



## MIDJAY PLUS - HOW TO USE

The main functions and technical specifications of the MiDJay Plus are so similar to those of the standard MiDJay, we provide the standard version owners manual for all basic instructions and technical information. The upgraded benefits and features of the MiDJay Plus are: The new large size display, a much larger 80 Gigabyte Hard Drive, 140 new Styles and an amazingly authentic new sound generator offering twice the performance of the standard model.

This addendum booklet provides all additional information required to operate the upgraded MiDJay Plus (and information relating to updates 3.00 and 4.00 of the standard MiDJay). Here you can find the MiDJay Plus technical Tables, complete list of styles, Orchestral Voices, Drum Sets and Drum Loops with corresponding Bank and Program Change data.

### WARNING ! AC POWER ADAPTOR

To connect the MIDJAY PLUS to the wall socket you will need the supplied KETRON AC Power adaptor. Use of other AC adaptors could result in serious damages to the instrument's power circuit. So be sure to use only the KETRON power adaptor and ask for right kind.



## MIDIJAY MANUAL UPDATE RELEASE 3.0

### MIDI FILES LINKED & SYNCHRONIZED TO WAVE WITH TEMPO CONTROL!

An amazing feature which allows you to link and synchronize a Wave file (or SFX, or DJLoop) to a Midi file. Here is how to do this:

Select a midi file and press Play. As it plays, press the Record button and choose your wave (or SFX) to be linked to the Midi file.

Press the ENTER button whenever you want the Wave file to be played with the Midi file. Of course you can repeat this procedure all the time with different waves as well, hence having more than one wave file linked to a Midi file.

When completed, press STOP to stop the Midi file. Midijay will now display a 'Saving procedure message.

Press Save to confirm it! This procedure stores a Sys Exclusive message located for any wave "linked" to this midi file.

If you get a wrong "insert beat" of the wave ...don't worry about it!! You can further import this midi file (via USB or floppy) into a sequencer editor such as Cubase ® , Logic ® , Cakewalk® or another and edit these Exclusive message.

Now you can move these events in the correct bar, measure or duplicate Sys Exclusive (Copy and paste) on this midi file as you would like! The best performance will be obtained when you use a loop (or several loops) on a midi file and ... at last ... change the BPM of it!! Here how to do this!!

1) Choose a midi file (e.g. with 120 BPM)

2) Choose one (or more) loops with the same BPM (of 120).

3) Following the procedure as described above, "link" these loops to the midi file as you like!

4) Then edit these events, by using an external Sequencer, and move it where you want (bar, measures, tick) and save it.

When this procedure has been completed play your own midi file on the Midijay with the Wave and DJ LOOP sliders "active", and change the Tempo with the alpha dial.

N.B. Don't forget to turn up the volume on these sliders!

Of course this feature will be also be recognized if you put Exclusive messages manually on the tempo track from an external sequencer (Hyper Edit).

**N.B.** Loops used for this purpose MUST have (before any tempo modifications) the same BPM as that of the midi file it's to be liked with. We recommend (to avoid latency) to place the Wave or Loops used in the same folder as that where the Midi file resides.

### MARKER OPTION NOW AVAILABLE FOR WAVE FILES

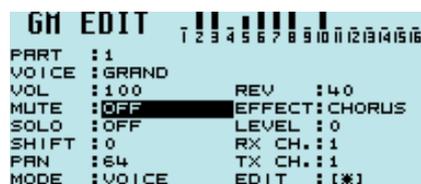
It's now possible to use Markers (just as previously only with Midi files) on Wave as well. These Wave files should have the markers inserted (using external Audio Editor software such as Sound Forge ® , Wavelab ® , etc). The Wave file is also playable just as a Midi file. You can instantly "jump" from any part/'mark' of the song to another easily (e.g. chorus or intro or else) by using Play list button, (0-9).

### METER LEVEL WITHIN MIDI FILES

A very useful new feature within the Midi Files.

Play a midi file and then browse by going to GM Edit menu (Edit, GM Part). You'll now get a new Level meter display on the top of the screen showing all midi parts and their corresponding activities .This grants instant access to Midi parts to be edited.

By using the Play list buttons (0-9), you can instantly select any of the first 10 tracks of midi file (Direct access). You can then use the ">" data button, or the Data Value wheel to select the other tracks (11-16).



### QUICK SAVE PROCEDURE ON MIDI FILE

Often when using a Midi file, you might need to modify some parameters such Volume, Controllers, Program and others. Now you can Save this information 'on the fly' and avoid "Stopping" the midi file as you play!! The Save procedure will be executed without any interference to the Midi file being played.

### IMPROVED FUNCTION EDIT MIDI FILE SECTION

There are new options available in this menu.

These functions are self explanatory.



### ASSOCIATE AND SAVE LEAD VOICE ON MIDI FILE

You can "link" a Voice within a Midi file to be played via an external device such as master keyboard, accordion etc each time you select and play this Midi file. Select a midi file (e.g. New York New York) and press Start; than as the song plays, select a Voice (Piano, Organ or else) and press Save to link this information. From now on, anytime you play back this Midi file, Midijay will recall the voice previously stored and it will instantly be ready for use with the Midi file.

## DISPLAY PLAY BAR

On the Wave, Midi file, Mp3 and other main screen, the Midijay display will now show new information such as Transpose, Time left, Bar etc (to turn this on, press Midi file, EDIT, FUNCTION, scroll down to 'Play Bar Displayed' and set this to "ON").



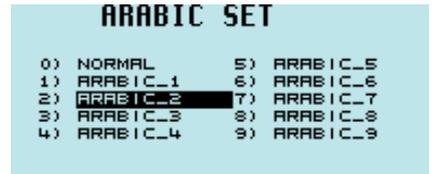
## NEW MICROPHONE AND VOCALIZER LOCK

A new function called "LOCK" on the Microphone and Vocalizer Menu section allows you to "freeze" their parameters in order to ensure your own original settings regardless of any unwanted Midi file modifications.



## ARABIC SCALE

New ARABIC SCALE option fitted within the master MENU (scroll down). Here you'll find 10 templates. The first one (called Normal) is to be considered as a Default (no writing/saving will be possible in this location). The others (1-9) are programmable. Select one of these and press EDIT to access the "Arabic Set Edit screen". Now you can modify the temperament by using the alpha dial. When you have set all of them, press SAVE to confirm. This information will be stored in the Arabic.ini file (root C:\) and will be loaded each time the unit is turned on.



## MIDI FILE MARKER AND LYRICS AUTO DISPLAY

You can determine if the Midijay should automatically display lyrics and Marker information or not when a file with such information is loaded (press Midi file, EDIT, FUNCTION, scroll to bottom "Marker Enabled" and "Auto Lyrics Displayed". This feature is useful in order to avoid annoying "pop up" views on display screens when not wanted/needed.

