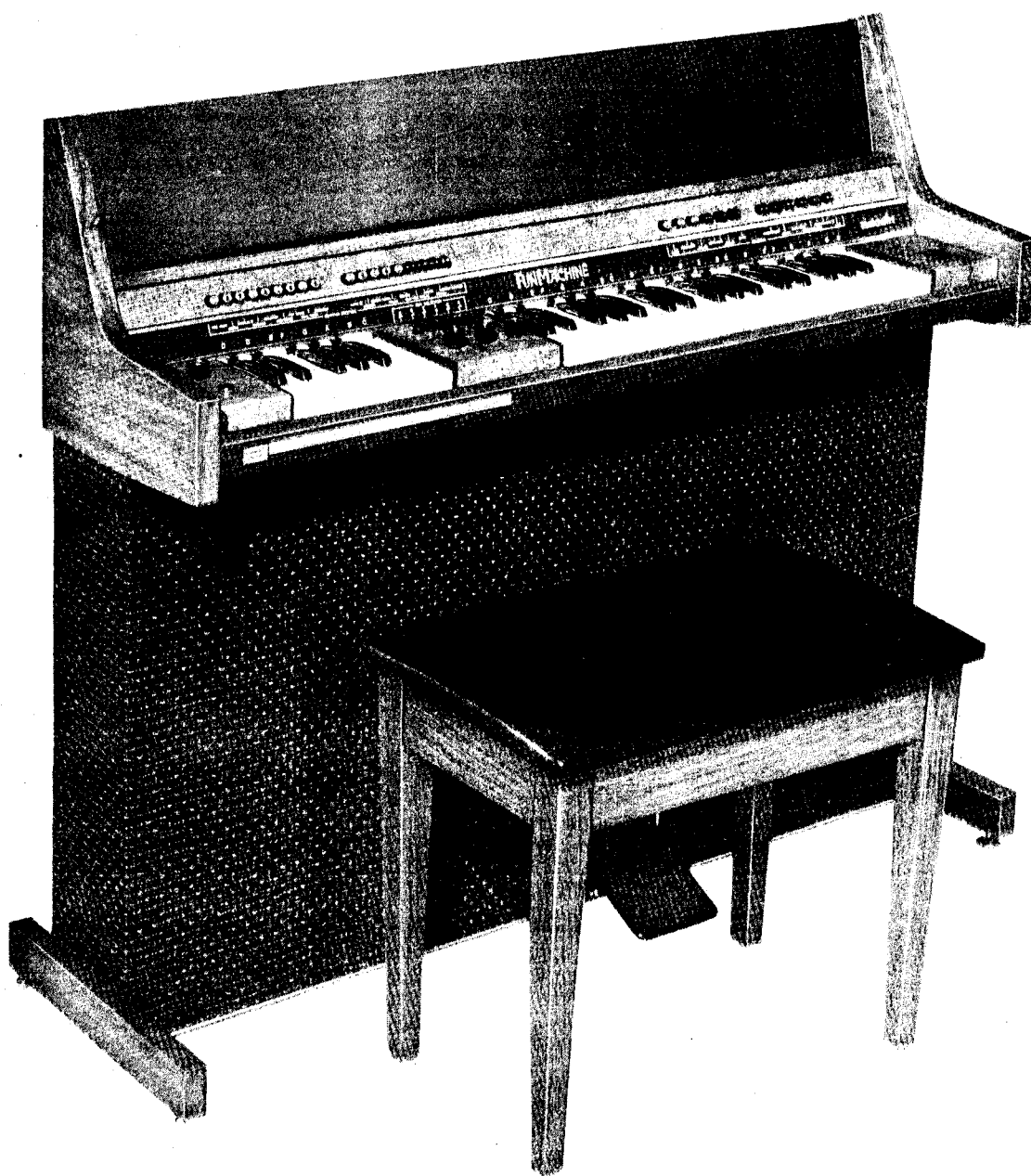


Baldwin®

FUNMACHINE®



A Complete Guide for Your New Baldwin FunMachine — Model 121W

Baldwin®

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Welcome to the wonderful world of music. As the new owner of a Baldwin FunMachine you are starting on an exciting adventure. Making your own music is an entertaining and satisfying experience. Your Baldwin FunMachine makes it extra easy and extra fun for you to learn to play.

