the Hammond Synthesizer

with Auto-Patch™

Hammond Synthesizer

Contents

After the introduction of Hammond tonewheel organs in the 1930's, it simply became a matter of time before the electronic music synthesizer would be developed. The Hammond tonewheel organ is a synthesis instrument. It generates, and then modifies sounds. Complex tones are synthesized by combining a number of pure, or simple tones called sine waves. This process is called "additive synthesis." Additionally, the volume of these tones is altered, creating percussive voices. And they are modulated for vibrato, celeste, reverberation and other effects. This same principle forms the basis of today's synthesizers.

Your new Hammond Synthesizer is a monophonic musical instrument. As with the human singing voice and most of the instruments in a symphony orchestra, it produces enjoyable sounds, melodies or countermelodies, one note at a time. It's capable of creating many unique sounds. Wind, surf, authentic instrumental voices, and many of the "wow" effects of today's popular music are now all at your fingertips by simply pressing a few controls.

Synthesizers, with their almost unlimited potential of creating traditional instrumental and pure electronic sounds, have long passed the "fad" stage. Their contribution to every musical idiom from rock to classical becomes more significant each day. As you listen to these sounds and those which surround your daily living, try to relate them to the controls of your synthesizer.

Gaining an increased awareness of your audio environment and experimenting with those sounds in your music can be a most exciting and pleasurable experience. Listen . . . experiment . . . and have fun in this new world of synthesized sound . . . with your Hammond Synthesizer.

How to connect and set up

1. The Hammond Synthesizer must be connected to an amplifier and speaker system. You can plug it into a Hammond Organ (acts only as an amplifier speaker), or into a guitar amp, or even into a hi-fidelity or stereo system. A connecting cord is available from most stereo outlets for this purpose. The synthesizer requires a ¼" phone jack which has a straight shell (not a 90° bend) not greater than ½" diameter. If your organ does not have the input jack, contact your local dealer about installing one.

2. The most convenient place to set up your Hammond Synthesizer is on top of the organ with the organ music rack removed. Here, it can be played as an extra keyboard. A downward slope makes the keys clearly visible and easy to reach. And you can use the synthesizer music rack.

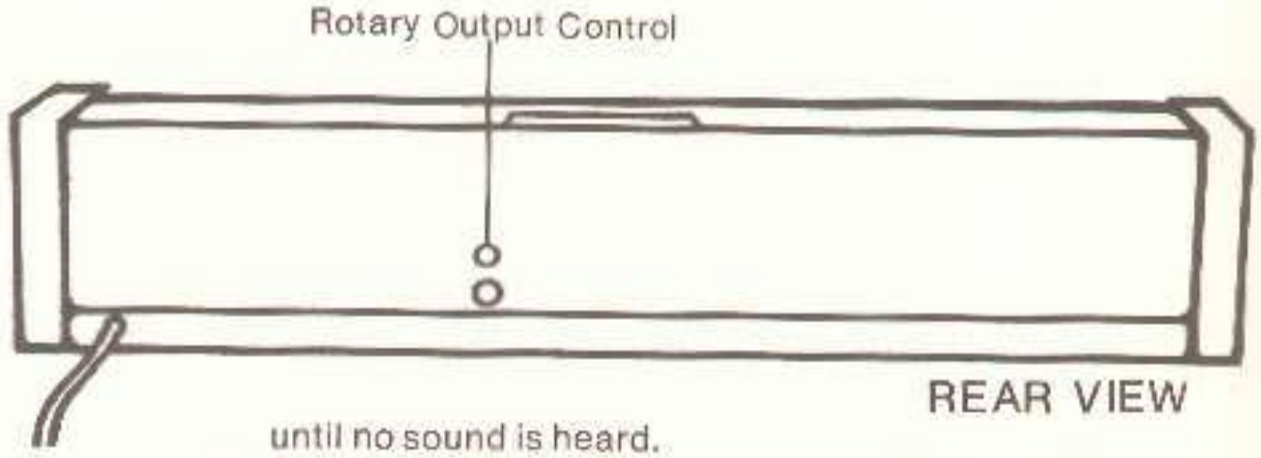
3. If you don't find this position comfortable, try placing the synthesizer on a stand to the right of the organ. Many professional musicians prefer this arrangement. And you may too. A stand designed for the synthesizer is available from your Hammond dealer.

Let's get started

Adjust output control

The rotary output control is located next to the output jack. To adjust it:

- Press the Clarinet button in the preset row.
- Move the Wind slider to the left.
- Center the Volume slider and play a few keys.
- Again, play a few keys, gradually moving the Volume slider to the far left. Notice how the volume decreases until no sound is heard.
- Now, continue to play, and slowly move the Volume slider all the way to the right. If the volume is too loud, or too soft, adjust the output control until the volume is as loud as you want. This will give you maximum use of the Volume slider and best musical performance.



Auto-Patch™ registrations

Some synthesizers require more complicated methods of setting up tone registrations. Patch cords are plugged into sockets, thereby resembling a telephone switchboard. All of the thousands of varied effects on your Hammond Synthesizer can be "patched in" by pressing one button in each of seven rows. These "Auto-Patch" settings are represented by a seven digit number such as 4 311 127 C. This is a patch (or registration).
The letter C is a reminder that the preset Cancel must be pressed for the buttons to operate.

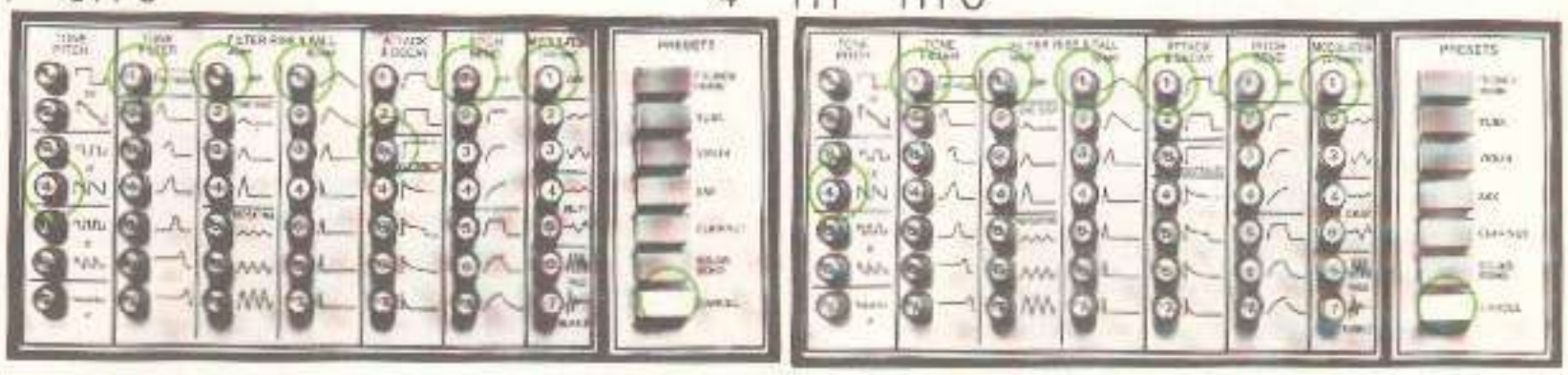
Occasionally an Auto-Patch calls for Wind only and no musical tone. In this case, it doesn't matter which Tone/Pitch button (first row at left) is pressed. The Volume slider will be set to the extreme left (off), thus silencing any Tone/Pitch button. In such a case, we use the letter "W" for the first row as a reminder that it is a "Wind only" sound and the Volume must be turned off.

Experimental patches

AUTO-PATCH 1: W 4 — V 111 — T 311 C

AUTO-PATCH 2: W 4 — V 111 — T 111 C

These two patches will be used to experiment with the various controls of the synthesizer. Shown above the patches are the suggested positions for Wind, Volume and Tuning slider controls.



Tune your Synthesizer

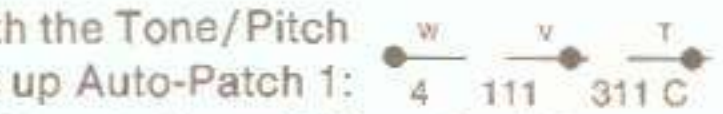
- Select an 8' Flute stop or set a tonebar registration (00 8000 000) for the organ upper keyboard.
- Turn off all organ vibrato and tremolo effects.
- Set up Auto-Patch 6 111 311 C on your Synthesizer. You'll notice that:
  a. When No. 3 button (Sostenuto) in the Attack & Decay column is pressed in, it's not necessary to continue holding down a key after pressing the first key.
  b. When you complete an effect using Sostenuto, press any other button in the Attack & Decay column to discontinue the sustained sound.
- Move the tuning slider slightly to the right of center.
- Play the third C down from the top of the upper keyboard of the organ and also the same C on the Synthesizer at the same time.
- If you hear any wavering, the two instruments are slightly out of tune.
- Slowly move the tuning slider to the right until the wavering slows down and stops entirely. If the wavering speeds up, then move it to the left until it stops. (For some special effects, it's necessary for the Synthesizer and organ not to be perfectly tuned.)

All about controls

Tone/Pitch

You're able to hear voices or music because air waves are generated which transmit sound to your ear. The air wave for each sound has a definite shape called a waveform. It's this shape that determines the tonal quality of the sound you hear. Your Hammond Synthesizer offers a choice of two basic waveforms: square and sawtooth (stairstep) in four different pitch ranges . . . 32', 16', 8', and 4'. The 4' range has the sawtooth wave only.

To experiment with the Tone/Pitch control set up Auto-Patch 1:



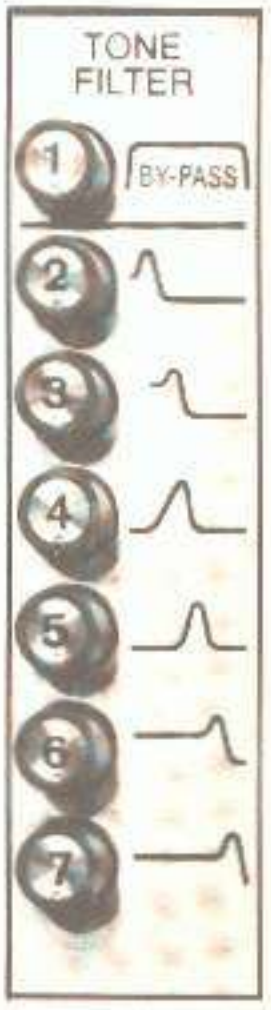
- Play the lowest C and release it. You should hear a continuous sound . . . the 16' sawtooth wave. (If there's no sound, check the Volume slider.)
- Press button 3 to hear the 16' square wave tone. Press button 4 and then 3 again. The sawtooth wave (strings) is richer and fuller than the hollow sounding square wave which is characteristic of the clarinet.
- Try both waveforms in the 32', 16' and 8' pitch ranges, and combine two different pitch ranges such as 16' and 4'.
- Pressing two or more buttons at a time is only recommended for the Tone/Pitch column. In these cases, the patch will show two numbers for the first row.

Tone Filter

The Tone Filter modifies wave sounds. A familiar example of tone filters are the tone controls of a hi-fi or stereo set. These controls soften the high (treble control) or low (bass control) frequencies. Your Synthesizer filter is more flexible. It softens some frequencies and permits others to pass. Six of the controls allow you to change the basic tonal quality of the two waveforms.

To experiment with the Tone Filter control, set up experimental Patch 1:

- Play the lowest C. There is no resonance in Patch 1 because all the frequencies of the basic tone by-passed the filter.
- Try Tone Filter buttons 2 through 7. Notice how each emphasizes a different band or range of frequencies and how this resonance band rises in pitch. The lower resonances correspond to large orchestral instruments and higher resonances to smaller ones.



Special Note: Touch Responsive Controls

Filter Rise & Fall, Attack & Decay, Pitch Bend, and Modulator (vibrato) effects can be activated by the manner in which your fingers move from one key to the next. You may release a key before playing the next ("detached" style) or play the new, higher key before releasing the previous lower key ("legato-high-note" style).

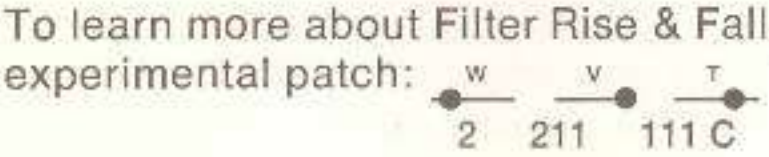
To understand why the "legato-high-note" style is significant, consider that the Synthesizer is monophonic. Therefore, the highest of two or more keys played determines the pitch. For example, if you press a C key and also press the D key above it, D is the note or pitch you hear.

