

COMMODORE
MUSIC MAKER
USER'S GUIDE

Including the hit song: 'When I'm 64'

 commodore

When I'm Sixty-Four

Words and Music by
John Lennon and Paul McCartney

Suggested Registration:
PIANO
OR
TRUMPET

Rhythm:
SWING

Tempo:
MEDIUM

C

1. When I get old - er lo - sing my hair,
2. I could be hand - y mend - ing a fuse,
3. Send me a post - card, drop me a line,

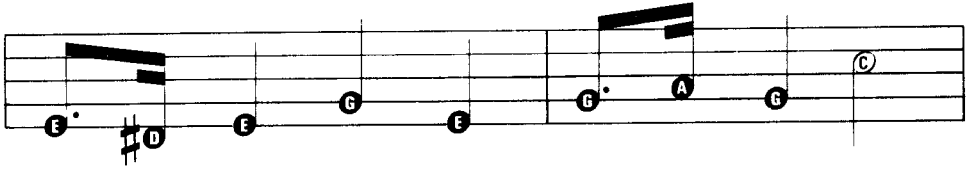
G 7

Man - y years from now,
When your lights have gone,
Stat - ing point of view.

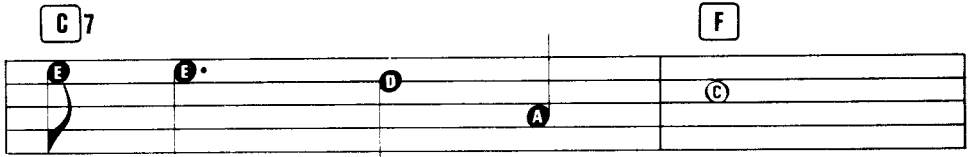
Will you still be send - ing me a val - en - tine,
You can knit a sweat - er by the fire - side,
In - di - cate pre - cise - ly what you mean to say,

C

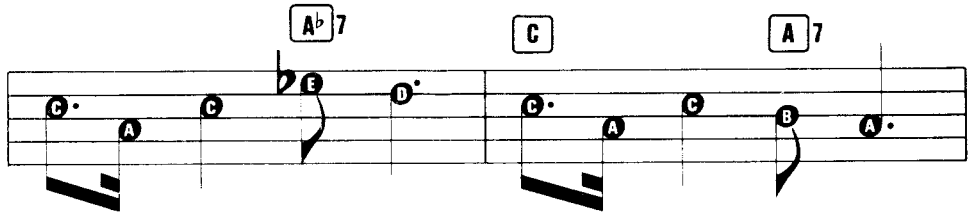
Birth - day greet - ings, Bot - tle of wine. _____
Sun - day morn - ings, Go for a ride. _____
Yours sin - cere - ly wast - ing a way. _____



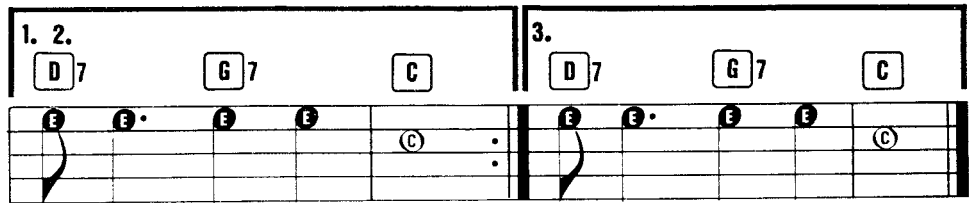
If I'd been out till quar - ter to three,
 Do - ing the gar - den, dig - ging the weeds,
 Give me an an - swer, fill in a form,



Would you lock the door?
 Who could you ask for more. }
 Mine for ev er - more.



Will you still need me, Will you still feed me,



When I'm Six - ty Four, When I'm Six - ty Four,

INTRODUCTION

Welcome to MUSIC MAKER.

In this the first of an exciting series of music programs, you will be introduced to the fascinating world of Music. With Music Maker, you can synthesize a vast range of musical instruments and voices, play along with pre-programmed rhythms and bass accompaniments and together with the specially produced SFX Tutor, discover how easy it is to make music. Gone are the days when music was looked upon as difficult and treated as a complex foreign language. NOW, with the help of the versatile Commodore 64 and Music Maker, you will see how simple and exciting music can be.

Now check that you have the following:-

1. Musical Keyboard
2. Keyboard note stickers
3. The SFX Tutor

First, remove the adhesive stickers from the keyboard guide and place them on the correct white keys of the keyboard unit. Start at the key furthest to the left with the C sticker and proceed along in order. This will familiarise you with the keyboard notes.