In this manual you will find a description of your FunMachine's playing features, instructions on their operation, and suggestions for using them most effectively. You will not need all of this information to begin to enjoy your FunMachine right away, but it is provided to answer questions that may come up and to help you try new and different playing ideas after you've mastered the basics.

The key to enjoying your FunMachine is the package of four music books provided with your instrument. Book One, "Introducing the FunMachine," leads you step by step, song by song, through all the controls. There's a complete song to introduce you to each of the 17 different rhythm patterns. The other songs give you still more music to play, ranging from the latest pop hits to old-time favorites including "Sing Alongs" for the FunMachine.

The best way to learn how to play your FunMachine is to get out Book One and start in. You'll be playing your first song in a matter

of minutes. Book One has been specially prepared to teach you how to play music logically and simply with exclusive Fun Music. If you start at the beginning and master each step, you will not only learn all about your FunMachine, but you will have gained a basic understanding of the fundamentals of music. As you learn to play your FunMachine, use this owner's manual as a reference to help you understand each control and how it works and to answer any questions that may arise.

General Operating Instructions . . . Page 2

A description of the Soloist and Rhythm Sections and how they work, including FunBass, Minor Touch, Key Selector, and other features of your FunMachine.

Care of your FunMachine . . . Page 12

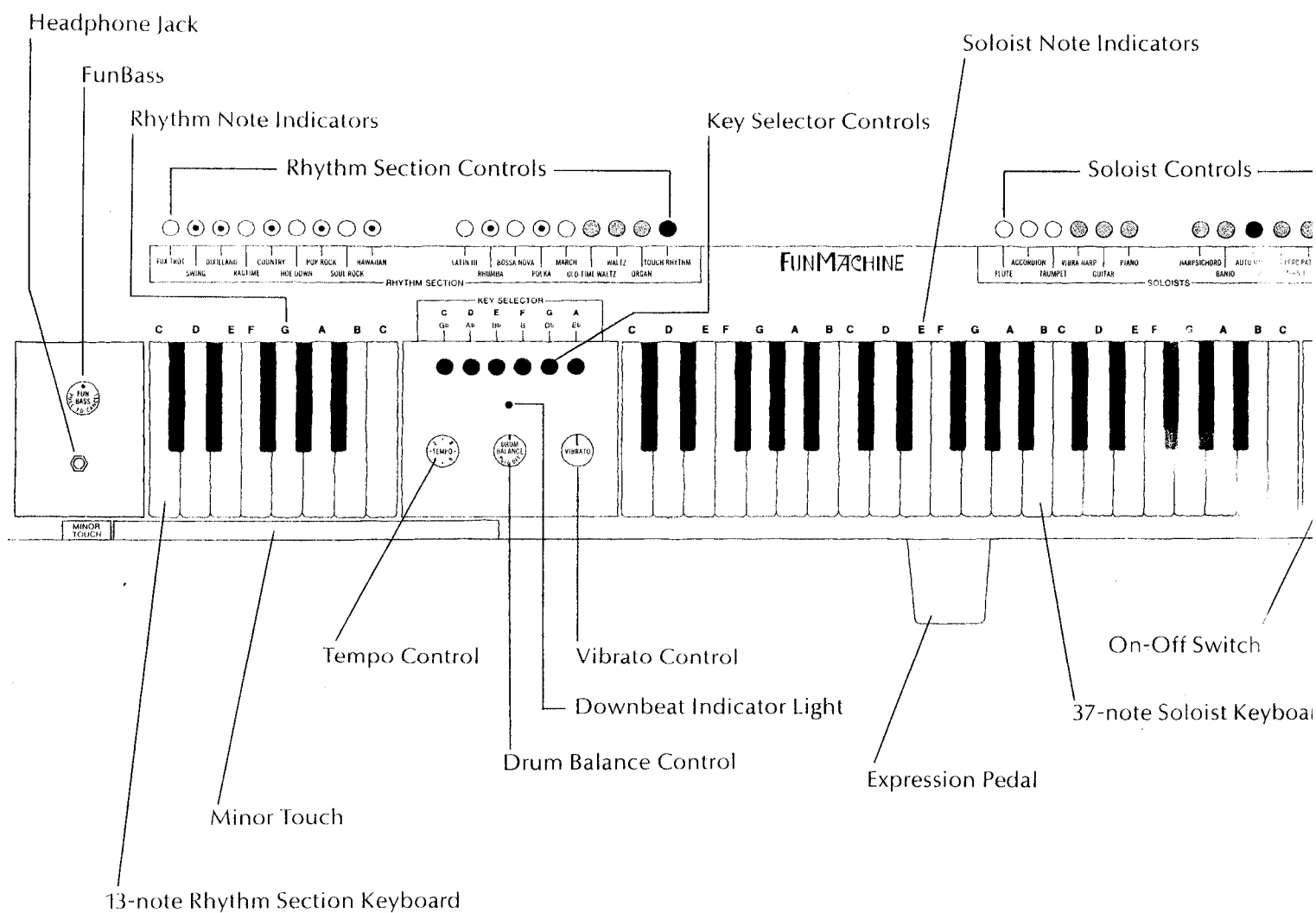
Instruction on the care and service of your FunMachine.