As you try each of the next five effect columns, you'll find that most are activated by the "detached" style; the four percussions are activated by the "legato-high-note" style. These touch responsive controls add tremendous flexibility to your Hammond Synthesizer.

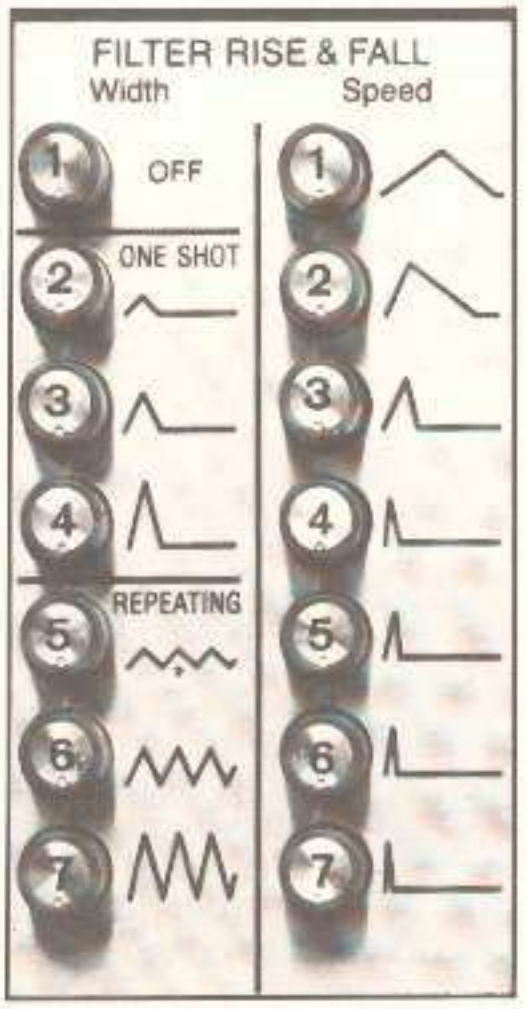
Filter Rise and Fall

Filter Rise & Fall gives you control of the Tone Filter "sweep" (movement) and speed. The "width" buttons control how far the resonance will "sweep" in frequency, while the "speed" buttons control how quickly the sweeping effect moves.

To learn more about Filter Rise & Fall, set a new experimental patch:



- Play the lowest C.
- Press Width buttons 2, 3, and 4, one at a time. Repeat low C with each button change. Notice how the "sweep" effect occurs only once each time you press the key. These three Width buttons are "one shot" effects.
- Press the same buttons again, and with each, play a series of keys using first the detached style, then the legato (smooth) style. Notice how the sweeping effect is activated or deactivated (touch responsive) by your playing technique.
- Now try Width buttons 5, 6, 7, one at a time. Play a series of keys and notice how the sweeping effect continues to repeat as long as each key is held. These buttons are "repeating" effects. (This repeating or free running rise and fall effect is not activated by the playing style.)
- Press Width button 7, play and hold low C while you try all the Speed buttons, one at a time. Notice the increased speed of the sweep with each successive button.



Attack and Decay

Attack & Decay permits you to control how a sound begins (attack) and how it fades (decay). For example, when a piano key is struck, the sound begins very quickly; it therefore has a fast attack. The flute, on the other hand, has a much slower attack. The decay (or fading characteristic) of a piano note differs from a xylophone note. The piano note lingers and decays more slowly than a note played on a xylophone. The flute note does not decay, but remains at constant volume until the end of the note.

To learn more about these controls, set up experimental Auto-Patch 2:

Button 1: A slow attack. Touch responsive. Use it to create authentic instrumental sounds. It's activated by the "detached" playing style; only the first of a series of legato played notes will have the slow attack.

Button 2: A fast attack. Use it to produce special novelty effects. All notes will have fast attack with either playing style.

Button 3: Play low C. Release, and the note will continue to sound. This setting has no decay factor (sostenuto) and is useful for producing non-musical or unpitched effects, such as wind or surf, leaving your right hand free to play melodies on the organ. To stop the sostenuto, select and press another button in the Attack & Decay row.

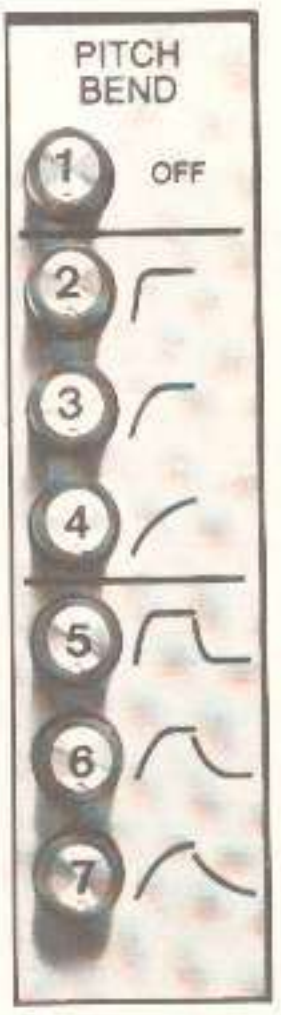
Buttons 4–7: Each one creates a percussed sound. These four sounds are activated by the "legato-high-note" style.

Button 4: Play and *hold* low C. The sound will decay even though you continue to hold down the key. Play and quickly *release* low C. The sound will decay in the same amount of time, but you will hear a sustained quality.

Button 5: Play and hold low C. The sound will decay at the same slow rate as 4. Play and quickly release low C. This time the sound stops. This feature is called "snubbing," a piano effect produced when the sustain pedal is not depressed.

Button 6: Functions the same as Button 4, but the sustain (decay time) is shorter.

Button 7: Functions the same as Button 4, but with a very short decay whether you hold or release a key. It's a pizzicato effect.



Pitch Bend

Buttons 2, 3, and 4 enable you to play a note on the keyboard and have it "slide up" to the pitch you would normally hear if the Pitch Bend were turned off. Buttons 5, 6, and 7 enable you to "bend" a pitch *up or down* and they're activated by the "detached" style. For example, when a Pitch Bend setting is part of your Auto-Patch, and you play and release a key, then play another key, the Pitch Bend will affect both notes. If you play one key and then play the next higher key before releasing the first, in a very smooth or continuous manner, Pitch Bend will affect only the first note played.

To learn more about Pitch Bend controls, set up experimental Auto-Patch 2:

AUTO-PATCH: W 4 — V 111 — T 111 C

Button 1: Off position. If Pitch Bend is not part of an Auto-Patch, make sure this button is pressed.

Button 2: Play and release low C. You'll hear a very quick and subtle slide *up* to the normal pitch.

Button 3: Play and release low C. You'll hear a slower slide *up* to the normal pitch.

Button 4: Play and release low C. You'll hear an even slower slide *up*.

Buttons 5-7: Notes bend both up and down when using a "detached" technique. The Pitch Bend becomes slower as you move down from 5 to 7.

- The Pitch will slide *up* to the first note you play and to any detached note which is higher than the previous note.
- The pitch will slide *down* when you play a detached note lower than the previous note.
- In other words, the direction of the Pitch Bend depends on the direction in which the notes move.
- To experiment with each button, play C, D, E, F, G, (up) and then G, F, E, D, C, (down).

Modulator (Vibrato)

The Modulator controls enable you to add a wavering effect to the Synthesizer tones. This effect ranges from a slow vibrato (~~~~) to the extremely rapid razz effect. (^^^^)

To experiment with Modulator control, set up Auto-Patch 2:

AUTO-PATCH: W 4 — V 111 — T 111 C

Button 1: The off position.

Button 2: Play low C and you'll hear a slow vibrato with only a slight pitch variation.

Button 3: Play low C and you'll hear a faster vibrato and a wider pitch variation.

Buttons 4&5: Delayed vibrato . . . a momentary withholding of the vibrato. Vibrato begins just slightly after a key is played and held. This delay is activated by the "detached" playing style.

- Button 4: This produces the same vibrato as Button 2, but with delay. Slowly play a series of notes, using each playing style (detached and legato-high-note). Delay is achieved only when playing the detached style.
- Button 5: This produces the same vibrato as Button 3, but with delay. Again play a series of notes,using each playing technique.

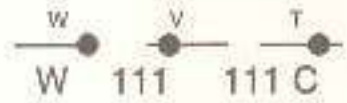
Button 6: Play a series of notes. You'll hear a "razz". . . a buzzing sound often used in jazz and rock music.

Button 7: Again, play a series of notes. You'll hear a sound called "burble". . . a slight razz during the attack of each note you play. The razz is activated by the "detached" playing style.

Wind

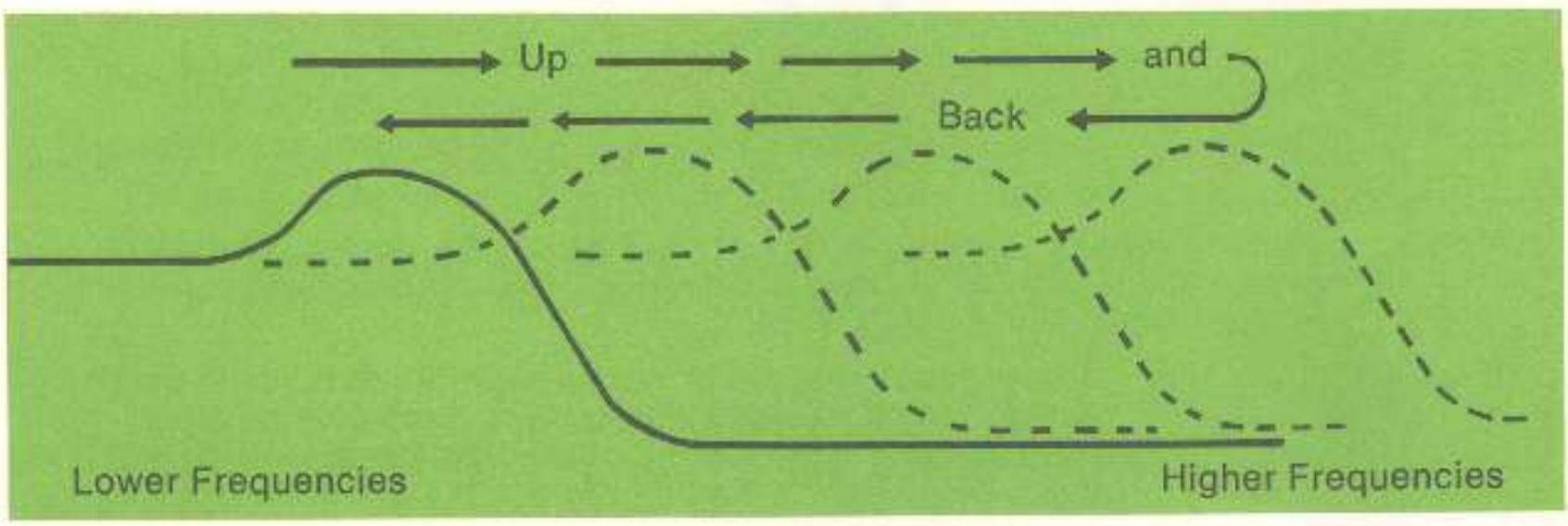
The Wind control is located to the left of the Volume slide control. It provides the "raw" sound for the unpitched sound effects you'll enjoy creating. Remember: when a "W" is used in a patch to represent the first row (Tone Pitch), volume must be turned off. And it doesn't matter which button is pressed in the Tone Pitch row.