## AUTO SPACE AND AUTO PAUSE

We've improved the Folder Auto Play section. By this feature, you can select how Midijay will play the files within the Wave, Midi file and Mp3 folders. Turn on the Folder Auto Play feature and enable the Auto Pause function. This feature will pause the song at the end and will only move on to the next song when initiated by pressing the footswitch (as programmed) or the Start button. Minidisc ® users are experienced with this feature which is there in order to get "preserved" functions on following song. Auto Space inserts a timing space between files on selected folder. This timing (in seconds) can be set by the user with the Alpha Dial once selected. These functions are available only when Folder Auto Play is selected within the current folder. If you select another folder, the settings of this function will be erased.



## TRANPOSE SONG ONLY FUNCTION

This feature allows the Transpose function to impact only the Midi Song and not the rest of the Midijay. When turned on (Midi file, EDIT, FUNCTION, 'Tran.Song Only'), notes received on the Midi Input will not be transposed. Now, you can at least play any Midi song in your favourite pitch or key while you transpose just the song.

## SONG FAST FORWARD AND REWIND

After pressing the Song Position buttons (<< or >>), you can now fast forward or rewind the song quickly using the Alpha data wheel.

## MAIN VOICE OFF FUNCTION (VOX MUTE)

This feature allows you to switch off the Voices of the Midijay while playing the voices of your external controller or midi device. Select this feature from the Footswitch menu. 'Vox Mute' allows you to instantly "turn off" the lead Voice (Grand Piano, Sax etc) currently being played from the Midijay by using the external controller (keyboard, accordion etc).

## TIME STRETCH AND PITCH ON DJ LOOP

At last ...Time stretch and Pitch change is available within the Dj Loop Section. Use this features as used on Waves.

## OCTAVE ON VOCALIZER

We've added an Octave function within the Vocalizer (in place of the Reverb feature).

Select your favourite set on this menu. When the OCATAVE value is set to:

TRUE: Plays the "true" note as received via Midi.

- + 1: Plays notes received 1 octave up
- + 2: Plays notes received 2 octaves up
- 1: Plays notes received 1 octave down
- 2: Plays notes received 2 octaves down

AUTO: "Forces" automatic transpose on +2 when Keyboard Left mode is used or -2 when K. Right mode is used.

DEFAULT: Factory set

### NEW FUNCTIONS ON FOOTSWITCHES MENU

Here you'll find new function assignable to the Footswitches. Beside the Main Voice off (as previously mentioned) we added some new exciting functions such as Major, Minor mode to use in conjunction with the Arranger section.

### RECALL REGISTRATION VIA PROGRAM CHANGE

Now you can recall Registrations via Program change without pressing the relative button on the Midijay. Choose within the Menu Midi Channel RX, Midi channel to use and send program change to select your own Registration.

### ARRANGER CHORD PLAYED FROM PEDALBOARD AND FOOTSWITCHES

As you know, Arranger chords can be controlled by a pedalboard. When you push on the pedal (e.g. a C note), the Arranger section will play a C major chord automatically! Now, assign the chord mode (Minor, 7th or any other) on the Footswitch menu' by using the alpha dial to scroll through the entire table! Beside you can also operate the Pedalboard in the "previous style" as well, i.e. the play style used by organist in the past. Press a C on the pedalboard (Midijay will play a C major). If in the mean time you press a Eb (3rd minor = C + Eb) you'll obtain a C minor chord. With the same related harmonic theory, Midijay will reproduce the relative chord (C + Bb = C 7 and so on!!)

### VOCAL PART LOCK

This feature allows you to "Freeze" a track within the Vocalizer menu used. Select your own track to assign to the Vocalizer by using the alpha dial within the Edit menu of Midi File. The selected track will be "locked" and used to play Vocalizer parts triggered by a midi file.

### FADE OUT

A new Fade Out function has been added within the Crossfade Curve menu. With this feature on, you can Fade out of a single song (Wav or midi file) by pressing the Crossfade button. This function can be saved within the Power On Set Up mode.



### KEYBOARD MODE RESET

This function is located within the Menu EDIT Midifile/Function.

When turned on, it permits one to reset the keyboard status between Style and Midi file play mode. As an example...if you play in the Style mode (with a split point and left part, transposer and so on) and then later go to select Midi file, the keyboard status will be reset to full keyboard (single sound on entire range, ignoring any split point) and any transposer or previous style mode settings will be removed.

### MP3 LYRICS TAG3

This feature allow Midjay to show Lyrics on Mp3 which use Tag 3 format! You could arrange those format by using software to import or insert text onto Mp3 file. Of course Lyrics in Tag 3 format will be displayed by entire lines (not with syllable).

### NEW MONITOR SETTING MENU

On this section you'll find a couple of new features.

These new controllers named as Screen Width and Screen Height are specially designed for a better size adjustment on LCD monitors.

### NEW MIDI CHANNEL RECOGNIZE ON ACCORDION MENU

From now (release 3.0) we'll find a new recognize midi setting on Accordion Play menu on Midi channel. Without file Machine.ini (own setting) on Midjay whenever you'll switch between Accordion or Keyboard Play mode thus always will "force" RX midi channel as default (1 Right, 2 Chord, 3 Bass, 16 Registration).

If Machine .ini is present your midi RX setting will be unaffected anytime you'll select Keyboard or Accordion Play mode.

# MIDIJAY MANUAL UPDATE RELEASE 4.0

## NEW MIDIFILE LINK MODE

From the contextual menu of the MIDIFILE section (which is activated using the Edit key) you can select one of the 4 Link Modes available to define the transition mode between two consecutive midifiles. Manual mode is the normal operating mode of the MIDJAY unit, in which the midifiles are played immediately when the Enter key is pressed. In Sync Live Medley mode, the MIDJAY unit “links” the midifile that you wish to play with the current midifile. In this way the midifile will never be played immediately but will only start when the next beat of the current midifile starts. In this way, you can also play synchronised Medleys produced in real time. You can activate the Tempo Lock function to leave the BPM unaltered when switching between the various midifiles. The function is also activated with the Crossfade on. In this case, the temporal synchronisation between the two midifiles remains, but the classic “fading out” effect will be executed, which is typical in this mode. Using the Tempo Cross function, the BPM is automatically cross faded (metronomic velocity) between two consecutive midifiles. In this mode, the BPM of the current midifile is gradually varied and adapted to the BPM of the next midifile. The function is only activated when the Crossfade key is on and the transition time depends on the length of the Crossfade. Marker Jump Preload mode is used to select the starting marker of a midifile. In particular when it is activated, when you press the Enter key, the midifile is not played but just analysed. At the end of the scanning time, the display of the MIDJAY unit shows the markers within the midifile. By pressing one of the function keys you can start and play the midifile from the point desired. If the midifile does not have a marker, just one corresponding to the beginning of the midifile will be shown. The function can only be used when the Crossfade key is off.