Additional Music . . . Page 17

Additional music available for the FunMachine and how you may obtain it.

Your FunMachine Warranty . . . Page 19

The warranty (which you should keep for your records) is located at the back of this book. Your dealer should have filled it out at the time of delivery.



Getting Acquainted

Learning the "basics" of your FunMachine is easy. You can play a complete song using only one finger of each hand. The solo, or melody part, is played with your right finger. A complete drum and orchestral instrument accompaniment—chords, bass notes, and rhythm—is played with your left finger.

All of the easy-to-play FunMachine controls are reviewed and explained in the following pages of this manual. Here to help you get acquainted are the general sections of your FunMachine.

On-Off Switch

Your FunMachine is quickly turned on with the switch to the right of the keyboard. When the FunMachine is turned on, the panel lights up, showing you the names of all the controls and the letters by which you identify each key. Your FunMachine Fun Music uses these letters inside the music notes to show you which keys to play.

Control Panel

The lighted panel indicates all the controls for the FunMachine. These controls are introduced to you one by one in "Introducing the FunMachine" (Book One) on Page 2. As this book shows you, there are only a few basic settings to be made, and you're ready to play as soon as you select the rhythm you want.

The Key Selector buttons are self-cancelling. All of the other buttons are the push-push type; you push once to activate and push a second time to cancel. All of these controls may be used singly or in a variety of combinations as you gain experience in playing.

Expression Pedal

The large pedal at the bottom of your FunMachine in front of your right foot is called the expression (or volume) pedal. This pedal controls the overall volume of your FunMachine, and it's very easy to use. Push the pedal down with the ball of your foot, and the tone gets louder. Push it up with your

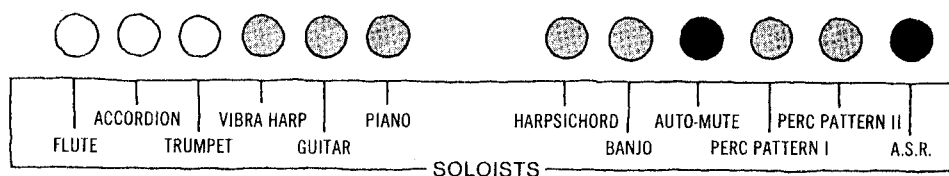
heel, and the tone gets softer. At the beginning, you can simply set the volume at the level you like and leave it there. As you increase your playing ability, you can quickly change the volume with your foot in the middle of a song for added emphasis or special effects.

Keyboards

The 13-note keyboard on the left of your FunMachine is the Rhythm Section keyboard. When you play one note on this keyboard (with just one finger of your left hand), you get a complete orchestral Rhythm Section—drums, bass notes, chords—in the rhythm pattern you have selected. You can only play one note at a time on this keyboard.

The 37-note keyboard at the right of your FunMachine is your Soloist keyboard. With one finger of your right hand, you play the melody on this keyboard. You can select one or more of the Soloist sounds to play this melody, or you can have the Soloists automatically programmed for you with the ASR button.

All of your Fun Music shows you where to start playing and suggests playing in a low, middle or high range, with the bottom (or left end) of the keyboard being the low end. Although you do not need to worry about such technical details, Middle C on the Soloist keyboard is the second C.