To silence a previous patch, move the volume slider to *off*, and set up this Auto-Patch:

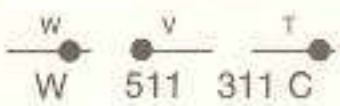


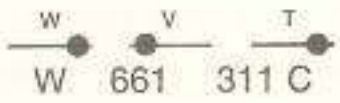
Now you're ready for some wind experiments

- Move the Wind slider to the far right. Press any key to start the wind sounding sostenuto.
- Experiment with each of the Tone Filter buttons to create different wind sounds.
- Use Width and Speed controls, especially Width buttons 5, 6, and 7, to create whistling wind and various surf sounds.
- Compare the Tone Filter, Width, and Speed setting to the sound you hear. You'll soon discover that the whistling winds are higher frequencies, while the howling winds are lower frequencies. The Filter Rise & Fall accentuates these frequencies from low to high, and back:



- Try the following patches:



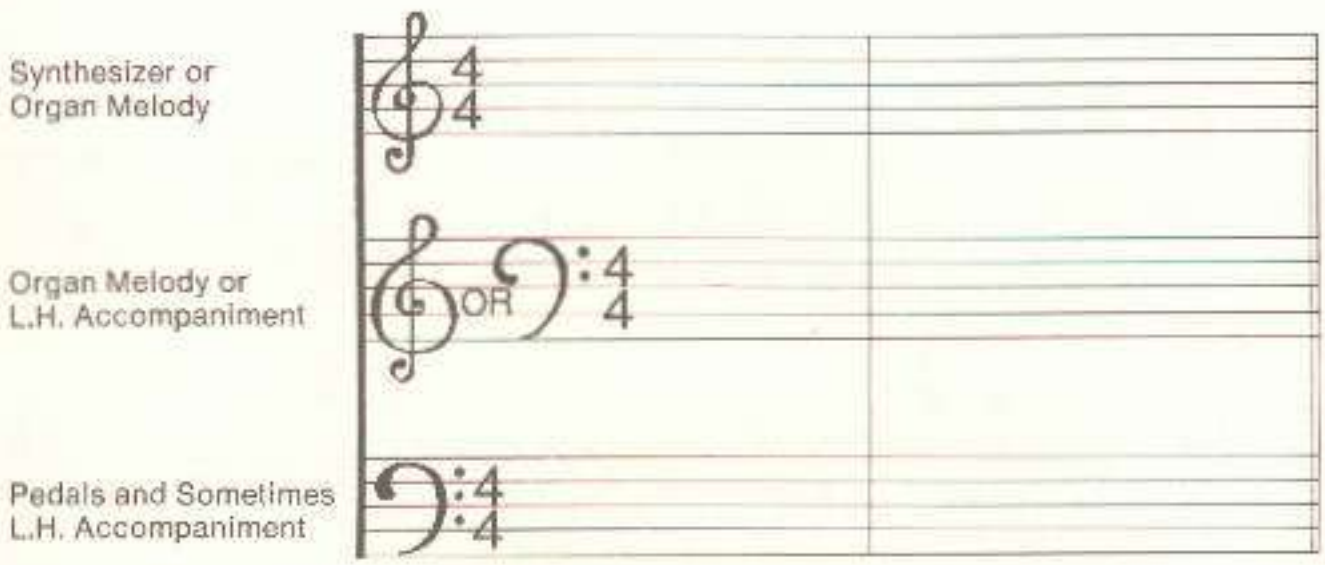


Filtered Noise

- Set up Auto-Patch: W 3 — V 611 — T 111 C
- This adds the 16′ square wave to the wind, and speaks with slow attack. Now you can play "filtered noise" with the melody. As you play several keys, try various pitch ranges (Tone Pitch).
- Now, adjust the Volume slider to a high level and the Wind slider to a low level. Again, play several keys, and listen to the effect. The slight amount of wind in the background simulates the air which escapes when an instrument such as the flute is played. Later on you may wish to add this effect to the instrumental sound you'll be synthesizing.

Putting it all together

Now that you've experimented with your Hammond Synthesizer controls, the following songs will give you an opportunity to try out the effects. Each song will have a suggested Hammond Synthesizer Auto-Patch (registration). And music notation is written on three staffs like this:



You may play the arrangements in various ways

- Sustain the chords and pedals on the organ while you play the synthesizer part.
- Use an appropriate automatic rhythm, while sustaining the chords and pedals.
- Play the chords and pedals as the arrangement is written.

If you're ready (Come go with me)

AUTO-PATCH: W 5 · V 443 · T 211

Words and Music by Homer Banks, Raymond Jackson & Carl Hampton

Synthesizer

N.C. F B♭ F B♭

If you're read - y (Come go with me.) If you're read - y (Come go with me.) If you're

Organ - Lower Keyboard

Pedals

F B♭ F B♭

read - y (Come go with me.) Come go with me (Come go with me.) No

F B♭ F

ha - tred. (Come go with me.) We'll be tol - er - a - ted. (Come go with

B♭ F B♭

me.) (Peace and love ___) Come go with me; go be - tween the

F B♭ C7

rac - es; Come go with me. Love is the on - ly

B♭ C7 N.C.

trans - por - ta - tion to where there's to - tal com - mun - i - ca - tion.

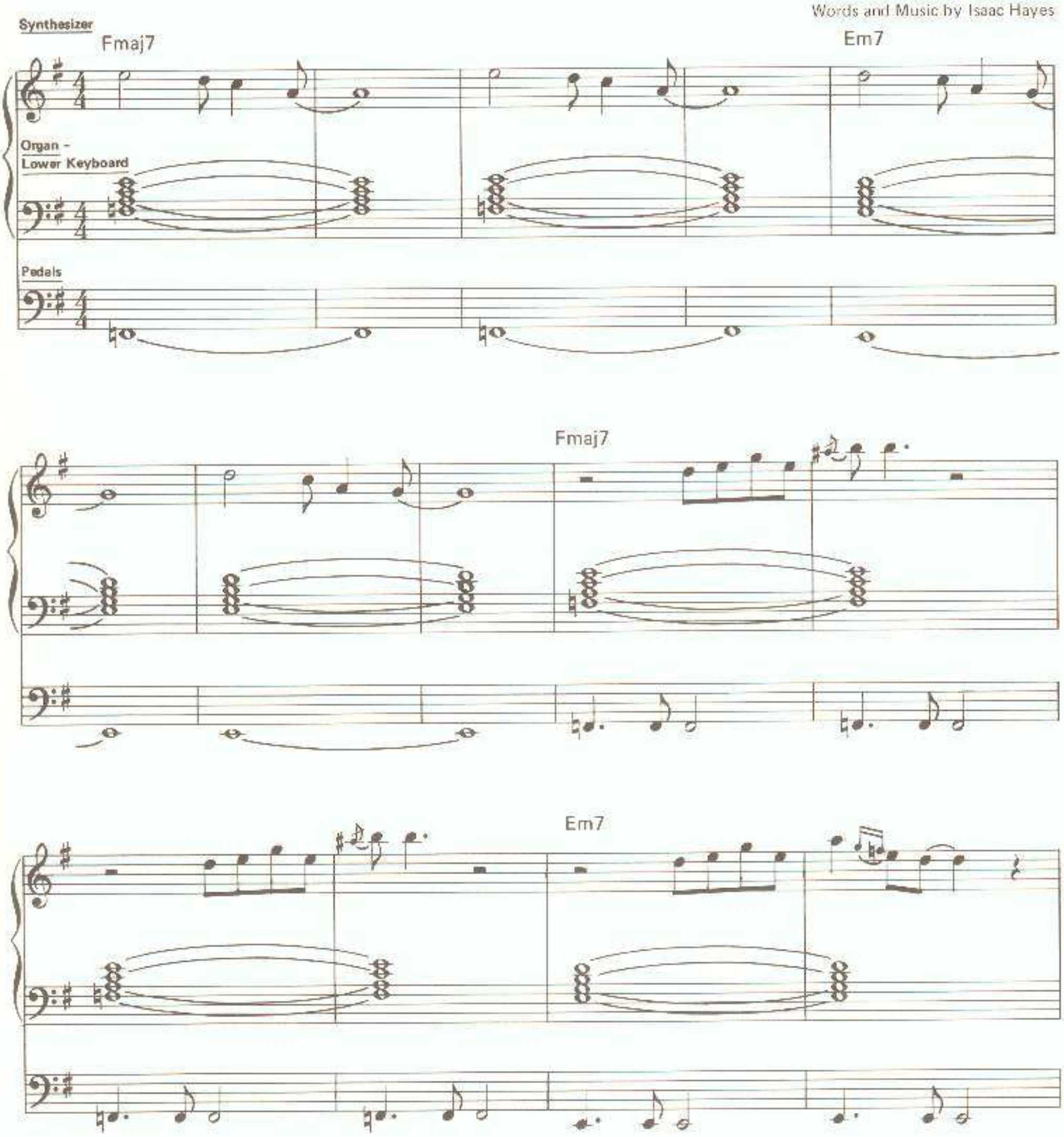
F B♭ F B♭ Repeat and Fade

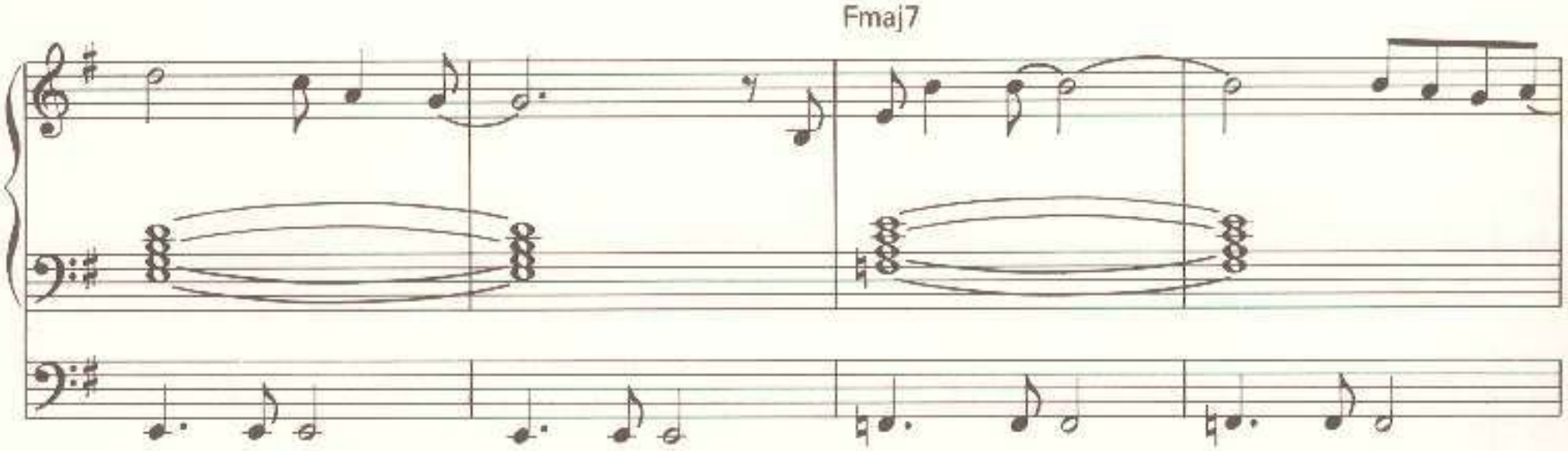
read-y come go with me. If you're read-y come go with me. If you're

