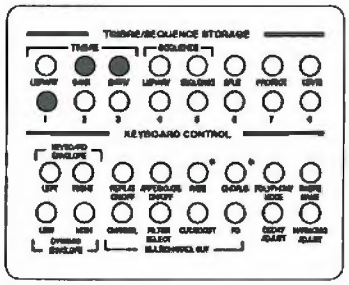
Recording

SK-02-0988

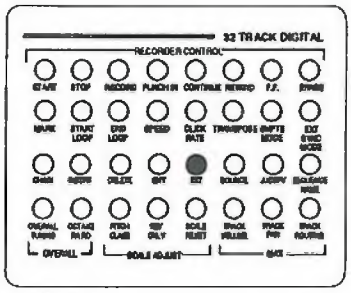
Preparing to record

Before recording

- have sequence files of adequate size available;
- recall a timbre;
- set a click rate;
- set up for justification if desired;
- erase any previously recorded sequence.



BANK, ENTRY, numbered button panel 4



SKT panel 2

Recalling a timbre

When you use the keyboard control panel, you can only recall a timbre from a timbre file in the current catalog, from a track in the current sequence or from a disk placed in floppy drive 0. To recall timbres from other devices and catalogs use the terminal Subcatalog and Timbre Directories. (See the manual *Sequence Editing*.)

To recall a timbre from a timbre file in the the current catalog:

1. Press BANK and then a numbered button to select a timbre bank.

2. Press ENTRY and then a numbered button to select a timbre entry.

To recall a timbre from a track in the current sequence:

1. Press SKT (select keyboard timbre).

   The SKT button, the TRACK SELECT buttons and the numbered buttons in the TIMBRE/SEQUENCE STORAGE panel begin blinking.

2. Using the TRACK SELECT buttons, select the track containing the desired timbre.

   All the blinking buttons go out, and the current keyboard timbre matches the timbre of the selected track.

Recalling a timbre (con't)

To recall a timbre from a floppy disk:

1. Place the disk containing the desired timbre file into floppy drive 0.

2. Press and hold TIMBRE LIBRARY.

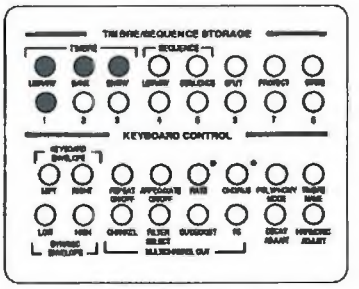
3. Press BANK and a numbered button for the bank you want to recall.

4. Continue to hold down LIBRARY while you press ENTRY and the numbered button for the timbre you want to recall.

   The timbre is placed on the keyboard and its data appears in the display window.

If the timbre you want is in a subcatalog on the floppy disk, use the Subcatalog Directory on the terminal screen to make that subcatalog the current catalog. (See "Storing, recalling and playback" in the Sequence Editing manual.) Then use the buttons as usual.

If you are recalling a sound file timbre and some sound files are missing, use the Missing Sound File display to identify and load the missing files. (See "Storing, recalling and playback.")



TIMBRE LIBRARY, BANK, ENTRY, numbered button panel 4

Recalling timbres with 64-voice poly systems

If you have a Synclavier keyboard and a 64-voice poly system, the sound files associated with a recalled timbre are loaded into the poly bin assigned to the keyboard. By default, the keyboard is assigned to poly bin 1. You can change the keyboard assignment at any time using the Multichannel Display. (See the section "Recording with a 64-voice poly system.")

As sound files are loaded into the assigned poly bin, sound files in that poly bin that are not part of any of the track timbres of the current sequence are deleted from poly memory as more room is required. If the memory in the assigned poly bin is insufficient for all the sound files associated with the recalled timbre, the remaining sound files are loaded into the other poly bin. If there is insufficient room in both poly bins, an error message appears.

Out of Room in Sample Memory

Once a sound file is loaded into one bin or another, it remains there until it is erased from poly memory. If, for example, a timbre with sound files assigned to poly bin 2 is recalled and its associated sound files are already loaded into poly bin 1, the sound files remain in poly bin 1.

Making sure sound files are recalled to the assigned poly bin

Since any notes on the keyboard using sound files loaded into the wrong poly bin do not sound, you should make sure that the total amount of memory required for any timbre is less than the amount of memory you have in the poly bin to which it is assigned. You may also want to erase all currently loaded sound files from poly memory before recalling the timbre.

1. If there is a sequence in the Memory Recorder, back it up to disk and erase it.

2. Recall the Extra System Commands screen from the Main Menu.

3. Select the Erase All Sound Files from Poly Memory command.

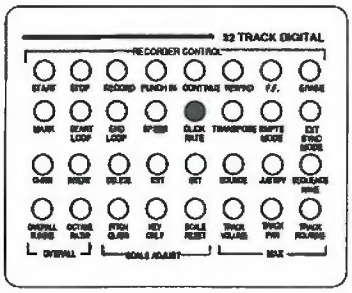
4. Recall the desired timbre.

   The associated sound files are loaded into the assigned poly bin.

The digital metronome

The digital metronome provides an audible click used to synchronize recording on one track with that of another. If your system has been properly set up, the click is audible when you first load the Real-Time Performance system and press START. If it is not, see that the CLICK OUT jack on the control unit is connected to a line input on your console or mixer and that the volume level at the console is turned up.

The click can also be heard through headphones connected to the headphone jack on the back of the keyboard unit. The volume knob next to the headphone jack controls the headphone volume.



CLICK RATE panel 2

To turn the click off:

- Press the CLICK RATE button three times.

  The button begins to blink, and the click becomes inaudible.

To turn the click back on:

- Press the CLICK RATE button once.