## CROSS FADE CURVES EDITOR

From the menu used to select the CrossFade curves (Slow, Medium, Fast e Fade Out) press the Edit key to activate the environment where you can edit and customise the fading curves available. The parameters in the FALL section define how the outgoing song fades out its volume while the parameters in the RAISE section refer to the incoming song. Let's analyse the various parameters:

- Time: This sets the transition time with a resolution in tenths of a second. The total time of the Crossfade corresponds at the most between the two set for the output curve and the input curve.
- Curve: This defines the transition curve. You can choose between a linear curve (LIN) or exponential curve (EXP)
- Start: This indicates the starting volume of the transition
- End: This indicates the final value of the volume after the transition.

The curves are independent for each section. For example, you can establish different curves between the MIDIFILE and WAVE section. The settings of the curves can be saved in the MACHINE.INI file so that it can be automatically loaded again each time the machine is started.



## NEW MENU FUNCTION OF THE DISPLAY

From the Mode/Function menu (activated using the MENU key) you can access the settings of the Display (Display Settings). Two important functions have been added to this menu:

Lyrics Zoom ...which is used to double the dimensions of the characters used to display the texts and words of the songs on the display of the MIDJAY unit.

When the Zoom function is activated, the display shows 5 lines of words for each page and it is no longer possible to display the PlayBar and the initials of the chords within the midifile.

Txt Auto Load which is used to enable or disable the loading function of the TXT files automatically when a file is started. The MIDJAY unit does indeed enable you to combine a Txt file with any file (Wav, Mid, Mp3) and to pull it up automatically when the song starts. When the current directory contains lots of files, the search and opening time of the TXT files slows down the starting of



the actual song. If you wish to maintain the playing performance and rapidity of the MIDJAY unit also in a directory that contains lots of files, you can switch this function OFF. In this way, the searching function of the song file is inhibited and the starting time of the files selected is drastically reduced.

```
"SE STASERA SONO QUI"
SE STASERA SONO QUI
E' PERCHE' TI VOGLIO BENE
E' PERCHE' TU HAI BISOGNO DI ME
ANCHE SE NON LO SAI
SE STASERA SONO QUI
E' PERCHE' SO PERDONARE
E NON VOGLIO GETTAR VIA COSI'
[ Bb ] -- 0000 J=64 t 3/ 60j
```

```
"SE STASERA SONO QUI"
SE STASERA SONO QUI
E' PERCHE' TI VOGLIO BENE
E' PERCHE' TU HAI BISOGNO DI ME
```

## NEW MENU FUNCTIONS OF THE MONITOR

From the Mode/Function menu (activated using the MENU key) you can access the settings of the Monitor (Monitor Settings). The Txt Line Number function has been added to this menu, which is used to choose the number of lines of words to be displayed on the monitor. When the value is 5, the page shows 5 lines of words and the characters will be larger than those used to display 10 lines. The settings of the monitor can be saved in the MONITOR.INI file by pressing the SAVE key. Remember that the settings of the monitor and of the built-in display are independent.

```
[ MODE/FUNCTION ]
Play Modes
Midi
DSP
Footswitch
Monitor
Metronome click
Display
Master Tune
```

```
Monitor Settings
TEXT LINE NUMBER 5
```

## REGISTRATION FILTERS

In the contextual menu of the REGISTRATION menu (activated using the EDIT key) it is now possible to set which functions and which parameters are to be modified by the Registration. By enabling or disabling the various items within the Registration Filters menu you can establish which parameters will be left unaltered when a REGISTRATION is loaded. The parameters set can be saved in the MACHINE.INI file and automatically loaded again when the instrument is started.

```
C:\REGISTRATION
10 01 REG.REG
[REGISTRATION MENU]
Alphabetical Sort
Number Assignment
Registration Filter
15 A.REG
1. BATUCADA.REG
2. BOOGIE.REG
```

```
C:\REGISTRATION
[REGISTRATION FILTERS]
Style Parameters
Style
Text
Voice
Use Effects
Play Modes
Mike Parameters
Vocal Parameters
```

## DJLOOP CHAIN

This function is used to program and save a sequence of sections for a DJLOOP in order to create an actual song produced using the audio parts of the file. To record a sequence, you need to load a DJLOOP (Enter on the file name), activate the contextual menu using the EDIT key and select the Record Chain item. Once the function is activated, the machine is ready to record. A small R within two square brackets [R] appears at the bottom of the main page of the DJLOOP to point out that the instrument is recording. Start recording the DJLOOP by playing the various sections and stop recording using either the STOP key or the Ending function of the actual file. To play back the sequence recorded, activate the Play Chain item or press key 0 (PLAYLIST section). By pressing the SAVE key, you can save the sequence within the current DJLOOP so that it is then available each time the actual DJLOOP is loaded again.

```
[DJLOOP]
DJL: [ DJLOOP CHAIN ] }
Voi: Play Chain :?
Split : C0 J=120
Transp: --
```

## GROOVE REMIX

With release 4.0 you can synchronise a Groove (.GRV) with a midifile and use it as a rhythmic audio base with which you can remix the midifile in the same way as for the Drum Remix procedure with internal Styles. To associate a Groove with a midifile you need to play the midifile (Enter on the name), select the Groove section with the relative key, activate the Remix procedure with key 9 (PLAYLIST section) (LED lit) and load the Groove required. At the end of the loading time, the Groove will be played in synchronisation with the midifile. The rhythmic and percussion parts of the midifile will be muted. By then pressing key 9 (PLAYLIST section) you can re-activate the rhythmic parts of the midifile and play them over the Groove. While playing, you can alternate the various sections of the Groove (Arr A, Arr B, Arr C, Arr D) or add some fills or Breaks using the relative buttons (Fill, Break). To

```
ANONIMO_VEN -- 100 J=91 [ 6/ 51]
37 A_DemoLink
[ DRUM REMIX PARAMETER]
START BAR : 0
END BAR : 51
8 Cabaret.MID
3 Doctor_Zivago.MID
```

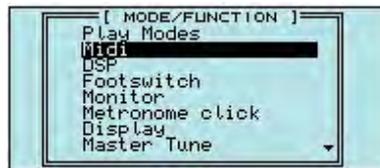
save the combination of the two files and pull-up the Groove automatically when the midfile is started again you need to go back to the MIDIFILE section by pressing the relative key and press the SAVE key. In the window that appears you can add the starting beat of the Groove and the End beat. In this way you can activate the Remix on the beat specified. Press Enter after you have completed the settings. In the Song Setup window that appears, select the mode desired (refer to the user manual for further details on Song Set up) and press Enter. To play back the combination, simply select the midfile, press Enter, wait for the Groove to be loaded and play everything. It takes a large amount of memory to manage the Grooves. If the HD supplied (20 GBytes) has been replaced with one with more memory, the internal RAM memory of the instrument may not be enough to load these files. In such case, the machine would trigger the error message: Out of Memory.