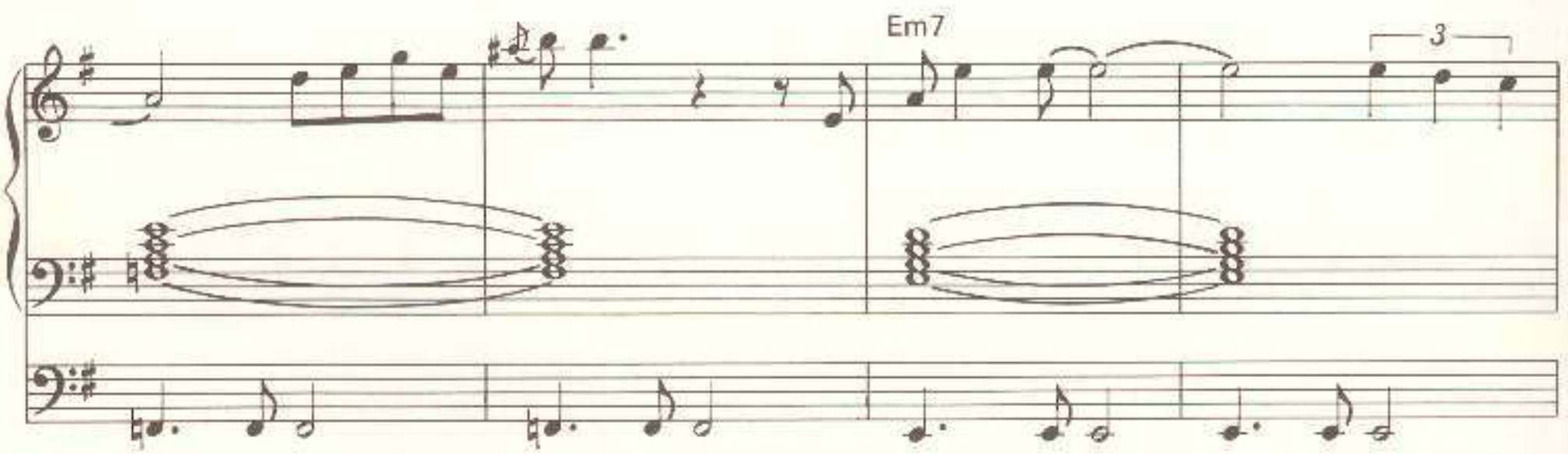
Theme from Shaft

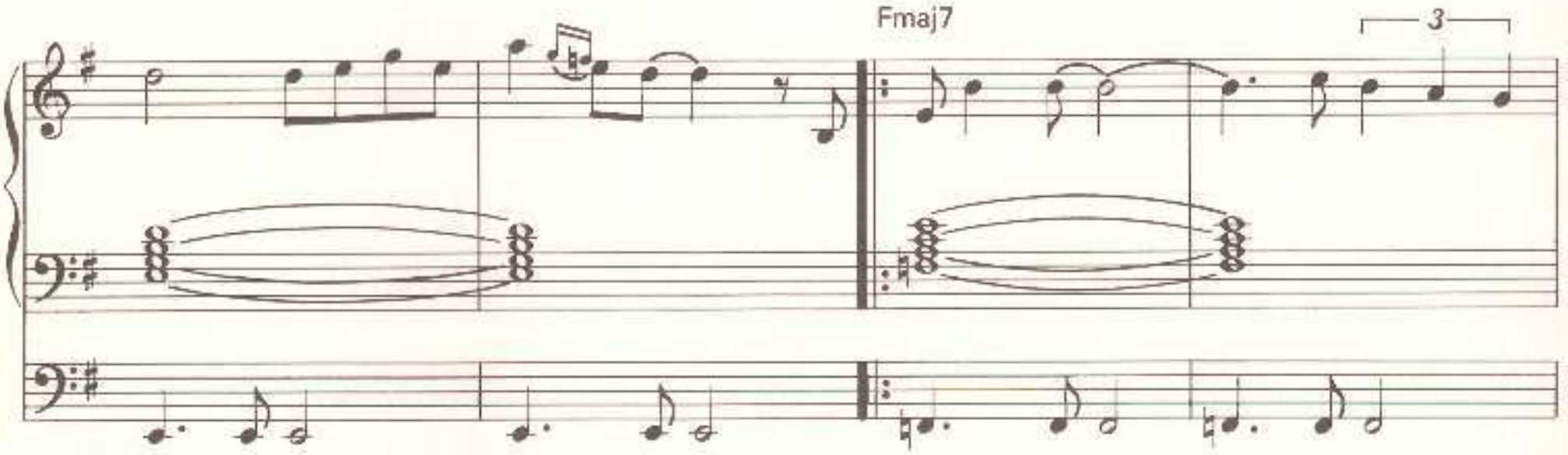
AUTO-PATCH: W 4 V 465 T 411 C

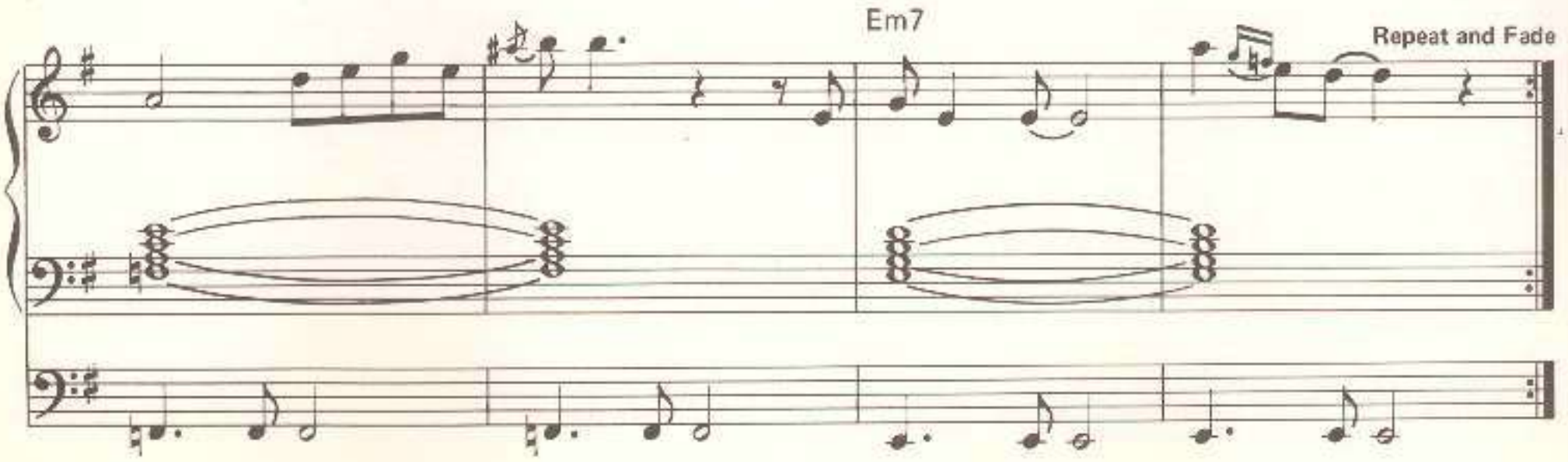
Words and Music by Isaac Hayes




Fmaj7


Em7
3


Fmaj7
3


Em7
Repeat and Fade

Touch a hand, make a friend

AUTO-PATCH: W 6 V 743 T 211 C

Words and Music by Homer Banks, Raymond Jackson & Carl Hampton

Synthesizer

N.C. C Dm

Organ - Upper Keyboard

Can't you feel it in your bones, y'all?— A change — is — com-ing on.

Pedals

F G F

From ev - er - y walk of life — peo - ple are see - ing the light—

C N.C. C

— Can't you feel it in your hearts now? A new thing is

Accomp. to Lower Keyboard

F Dm G7

tak - in' shape. Reach out touch a hand, y'all.

Fmaj7 C N.C. C

Make a friend if you can. Hey, what a-bout you, my friend?

F

Ain't it time you come on in? Live the un-

G7 F C D.C. and Fade

i - ted way. Why don't you join us to - day?

(Sittin' on) The dock of the bay

AUTO-PATCH: W 2 4 — V 447 — T 411 C

Words and Music by Otis Redding & Steve Cropper

Synthesizer

F A B♭ N.C. G

Sit-tin' in the morn-ing sun — I'll be sit-tin' when the eve-nin'_ come,
left___ my___ home in Geo- - gia head-ed for the Fris-co_ Bay.

Organ - Lower Keyboard

Pedals

F A B♭ G

Watch-in' the ships roll in — then I watch 'em roll a-way a-gain. — Yeah! ___ I'm ___
I have ___ noth-ing to live ___ for look like noth-ing gon-na come my way. — So, I'm just gon-na

F D F D

sit - tin' on the dock of the bay, —
sit ___ on the dock of the bay —

watch-in' the tide ___ roll a - way ___ (oo ___ ee)

F G 1 F D

sit-tin' on the dock of the bay wast - in' time.

2 F D F C B♭

Look like noth-ing gon - na change;

F C B♭ F C

ev - 'ry - thing still re - mains the same I can't do what

B♭ F E♭ C7 D.C. and Fade

ten peo - ple tell me to do, So I guess I'll re - main the same.

More about controls

Preset Buttons

Your Hammond Synthesizer offers a choice of six preset sounds. Each is a pre-programmed patch, and sounds automatically with amazing realism. Simply select the instrumental voice you wish to hear . Use them only one at a time.

NOTE: To deactivate the preset buttons, the "cancel" control must be pressed. When any preset is on, the buttons on the control panel are temporarily ineffective. But the Wind, Volume, and Tuning sliders are still operable. To hear the Presets, the Volume slider must be moved to the right. You may either set the Wind to off, or add any degree of wind to any preset as you desire.

	EQUIVALENT AUTO-PATCH NUMBERS		
4	311	127	C
2	211	127	C
6	111	155	C
4	611	124	C
3	511	111	C
6	573	417	C

(Restores operation back to button settings)

French Horn

The French Horn is a brass instrument with a large flaring bell and a funnel-shaped mouthpiece. It has a slow attack which builds to a big brilliant sound.

Tuba

The Tuba is a large brass instrument which is usually used to create a tonal foundation in the brass part of an orchestration. The low tones and slow attack of the tuba enable you to easily recognize this distinctive sound.

Violin

The most important of the stringed instruments is the violin. Its fantastic range of dynamic expressiveness makes the violin sound totally unique.

Sax

The saxophone produces an extremely variable sound. While this instrument possesses the strength of the cornet, it may also be played as softly and delicately as a flute. The flexibility of the saxophone has made it a popular instrument with jazz groups.

Clarinet

The beautiful, hollow sound of the clarinet is equally at home in a symphony orchestra or a Dixieland band. The distinctive sound comes to life when you press the clarinet preset tab and play music like "Cotton Candy."

Solar Echo

One of today's modern electronic sounds is at your fingertips. Sustain is built into this preset voice; therefore, play the notes with a short, detached touch.