  The button lights, and the click becomes audible.

The audible or inaudible state of the CLICK RATE button is retained in memory, even when you turn the button light out by pressing a different button to change another parameter. Pressing the CLICK RATE button when it is not lit does not change the status, but lights the button in its current state, displaying the click rate in the display window.

Setting a click rate or click period

The click can be expressed as either a click rate (beats-per-minute or frames-per-beat) or a click period (milliseconds). These values are reciprocals; that is, the click rate increases as the period between clicks decreases, and vice versa.

When you first load the system, the click is expressed in beats-per-minute. When you press the CLICK RATE button, the button lights up and the display window shows:

120 BEATS/MIN

To see the click expressed as a click period, press CLICK RATE a second time. The button remains lit and the display window shows

500 MILLISEC

If you press CLICK RATE a third time, the button begins blinking and the click becomes inaudible during playback or recording.

To change the click rate:

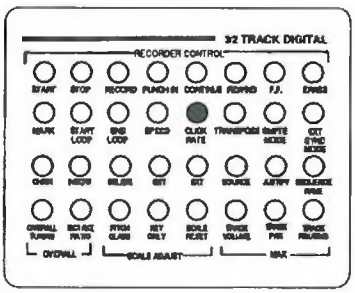
1. Press the CLICK RATE button.

   The display window shows

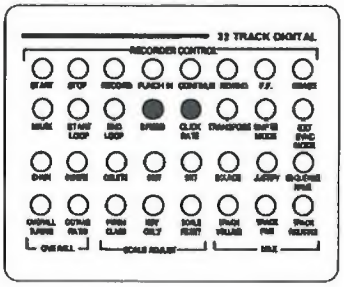
   120.0 BEATS/MIN

2. Press START if you want to hear the click while you change the rate.

3. Use the control knob to change the click rate.



CLICK RATE panel 2



SPEED, CLICK RATE panel 2

The frames-per-beat mode

When recording music for film synchronization, you may want to use a click rate expressed in frames-per-beat instead of beats-per-minute. Based on the standard film speed of 24 frames-per-second, this click rate allows you to specify the tempo of the music in film synchronization terms.

1. Press the SPEED button twice.

   The number 0.960 appears in the display window. This timing adjustment is necessary so that each Synclavier click exactly equals an eighth of a frame.

2. Press CLICK RATE. The display window shows

   12.4 FRAMES/BT

   This default click rate makes each click last exactly 12 and 4/8ths frames at the frame rate of 24 frames-per-second. (The number to the right of the decimal is in base 8.)

3. To change the click rate, dial in a new frames-per-beat rate.

To return to a click rate in beats-per-minute (or a click period in milliseconds), press SPEED twice more. The setting returns to 1.000.

Any time the speed is set to 0.960, the click rate is displayed in frames-per-beat. This is true whether you press the SPEED button twice or use the control knob to dial the speed to 0.960.

Resetting the click rate to its default value

The default click rate is 120 beats-per-minute. The default value of its reciprocal, the click period, is 500 milliseconds.

When you store a sequence, the current click rate is stored along with it. When you erase a sequence, the current click rate is not reset to its default value.

You can only reset the click rate to its default value by

- using the control knob to set the click rate to 120.0 beats-per-minute or 500 milliseconds;
- leaving the Real-Time Performance system.

If you change the click rate after a sequence has been recorded, the tempo of the sequence remains the same. This allows you to set the click to different metronomic settings without changing the tempo.

Recording with justification

When you record with justification, the computer automatically positions the notes you play exactly on the nearest click or selected subdivision of the click.

You specify the number of subdivisions by setting a click-rate multiplier.

According to the click-rate multiplier setting, additional inaudible "clicks" are produced internally. You still hear the click only on the beat, but when recording, all notes are justified to the nearest internal click.

Different click-rate multiplier settings can be used to achieve different justification results. The default setting for the click rate multiplier is 4.

To set up for justified recording:

1. Press the JUSTIFY button so that it is lit.

   The display window shows

   [number] CLICK MUL

   Justification is turned on.

2. Use the control knob to set a click-rate multiplier from 1 to 16.

   The click is subdivided into the selected number of internal clicks.

Erasing a sequence

Before you record it may be necessary to erase anything previously recorded on the track or tracks to be used.

The ERASE button is used to erase an entire sequence or an entire track.

To erase an entire sequence in the Memory Recorder:

- Press the ERASE button twice when none of the track select buttons are lit.

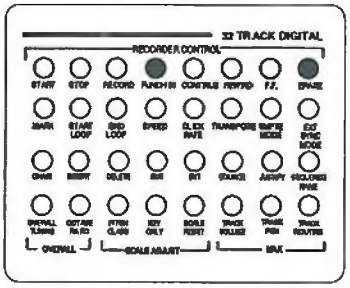
To erase one or more individual tracks:

1. Select the track or tracks you wish to erase by pressing the appropriate TRACK SELECT button(s). The buttons must be lit or blinking.

2. Press ERASE twice.

   All tracks with lit or blinking buttons are erased. Tracks with buttons neither lit nor blinking are not erased.

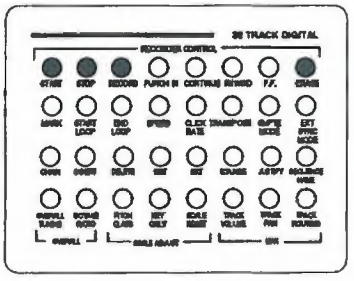
You can also erase a section of track as you record by pressing PUNCH IN instead of RECORD (see "Punching in" in this section).



PUNCH IN, ERASE panel 2

Recording

When you have selected a timbre, set the click rate and set up for justification, you are ready to record the first track.