You will see that the keyboard has two sets of eight white notes (octaves), C through B and C through B again. The SHARPS and FLATS (black notes) are in groups of two and three and the arrows in the corners of the adhesive stickers point to the corresponding SHARP and FLAT. For instance, 'F SHARP' (black note to the right of 'F'), 'B FLAT' (black note to the left of 'B'), etc.. You may wonder if G SHARP and A FLAT are, in fact, the same note. They are, but don't let it confuse you as all will be made clear as you progress with the program.

THE SFX TUTOR

This tutor has been specially designed for the 'MUSIC MAKER' and contains a great deal of useful information as well as a selection of well known popular tunes.

PLEASE NOTE

Throughout the SFX Tutor you will see reference to chords shown thus:

Am

G7

Please ignore these for this program. They will be dealt with in depth in a subsequent program, SFX COMPOSER

Although we know you're itching to get started, before commencing the program you will find it helpful to glance through the SFX Tutor, particularly pages 5, 6, 7, 8, 9, 30, 34, 37, 41 & 45. Do not try to digest too much at once, as what seems terribly complicated at first becomes clearer and easier as you progress.

LOAD PROGRAM

Now you are ready to load the program.

Read all the instructions carefully. Check that you have followed the correct procedure for setting up your Commodore 64. Note: It is always advisable to turn the Commodore 64 off then on again before loading a new program. This clears all the memory locations and minimises load errors.

CASSETTE

Before switching on, check that your Commodore Cassette Unit is correctly plugged in and ready for use. Ensure that the cassette unit is kept as far away as possible from the TV. Now switch on both your Commodore 64 and TV and turn up the volume. The screen displays the 'READY' signal with a flashing cursor.

HOW TO LOAD THE PROGRAM

1. Insert the cassette into the cassette unit.
2. Ensure the tape is fully rewound to the beginning.
3. Hold down the SHIFT key and press the RUN/STOP key.
4. Press PLAY on the cassette unit.
5. The screen appears once the program has loaded.

DISKETTE

Before switching on, check that your Disk Drive is correctly plugged in and ready for use. Now switch on your Commodore 64 and TV. The screen will display the 'READY' signal with a flashing cursor.

HOW TO LOAD THE PROGRAM

1. Put the diskette into the Disk Drive.
2. Type LOAD " * ",8,1 then press RETURN.
3. The screen appears once the program has loaded.

Now place the Musical Keyboard unit on your Commodore 64. You will find that after pressing down gently on each side, it fits snugly into place. When you look at the screen display, you will see that the various options are selected using the FUNCTION keys to the right of the computer. These are described below.

By pressing any of the black or white keys, you will find that they produce musical notes monophonically (one note at a time). The sound of these notes can be changed by pressing F5. Eight separate voices are instantly available. Experiment for a while to become familiar with the keyboard. High notes are on the right and low notes on the left. Try to play a simple tune, just for the fun of it, such as the one on page 12 of the SFX Tutor.

F4 CHANGE OCTAVE (F3 + SHIFT)

To change the OCTAVE range of the keyboard (make the whole keyboard sound either lower or higher in pitch), press F4. This effectively extends the range of the keyboard. Six octaves are available in all. Experiment for a while. There will be a slight pause when changing octaves so wait until the octave number shows before playing.

F7 SEQUENCER (Note and Time Memory)

This function enables up to 256 notes to be programmed into the computer one step at a time. First input the notes and then the timing. Now just press F1 and then select your tune and enter the notes in the order in which they appear in the SFX Tutor. (Pick a tune that you are familiar with). If you make a mistake, press F2 and the last note entered (shown in brackets) will be deleted. You can back up as far as necessary. Now enter the correct note(s) and continue until the end of the tune. Now put in the timing. Press F3 and tap in the timing on any of the keys. When you have reached the end of the tune, press F5 (Or any key) and the tune will be played back in its entirety. If, on playback, you find you have made a mistake in the timing, don't panic! Simply press F3 and re-program the timing.

F2 RHYTHM SELECT (F1 + SHIFT)

This gives the player three rhythm combinations comprising drum sounds and bass line. You can start and stop the rhythm by pressing F2. To speed up the rhythm, press the CRSR RIGHT several times and to slow down the rhythm press the CRSR DOWN several times. Set this to a comfortable slow speed. Now try playing an easy tune such as the one on page 15 of the SFX Tutor, in time with the rhythm.

F1 CHANGE BASS

As an experiment, change BASS to Pattern 0 by pressing F1. This will give you just the drum rhythm. This function produces two Bass sounds (1 = Bass Guitar, 2 = String Bass and 0 = Drum rhythm only).