Fun sounds and effects

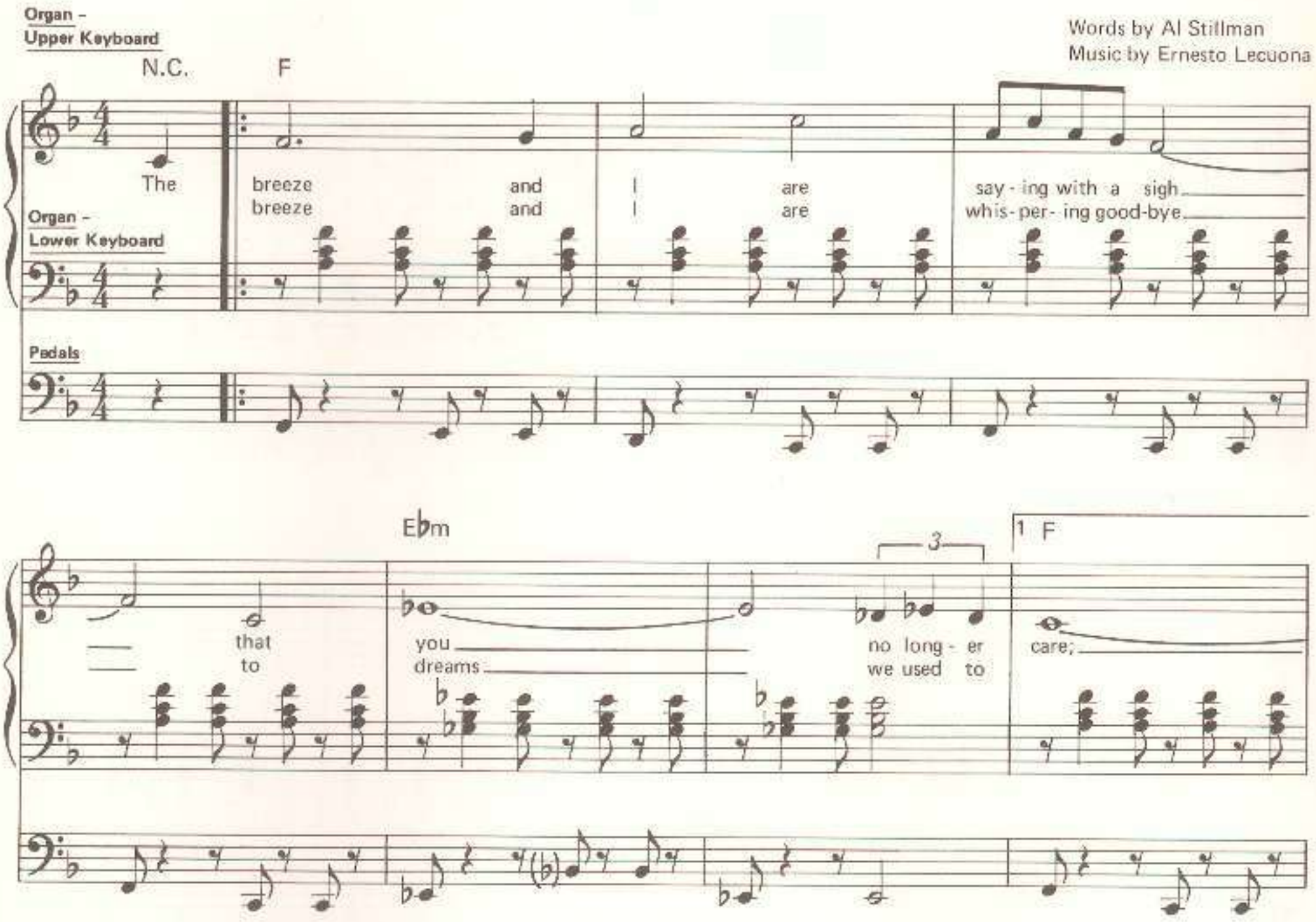
The breeze and I

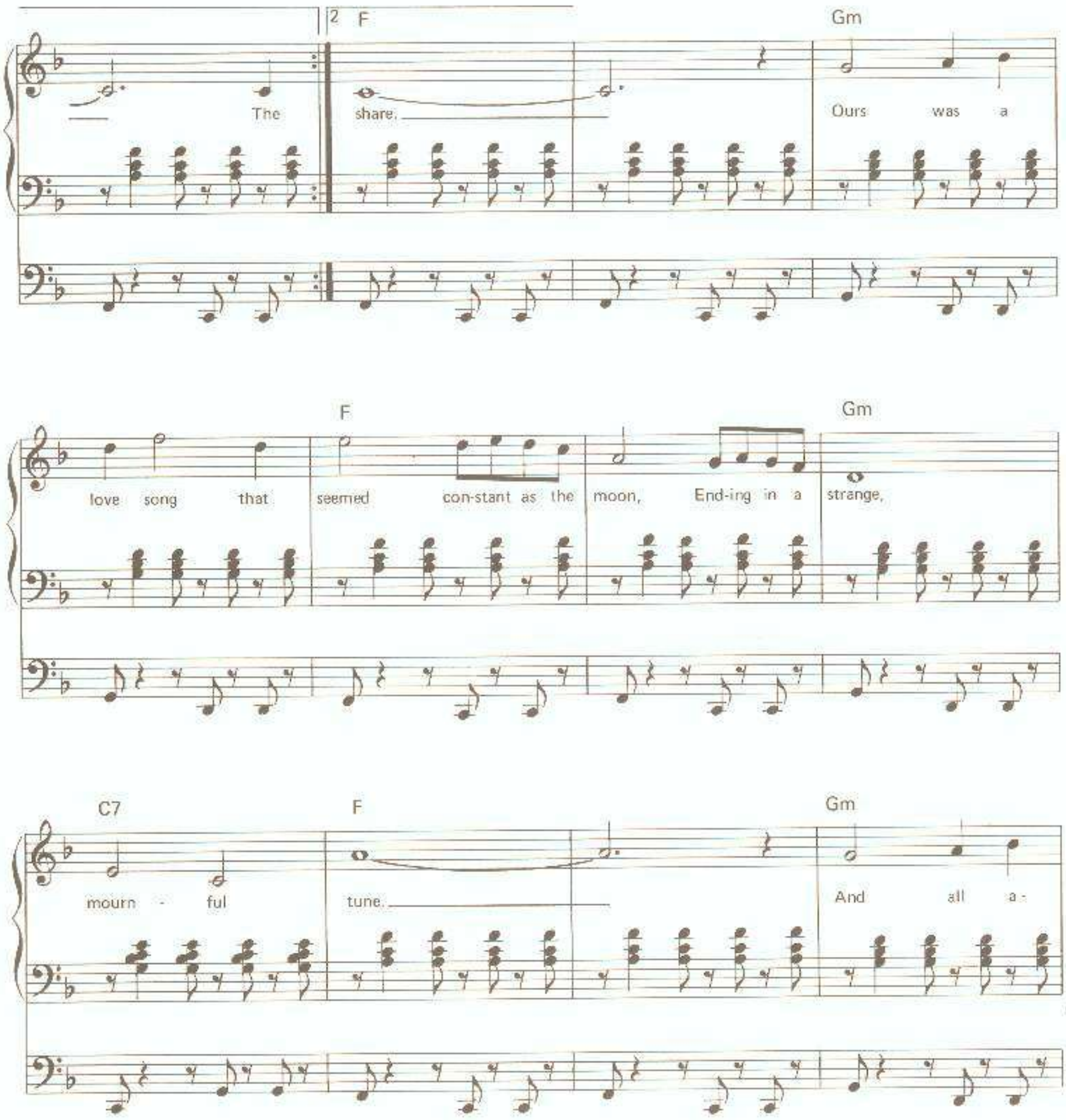
Wind

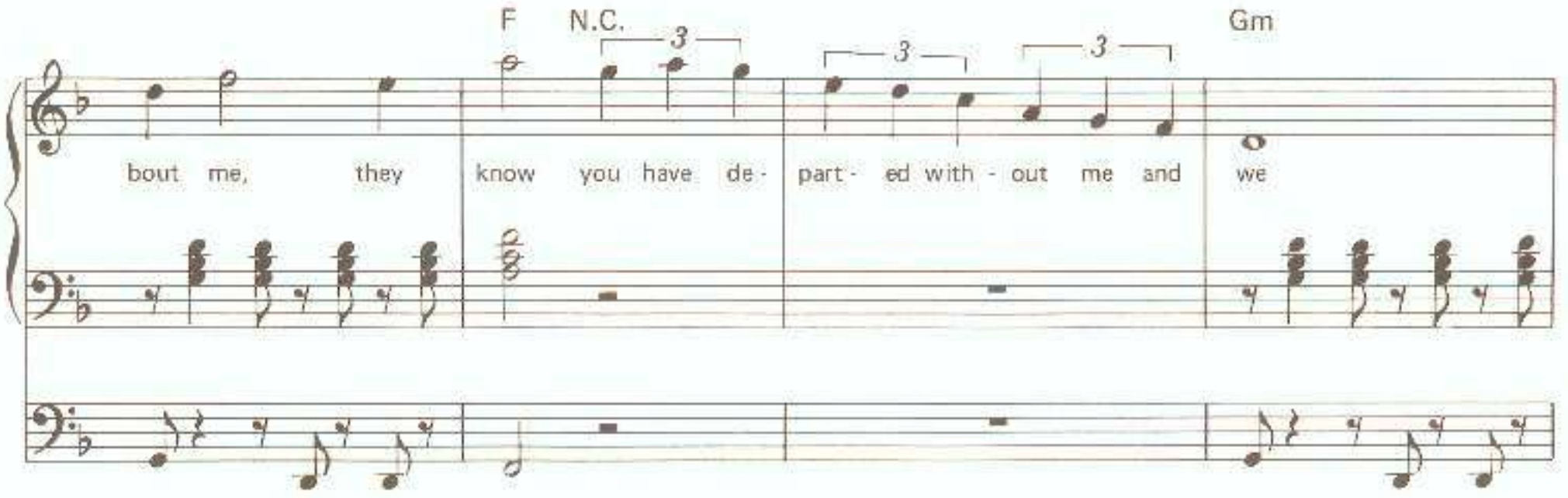
As you've already learned, your Synthesizer can produce many different wind effects. Begin THE BREEZE AND I, using the wind alone as an introduction. Then, reduce the wind sound volume so it provides a soft background as you play the melody. At the end of the arrangement, increase the wind volume to provide an effective ending.

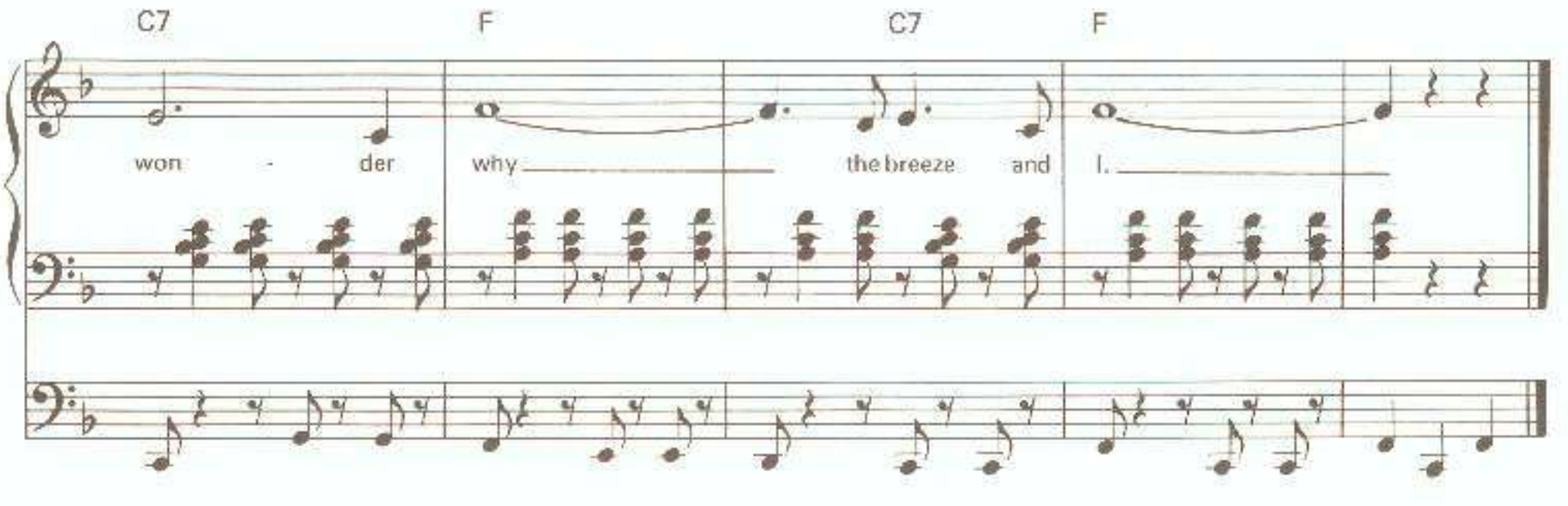
AUTO-PATCH: W 371, V W, T 311 C

Words by Al Stillman
Music by Ernesto Lecuona




2
F
Gm
The
share.
Ours was a
F
Gm
love song that seemed con-stant as the moon, End-ing in a strange,
C7
F
Gm
mourn - ful tune.
And all a -


F
N.C.
Gm
3
3
3
bout me, they know you have de- part - ed with - out me and we

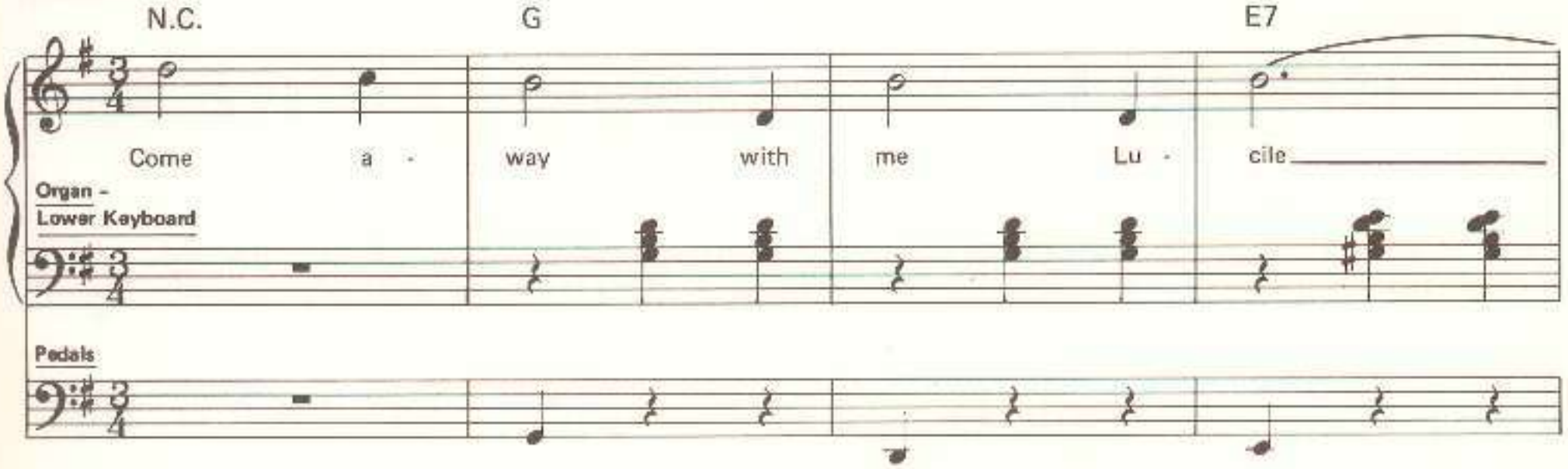

C7
F
C7
F
won - der why the breeze and I.