START, STOP, RECORD, ERASE panel 2

Recording the first track

1. Press RECORD.
2. Listen to the click for a couple of measures.
3. Play on the keyboard.

   Your performance is automatically recorded on track 1.
4. Press STOP when you are finished recording.
5. Play back the recording by pressing START (once to play back your sequence from the first beat or twice to play back from the first note).

If you do not like what you have recorded, press ERASE twice to clear out the Memory Recorder.

Overdubbing

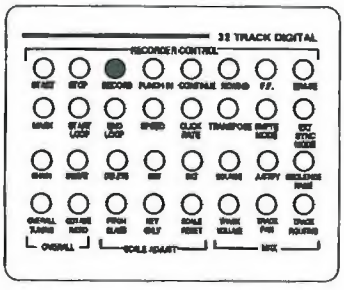
When you record on a previously recorded track, nothing is erased. Any notes played while recording are simply added to the track.

Normally, when you press Record, the first track using the same timbre is selected for recording. If there is no track with the same timbre, the first empty track is selected.

Thus, if you have recorded on track 1 and want to add notes using the same timbre, the notes are added to track 1. If you add notes using a different timbre, the new notes are recorded on track 2.

When overdubbing, notes sounding simultaneously use at least one voice per note. If you exceed the maximum number of voices in your system while recording, bars appear in the display window and the notes are not recorded. (See the section "Notes, voices and the polyphony mode.")

When two identical notes are recorded on one beat, they are layered. When editing with either the Music Notation of Recorder displays each layer must be deleted or edited individually.



RECORD panel 2

Overdubbing (con't)

You can record additional notes on the same track if you use the same timbre.

1. Press RECORD.

   You hear the previously recorded notes.

2. Play any additional notes you wish to add to the track.

   The notes are added to the original track.

Sometimes it is better to record new notes on a separate track to preserve the integrity of the original track, or if you are planning to use Music Printing to print separate parts (such as for first and second violin) that are recorded using the same timbre.

To record on a second track using the same timbre:

1. Press the desired TRACK SELECT button to select the track on which you wish to record.

   The TRACK SELECT button begins blinking.

2. Press RECORD.

   The new notes are recorded on the track with the blinking button. If no other TRACK SELECT buttons are lit, you hear all other recorded tracks.

After recording the same timbre on two or more different tracks, you can bounce, or merge, them to one track once you are satisfied with the recorded sequence. (See the section "Editing whole tracks.")

Selective track monitoring

If you are recording many tracks, you may not want to listen to all previously recorded tracks while recording new ones.

To record while monitoring selected tracks:

1. Press the TRACK SELECT button(s) of the track(s) you want to monitor.

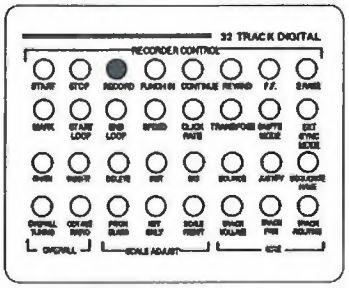
   The buttons of the selected tracks light, and the last one pressed blinks.

2. Press the TRACK SELECT button of the track on which you want to record.

   The button of the selected track blinks, and the buttons of the previously soloed tracks remain lit.

3. Press RECORD.

   As you record, you hear only the tracks with lit or blinking TRACK SELECT buttons. The notes you play are recorded on the track with the blinking button.



RECORD panel 2

Recording (con't)

Recording without monitoring

There may be times when you want to record without hearing any of the previously recorded tracks. You do this by monitoring an empty track.

1. Press the TRACK SELECT button of an empty track.

   The button of the empty track begins blinking.

2. Press the TRACK SELECT button of the track on which you want to record.

   The empty track's button lights, and the selected track's button begins blinking.

3. Press RECORD.

   You hear only the click and the keyboard timbre as you record.

Recording from the middle of a sequence

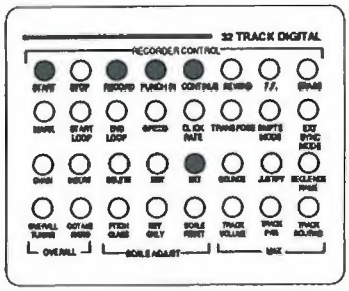
You can enter the record mode at any time while the sequence is playing.

- Press RECORD while the sequence is playing.

  The RECORD button lights, and any notes played are recorded on the selected track.

You can also use the MARK button to set a starting point for recording anywhere in a sequence. (See the section "Marking a sequence.")

Recording (con't)



START, RECORD, PUNCH IN, CONTINUE, SKT panel 2

Punching in

You can record using the PUNCH IN button and erase any previously recorded notes as you record new ones.

1. Recall to the keyboard (SKT) the timbre matching the timbre of the track you want to punch in.

2. If the keyboard timbre is recorded on more than one track, solo the track on which you want to record.

3. Play back the sequence to the point where you want to punch in.

   - Press START to hear only the soloed track.
   - Press RECORD if you want to hear all other tracks.

4. Press PUNCH IN after the last note preceding and before the first note of the passage you want to change.

   Both the PUNCH IN and RECORD buttons light.

   The previously recorded notes are erased as you record new notes over them.

5. When finished, press PUNCH IN a second time or press CONTINUE.

   Erasing and recording stop, and the sequence continues to play.

Punching in (con't)

The Memory Recorder does not start or stop erasing in the middle of a note.

- If you press PUNCH IN between two notes (after one has ended and before the next one begins), the erasing begins immediately.
- If you press PUNCH IN in the middle of a note, the erasing begins right after the note ends.
- If you press PUNCH IN a second time to stop recording during a held note, the recorder does not stop erasing until the note ends. The complete note is eliminated.