### DRUM REMIX START STOP BARS

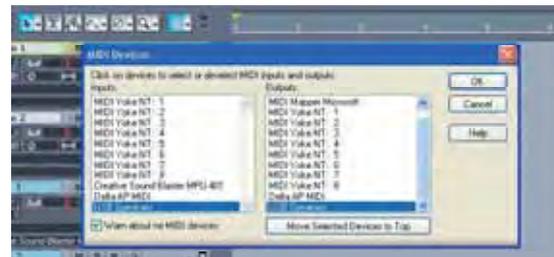
The possibility of establishing the starting and end beat has also been extended to the Drum Remix functions that utilise internal Styles (refer to the user manual for further information on Drum Remix). In this case again, when you save, a page similar to that of the previous point appears in which you can set the parameters required to Start/Stop the rhythm associated with the song. For Midfiles with Drum Remix produced with previous software releases, the Start beat is set on beat 0 while the Stop beat is set at the end of the midfile.

### USB TO MIDI

From the Midi settings menu you can set the USB to MIDI operating mode, which is used to transmit and receive MIDI information via the USB connection. This function proves very useful to connect the MIDJAY unit to a Pc without a midi interface (usually all portable computers).

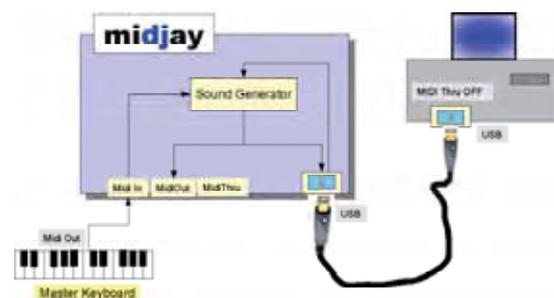


When set in one of the two Modes available (Mode 1, Mode 2) the USB connection of the MIDJAY unit stops working as a removable HD and configures itself to transmit and receive MIDI data. Once you have set one of the two Modes, simply connect the USB cable to the PC and the operating system will acknowledge the device and enable its use as a MIDI peripheral unit. In the case of Windows XP © the MIDJAY unit is acknowledged as Composite Audio Peripheral unit and installed with the name of USB Speakers. To utilise, receive and transmit midi data, you need to set the corresponding device in the software of Midi Sequencing. The illustration that follows shows the correct setting for Sonar ©

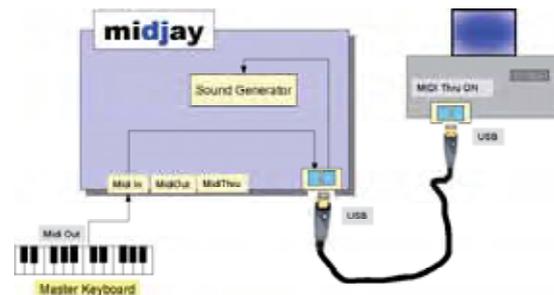


The MIDJAY unit avails of two different operating modes for the Midi USB.

Mode 1 is suitable when you wish to record the midi data produced by the MIDJAY unit on a sequencer. For example, it proves useful when you wish to record MIDI data generated by a style or played by the internal voices and when the MIDJAY unit is set on Play Mode Keyboard. In this configuration, the midi data are sent to the MIDJAY unit, which processes them and sends them back to the PC. In this case, the Soft Thru function of the PC must be DISABLED.



Mode 2 reproduces the classic "cascade" connection between Master Keyboard, Pc and MIDJAY, ideal for playing and recording MIDI sequences. The Midi data are sent to the Pc, which sends them towards MIDJAY or other external devices. The Soft Thru function of the PC must be ENABLED.



### EASY HD RECORDING

This is used to rapidly activate an HD Recording session in whichever contextual menu the instrument is working. By simply pressing the RECORD and START keys together at the same time, the MIDJAY unit starts an HD recording session, generating a file denominated

Untitled\_xxx in the main directory of the WAVE folder (C:\WAVE) and numbering it progressively. The numbering goes from 0 to 999. The function can also be activated with the Footswitch.

## SD5 INTERFACE

The MIDJAY unit can be controlled remotely from the new Ketron SD5 keyboard. Release 4.0 implements a special MIDI communication protocol via which you can view and activate all the files in the HD of the MIDJAY unit directly from the display of the SD5 keyboard. Once communication has been established, the MIDI connections of the MIDJAY unit (IN/OUT) are disabled and used just to communicate with the SD5 keyboard. You can check the status of the connection in the MIDI menu; SD5 Connect ON will appear if communication has been established. To set the Midi connections of the MIDJAY unit back in their normal operating mode you need to manually set the SD5 Connect parameter OFF. Consult the instruction manual of the SD5 keyboard for further information.



## WAVE SONG SETUP

It is now possible to set-up the songs in Wave format. In particular, you can save the transposition set, the algorithm selected (Wave Transpose Mode) and the setting of the Lead Mute in the file. In this way you can customise the key and the sound of a wave file simply and immediately. To save a Setup, select the file and play it (Enter key), execute the transposition by activating the relative box using the Transpose key. If you wish, you can modify the transposition Mode by activating the relative selection menu using the Edit key. Save the Setup by pressing the SAVE key. The next time the Wave file is started, the transposition value and the status of the Lead Mute will be set according to the information saved in the song Setup. It is important to remember that the original file is not modified.

## R.TIME TO WAVE AND R.TIME TO MP3

It is now possible to control the Starting and Stopping of a Wave file and/or Mp3 file using the midi real time controls (Real Time Midi Events). You can control the starting and stopping when playing back a Wave file or an Mp3 file, from an external sequencer or from a keyboard in which the Midi Clock Out function has been activated. The activation of the RTime to Wave and RTime to Mp3 options of the Midi->Filter&Clock menu determines whether the Wave files or Mp3 files respectively are to be affected by this type of event.

## MIDIFILE MASTER TRANSPOSE

It is now possible to set a Global transposition value to be applied to all the midifiles played on the machine. The transposition value set is added to that possibly saved within the midifiles (saved with the Song Setup procedure) or set manually on the control panel of the MIDJAY unit.