Soloist Section

The Soloist controls affect the right keyboard. These controls give you the solo sounds with which you play the melody of a song.

Soloists

Eight different solo sounds or "voices" are controlled by push-push buttons. Again these may be used singly or combined. You may use any "soloist" you choose with any rhythm. Trying different sounds for yourself with different rhythms is the best way to discover the versatility of these voices and to find out which ones you personally like the best.

The Vibra Harp Soloist voice continues to sound after you lift your finger. We call this effect "long sustain." When you combine the Vibra Harp with other Soloists, the other voices will also sustain.

ASR (Automatic Solo Registration)

This exclusive Baldwin feature makes setting up your FunMachine even easier. When this button is depressed an appropriate Soloist is automatically programmed (or registered) for each rhythm. All you have to do is to select the rhythm you want, and your FunMachine is ready to play.

The Soloists which ASR automatically registers for you with the rhythms are:

Fox Trot	Accordion-Flute Combination
Swing	Piano
Dixieland	Trumpet
Ragtime	Rinky-tink Piano
Country	Guitar
Hoe-down	Banjo
Pop Rock	Electric Piano
Soul Rock	Mod Electric Sound
Hawaiian	Hawaiian Guitar
Latin III	Trumpet
Rhumba	Piano-Flute Combination
Bossa Nova	Vibra Harp
Polka	Accordion
March	Trumpet
Old-time	Piano
Waltz	
Waltz	Harpsichord
Organ	Parlor Organ

Auto-Mute

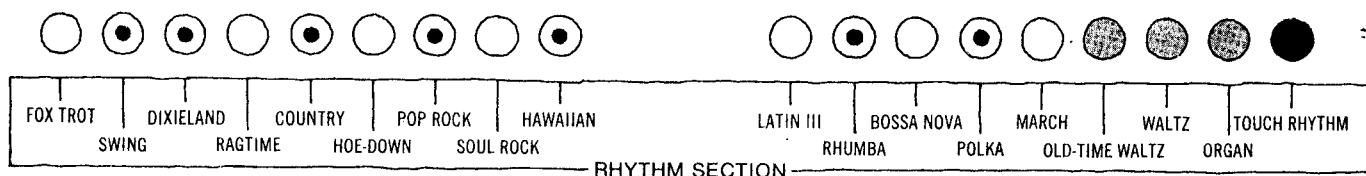
Auto-Mute affects all the Soloist voices except the Flute and Vibra Harp. When you depress this button, you have an automatic muted effect, which adds a whole new character to the voices. The Auto-Mute used with the Trumpet, for example, gives you a wah-wah muted brass sound. The Auto-Mute used with other voices or combinations gives you some very unusual effects, including lay-out synthesizer-like sounds. Auto-Mute affects the Soloist voices when you are using ASR, too.

Percussion Patterns

The FunMachine's two Percussion Patterns affect the Piano, Guitar, Banjo, and Harpsichord Soloist voices. Percussion Pattern I continuously repeats (reiterates) the Soloist Percussion voices synchronized to the tempo of the Rhythm Section. Percussion Pattern II provides a different solo percussion pattern for each of the 17 rhythms in the left-hand Rhythm Section. A unique Baldwin feature, the Percussion Patterns give you a variety of rhythmic solo effects merely by holding down a solo note.

Vibrato

Vibrato is a pitch variation which produces a wavering effect similar to the vibrato of the human singing voice. This effect is controlled by a continuously variable dial, so you can set exactly the amount of vibrato that you prefer. Vibrato is particularly effective in creating authentic sounds like the Hawaiian guitar or a trumpet sound. The FunMachine Vibrato has an automatic time-delay for more realistic sounds. When you play the key, there is no Vibrato, and as you hold it, the Vibrato gradually comes on. If you play very "legato" or connected, the Vibrato will stay on.



Rhythm Section

The Rhythm Section controls affect the left keyboard, on which you play the complete accompaniment for a song.

Rhythms

You have a choice of 17 different rhythms, controlled by push-push buttons. Each rhythm button automatically gives you a full orchestral rhythm section—drums and orchestral instruments—playing full chords, bass notes, and rhythm accompaniment in an appropriate rhythm pattern.

The rhythms may be used individually or combined for different effects. Whenever the

Waltz or Old-time Waltz is used in combination with other rhythms, the other rhythms are automatically converted to 3/4 waltz time.