PUNCH IN can be used to simply erase a note or notes without recording new ones. However, even if you only want to erase notes, the keyboard timbre must be the same as the timbre on the blinking track.

Using a foot switch to punch in

A foot switch, used to punch in, frees your hands for the keyboard.

Connect the foot switch output to the FOOT SWITCH jack on the back of the keyboard unit labeled PUNCH IN/OUT.

To start punching in:

- Press the foot switch once and release it.

To stop punching in, press the foot switch again.

The info button

You use the INFO button to get information about the sequence in the Memory Recorder.

1. Press INFO.

   The button lights, and the display window shows

   PRESS BUTTON FOR
   INFORMATION

   The TRACK SELECT buttons of all tracks containing notes light (or blink when the current position is beyond the last note on the track).

2. Press the START button.

   The display window shows the number of notes that can be recorded in the remaining amount of memory.

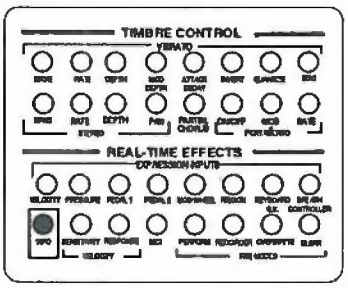
3. Press a TRACK SELECT button.

   The first note recorded on the track sounds. The display window shows the track number, the number of notes recorded and the name of the timbre.

4. Press a PARTIAL TIMBRE button.

   The display window shows the number of voices and number of timbre frames in that partial timbre of the keyboard timbre.

When you have finished using the INFO button, press it so that the light goes out.



INFO panel 5

Recording with a 64-voice poly system

With a 64-voice poly sytem, you can record sequences that have 64 voices sounding simultaneously. If you also have 32 FM voices, you can record sequences with up to 96 voices.

Using two poly bins

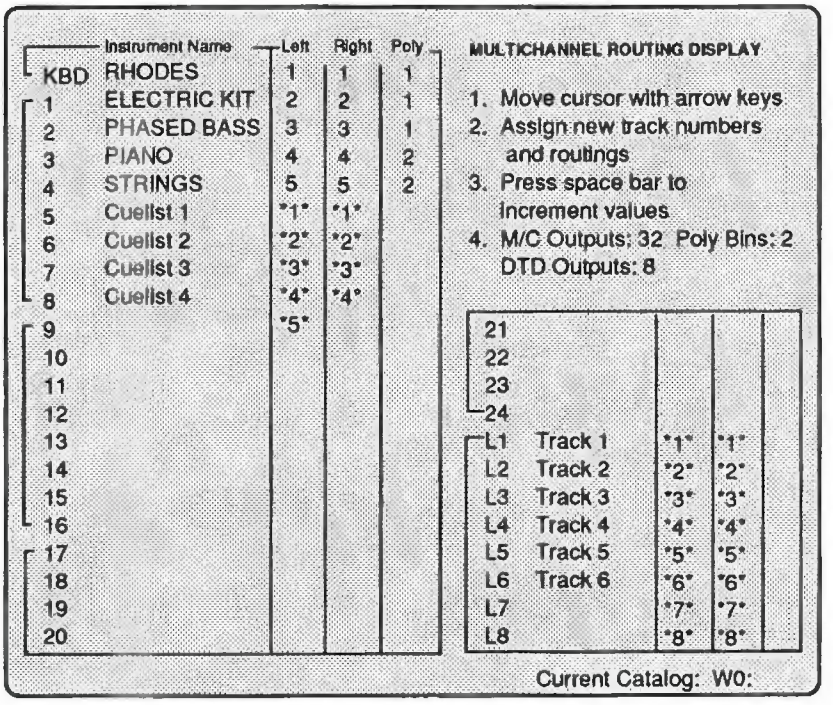
The voices in a 64-voice poly system are stored in two separate polyphonic sampling units (poly bins). Each bin can hold up to 32 poly voices. A sound file can be loaded into one bin or the other, but not both. Each bin sounds through its own outputs.

In the upper right corner of the Multichannel Display, the instructions list the number of poly bins in your system. The Poly column shows the number of the poly bin assigned to the keyboard and track timbres listed.

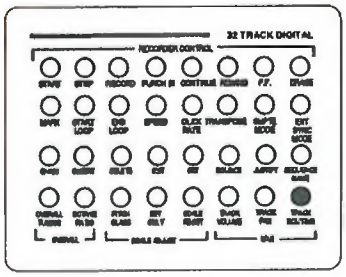
When you record a sequence, the poly bin assigned to the keyboard timbre is assigned to each track recorded with that timbre.

You can change the poly bin assignments for the recorded tracks after the sequence is recorded. You can also change poly bin assignments for sequences recorded on systems with only one poly bin.

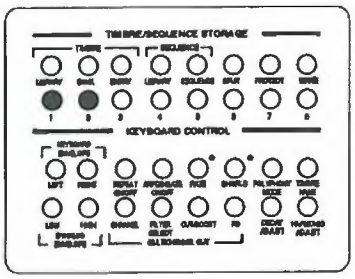
When you store the sequence, the poly bin assignment for each track is stored with the sequence.