## MIDIFILE KICK&BASS BOOST

This allows you to soften or enhance the audio levels of the percussion instruments belonging to the bass drum family (kick) and of the sounds related to the family of electric guitars (fretles, finger etc.) by a preset quantity. The parameter affects all the midifiles being played and can be saved in MACHINE.INI using the PowerOn setup procedure.

## MISCELLANEOUS

The functions of the Power On Setup have been extended, which implement and saves the Audio Local, Format and Sampling Rate parameters in the HD Recording menu.

- Hold the arrow keys down to scroll the current directory forwards by pages and not by single files. The first time you press the key, the current position of a single file is modified, then the position is modified by page in page.
- The functions of the Footswitches have been extended by adding the following functions:
  - Bass&Drum and BassToLowest.
  - Easy Hd recording.
- The possibility of saving the volume of the vocalizer in the Song Setup of a midi base has been added.
- The midi reception of the volume on the channel of the automatic bass has been enabled.
- It is now possible to save the Lower Off within the Registrations
- The synchronisations of the Karaoke on Mp3 files have been optimised.

TECHNICAL SPECIFICATIONS

<b>Panel</b>	Alpha Dial, 8 Volume slider controls, 40 direct easy access tabs, display contrast control.
<b>Display</b>	LCD 320x240 backlit.
<b>Wavetable</b>	Over 380 Voices, 32 Drum sets, 66 Live drums. GM standard.
<b>Disk</b>	80Gb internal hard disk. 3,5 2DD/HD internal floppy disk.
<b>Video</b>	Video interface with RGB Monitor Out.
<b>USB</b>	USB connection.
<b>Player</b>	2 x Midi file, 2 x Wave, MP3 (MPEG 2 Layer 2/3 audio). Play list . Automatic song chain, karaoke and txt. Numerical & alphabetical search, long file names, advanced editing, drum mixer. Full compatibility with SD1, SD1 Plus and XD Series. Intelligent transposer. 16 Markers, lead voice mute (vocal remove), loop, wave to midi file link. Bass / Treble equalization on MP3.
<b>Disk function</b>	Copy, move, rename, delete and new folder functions.
<b>Hard Disk Recording</b>	1 stereo track on wave format, with music and microphone.
<b>DJ Loops &amp; Grooves</b>	Over 100 traditional acoustic and electronic drum loops, backgrounds (stereo wave 44 Kz / 16bit), Dj loops (afro, dance, chill out, lounge).
<b>Arranger</b>	Over 140 styles. Intro, 4 variations, fill, break, ending with riff and drum remix function.
<b>SFX</b>	200 hi-quality sound effects.
<b>HD Bonus Song Library</b>	International hits, instrumental and evergreen. Italian dancing orchestras (wave and midi files).
<b>Microphone</b>	Gain, volume and tone control. Reverb and echo-delay effects. Solo talk.
<b>Vocalizer</b>	3 voice vocalizer unit (optional).
<b>Midi</b>	In, out, thru.
<b>Output</b>	Left/mono & right, micro, RGB (for video). Metronome click. Footswitch (optional).
<b>Input</b>	Line in left & right, headphone, microphone.
<b>Power</b>	External power supply adaptor 5 V Dc.
<b>Dimensions</b>	32 x 23 x 11 cms. approx. / 12,5" x 8,7" x 4,5"approx.
<b>Weight</b>	3,200 Kg. / 7 lbs.

Specifications and appearance are subject to change without notice.

## GM PRESETS

<b>PIANO</b>	Grand Rock Upright Honky Tonky Harpsichord Jingle Electric House	60 Stopped 12 Strings Solid Pop Guitar Django Texas Shadow Pedal Steel Rock Stops Wha Guitar Hawaiian Rock&Roll Finger Pick	<b>BRASS</b>	Mexican Trombone 1 Miles Mute Flugel Horn Brass 1 Golden Tpt Dixie Trumpet SynBrass 1 Trumpet Mute Tpt French Horn Brass 2 OctaBrass GrowlBrass Fall Off SynBrass 2 Slide Tbn Trombone 2 Trombones Blare Brass Fx Tijuana Salseros Synbrass 3	Startheme Flanger Movie
<b>E. PIANO</b>	Rodes DX Piano Clavinet EloPiano Vintage Mark Piano Funky Pno Rodes Hi	<b>BASS</b>	Jazz Bass Finger Picked Freetless Slap Bass Funky Bass SynBass 1 SynBass 2 Precision Mute Bass SynBass 3 SynBass 4 SynBass 5 Subbass Bass&Guitar OberBass BlueBass Pop Bass 60 Bass Tuba Wow Bass BassFx ResoBass FM Bass	<b>SYNTH</b>	Synt 1 Synt 2 Synt 3 Reso 1 Reso 2 SynPad Rave Square Saw Calliope Wha Plate Vox Wow Sax 5Th FM Lead PolySynth SawMix Square Wave Sine Minimug Maxisaw Synclead Old Matrix
<b>CHROM</b>	Celesta Glocken Music Box Vibraphon Marimba Xylophon Tubolar Bell Tinkle	<b>STRINGS</b>	Violin Viola Strings Slow Strings SynStrings 1 SynStrings 2 Pizzicato Harp Symphony Marcato OctaStrings Legato Zivago Violas Orchestra Hits Timpani	<b>SAX</b>	Alto Soft Contralto TenorSax 1 TenorSax 2 Jazz Tenor Circusax Clarinet Oboe English Horn Bassoon NightSax Bebop Baritone Graffiato Blowed Sax&Brass
<b>ORGAN</b>	Leslies Jazz Organ 1 Rocker Theatre Rotary Church 1 Church 2 Church 3 Gospel Jazz Organ 2 RockSlow RockFast Fast B3 Jazzy Whiter Click Organ	<b>FLUTE</b>	Flute 1 Flute 2 Panflute Bottle Shakuhashi Whistle Ocarina Jungle Flute	<b>ETHNIC</b>	Santur Sitar Banjo Shamisen Koto Kalimba Bag Pipe Fiddle Zurna Mandolin Hackbrett Cuatro Fado Charango Tres Lute
<b>ACCORD</b>	Musette Harmonica Accordeon Master Diatonic Jazz Fisa Tango Paris	<b>PAD</b>	Fantasy Warmness Score Space Dark Pad Metal Halo Pad Sweep Warmpad Glock Pad Wisper Atmosphere Brightness	<b>EFFECT</b>	Fret Slide Seashore Bird Telephone Helicopter Applause Gunshot Hits Clakson Effects 1 Effects 2 Effects 3 Scratch 1 Scratch 2 Scratch 3 Fx Slap
<b>GIUITAR</b>	Gitana Country Jazz Guitar Clean Muted Overdrive Distorted Strato Brazilian Folk Funky Guitar	<b>CHOIR</b>	Choir 1 Choir 2 SynVoice Dah Uuuh Tuuh Warm Voice Corale		