By experimenting on your own and trying different combinations, you will find interesting combinations which you particularly like. Trying out your own ideas is a big part of the fun of making music.

The Organ button, unlike the other rhythm buttons, gives you a “sustained” or continuous sound with no beat or rhythm pattern. When you try it, you will notice it sounds just like a real organ.



Tempo

This continuously variable dial lets you set the tempo speed that you want. You will want to set it slower when you first play a piece and gradually increase the speed as you become familiar with the music. You will also want to change the tempo from one piece to another because different kinds of songs sound best at different speeds.

There is a small light between the Key Selector buttons and the three dials. This is the Downbeat Indicator Light which automatically flashes at the beginning of every measure (the first beat or downbeat). The speed or tempo at which the rhythm plays (and, therefore, how often this light flashes) is controlled by the Tempo dial. Playing at the right tempo in time with the light is explained in Book One.

The Tempo dial is numbered from "2" to "8"—slow to fast. This helps you find the speed you want quickly. Fun Music in the FunMachine music books gives you a suggested tempo for each song, which is indicated by dial number.

Drum Balance

This control lets you adjust the balance between the drum sounds and the orchestra sounds in the Rhythm Section to suit your own personal taste. A continuously variable dial, it is turned clockwise to increase the drum level in relation to other sounds. If you do not want any drums at all, pull this dial up (or "out") and the drums will be cancelled.

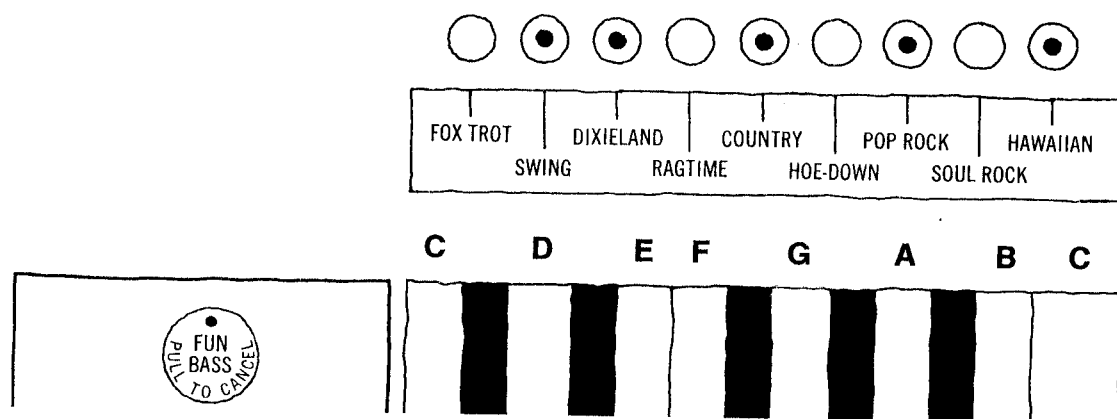
Touch Rhythm

The Rhythm Section may be played in two different ways. Unless the Touch Rhythm button is depressed, you are playing in what we call "continuous rhythm."

Continuous rhythm starts when you touch a key on the Rhythm Section keyboard. The drums will continue to sound whether or not you keep a finger on the key. The orchestral voices will only sound if a key is held down. This is easiest for a beginner, because it keeps a continuous beat. Whenever you play another note, the orchestral voices will automatically start wherever the drum rhythm is at that point. If you are playing in this manner you must push the Touch Rhythm button to shut off the drums at the end of a song.

When you depress the Touch Rhythm button, each time you play a key, the entire Rhythm Section—drums and orchestral voices—will automatically start on the downbeat. They will continue to play as long as you hold a key, but only while you're holding the key down. Both methods of playing are used in the introductory book so that you can best see how they work by actually playing a song with each kind of rhythm.

When you are using a Solo Percussion Pattern, the pattern will also stop when you are playing in Touch Rhythm and lift a finger off the Rhythm Section key. When you are playing in continuous rhythm, the Percussion Pattern will continue like the rhythm, even if you take your finger off the Rhythm Section key.