Instrument Name
Left
Right
Poly
KBD RHODES 1 1 1
1 ELECTRIC KIT 2 2 1
2 PHASED BASS 3 3 1
3 PIANO 4 4 2
4 STRINGS 5 5 2
5 Cuellst 1 "1" "1"
6 Cuellst 2 "2" "2"
7 Cuellst 3 "3" "3"
8 Cuellst 4 "4" "4"
"5"
9
10
11
12
13
14
15
16
17
18
19
20
MULTICHANNEL ROUTING DISPLAY
1. Move cursor with arrow keys
2. Assign new track numbers and routings
3. Press space bar to increment values
4. M/C Outputs: 32 Poly Bins: 2 DTD Outputs: 8
21
22
23
24
L1 Track 1 "1" "1"
L2 Track 2 "2" "2"
L3 Track 3 "3" "3"
L4 Track 4 "4" "4"
L5 Track 5 "5" "5"
L6 Track 6 "6" "6"
L7 "7" "7"
L8 "8" "8"
Current Catalog: W0:

Recording with a 64-voice poly system (con't)



TRACK ROUTING panel 2



TIMBRE/SEQUENCE STORAGE numbered buttons 1 and 2 panel 4

Assigning a poly bin to the keyboard

1. Press and hold the TRACK ROUTING button.

   The button lights. The first and second numbered buttons under TIMBRE/SEQUENCE STORAGE blink.

2. Press any key on the keyboard.

   The first and second numbered buttons under TIMBRE/SEQUENCE STORAGE continue to blink.

3. Press the numbered button corresponding to the bin you want assigned to the keyboard.

   The selected bin appears on the second line of the keyboard display window.

   Sound files of any timbre recalled to the keyboard after you make the assignment are loaded into the assigned bin. The assignments do not affect the current keyboard timbre.

Assigning a track timbre to a poly bin

You can assign the sound files of each track timbre of the current sequence to a poly bin.

1. Recall the sequence.

2. Press and hold TRACK ROUTING.

   The button lights. The first and second numbered buttons under TIMBRE/SEQUENCE STORAGE blink.

3. Press the TRACK SELECT button corresponding to the track you want to assign.

   The TRACK SELECT button lights. The first and second numbered buttons under TIMBRE/SEQUENCE STORAGE continue to blink.

4. Press the numbered button corresponding to the bin to which you want the track timbre assigned.

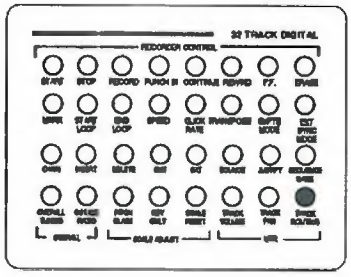
   The selected poly bin appears on the second line of the keyboard display window.

   Poly Bin: 1

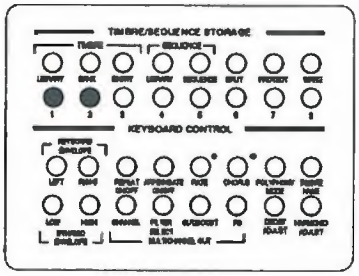
5. Store the sequence.

   The poly bin assignments of each track timbre are stored with the sequence. If you do not assign a poly bin to a track, Poly Bin 1 is automatically assigned.

Whenever the sequence is recalled, the sound files associated with each track timbre are loaded into the assigned bin.



TRACK ROUTING panel 2



TIMBRE/SEQUENCE STORAGE numbered buttons 1 and 2 panel 4

Click tracks

You can record a sequence with a changing tempo by using a click track.

Recording with a click track

The clicks generated by the digital metronome occur at a steady rate. Although you can change the click rate at any time during recording, the click rate remains the same from one bar to the next. This does not lend itself to certain types of musical expression, such as a cadenza, accelerando or ritard.

Any track can be used to control the output of the digital metronome. Tracks used this way are called **click tracks.***

You can record a click track by tapping the beat on a key on the keyboard. Percussion timbres are easiest to work with, but any timbre may be used.

You may want to record different parts of the click track on different tracks at different tempos and then slide and bounce the tracks together to create the final click track. The justified mode should be used in this procedure.

You can record some parts of your sequence with the digital metronome and others with a click track. A click track cannot be used to impose tempo changes upon already recorded tracks, however.

* A system limitation allows no more than 60 seconds between clicks.

Using a click track

1. Record a track using a percussion timbre. Play each note at exactly the time you want the clicks to sound.

2. Press and hold CLICK RATE while you press the appropriate TRACK SELECT button.

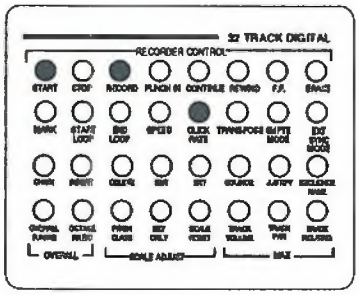
   The display window shows

   CLICK: TRACK [number]

3. Press TRACK VOLUME and turn the control knob to zero.

4. Press START or RECORD.

   A click sounds for every note recorded on the click track. If you are in the justified mode, recorded notes are justified to these clicks.



START, RECORD, CLICK RATE panel 2

To return to the digital metronome:

1. Press CLICK RATE and hold it down.

   The display window shows

   CLICK: TRACK [number]

2. Press the TRACK SELECT button of the click track.

   The click source is changed back to the digital metronome and the display window shows the current click rate.

Click tracks (con't)

External clicks

You can use a click from an external source to control the Memory Recorder.

External clicks that can be used include

- a live click or percussive sound that has been recorded on tape and conditioned using a timing interface module;
- a SMPTE-driven metronome that generates a trigger pulse from SMPTE time code recorded on tape;
- a drum machine or sync box that generates a trigger pulse based on a sync code (such as FSK) recorded on tape.
- any TTL standard trigger pulse (2 volts or more).

See the manual *Studio Operations* for complete instructions.

Using an external click track

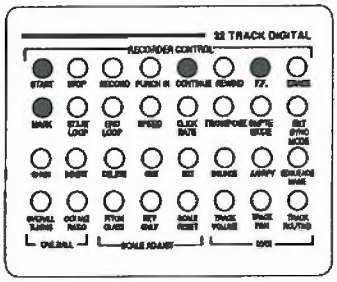
You can record your sequence to an external click fed through a pulse conditioner into the EXTERNAL CLOCK IN jack on the Synclavier control unit.

