 FX Shak2 FX Snark FX Spark FX Alien FX Steps FX Stix FX Wiggy FX Falic FX Afro FX Blow FX Log FX Metal FX Pip FX Revrs FX Rezzo FX Whist FX BDMth FX S1Mth FX S2Mth FX S3Mth FX CYMth FX HCMth FX HOMth FX Type FX Heart FX Tape BA Nasti BA KIIB BA Softa BA 30	FX Bubbl FX Canes FX OilDr FX Sheet FX Sword FX Stab FX Gongy FX Robot FX R2D2 FX RvCrns FX Guiro FX Shak1 FX Shak2 FX Snark FX Spark FX Alien FX Steps FX Stix FX Wiggy FX Falic FX Afro FX Blow FX Log FX Metal FX Pip FX Revrs FX Rezzo FX Whist FX BDMth FX S1Mth FX S2Mth FX S3Mth FX CYMth FX HCMth FX HOMth FX Type FX Heart FX Tape BA Nasti BA KIIB BA Softa BA 30	Rock 1 Rock 2 Rock 3 Studio 1 Studio 2 Metal Pop 1 Pop 2 Country LatinRock LatinPerc Brazil Funk R&B 1 R&B 2 JazzBig JazzSmall JazzBrush Dance 1 Dance 2 House 1 House 2 Rap MouthKit Hip Hop World 1 World 2 Gated 1 Gated 2 Fusion 1 Fusion 2 Reggae 1	Reggae 2 Techno 1 Techno 2 Analog 1 Analog 2 Reverb Stadium SfxKit 1 SfxKit 2 G MIDI YAMAHA FX Dry Zone 1 Dry Zone 2 RoomZone 1 RoomZone 2 RevZone 1 RevZone 2 Kicks 1 Kicks 2 Kicks 3 Snares 1 Snares 2 Snares 3 Toms 1 Toms 2 Toms 3 Cymbals 1 Cymbals 2 Perc 1 Perc 2 SpecialFX1 FX/ Stacks
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DR: Dry
JZ: Jazz
RM: Room

RV: Reverb
GT: Gated
AN: Analog

EL: Electric
FX: Sound FX
SS: Side Stick

HH: HiHat
RD: Ride cymbal
CR: Crash cymbal

CS: Splash cymbal
CH: China cymbal
LP: Latin perc

PC: Other perc
BA: Bass

Rhythm Kit List

Rock 1 Rock 2 Rock 3 Studio 1 Studio 2 Metal Pop 1 Pop 2 Country LatinRock LatinPerc Brazil Funk R&B 1 R&B 2 JazzBig JazzSmall JazzBrush Dance 1 Dance 2 House 1 House 2 Rap MouthKit Hip Hop World 1 World 2 Gated 1 Gated 2 Fusion 1 Fusion 2 Reggae 1	Reggae 2 Techno 1 Techno 2 Analog 1 Analog 2 Reverb Stadium SfxKit 1 SfxKit 2 G MIDI YAMAHA FX Dry Zone 1 Dry Zone 2 RoomZone 1 RoomZone 2 RevZone 1 RevZone 2 Kicks 1 Kicks 2 Kicks 3 Snares 1 Snares 2 Snares 3 Toms 1 Toms 2 Toms 3 Cymbals 1 Cymbals 2 Perc 1 Perc 2 SpecialFX1 FX/ Stacks
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Specifications

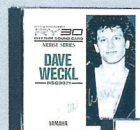
Tone Generator	16-bit AWM2, 48 kHz sampling frequency, digital filter, reverse sample playback
Polyphony	16 notes maximum
Note Layering	2 elements/voice, 2 voices/note
Rhythm Kits	64 preset, 64 internal, 64 card
Voices	On board: 500 preset, 500 variation, 128 internal Data card: 500 variation, 128 internal Wave card: 32 user × 3
Waveforms	133 preset, 64 internal (max.), 64 wave card (max.) × 3
MIDI Controllable Parameters	Volume, pitch, pan, decay, element balance, filter cutoff frequency, LFO modulation depth
Controls	• Rotary volume knob • 12 panel switches (PLAY, EDIT, UTILITY, MACRO, PAGE+, PAGE-, +1/YES, -1/NO, SHIFT, ►, EXIT, SOUND)
Displays	• Backlit 24-character × 2 line LCD • 2 LEDs (EDIT, MIDI)

Expansion slots	• Data card • Wave card × 3 • 0.5 Mbyte expansion memory board (internal)
Connectors	• Headphones × 1 (+3.5 dBm, 150 Ω) • Stereo out L/MONO, R (+5 dBm, 10 kΩ) • Individual out × 6 (+5 dBm, 10 kΩ) • MIDI IN, OUT, and THRU • Trigger input × 6
Power Supply	• US & Canadian models: 120 V, 14 W • General model: 220-240 V, 14 W
Dimensions (W × H × D)	480 × 44 × 346.7 mm (18-7/8" × 1-3/4" × 13-5/8")
Weight	Approx. 5 kg (11 lbs)
Optional Accessories	MCD64 and MCD32 Memory Cards SYEMB06 0.5 Mbyte Expansion Memory Board

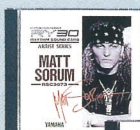
All specifications subject to change without notice.

Optional Rhythm Sound Cards

You can expand the RM50's musical potential using the waves and voices from rhythm sound cards released for the RY30. Your choices include: RSC3001 (PERCUSSION), RSC3002 (FX DRUMS), RSC3003 (HOUSE & RAP), and RSC3004 (DANCE & SOUL), plus the cards in the popular Artist Rhythm Sound Card series pictured at right. The RM50 also lets you use waves from the wave cards released for the SY77 and SY55 Music Synthesizers.



RSC3071
Dave Weckl



RSC3073
Matt Sorum



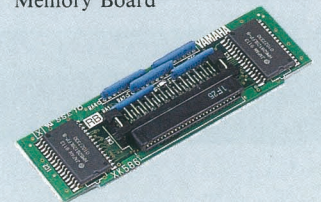
RSC3072
Tommy Aldridge



RSC3074
Peter Erskine

SYEMB06

0.5 Mbyte Expansion
Memory Board



For details please contact:

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