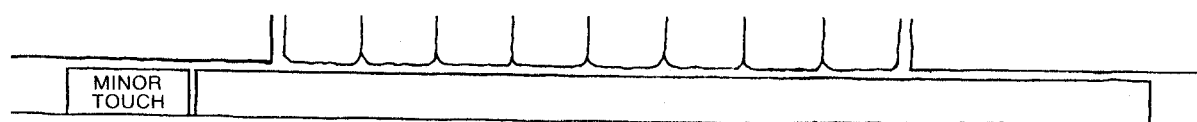
FunBass

To add even more variety to your FunMachine Rhythm Section, you can add a fancy bass pattern to some of the rhythms with FunBass.

The rhythms with FunBass are Swing, Dixieland, Country, Pop Rock, Hawaiian, Rhumba and Polka. The FunBass control has a black dot in the center. This same black dot is repeated on the rhythm buttons that have these special patterns.

Using these patterns is a matter of personal taste and the style of music you're playing. If you combine a rhythm that has a FunBass pattern with one that does not, you will still get a fancy FunBass pattern. Combining two rhythms that have FunBass patterns will sometimes give you a new and different FunBass pattern.

The FunBass Pattern is automatically "on" when you select a rhythm unless you cancel it. To cancel FunBass, pull up on the FunBass control.



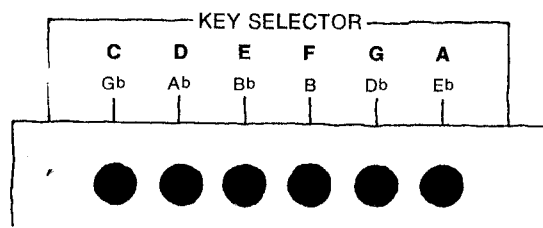
Minor Touch

FunMachine automatically plays appropriate major chords for you. There are times in playing a piece of music when you will need a minor chord instead of a major chord. This is indicated by the letter "m" beside the chord letter.

When you touch the Minor Touch strip, the chord you are playing automatically changes

from major to minor as long as you touch the strip. Minor Touch will also automatically change the notes in the FunBass patterns to be compatible.

Try a few chords with and without Minor Touch. You can easily recognize the difference in sound.



Key Selectors

The six Key Selector buttons automatically select the proper chords for any song you play. When you select the key in which your music is written, FunMachine automatically plays the right chords for you.

To enjoy your FunMachine and to play Fun Music, you do not need to understand the following description of what the Key Selector does. As you become more musically advanced, however, you will find this information useful in creating special effects with your FunMachine.

FunMachine plays major triads (three-note chords) when all the Key Selector buttons are up. The FunMachine chord keys, therefore, produce 12 different major triads (counting only one C key since they both produce the same chord). Minor Touch changes all of these 12 Major chords to Minor chords ... giving you 24 different chords.

When you select a button in the Key Selector, it automatically programs 7th chords (four-note chords) in the proper place for that key.

For example, select C and play the notes in the C scale. You will get:

C	D	E	F	G	A	B
Triad	7th	7th	Triad	7th	7th	Triad

Select G and you will get:

G	A	B	C	D	E	F#
Triad	7th	7th	Triad	7th	7th	Triad

As you can see, this sets up 7th chords in the same sequence as C. In this way, FunMachine automatically plays 12 Major 7th chords and 12 Minor 7th chords for you in the correct places. The Key Selector automatically, then, gives you a total of 48 chords.

Amplification

Fully self-contained in one compact console, Baldwin FunMachine has 25 watts of audio power. This is a completely transistorized single-channel system rated at 8 ohms, 20 Hz-20 KHz, 1% THD.

Creating your own FunMachine settings

FunMachine settings are suggested with each of the songs in the four FunMachine books and the Baldwin Organ Learning System. As you progress and want to play additional music, you will enjoy creating your own FunMachine settings. We are giving you some basic guidelines for doing this, plus some helpful charts provided by the publishers of the most readily available Fun Music.

Many songs are similar in the type of rhythm, tempo and even the general “feeling” of the song. Therefore, similar songs can use similar FunMachine settings. All of the settings for the Fun Music that comes with your FunMachine can be used for many other songs.