**BANK A (CONTROL CHANGE 00, VALUE = 0)**

<b>Pr.Ch.</b>	<b>Name</b>				
1	Grand Piano	48	Timpani	95	Halo
2	Rock Piano	49	Strings1	96	Sweep
3	Upright	50	SlowStrings	97	Ice Rain
4	Honky	51	Synstrgs1	98	Soundtrack
5	Rodes	52	Synstrgs2	99	Crystal
6	DxPiano	53	Choir1	100	Atmosphere
7	Harpsichrd	54	Choir2	101	Brightness
8	Clavinet	55	Synvoice	102	Goblin
9	Celesta	56	Hits	103	Echodrops
10	Glocken	57	Trumpet1	104	Startheme
11	MusicBox	58	Trombone1	105	Sitar
12	Vibraphon	59	Tuba	106	Banjo
13	Marimba	60	Miles	107	Shamisen
14	Xylophon	61	Fr.Horn	108	Koto
15	Bell	62	Brass1	109	Kalimba
16	Santur	63	Synbras1	110	Bagpipe
17	Leslies	64	Synbras2	111	Fiddle
18	JazzOrg1	65	Altosoft	112	Zurna
19	Rock B3	66	Contralto	113	Tinkle
20	Church	67	Rock Tenor	114	Agogo
21	Theatre	68	Bariton	115	Steeldrum
22	Musette	69	Oboe	116	Woodblock
23	Harmonica	70	Englshorn	117	Taiko
24	Accordion	71	Basson	118	Melotom
25	Classic	72	Clarinet	119	Syntom
26	Country	73	Piccolo	120	Reverse
27	Jazz	74	Flute	121	Fretslide
28	Clean	75	Recorder	122	Breath
29	Muted1	76	Andes	123	Seashore
30	Overdrive	77	Bottle	124	Bird
31	Blues	78	Shakuhashi	125	Telephone
32	Harmonics	79	Whistle	126	Helicopter
33	Jazzbass	80	Ocarina	127	Applause
34	Finger	81	Squares	128	Gun shot
35	Picked	82	Saw		
36	Fretless	83	Calliope		
37	Slap	84	Wha		
38	Funk	85	Plate		
39	Synbas1	86	Vox		
40	Synbas2	87	Saw 5th		
41	Violin1	88	Fm Lead		
42	Viola	89	Fantasy		
43	Cello	90	Warmpad		
44	Contrabass	91	Score		
45	Tremolos	92	Space		
46	Pizzicato	93	Softpad		
47	Harp	94	Metal		

**BANK B (CONTROL CHANGE 00, VALUE = 1)**

<b>Pr.Ch.</b>	<b>Name</b>				
1	Jingle	48	Slow Arcos	95	Lower 8' - 4'
2	Electric	49	Strings2	96	Jazzy
3	House	50	DarkStrings	97	Pop
4	Elopiano	51	Dah	98	Telecast
5	Vintage	52	Vocalize	99	Strato
6	Funky Pno	53	Scat	100	Texas
7	Fm Piano 1	54	Ooh	101	Tremolo
8	Fm Piano 2	55	Aah	102	Unplug
9	ToyBox	56	Corale	103	Stops
10	Chimes	57	Golden Tpt	104	Wha guitar
11	Mallets	58	Cornet	105	Hawaian
12	Long Vibes	59	Tuba&Bass	106	Mandolin
13	WoodBell	60	Muted Tpt	107	Django
14	Mellow	61	Flugelhrn1	108	ClassicFx
15	Tinkles	62	Brass 2	109	Pedalsteel
16	Windchimes	63	GrowBras1	110	Rock&Roll
17	Rotary	64	BrassFx	111	Reed 8'
18	JazzOrg2	65	Soprano	112	Blow
19	Drawbar	66	Liscio Sax	113	Fx
20	Positive	67	Jazz Tenor	114	Tecnosynt1
21	Master	68	Graffiato	115	Tecnosynt2
22	Francaise	69	Mariachi	116	Rave1
23	Cassotto	70	GrowBras2	117	Rave2
24	Tango	71	Blare	118	Rave3
25	Nylon	72	Slide Tbn	119	Rave4
26	Folk	73	Clarino	120	Rave5
27	Funk	74	Fife	121	Effects1
28	60' Stopped	75	Lip Flute	122	Effects2
29	Muted2	76	Chiff	123	Effects3
30	Lead	77	Analogs	124	Effects4
31	12Strings	78	Flanger	125	Effects5
32	Solid	79	Brightpad	126	Effects6
33	Warm	80	Wiring	127	Effects7
34	Ms Finger	81	Wow	128	Effects8
35	Mute	82	Starcase		
36	Bluebass	83	Square		
37	Precision	84	Sine		
38	Synbas3	85	RockBas		
39	Synbas4	86	Synbas6		
40	Synbas5	87	Synbas7		
41	Philarmoni	88	Synbas8		
42	Violas	89	2nd Perc		
43	GlockString	90	3th Perc		
44	OctaStrgs1	91	Click		
45	OctaStrgs2	92	Tonebar		
46	Marcato	93	Pop Organ		
47	Orchestra	94	JazzOrg3		