SLIDE

This feature is created by pressing the note, then, with your thumb, depressing the space bar and releasing the note. The note will slide up in pitch (Glissando). Experiment with different voices.

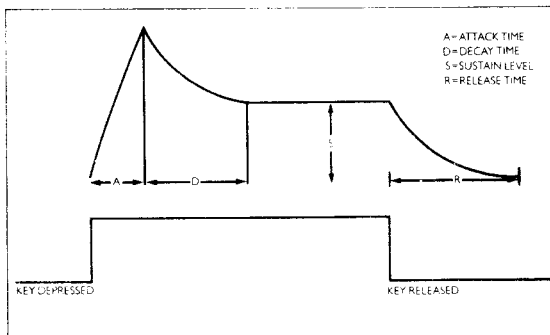
F3 POLY PLAY

This function enables notes to be played polyphonically i.e. different notes can be played simultaneously, on the Commodore 64, up to three at a time. In this mode, the keys on the display do not light up. Experiment by depressing any three notes on the keyboard. Try until you find a pleasant sound.

F6 MODIFY VOICE (F5 + SHIFT)

By modifying a voice (changing the sound of the musical note), you can 'paint' it a different colour - in musical terms, to give variety to the music. You can recognise the difference in sound

between, say, a note played on a piano and a note played on a trumpet. This is because notes played on different musical instruments are structured differently (modified).



These four components, known as ADSR (the common term used on professional synthesizers), have 15 degrees of adjustment. For example, a note with RELEASE set at 15 would be longer than a note set at 2, as the degrees are a measurement of time. Press F6 to enter this option.



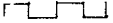
The following components can be adjusted by pressing F5 until the desired value is reached and then pressing RETURN. The next option is then displayed.

- ATTACK** Produces a hard beginning to a note, like striking a xylophone, if it is a low number, or a soft beginning like a note on a cello if it has a high number
- DECAY** Defines the time it takes for the note to start to die away. A low number means it dies quickly like a banjo.
- SUSTAIN** Makes the note continue at a set volume while the key is depressed. An organ note has a high sustain value.
- RELEASE** The time it takes for the note to fade away when the key is released. A long release is like a guitar string as it gradually stops vibrating.

WAVE FORM

Although this is a technical term, it is not complicated.

There are basically four wave forms:

1. SAWTOOTH  a sound with a lot of brightness and used for brass instrument sounds.
2. TRIANGLE  best used for smooth sounds such as flutes.
3. PULSE  produces woodwind sounds such as a clarinet.
4. NOISE which sounds like escaping steam.

PULSE WIDTH

This alters the tone of the PULSE WAVE FORM by literally altering the width of the wave form available when Wave Form 3 is selected. The higher the percentage (%), the mellower the tone.

FILTER

The filter modifies the sound and can be off or have one of these settings:

- F1 = Lowpass (Reduces Treble)
- F2 = Bandpass (Reduces Treble and Bass)
- F3 = Highpass (Reduces Bass)

These alter the sound of a note by reducing the amount of treble and bass content. There are some variations in filters in different 64s. Experiment until you obtain the sound you find most pleasant.

CUT-OFF FREQUENCY IN Hz

This setting allows for the cutting off of all frequencies (sounds) above a given level. Range available is 500 - 12,000 Hz.

FILTER RESONANCE

This has a range of 1 - 15 and enhances the effect of the filter. The higher the number, the more resonant.

Note: All these terms are standard terminology used in professional synthesizers and are the subject of personal experimentation.

F8 SAVE/LOAD

When you have set up a voice that you wish to use again or if you have sequenced a tune you wish to play again, you can save it on disk or cassette to reload later.

CASSETTE

F2 SAVE VOICES

Use a cassette rewound to an unused portion. Press F2 and you will be asked for a name for the voice to be saved. The name must begin with a letter and have no more than 12 characters. Enter the information and then press RETURN and then press RECORD on the cassette unit. All the voices will then be saved on the cassette and you will be returned to the SAVE/LOAD menu.

F4 SAVE SEQUENCE

Press F3 and then follow the instructions as in SAVE VOICES above. When the sequence is saved, you are returned to the SEQUENCER menu.

F1 LOAD VOICES

Insert the cassette containing the voice you wish to recall into the cassette unit. Press F1 and you will be asked for the name of the voice to be recalled. This name must be entered exactly as it was when you saved the voice. If in doubt, press RETURN and the first file will be loaded. The voices will now be loaded, replacing the voices of those numbers in the program.