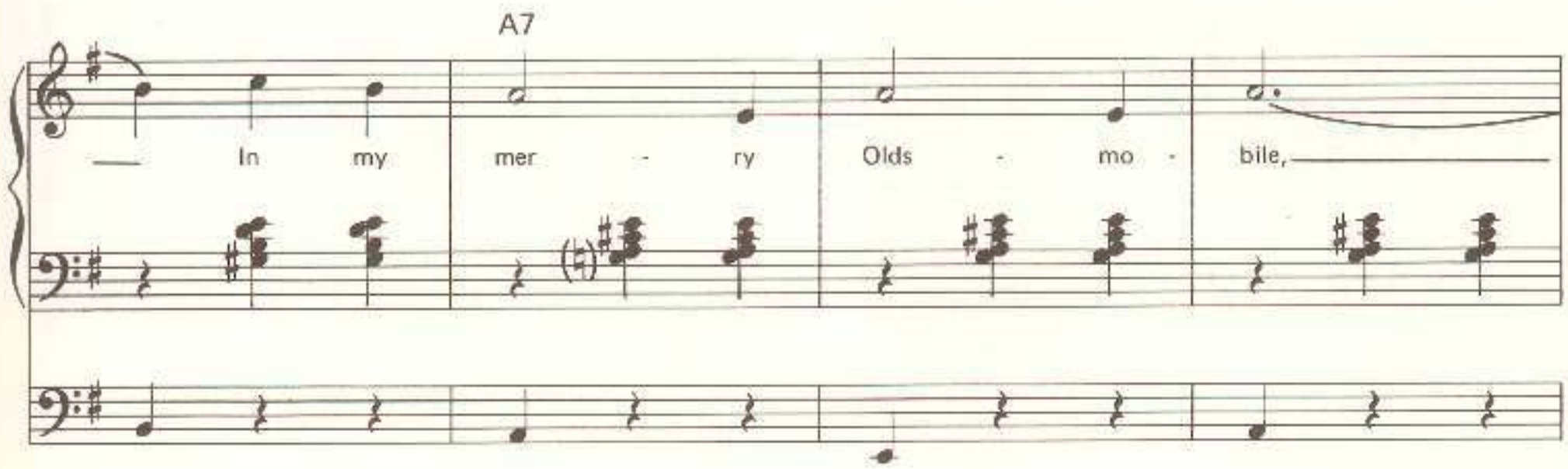
In my merry Oldsmobile

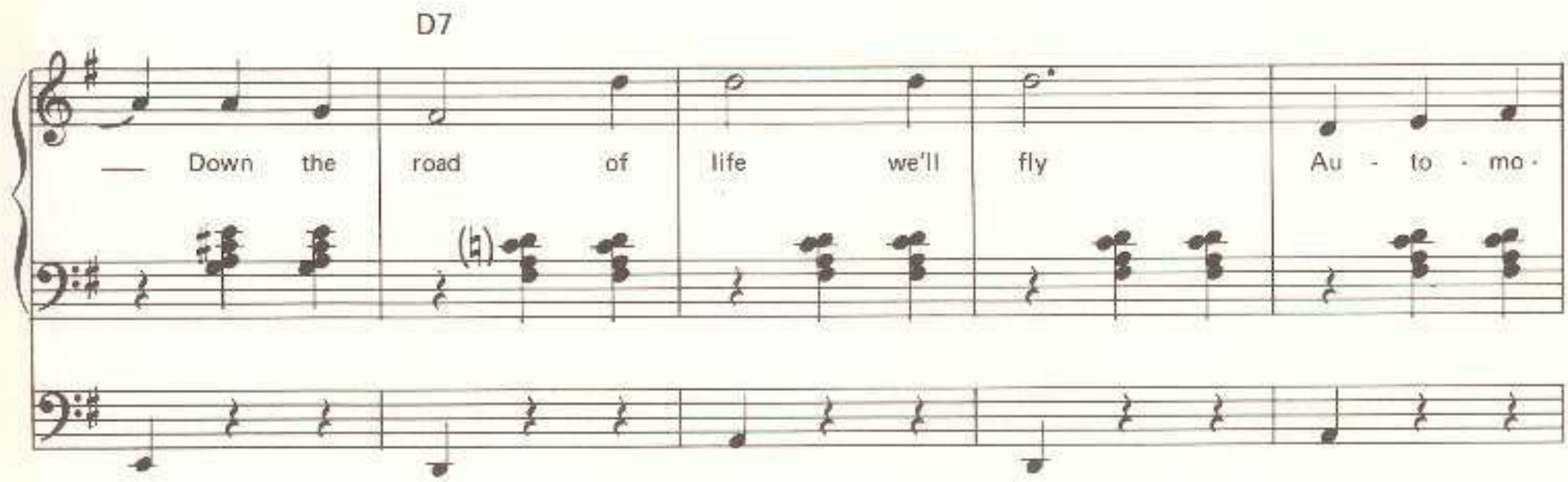
Old-time car motor

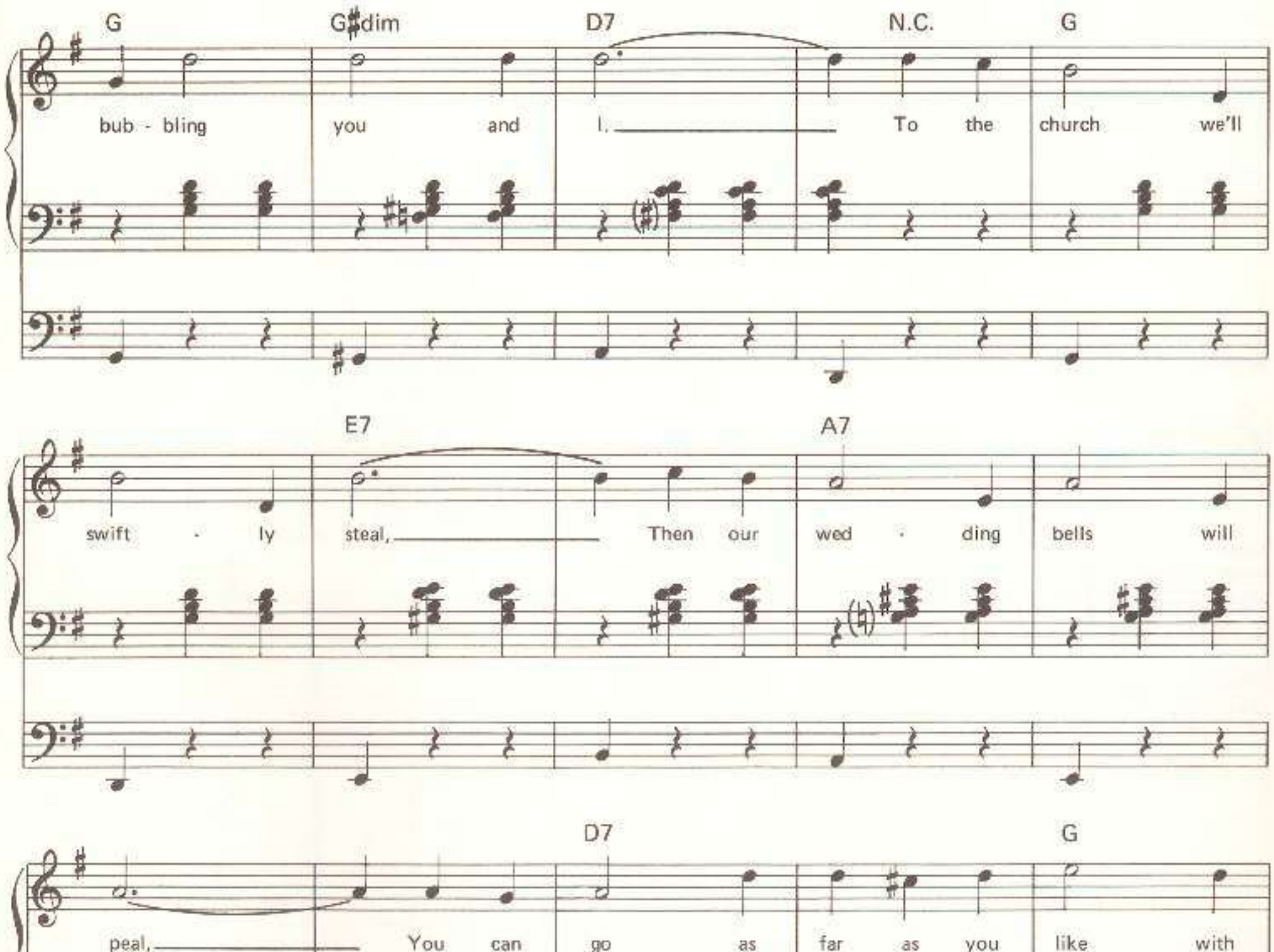
This patch provides some car motor sounds of the past as you play IN MY MERRY OLDSMOBILE. Begin with the effect as an introduction, reduce the Wind slider while you play the melody, then end with the motor sound alone. For an added effect, in the ending, gradually decrease the volume of the motor sound. Different motor sounds are produced by changing the Tone Filter, Width, and Speed settings.

AUTO-PATCH: W V T — W 477 311 C








G
G♯dim
D7
N.C.
G
bub - bling you and I. To the church we'll
E7
A7
swift - ly steal, Then our wed - ding bells will
D7
G
peal, You can go as far as you like with
Em
A7
D7
G
me, In my mer - ry Olds - mo - bile.

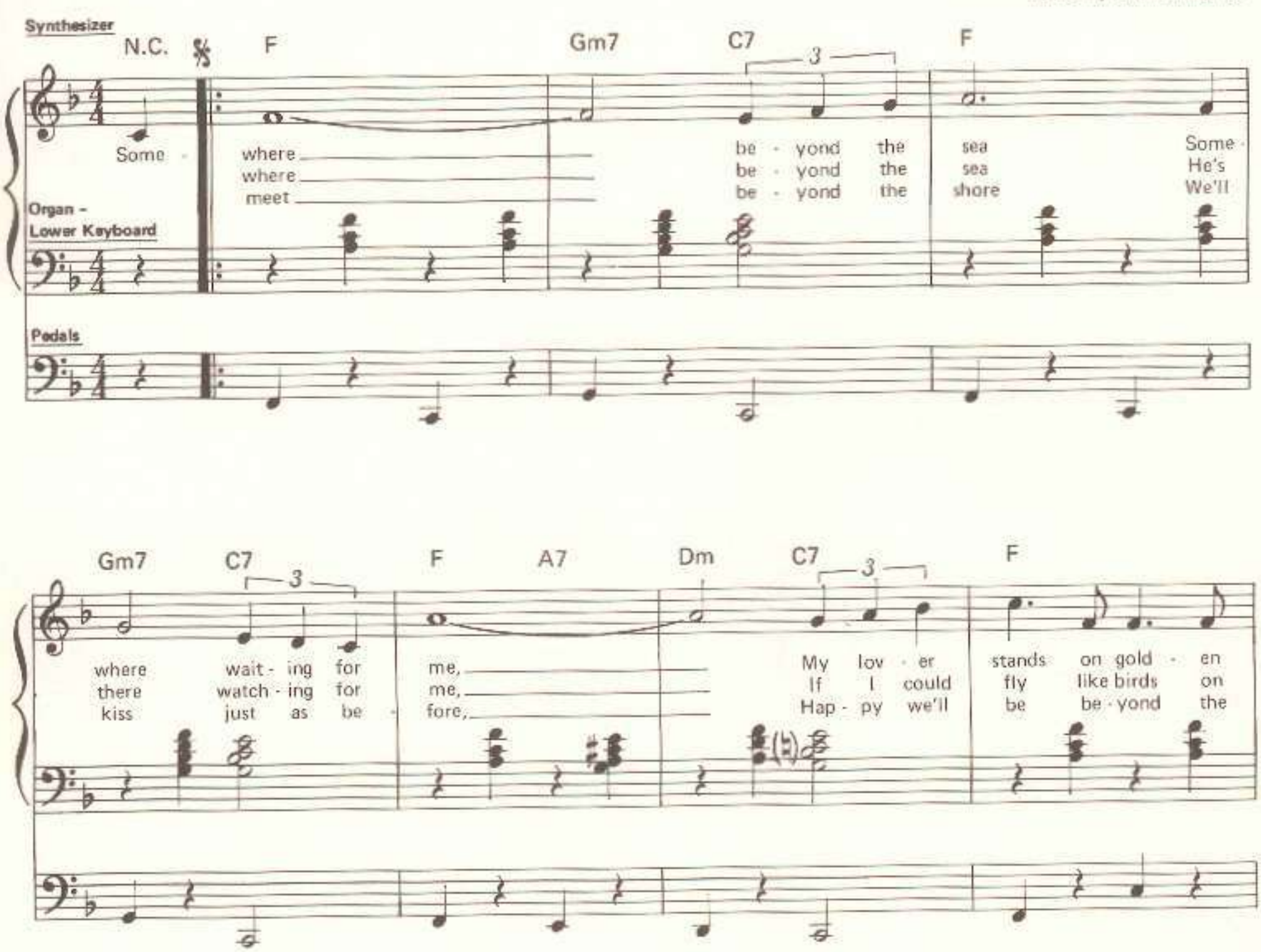
Beyond the sea

Surf

The beautiful sound of the surf has been used as a background in more than one recording. Set the suggested patch, then experiment a bit. In this arrangement of BEYOND THE SEA, use the surf sound as an introduction. Turn off the effect when you begin playing on the organ and use it again after you've finished the song. Or continue the surf at a reduced level throughout the song while using the organ to play the melody. For some varied surf effects, increase and decrease the volume.