**BANK C (CONTROL CHANGE 00, VALUE = 10)**

<b>Pr.Ch.</b>	<b>Name</b>				
1	Grand mono	48	Symphonic	95	Wisper
2	Rock mono	49	Strings3	96	Airpad
3	Piano L	50	Digistrings	97	Picking
4	Piano R	51	Wiener	98	Morphing
5	Mark	52	101Strings	99	Ambience
6	StagePno	53	Tuuh	100	Digipad
7	Rodeslow	54	Uuh	101	Movie
8	Rodeshi	55	Vocals1	102	Newage
9	Celestial	56	Vocals2	103	Voxing
10	China	57	Trumpet2	104	Synfony
11	AirBell	58	Trombone2	105	Cuatro
12	DryVibes	59	Dixie Tpt	106	Hackbrett
13	Malimba	60	Trombones	107	Tres
14	WoodMallet	61	Fall Off	108	Cajun
15	Glock&Pad	62	Brass 3	109	Peruvian
16	Elpiano&Strings	63	Latin Tbn	110	Fado
17	Whiter	64	Octabrass	111	Jungle
18	Rock Slow	65	Blowed	112	Balama
19	Rock Fast	66	NightSax	113	Tinklebell
20	Pipe	67	Bebop	114	Triangle
21	Gospel	68	RockSax	115	Tambora
22	Fisa	69	Brasslips	116	Claves
23	Diatonic	70	Softtrumpet	117	Ac.Tom
24	Alpen	71	Hi Trumpet	118	Brushtom
25	Brazilian	72	Flugelhorn2	119	Snare
26	CountryFx	73	Posaune	120	Crash
27	TexasFx	74	Anderson	121	Scratch1
28	StratoFx	75	MixFlute	122	Scratch2
29	Fingerpick	76	Panflute	123	Scratch3
30	PopFx	77	FluteVox	124	Scratch4
31	Spanish	78	EthnicFlute	125	Scratch5
32	Takamin	79	Whistling	126	FxSlap
33	Subbas	80	Flute&Stgrs	127	Laser
34	Bass&Guit1	81	Sawmix	128	Wind
35	Oberbas1	82	Brassfx		
36	60' Bass	83	Synclead		
37	Slappin	84	Chick		
38	Oberbas2	85	Minimug		
39	Pedalbass	86	Octasaw		
40	Bass&Guit2	87	Patlead		
41	Slow Violin	88	Maxisyntn		
42	Violin2	89	Warmness		
43	Quartet	90	Sawpad		
44	Tzivago	91	Large		
45	Concert	92	Movie		
46	Fast Strings	93	Magic		
47	Harp&Orchestra	94	Glockpad		

## DRUM SETS

Pr.Ch.	Name
1	Standard1
2	Standard2
9	Folk
10	Acoustic
11	Jazz Dry
12	Vintage
17	Rock
25	House
26	Techno
28	Progressive
29	Rave
30	Hip-Hop
33	Fusion
41	Brush
49	Orchestra
57	Studio
58	Light Pop
59	Rap
65	Custom
66	Latin
73	Pop Jazz
97	Street
98	Analog
99	Citypop
100	Smooth
101	Acid
102	Kick&Snare
107	Jazzbrush
121	Urban
122	Electro
123	Country
124	R&B

## LIVE DRUMS (DRUMS 2)

(CONTROL CHANGE 00, VALUE = 4)

Pr.Ch.	Name
1	Bachata
2	Bolero 1
3	Chacha 1
4	Cumbia 1
5	Guajra 1
6	Mambo
7	Salsa 1
8	Rhumba 1
9	Merengue 1
10	Merengue 2
11	Congas 1
12	Congas 2
13	Gipsy 1
14	Maracas 1
15	Tambourine
16	Brush
17	-----
18	-----
19	-----
20	-----
21	Dance 1
22	-----
23	Ethnic 1
24	Ethnic 2
25	Latingr 1
26	Latingr 2
27	Latingr 3
28	Latingr 4
29	Latingr 5
30	Latingr 6
31	Latingr 7
32	Latingr 8
33	-----
34	-----
35	NewAge
36	-----
37	-----
38	-----
39	Pop
40	-----
41	-----
42	Jazz 1
43	Shuffle 1
44	Jazz 2
45	Bossanova
46	Samba 1
47	Samba 2
48	Pandero 1
49	Salsa 2
50	Eurolatin
51	Popdown
52	-----
53	Dance 2
54	Dance 3
55	Tradition1
56	Bolero 2
57	Cumbia 2
58	Guajra 2
59	Rhumba 2
60	Merengue 3
61	Merengue 4
62	Congas 3
63	Congas 4
64	Gipsy 2
65	Maracas 2
66	-----
67	Jazz 3
68	Shuffle 2
69	Jazz 4
70	Samba 3
71	Samba 4
72	Pandero 2
73	Chacha 2
74	Afrohouse
75	Pop Jazz
76	Salsa3
77	Tradition2
78	-----
79	R&Blues
80	-----
81	Samba 5
82	Samba 6

## PRESET VOICE

(CONTROL 0 - VALUE 3 (WHIT VOICE TAB OFF) - PROGRAM CHANGE 1-64 ONLY GLOBAL AND RIGHT MDI CHANNEL)

Pr.Ch.	Name		
01	Grand Piano	48	Theatre
02	Rodes	49	Piano&Strings
03	DX Piano	50	Magic Tine
04	Vibraphon	51	WarmPad
05	Strings	52	SynBrass
06	Brass	53	Atmosphere
07	Jazz Organ	54	Fantasy
08	Rotary	55	Brightness
09	Alto Sax	56	House Lead
10	Golden Tpt	57	Synlead
11	Musette	58	Wiring
12	Flamenca	59	Ethno
13	Strato	60	Synstrings
14	Country	61	Octabrass
15	Flute	62	NightSax
16	Jazz Tenor	63	SynVoices
17	Liscio Sax	64	Supersaw
18	Jazzy		
19	Electric Gt		
20	Tone Wheel		
21	Leslies		
22	Overdrive		
23	Miles Muted		
24	Dixie Tpt		
25	Django		
26	Harmonica		
27	Cassotto		
28	Jazz Guitar		
29	Flugel Horn		
30	Mexican		
31	GlockPad		
32	Analog		
33	Distorted		
34	Vintage		
35	Rock Organ		
36	Shadow		
37	12 Strings		
38	Texas		
39	Choir Uuh		
40	Choir Dah		
41	Philharmonic		
42	Violins		
43	Church		
44	Tenor		
45	Trombone		
46	Clarinet		
47	Pop Organ		

## PRESET PROGRAM CHANGE (GLOBAL & RIGHT MIDI CHANNELS)

Pr.Ch.	Control 0 - Value 0 Bank 1	Control 0 - Value 1 Bank 2	Control 0 - Value 2 Bank 3
001	Grand	Jingle	
002	Rock	Electric	
003	Upright	House	
004	Honky Tonky		
005	Rodes	EloPiano	Funky Pno
006	Dx Piano	Vintage	Rodes Hi
007	Harpsichord	Mark Piano	
008	Clavinet		
009	Celesta		
010	Glocken		
011	Music Box		
012	Vibraphon		
013	Marimba		
014	Xylophon		
015	Tubalar Bell		
016	Santur		
017	Leslies	Rotary	RockSlow
018	Jazz Organ 1	Jazz Organ 2	Jazzy
019	Rocker	Gospel	Fast B3
020	Church 3	Church 2	Church 1
021	Theatre	Whiter	Click Organ
022	Musette	Master	Paris
023	Harmonica	Diatonic	
024	Accordeon	Jazz Fisa	Tango
025	Gitana	Brazilian	Finger Pick
026	Country	Folk	12 Strings
027	Jazz Guitar	Pop Guitar	Django
028	Clear	Solid	Shadow
029	Muted	60Stopped	Rock Stops
030	Overdrive	Rock&Roll	Funky Guitar
031	Distorted	Hawaiian	Pedal Steel
032	Strato	Texas	Wha Guitar
033	Jazz Bass	Bass&Guitar	Subbas
034	Finger	Precision	Oberbass
035	Picked	Mute Bass	Tuba
036	Freetless	BlueBass	Wow Bass
037	Slap	Pop Bass	Bassfx
038	Funky Bass	60 Bass	Resobass
039	Synbass 1	Synbass 3	FM Bass
040	Synbass 2	Synbass 4	Synbass 5
041	Violin		
042	Viola		
043	Violas		
044	Legato		
045	Symphony		
046	Pizzicato	Marcato	
047	Harp		
048	Timpani		
049	Strings	Octastrings	
050	Slow Strings	Zivago	