You can also record the external click onto a click track in the sequencer and proceed as explained in "Recording with a click track" earlier in this section.

Both procedures are explained fully in the section "External click tracks" in the manual *Studio Operations*.

Marking a sequence

You can specify any beat of a sequence as a mark point either while the sequence is playing or while it is stopped. Once a mark point is set, pressing START automatically starts the sequence from that point.



START, CONTINUE F.F., MARK panel 2

Setting a mark point

To set a mark point while the sequence is stopped:

1. Press and release the MARK button.

   The display window shows

   M [measure]:[beat]
   MARK POINT: ON

2. Use the control knob to set a starting beat number.

3. Press the START button.

   The sequence plays from the specified beat.

To set a mark point while the sequence is playing:

1. Press the START button to play the sequence.

2. Press and hold the MARK button.

   The display window shows

   M [measure]:[beat]
   MARK POINT: ON

3. Press CONTINUE at the desired mark point. Release both buttons.

   The display window shows a new starting measure and beat.

4. Press START.

   The sequence plays at the specified mark point.

Marking the first recorded beat

If you are working on a particular track that starts after the beginning of the sequence, you can set the mark point to the first recorded beat of the track.

1. Press and hold the MARK button.

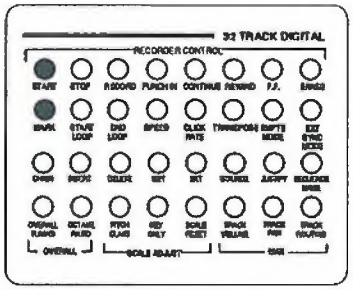
   The display window shows

   M [measure]:[beat]
   MARK POINT: ON

2. Press the desired track button.

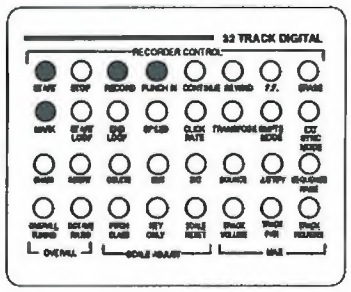
3. Press START.

   The sequence begins playing at the first recorded beat of the selected track.



START, MARK
panel 2

Marking a sequence (con't)



START, RECORD, PUNCH IN, MARK panel 2

Clearing a mark point

You can clear a mark point using either of the following methods.

Method 1.

1. Press MARK.
2. Use the control knob to set the mark point to zero.

Method 2.

1. Press and hold MARK.
2. Press a TRACK SELECT button containing an empty track. The display window shows

   M 0:0.000
   MARK POINT: ON

When a mark point has been set, pressing START once or twice starts the sequence from the designated mark point. RECORD and PUNCH IN also start the sequence from the mark point.

Turning the mark start feature on and off

You can turn off the mark start feature while retaining the mark point in memory.

1. Press and hold the MARK button.
2. Press the STOP button. The display window shows

   M [measure]:[beat]
   MARK POINT: OFF

   When you press START, the sequence starts at the beginning.

Even when the mark point is disabled, it can be set or changed using any of the methods described previously.

To turn the mark start feature back on:

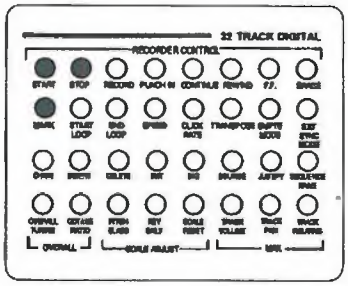
1. Press and hold the MARK button.
2. Press the START button. The display window shows

   M [measure]:[beat]
   MARK POINT: ON

   When you press START, the sequence starts at the previous mark point.

The on/off status of the mark start feature is displayed whenever the mark button is pressed. The status does not change when you set or change the mark point. The default status is "Off."

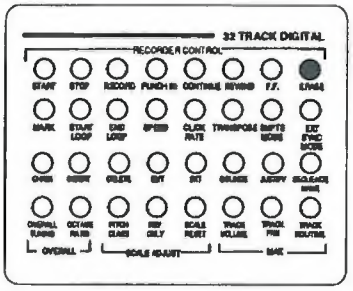
Mark points are saved with a sequence; the on/off status of the mark start feature is not.



START, STOP, MARK panel 2

Notes, voices and the poly–phony mode

As you create larger sequences, you need to know some information about using your system to the maximum.



ERASE panel 2

Maximum number of notes

The maximum number of notes available is determined by the amount of external memory installed in your system. To find out this number:

- Press the ERASE button twice just after you load the system.

  The display window shows the maximum number of notes available in your system.

A timbre is recalled to the keyboard automatically when you first load your system. If that timbre (entry 1, bank 1, top-level W0:) contains a large number of patches or frames, it might use some of the available notespace. In this case you may see a smaller number than the actual maximum.

Maximum number of voices

The maximum number of notes that sound simultaneously on the keyboard depends on:

- the number of FM and/or polyphonic sampling voices required by the keyboard timbre; and
- the number of FM and/or polyphonic sampling voices installed in your system.

When the number of voices used by the timbre, multiplied by the number of notes played, exceeds the number of FM or polyphonic sampling voices in your system, some of the notes will not sound. This is true not only of notes played on the keyboard, but of notes on tracks recorded in the sequencer.

Polyphonic sampling voices are independent of the FM voices. Therefore, you can reach the limitations of either system—polyphonic sampling or FM—without affecting the other.