AUTO-PATCH: W V T — W 261 311 C

Words by Jack Lawrence
Music by Charles Trenet



B♭ D7 Gm7 C7 F B♭ To Coda 1 G7

sands high sea

And watch - es the ships that go sail -
Then straight to his arms I'd go
And nev - er a gain I'll go

ing.

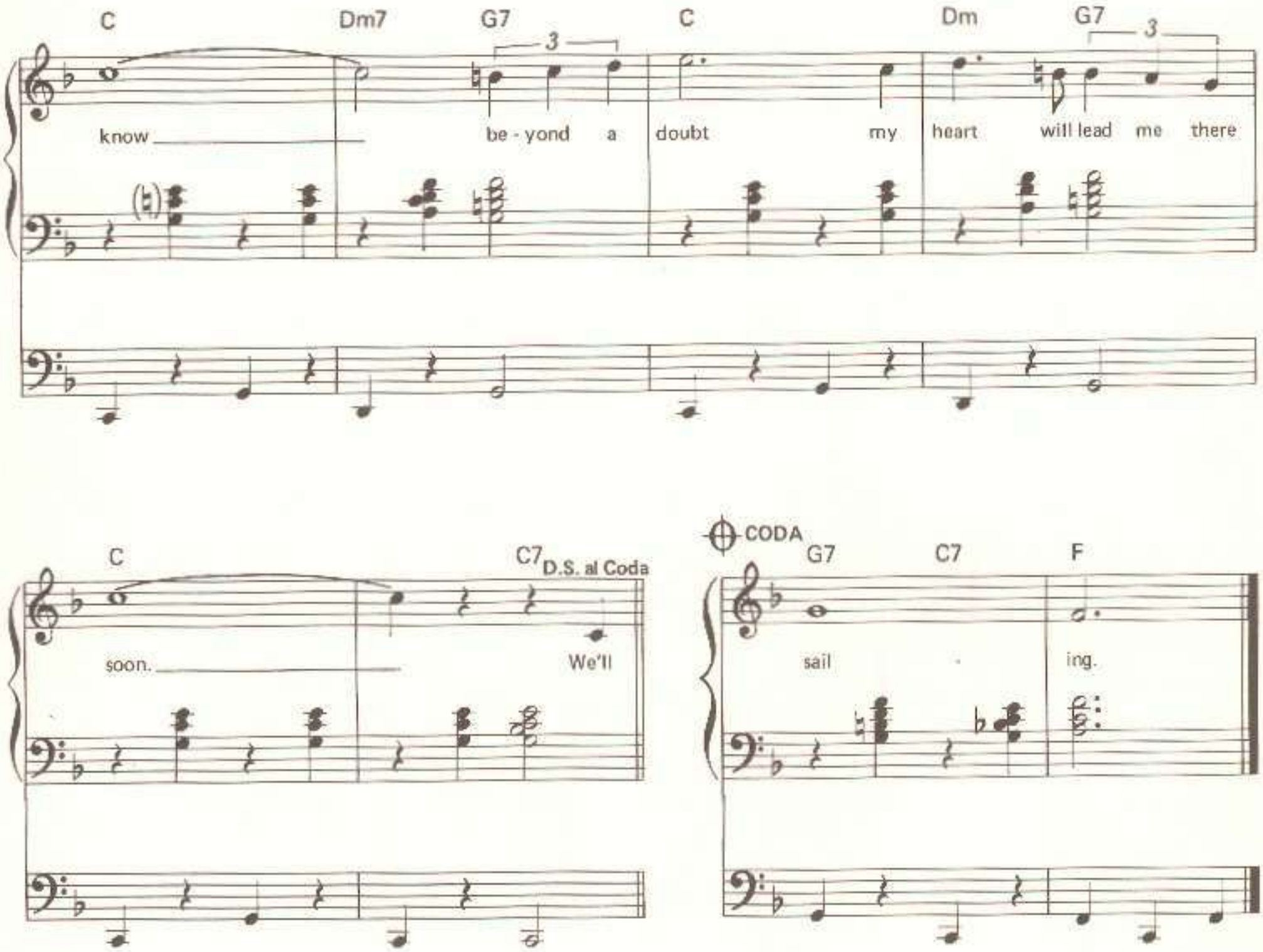
C C7 2 Gm7 C7 F E7 A Bm7 E7

Some - sail - ing. It's far be-yond a

star it's near be - yond the moon I

A Bm7 E7 A G7

Beyond the sea, continued



Popcorn

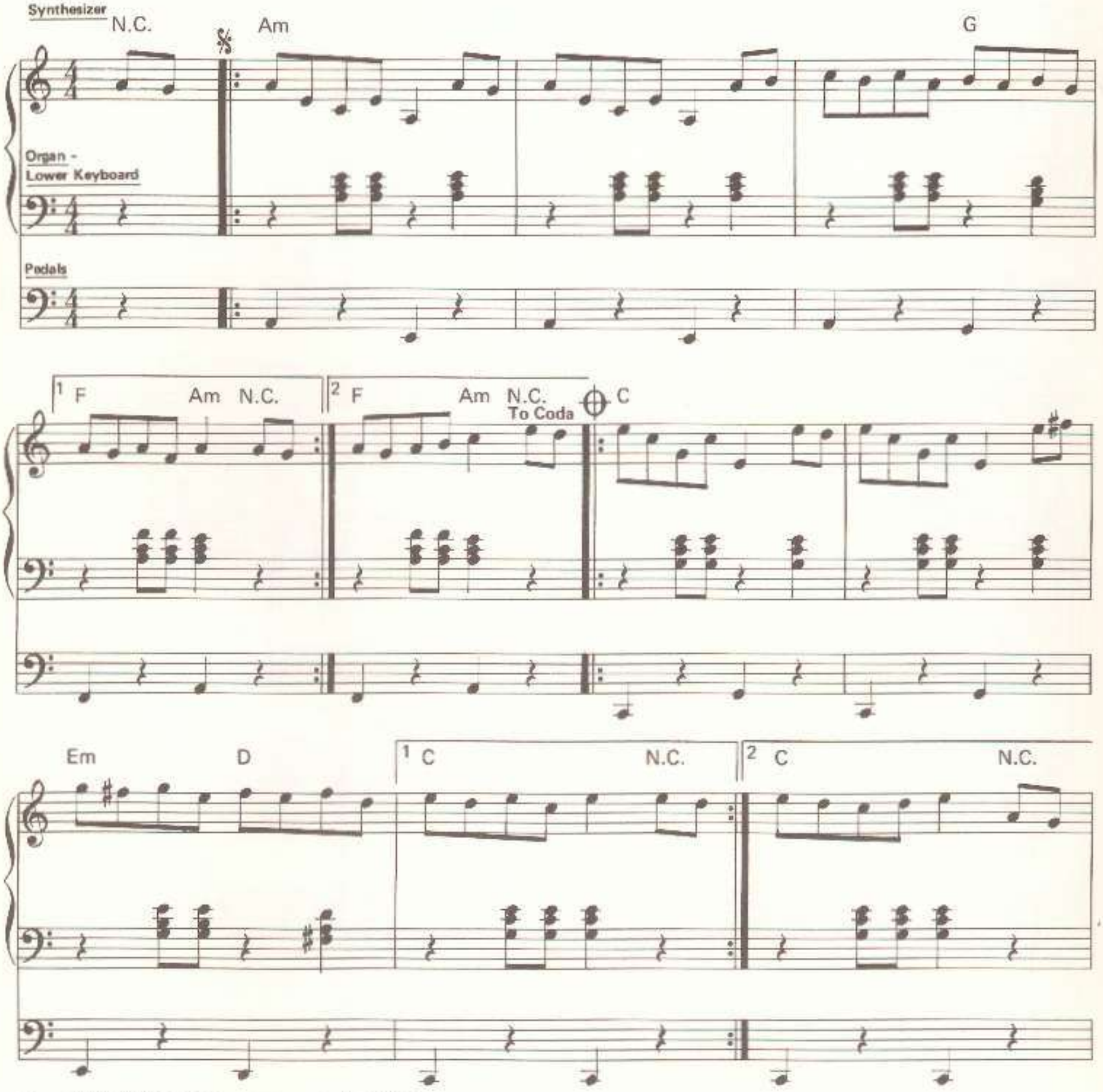
Popping corn

The hit song POPCORN is a natural for your Synthesizer. The percussive "popping" sound is produced by a very fast attack and decay. The suggested patch can be easily modified by changing the Tone/Pitch setting.

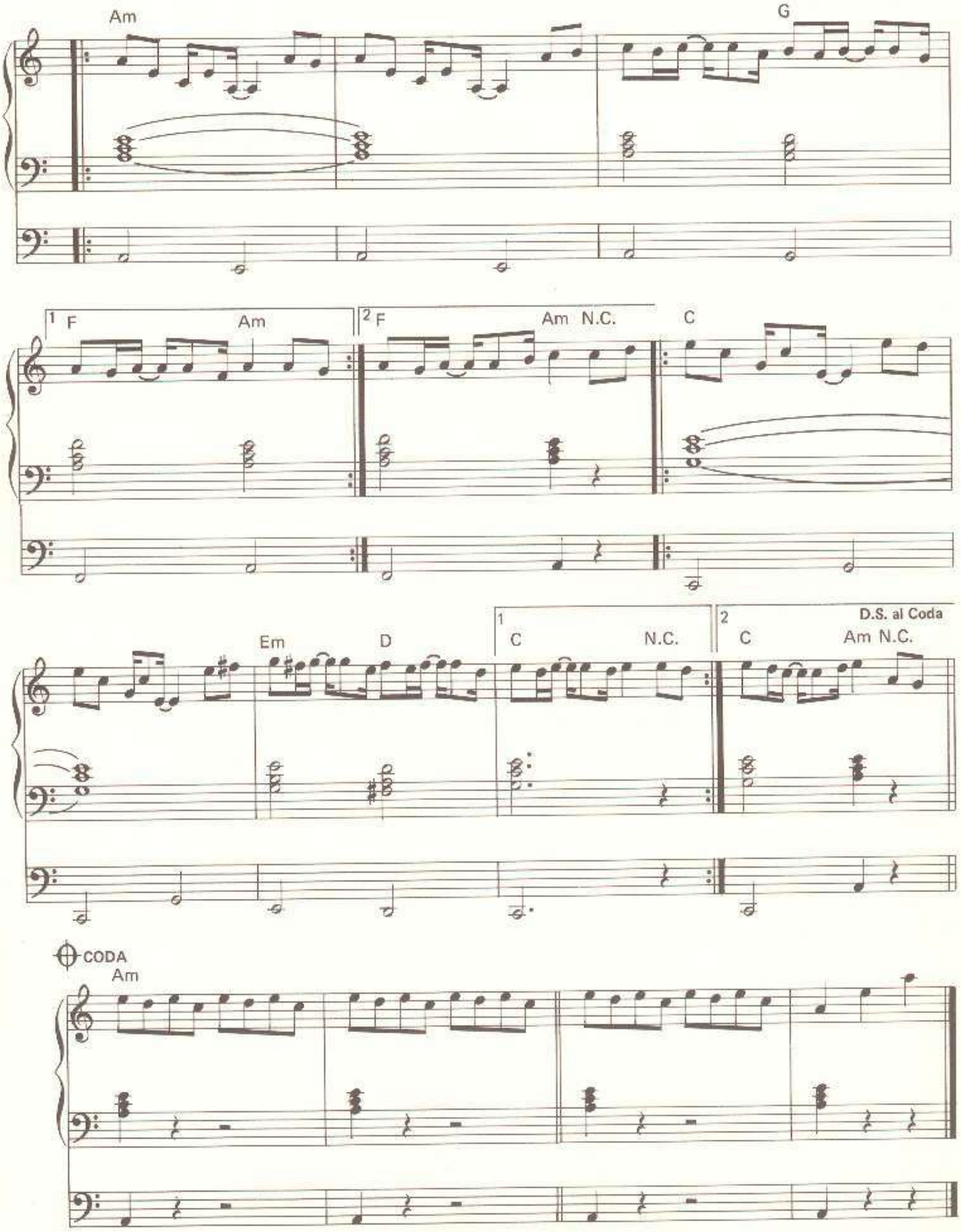
Use for the introduction. Hold lowest A on Synthesizer keyboard with thumb. Play — W 5, V 211, T 711 C

other four fingers at random, then change to this patch to play the melody. — W 4, V 337, T 711 C