Selecting the Proper Rhythm

Any 4/4 rhythm, either singly or in combination, can be used on any song with a 4/4 time signature. However, certain rhythms are more appropriate with certain songs. For instance, any type of Latin rhythm would not be used with the song “Village Tavern Polka.” The title itself (other polkas may not) tells you it’s a polka and, therefore, only the Polka rhythm is appropriate. In the same respect, other rhythms like Hoedown, Country, Pop Rock, etc., are not appropriate for march-type songs. Other songs, however, sound good with a variety of rhythms. A song that sounds great as a slow Fox Trot may even sound better with a medium slow Bossa Nova. Always experiment and use the rhythm that sounds best to you.

Use Old-time Waltz or Waltz for songs with a 3/4 time signature. The Old-time Waltz sounds better when used with the old gay ninety songs, such as “My Wild Irish Rose.” Use the Waltz rhythm when playing any classical-sounding waltz like the “Blue Danube” or a popular waltz such as “Moon River” or “Try to Remember.”

The Organ button will not produce a rhythmic accompaniment. The chord will sound for as long as you hold the chord key. Therefore, the Organ button can be used for 3/4 or 4/4 songs. This is perfect for playing hymns, slow classical selections and many Christmas songs.

For most songs, the Touch Rhythm should usually be in the “in” position. However, to create a drum solo, put the button in the “out” position. This will allow the drums to keep playing even if you’re not playing a chord key. Use this effect to “fill” songs that may have a measure or two marked N.C. (No Chord). Or play the drums alone to create an introduction for Latin or Rock-type songs.

Don’t forget FunBass. It’ll add a professional sound to your playing in many songs. When you’re using a rhythm with FunBass, try the song with and without it. Play it whichever way sounds best to you.

Using the Key Selector

If the proper Key Selector is not indicated at the beginning of a song, press the button with the letter that matches the letter of the last chord of the song. In most cases this will indicate the proper Key Selector button to be depressed.

Choosing Soloists

Baldwin’s exclusive ASR automatically creates the right solo set-up for the melody when you select a rhythm. However, should you wish to create your own sound set-up, just put ASR in the “out” position. Then select your own solo sounds.

Using Other Easy-Play Music

The publishers of both Easy-Play Speed Music and E-Z Play Music include suggested registrations for all of their songs. It's easy to play all of this music on the FunMachine. Choose a rhythm, following the instructions above. You may use ASR for the Soloist, or you may choose your own, following the charts provided below. These charts also show you other controls to set to enhance the sound of these FunMachine combinations.

Easy-Play Speed Music

(Sight & Sound International, Inc.)

Sound Set-up	Soloists	Other Controls
Full 'n' Brilliant	Flute, Accordion	Vibrato
Full 'n' Mellow	Flute, Vibraharp	Vibrato
Bright 'n' Brassy	Trumpet, Guitar, Accordion	
Big 'n' Bold	Trumpet, Flute, Piano	Vibrato
Soft Solo	Vibraharp or Piano	Vibrato
Brilliant Solo	Trumpet, Banjo or Accordion	Auto-Mute or Perc Pattern I or II (optional)
Classical	Harpsichord or Flute	

E-Z Play Music

(Hal Leonard Publishing Corporation)

E-Z Play Registration Number	Soloists	Vibrato
1	Flute	Medium
2	Flute, Piano	Off
3	Flute, Accordion	Full
4	Accordion	Light
5	Flute, Accordion, Trumpet	Medium
6	Flute, Harpsichord	Off
7	Flute, Guitar, Auto Mute	Off
8	Piano	Off
9	Trumpet, Auto-Mute (optional)	Light
10	Vibra Harp, Harpsichord	Optional

Taking Care of Your Baldwin FunMachine

In building each Baldwin musical instrument, Baldwin has brought together the best in engineering research, design, materials, and craftsmanship. Every conceivable test and precaution at the factory insures the high standard of Baldwin excellence in each FunMachine.

This instrument was carefully inspected during all stages of its production and was given a complete final inspection before shipment. Your Baldwin dealer again checked the instrument at the time of delivery.

With such a fine instrument in good condition, you will want to keep it that way. While Baldwin designers and engineers have created your instrument to give long service with a minimum of care and attention, there are a few important things you can do to keep it in perfect condition in the years to come.

Preserving the Finish

Before leaving the factory, your Baldwin was given a lustrous and lasting wax-rubbed finish. This special finish, developed by Baldwin, is a new and improved method of maintaining and enhancing the original beauty of the fine woods in your instrument.