You can record 200 timbres on 200 tracks, but the number of sounds you hear simultaneously on playback is still limited by the number of FM or polyphonic sampling voices in your system.

If you have recorded more voices than your system has available, some of the recorded notes do not sound when you play back the sequence. They are still in the sequence, however, and you can hear them by soloing different tracks. You can also assign them to MIDI output channels and use them to control other synthesizers.

Notes, voices and the polyphony mode (con't)

Keyboard polyphony

The keyboard polyphony setting of a timbre defines the number of notes that can sound simultaneously. Most timbres are fully polyphonic with a setting of 128. With such timbres, notes sound simultaneously until all voices are used. Other timbres have a keyboard polyphony setting of 1. With such a timbre, only one note can sound at a time. Each following note cuts off the previous note.

When performing or recording with timbres that use many voices, you may want to adjust the keyboard polyphony setting, especially of FM timbres that have a long final decay or sound file timbres that are looped. The final decays of these types of timbres are cut off to free voices for new notes when performing on the keyboard but not when notes are recorded on different tracks. If the system runs out of voices, bars appear in the display window and some notes may not play.

Setting the keyboard polyphony

You can limit the maximum number of voices used by the keyboard timbre by setting the keyboard polyphony.

1. Press the POLYPHONY MODE button.

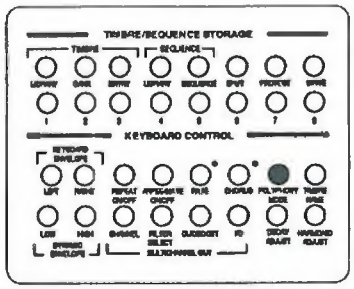
   The display window shows

   [number] POLYPHONY

2. Use the control knob to change the number of notes which can be played simultaneously by the keyboard timbre.

A keyboard polyphony setting of 1 makes the timbre monophonic on the keyboard. This means that each new note cuts off the previous note regardless of whether the note is in the attack, sustain or final decay.

A setting of 2 or 3 means that two or three notes may be played simultaneously before notes begin to be cut off.



POLYPHONY MODE
panel 4

Track assignments

Assigning tracks to TRACK SELECT buttons

You can record on any of 200 Memory Recorder tracks. Each bank of eight tracks corresponds to a row of TRACK SELECT buttons. Any bank of tracks may be assigned to any row of buttons. When you first enter the system, tracks 1-32 are assigned to buttons 1-32. If the Direct-to-Disk option is active, Direct-to-Disk tracks L1-L8 are assigned to buttons 25-32.

Assigning tracks to TRACK SELECT buttons is done from either the MIDI or Multichannel Display.

1. Select the MIDI or Multichannel Display from the Main Menu.

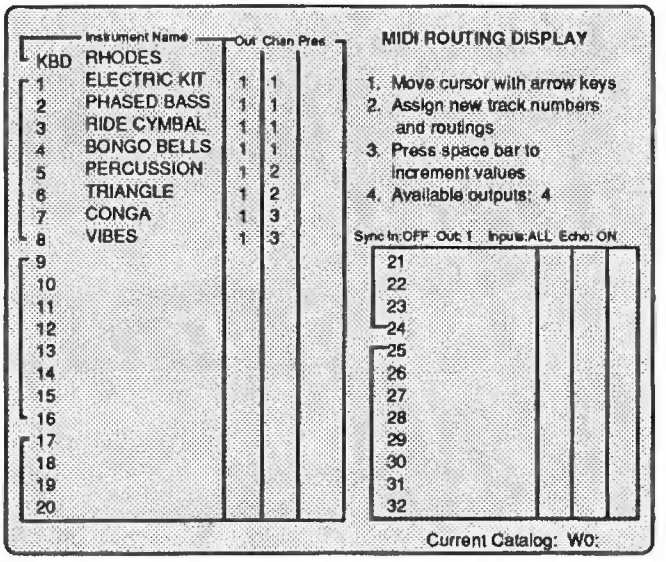
2. Use the arrow keys to place the cursor over any track number in the bank to which you wish to assign a different set of tracks.

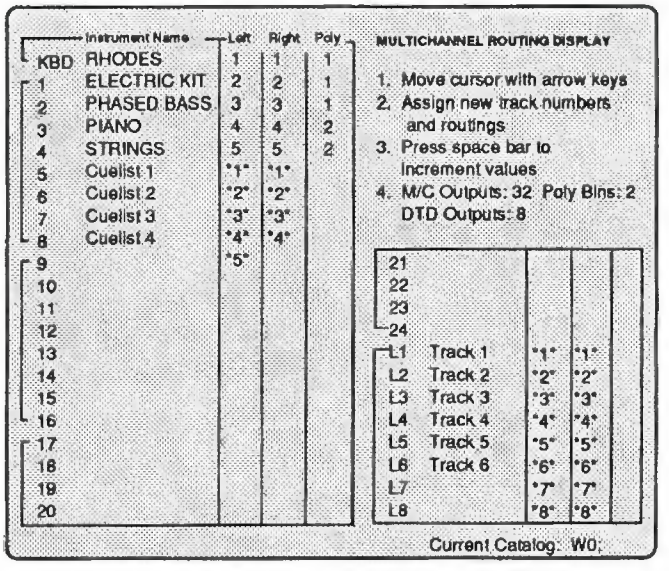
3. Enter the number of a track you wish to assign to the selected bank of TRACK SELECT buttons. You may enter any number between 1 and 200. Enter L1 through L16 to assign Direct-to-Disk (live) tracks.

   The track and its associated bank of eight tracks are assigned to the selected bank of TRACK SELECT buttons. The cursor moves to the selected track.