F3 LOAD SEQUENCE

Press F3 then follow the instructions as in LOAD VOICES above. When the sequence is loaded, you are returned to the SEQUENCER menu.

PRE-PROGRAMMED SONGS

Three songs have been saved for you to enjoy or experiment with. They are at the end of your program cassette. To load these songs use the LOAD SEQUENCE procedure above. The songs are saved under the following names: WHEN I'M 64 GEORGIA SNOW WALTZ

DISKETTE

You need a formatted disk on which to save voices or sequences. You can prepare a disk by selecting INITIALISE from the screen options. Note that it is not possible to save onto the program disk. WARNING This procedure destroys any information already on the diskette.

F2 SAVE VOICES

Press F2 and a list appears on the screen of any previously saved voices. Assign a unique name to the voice to be saved and press RETURN. The name must begin with a letter and have no more than 12 characters. The voice will then be saved on disk and you will be returned to SAVE/LOAD menu.

F4 SAVE SEQUENCE

Press F3 and then follow the instructions as in SAVE VOICES above. When the sequence is saved, you are returned to the SEQUENCER menu.

F1 LOAD VOICES

Press F1 and a list of previously recorded voices will appear. Just select the voice file required by number and press RETURN. This automatically loads the voices onto the 64 then returns you to the SAVE/LOAD menu.

F3 LOAD SEQUENCE

Press F3 then follow the instructions as in LOAD VOICES above. When the sequence is loaded, you are returned to the SEQUENCE menu.

PRE-PROGRAMMED SONGS

If you select F3 with the program disk in the drive, the screen will display the pre-programmed songs: WHEN I'M 64 GEORGIA SNOW WALTZ. Any of these songs may be selected by pressing the number preceding the title on the screen.

HINTS

TUNING

If you would like to play your Music Maker in a 'group', you may wish to tune it. Hold down the SHIFT key and press RETURN. You now hear the note the computer considers to be C. There may be a difference from computer to computer. Tune to the correct pitch or to another instrument or computer by pressing CRSR RIGHT to raise the pitch or CRSR DOWN to lower the pitch. When you are happy with the tuning, press RETURN and the computer will automatically adjust its sounds to the new pitch.

HI-FI

To enhance the sound of your Commodore Music Maker, you can connect your Commodore 64 Music Maker to your hi-fi using a 3 or 5-pin DIN plug. Use screened lead with the shield connected to pin 2 and the inner connected to pin 3. The connections to the hi-fi end will depend on your amplifier. For detailed information consult your Commodore 64 Users' Guide.

DISCLAIMER

Although programs are tested by COMMODORE before release, no claim is made regarding the accuracy of this software. COMMODORE and its distributors cannot assume liability or responsibility for any loss or damage arising from the use of these programs. Programs are sold only on the basis of this understanding. Individual applications should be thoroughly tested before implementation. Should you require installation, maintenance or training, please contact your COMMODORE dealer.

SUGGESTED VOICE PROGRAM CHART

The Voice Program Chart gives some suggested voice settings for you to try so that you can begin to understand how different sounds can be built up. You can then go on to experiment by yourself as there are thousands of different combinations available on this new musical instrument, The Commodore Music Maker.

Enjoy yourself and enjoy the additional songs available in other SFX song books.

When you are proficient with Music Maker, you can move on to other programs in the Commodore SFX series which will be available from your Commodore stockist.

	PIANO	CLARINET	TROMBONE	BASS GUITAR	VIOLIN	ACCORD'N	STEEL DRUMS	SAXOPHONE	BANJO
VOICE NO	1	2	8	3	5	6	4	2	7
ATTACK	0	1	0	0	8	5	0	3	0
DECAY	10	0	7	10	0	0	9	0	7
SUSTAIN	0	15	5	0	15	15	0	15	0
RELEASE	10	0	0	9	4	2	9	1	0
WAVEFORM	1	3	1	3	1	1	2	3	3
PULSE WIDTH %	---	50	---	25	---	---	---	30	10
FILTER	YES F 1	YES F 1	YES F 1	YES F 1	YES F 3	YES F 3	YES F 1	YES F 1	YES F 3
CUT OFF FREQUENCY IN Hz	5000	4500	5000	5000	12000	12000	7000	2000	5500
FILTER RESONANCE	2	4	15	12	2	3	12	0	15
OCTAVE	3	2	2	2	4	3	3 OR 4	2	3

Due to manufacturing tolerances in the filter, using the recommended numbers on this chart may give different results from computer to computer. Experiment by adjusting Filter Resonance and Cut-off Frequency.