Words and Music by Gershon Kingsley



Popcorn, continued



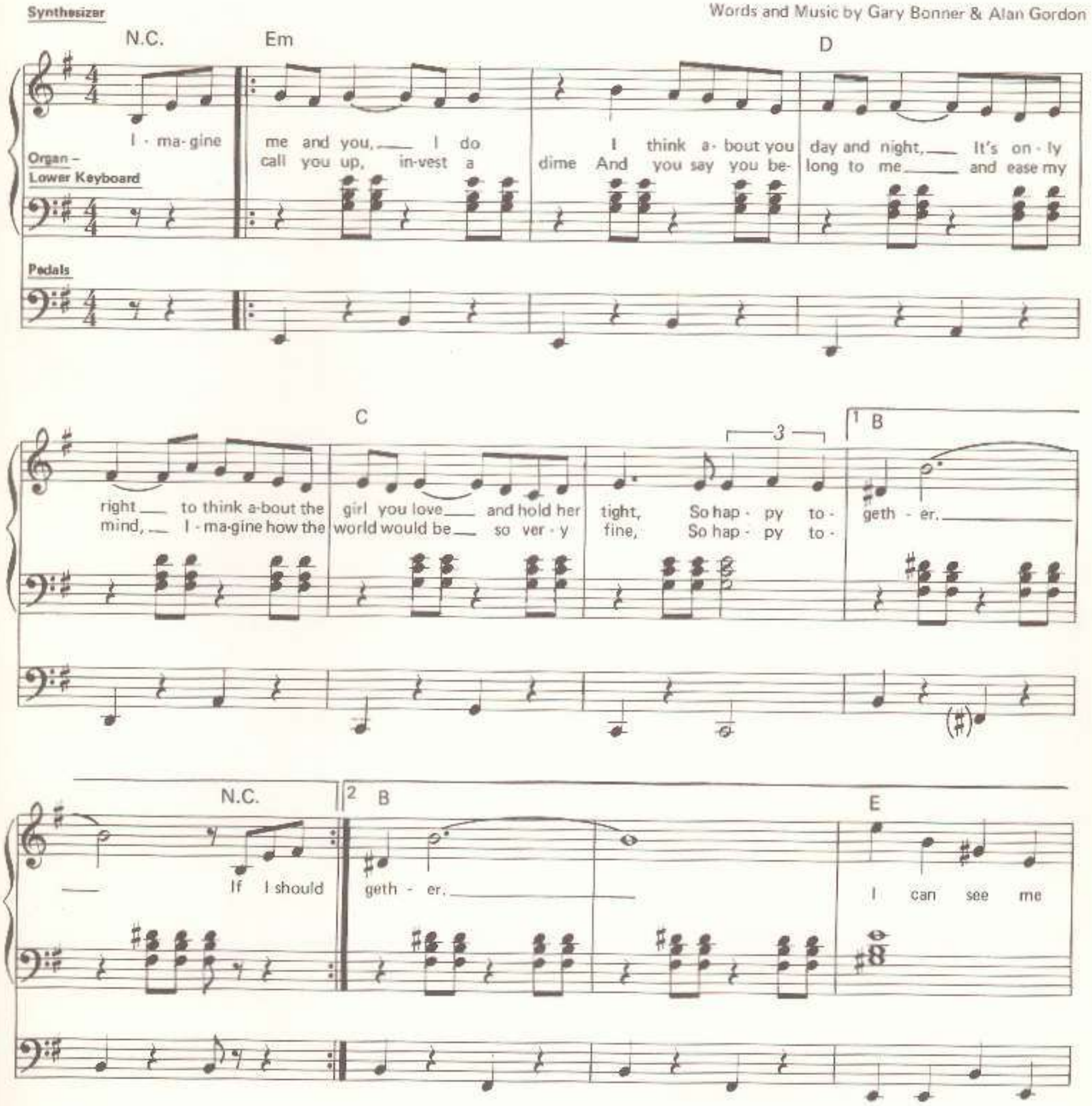
Happy together

Buzz clarinet

A "buzz" may be added to any instrumental sound you synthesize by selecting the Razz setting in the Modulator (Vibrato) section. It's an interesting sound which adds an unusual effect to this arrangement of HAPPY TOGETHER.

AUTO-PATCH: W 3 — V 111 — T 116 C

Words and Music by Gary Bonner & Alan Gordon



Happy together, continued

Bm7 E G E

lov - in' no - bod - y but you for all my life. When you're with me

Bm7 E G Em

ba - by the skies will be blue for all my life. Me and you and you and

D C

me, no mat-ter how they toss the dice it has to be, The on - ly one for me is you and you for

B Em B

3 3

me, So hap - py to - geth - er. Hap - py to - geth - er.

Repeat and Fade

Auto-Patch varieties

Use the following list of patches as a point of reference and also to help you get your own library of sounds and effects started. Refine them, add to them, and most of all, enjoy them!

Used in the experiments

AUTO-PATCH 1: W 4, V 111, T 311 C

AUTO-PATCH 2: W 4, V 111, T 111 C

ADDITIONAL PATCHES:
W 2 4, V 542, T 422 C

W 1 7, V 611, T 112 C

W 2, V 211, T 111 C

WIND EXPERIMENTS:
W W, V 111, T 311 C

W W, V 511, T 311 C

W W, V 661, T 211 C

FILTERED NOISE EXPERIMENT: W 3, V 611, T 111 C

Used for songs

IF YOU'RE READY (COME GO WITH ME): W 5, V 443, T 211 C

THEME FROM SHAFT: W 4, V 465, T 411 C

TOUCH A HAND, MAKE A FRIEND: W 6, V 743, T 211 C

(SITTIN' ON) THE DOCK OF THE BAY: W 2 4, V 447, T 411 C

THE BREEZE AND I (WIND): W W, V 371, T 311 C

IN MY MERRY OLDSMOBILE (CAR MOTOR): W W, V 477, T 311 C

BEYOND THE SEA (SURF): W W, V 261, T 311 C

POPCORN (PIZZICATO):
W 5 4, V 211 337, T 711 C 711 C

HAPPY TOGETHER (BUZZ CLARINET): W 3, V 111, T 116 C

Preset Auto-Patch equivalents

FRENCH HORN: W 4, V 311, T 127 C

TUBA: W 2, V 211, T 127 C

VIOLIN: W 6, V 111, T 155 C

SAX: W 4, V 611, T 124 C

CLARINET: W 3, V 511, T 111 C

SOLAR ECHO: W 6, V 573, T 417 C

New instrumental sounds

BASS CLARINET: W 1 · V 411 · T 124 C

WAH-WAH TRUMPET: W 4 · V 345 · T 224 C

HARMONICA: W 6 · V 456 · T 111 C
Best range is in center of keyboard.

ENGLISH HORN: W 4 · V 311 · T 111 C

BASSOON: W 2 · V 311 · T 214 C

BUZZ BASSOON: W 2 · V 311 · T 216 C

ELECTRIC BASS I: W 2 · V 227 · T 621 C

ELECTRIC BASS II: W 2 · V 227 · T 527 C

ELECTRIC BASS III: W 2 · V 227 · T 511 C

HARPSICHORD: W 7 · V 111 · T 611 C

PIANO: W 4 · V 311 · T 511 C

BALALAIKA: W 6 · V 711 · T 511 C

TRUMPET (CORNET): W 6 · V 311 · T 214 C

WOW TRUMPET: W 4 · V 242 · T 111 C

CELLO: W 4 · V 111 · T 125 C

TEMPLE BLOCK: W 2 · V 267 · T 511 C

New special effects

RAIN: W W · V 711 · T 311 C

SAW: W W · V 275 · T 311 C

CRICKETS: W 7 · V 565 · T 316 C

CLOCK CHIME I: W 3 · V 311 · T 411 C
Play the next to the top C on Synthesizer keyboard.

CLOCK CHIME II: W 1 · V 411 · T 411 C
Play the lowest C on the Synthesizer keyboard.

SMALL AIRPLANE: W 2 · V 111 · T 311 C; W 2 · V 611 · T 311 C
Strike second A from bottom on Synthesizer keyboard. Gradually move the Tuning slider back and forth.

LOCOMOTIVE: W W · V 726 · T 611 C; W · V 626 · T 611 C; W · V 526 · T 611 C
Begin by pressing a key, then gradually increase and then decrease the speed at which you press the key. After you've slowed to a stop, press button 4 in the Attack & Decay row.

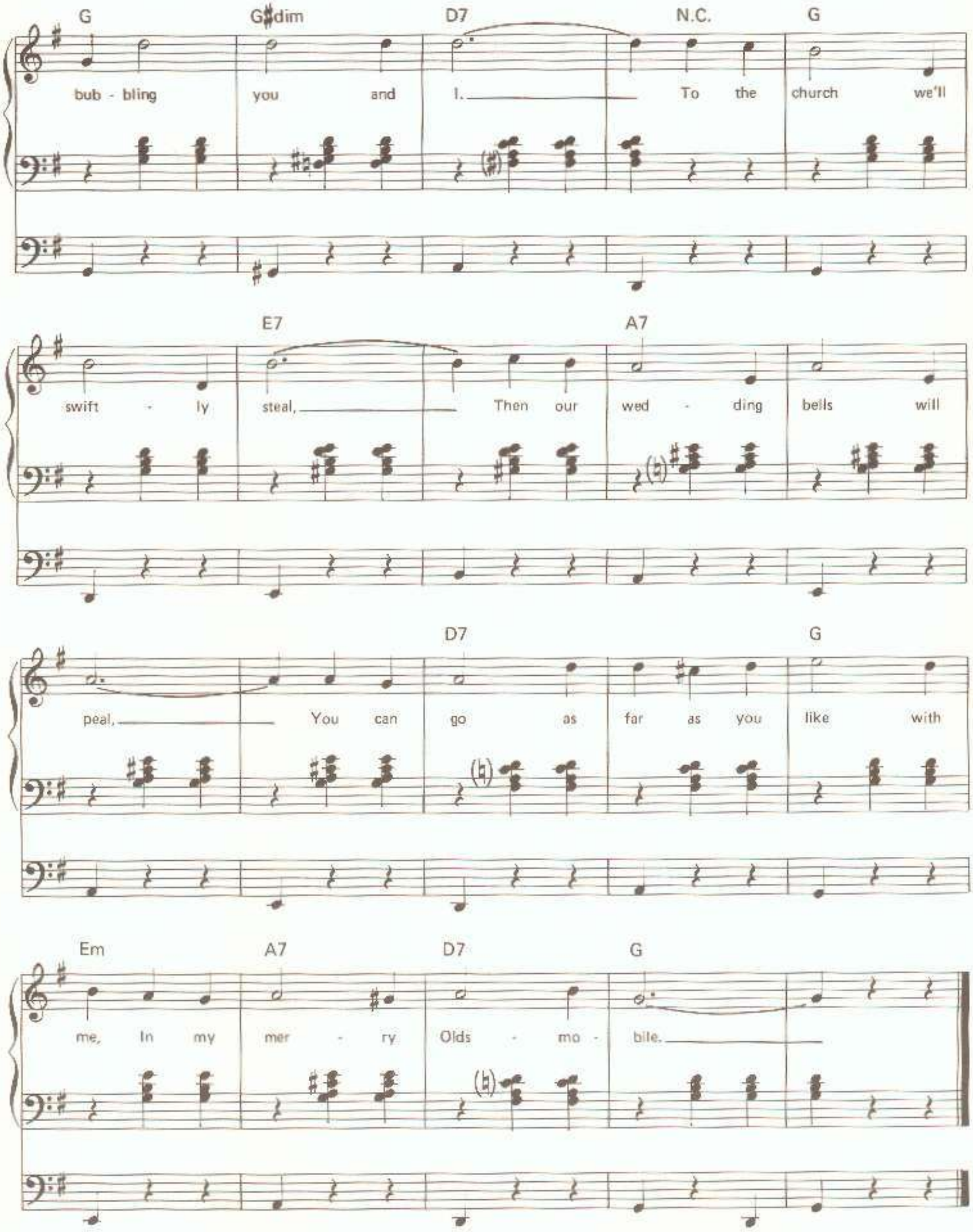
POLICE CAR: W 2 · V 411 · T 411 C; W 2 · V 511 · T 411 C
Strike top note on Synthesizer. Gradually move tuning slider back and forth.

NOVELTY I: W 1 · V 275 · T 411 C

NOVELTY II: W 2 · V 755 · T 617 C

NOVELTY III: W 6 · V 111 · T 466 C

NOVELTY IV: W 5 · V 456 · T 411 C; W 7 · V 456 · T 411 C


G
G♯dim
D7
N.C.
G
bub - bling you and I. To the church we'll
E7
A7
swift - ly steal, Then our wed - ding bells will
D7
G
peal, You can go as far as you like with
Em
A7
D7
G
me, In my mer - ry Olds - mo - bile.