A bank of tracks may not be assigned to more than one bank of TRACK SELECT buttons. If you enter the number of a track that is already displayed on the screen, the cursor moves to that track and the TRACK SELECT button assignments remain the same.

Note: If a soloed track is no longer accessible from the keyboard control panel because its TRACK SELECT button has been reassigned, you must reassign the track to the button panel in order to unsolo it.


Instrument Name
Out Chan Pres
KBD RHODES
1 ELECTRIC KIT 1 1
2 PHASED BASS 1 1
3 RIDE CYMBAL 1 1
4 BONGO BELLS 1 1
5 PERCUSSION 1 2
6 TRIANGLE 1 2
7 CONGA 1 3
8 VIBES 1 3
9
10
11
12
13
14
15
16
17
18
19
20
MIDI ROUTING DISPLAY
1. Move cursor with arrow keys
2. Assign new track numbers and routings
3. Press space bar to increment values
4. Available outputs: 4
Sync In:OFF Out: 1 Inputs:ALL Echo: ON
21
22
23
24
25
26
27
28
29
30
31
32
Current Catalog: W0:

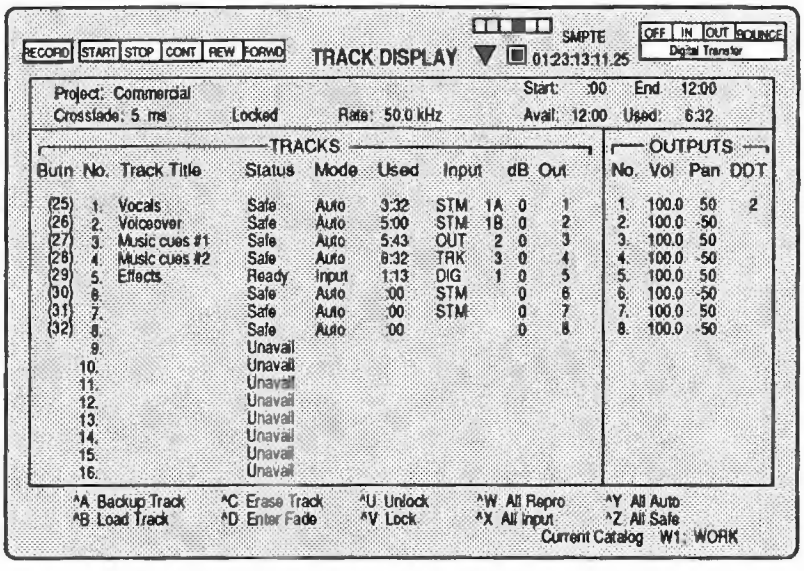

Instrument Name
Left Right Poly
KBD RHODES 1 1 1
1 ELECTRIC KIT 2 2 1
2 PHASED BASS 3 3 1
3 PIANO 4 4 2
4 STRINGS 5 5 2
5 Cuelist 1 *1* *1*
6 Cuelist 2 *2* *2*
7 Cuelist 3 *3* *3*
8 Cuelist 4 *4* *4*
5
9
10
11
12
13
14
15
16
17
18
19
20
MULTICHANNEL ROUTING DISPLAY
1. Move cursor with arrow keys
2. Assign new track numbers and routings
3. Press space bar to increment values
4. M/C Outputs: 32 Poly Bins: 2 DTD Outputs: 8
21
22
23
24
L1 Track 1 *1* *1*
L2 Track 2 *2* *2*
L3 Track 3 *3* *3*
L4 Track 4 *4* *4*
L5 Track 5 *5* *5*
L6 Track 6 *6* *6*
L7 *7* *7*
L8 *8* *8*
Current Catalog: W0:

Track assignments (con't)

Assigning Direct-to-Disk tracks to TRACK SELECT buttons

Direct-to-Disk tracks are assigned by default to TRACK SELECT buttons 25 through 32. You can assign them to any other bank of eight TRACK SELECT buttons using the Track Display. Once assigned, you can arm or disarm the tracks from the keyboard control panel one by one or in groups.

1. Select the Track Display from the Main Menu.
2. Click the Button column on the far left side of the display.
3. Press the Spacebar until the Direct-to-Disk tracks are assigned to the desired bank of TRACK SELECT buttons.


RECORD START STOP CONT REW FORWD
TRACK DISPLAY
SMPTE
01:23:13:11.25
OFF IN OUT BOUNCE
Digital Transfer
Project: Commercial
Start: :00 End 12:00
Crossfade: 5 ms Locked Rate: 50.0 kHz Avail: 12:00 Used: 6:32
TRACKS
Burn No. Track Title Status Mode Used Input dB Out
(25) 1. Vocals Safe Auto 3:32 STM 1A 0 1
(26) 2. Voiceover Safe Auto 5:00 STM 1B 0 2
(27) 3. Music cues #1 Safe Auto 5:43 OUT 2 0 3
(28) 4. Music cues #2 Safe Auto 6:32 TRK 3 0 4
(29) 5. Effects Ready Input 1:13 DIG 1 0 5
(30) 6. Safe Auto :00 STM 0 6
(31) 7. Safe Auto :00 STM 0 7
(32) 8. Safe Auto :00 0 8
9. Unavail
10. Unavail
11. Unavail
12. Unavail
13. Unavail
14. Unavail
15. Unavail
16. Unavail
OUTPUTS
No. Vol Pan DDT
1. 100.0 50 2
2. 100.0 -50
3. 100.0 50
4. 100.0 -50
5. 100.0 50
6. 100.0 -50
7. 100.0 50
8. 100.0 -50
^A Backup Track ^C Erase Track ^U Unlock ^W All Repro ^Y All Auto
^B Load Track ^D Enter Fade ^V Lock ^X All Input ^Z All Safe
Current Catalog W1: WORK