The Baldwin wax finish becomes even more lovely with subsequent waxings. If you will dust your Baldwin frequently with a very soft, clean cloth and occasionally apply a thin, even coat of good quality liquid wax, the original beauty will be protected and

maintained. Do not use oiled or "treated" dust cloths. The oil will cause hazing and clouding, and it has a tendency to collect dust.

Extreme Changes of Humidity or Temperature

Remember that extreme heat or extreme cold may damage the finish of your instrument, particularly sudden changes of temperature. Excessive changes in humidity may also injure the finish by affecting the moisture content of the wood case parts almost instantly, even though they are carefully coated with lacquer. This may result in swelling and shrinking, expansion and contraction of the wooden case parts, which may, in turn, cause the finish to crack or chip. Do not place your Baldwin over a heat register, near a steam or hot water radiator, or next to an outside window which will be opened for any length of time in cold weather.

Cleaning Keys

To clean the keys, gently rub them from back to front with a soft cheese cloth (lint free). Never rub across the keys, because that will darken the sides. Do not use any kind of furniture polish to clean or protect the keys; such materials may yellow or otherwise damage them. If plain water does not do a complete job of cleaning, a very limited amount of the mildest soap may be added. This procedure can be used on both the black and the white keys. Rub gently and dry with a soft cheese cloth.

Moving

Your Baldwin FunMachine is considerably lighter and smaller than most musical instruments and is portable. It can be moved to suit your convenience. Be sure to have adequate help when moving your Baldwin, since personal injury or damage to the instrument may easily result from careless moving. Also see that the electric current plug is pulled out.

Tuning

Your Baldwin is very stable tonally and will seldom, if ever, need tuning. If you desire, the pitch can be adjusted to match other instruments. Your Baldwin representative can handle this in just a few minutes.

Service

Except for the care of the finish and keys, do not try to service your Baldwin yourself. If you have occasion to need service, a call to your Baldwin dealer will bring prompt, courteous attention.

Should your Baldwin FunMachine fail to operate properly, check these few simple points before calling your service man:

1. Make sure FunMachine is securely plugged into the outlet.
2. Make sure FunMachine is turned on.
3. Make sure that there is power available at the wall or floor plug.
4. Make sure that you have pushed a Rhythm button if you are playing on the Rhythm Section keyboard. Make sure you have pushed ASR or selected a Soloist voice if you are playing on the Soloist keyboard. Remember, too, that the rhythm will stop when you take your finger off the key if you are playing the Rhythm Section in Touch Rhythm.
5. Move the expression pedal back and forth to see if you get a normal increase in volume.

Optional Accessories

Stereo Headphones

Baldwin headphones are available as an optional accessory so that you can enjoy your playing without being distracted from the outside or without disturbing others. The headphone jack is conveniently located to the left of the Rhythm Section keyboard. Your Baldwin dealer can give you additional information about the headphones.

Baldwin Organ Learning System

In addition to the instruction books provided with your FunMachine, additional learning materials are available to help you enjoy your Baldwin FunMachine.

The Baldwin Organ Learning System, which is available through your Baldwin dealer, is a complete learning course which can be helpful with the FunMachine. The four-book system leads you progressively through learning to play an organ.

The System uses a new three-way approach to having fun with music. One of the approaches is the FunMachine easy-play way with one-finger automatic chords and accompaniment. Complete FunMachine registrations are provided for all of the 48 songs in the System.

Your Baldwin dealer can tell you more about this Learning System and how you can use it with your FunMachine.

Technical Manual

Although service to your Baldwin FunMachine should be performed only by qualified electronic organ technicians, many owners prefer to keep a file of technical information covering their equipment.

For your convenience, the comprehensive technical manual for the FunMachine (Model 121W) is available to you at a price of \$10.00. This manual contains specifications, schematics, circuit board layouts, circuit theory, troubleshooting guides, parts lists and other pertinent technical information.

To order, send your complete name and address along with a check or money order to Baldwin Piano & Organ Company, 1801 Gilbert Avenue, Cincinnati, Ohio 45202, ATTN: Organ Technical Service Department. Be sure to specify model number and serial number when ordering a technical manual. Your order will be shipped parcel post prepaid (additional postage outside the continental United States).