<b>Pr.Ch.</b>	<b>Control 0 - Value 0 Bank 1</b>	<b>Control 0 - Value 1 Bank 2</b>	<b>Control 0 - Value 2 Bank 3</b>
051	Synstrings 1		
052	Synstrings 2		
053	Choir 1	Warm Voice	Tuuh
054	Choir 2	Corale	Uuuh
055	SynVoice	Dah	
056	Orchestra Hits		
057	Mexican	Golden Tpt	Slide Tbn
058	Trombone 1	Dixie Trumpet	Mute Tpt
059	Trombone 2	BrassFx	Tijuana
060	Miles Mute	Trumpet	Blare
061	French Horn	Flugel Horn	Salseros
062	Brass 1	Octabrass	Brass 2
063	Synbrass 1	Growlbrass	Fall Off
064	Synbrass 2	Synbrass 3	Trombones
065	Altosoft	Jazz Tenor	
066	Contralto	Circusax	
067	Tensorsax 1	Night Sax	
068	Tensorsax 2	Baritono	
069	Oboe	Graffiato	
070	English Horn	Blowed	
071	Bassoon	Sax&Brass	
072	Clarinet	Bebop	
073	Flute 1		
074	Flute 2		
075	Jungle Flute		
076	Panflute		
077	Bottle		
078	Shakuhashi		
079	Whistle		
080	Ocarina		
081	Square	Synt 1	Polysynth
082	Saw	Synt 2	SawMix
083	Calliope	Synt 3	Square Wave
084	Wha	Reso 1	Sine
085	Plate	Reso 2	Minimug
086	Vox	Synpad	Maxisaw
087	Saw 5th	Rave	Synclead
088	FM Lead	Wow	Old Matrix
089	Fantasy		
090	Warmness		
091	Score		
092	Space		
093	Dark Pad		
094	Metal		
095	Halo Pad		
096	Sweep		
097	WarmPad		
098	Glocken		
099	Wisper		
100	Atmosphere		

<b>Pr.Ch.</b>	<b>Control 0 - Value 0 Bank 1</b>	<b>Control 0 - Value 1 Bank 2</b>	<b>Control 0 - Value 2 Bank 3</b>
101	Brightness		
102	Flanger		
103	Movie		
104	Startheme		
105	Sitar	Mandolin	
106	Banjo	Hackbrett	
107	Shamisen	Cuatro	
108	Koto	Fado	
109	Kalimba	Charango	
110	Bag Pipe	Tres	
111	Fiddle	Lute	
112	Zurna		
113	Tinkle		
114	Hits		
115	Clakson		
116	Effects 1		
117	Effects 2		
118	Effects 3		
119	Scratch 1		
120	Scratch 2		
121	Freet Slide		
122	Scratch 3		
123	Seashore		
124	Bird		
125	Telephone		
126	Helicopter		
127	Applause		
128	Gunshot		

## STYLES

Pr.Ch.	Name				
01	12/8 Ballad	48	Dixie	95	On the Road
02	16 Beat 1	49	English Tune	96	Orch. Slow 1
03	16 Beat 2	50	English Walz	97	Orch. Slow 2
04	16 Beat 3	51	EuroChacha	98	PartyFox
05	16 UpBeat	52	Fado	99	Party Polka
06	60 Revival	53	FlipFox	100	Piano Ballad
07	70' s Beat	54	Folk Singer	101	Polka
08	8 Beat 1	55	Fox-Trot	102	PopMix
9	8 Beat 2	56	Funky 1	103	Pop Chart
10	8 Beat 3	57	Funky 2	104	Pop Rock
11	Afterhours	58	Gospel	105	Paso Doble 3/4
12	Antilles	59	G_Andaluz	106	Paso Doble 4/4
13	Bachata 1	60	G_Ballad 1	107	Quadriglia
14	Bachata 2	61	G_Ballad 2	108	R&Blues
15	Balada	62	G_Bossa	109	Reggaeton
16	Baroque	63	G_Brazil	110	Reggae 1
17	Batucada	64	G_Country 1	111	Reggae 2
18	Beguine	65	G_Country 2	112	Rocking
19	Big Band	66	G_Country 3	113	Rock Shuffle
20	Bluegrass	67	G_Flamenco	114	Rumba
21	Blues Ballad	68	G_Pop 1	115	R. Flamenca
22	Bolero	69	G_Pop 2	116	R&B
23	BossaMix	70	Hully Gully 1	117	Salsa
24	Bossanova 1	71	Hully Gully 2	118	Saltarello
25	Bossanova 2	72	House 1	119	Samba
26	Bugg 1	73	Irish Walz	120	Schlager
27	Bugg 2	74	ItalBeat	121	Shuffle Blues
28	Can Can	75	Jazzman	122	Shuffle Fox 1
29	Charleston	76	JL Bachata	123	Shuffle Fox 2
30	Chacha	77	Kramer	124	SlowFox
31	Country Dixie	78	LatinJazz	125	Slow Country
32	Country Rock	79	LatinRock	126	Slow Walz
33	CoolFunk	80	Light Pop	127	Soul 1
34	Country Ballad	81	Macarena	128	Soul 2
35	Country Beat	82	Mambo	129	Street
36	Country Fox	83	Mambo Hit	130	Swing 1
37	Country Pop	84	Manouche	131	Swing 2
38	Country Walz	85	March	132	Swing 3
39	Cumbia	86	Mazurka	133	Swing Ballad
40	Cumbion	87	Medium Fox	134	Tango 1
41	Dance 1	88	Meneito	135	Tango 2
42	Dance 2	89	Merengue	136	Tarantella
43	Dance 3	90	Moderato	137	Vallenato
44	Disco Samba	91	Musette	138	Walzer
45	Disco 1	92	Napoletana	139	Western
46	Disco 2	93	OberPolka	140	Wiener
47	Disco 3	94	OberWalz		



