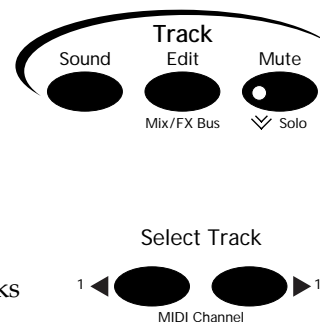# 2   Tracks

Introduction to Tracks

Whatever you do in the ASR-X Pro—and whatever kind of sound you play from its pads or via MIDI—you're always on a track in a sequence, even when you haven't yet recorded any notes. When you choose and listen to the sounds built-in to your ASR-X Pro, or that you've sampled/resampled yourself, you're actually choosing sounds for the currently selected track. Tracks are absolutely central to life with an ASR-X Pro. The Track buttons allow you to control the properties of each track.

Each track has:

- a sound that can be played using the ASR-X Pro pads or from an external controller via MIDI, or a sound that can play an external MIDI device.
- an editable set of parameters that determine how the sound will behave while it's assigned to the track.
- a mute/solo capability that can silence the track or isolate by turning all other tracks off.
- its own MIDI channel for receiving and transmitting MIDI data. Each track's MIDI channel is the same as its track number—there are 16 tracks in each sequence.
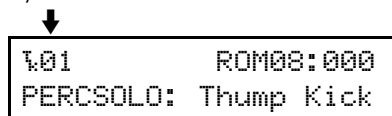
These topics are discussed in detail in this chapter.

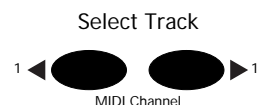## To Select One of the Tracks in the Currently Selected Sequence

The track display tells you which track is currently selected. To view it, press the Track Sound button.

The currently selected track

```
↓01            ROM08:000
PERCSOLO: Thump Kick
```

To Select a Track

1. Press the Select Track right arrow button to select a higher-numbered track, or the left arrow button to select a lower-numbered track.

Tip: Hold down either button to scroll through the tracks.

Selecting a Sound for a Track

There are four ways to place a sound on the currently selected track, all of which begin with pressing the Track Sound button:

- You can select a track's sound using the front-panel Sound Type and Sound Name knobs, taking advantage of the ASR-X Pro powerful SoundFinder feature—see "Selecting a Track's Sound Using the Sound Type and Sound Name Knobs" below.
- You can select a track's sound by sending MIDI Bank Select and Program Change messages to the ASR-X Pro—see "Selecting a Track's Sound Via MIDI" later in this section.
- You can transform any ROM sound on the track into a new, editable RAM drum kit by sampling or resampling and sending your sample to a pad (see Chapter 5).
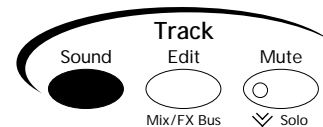
• You can transform any ROM sound on the track into a new, editable RAM drum kit by editing the sound using the Pad editing controls (see Chapter 3).

When a new sound is selected for a track, the ASR-X Pro will automatically reset certain track parameters if the System/MIDI Track ParamReset parameter is set to "On" (see Chapter 7). For a list of these parameters, see "Track ParamReset Behavior" in Chapter 9.

Banks and Sounds

Sounds are stored in the ASR-X Pro in groups called *banks*. A bank can contain up to 127 sounds. Each bank has a corresponding MIDI Bank Select number that allows it to be selected via MIDI, and within each bank , each sound has a program number corresponding to a MIDI Program Change value so that it, too, can be selected via MIDI (see "Selecting and Playing a Track's Sound Via MIDI" later in this chapter).

Selecting a Track's Sound Using the Sound Type and Sound Name Knobs

Sound selection using the ASR-X Pro front-panel knobs is simple. The ASR-X Pro utilizes ENSONIQ's acclaimed SoundFinder™ technology to make the location and selection of sounds logical and easy.

SoundFinder

SoundFinder is a database of all the sounds in your ASR-X Pro. The power of a database lies in its ability to let you to view information in a manner of your choosing. SoundFinder keeps a list of all the sounds available in your ASR-X Pro, and shows them to you in convenient categories called *sound types*.

SoundFinder sound types show you sounds by instrument family—vocals or bells, for example—or by other useful criteria, including the location in the ASR-X Pro's memory where they reside. The ALL-SND category is especially useful,: it shows all of the ASR-X Pro sounds arranged in alphabetical order.

Tip: When you select a sound from a SoundFinder category, the ASR-X Pro remembers the sound you've selected, and offers it to you as a first choice when you return to the category.
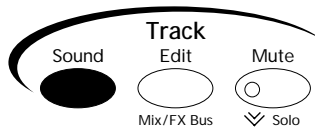

While most of SoundFinder's categories describe types of musical instruments, there are three additional categories that allow you to select sounds based on the location in memory in which they reside:

• EXP-SND—This category contains sounds located on an EXP Series Wave Expansion Board.
• ROM-SND—This category contains sounds stored in permanent ROM.
• RAM-SND—This category contains sounds stored in temporary RAM. There are two banks' worth of RAM sound memory (to learn about banks, see "Banks and Sounds" above).

You can also set a track to transmit MIDI data—see "Selecting and Programming a MIDI-OUT Sound."

To Select a Sound Using the Sound Type and Sound Name Knobs

1. Press the Track Sound button.

The display shows you information that's helpful when picking sounds:

The track being edited   Where the sound it resides   The sound's MIDI bank and program numbers

```
↓01              ROM08:000
PERCSOLO: Thump Kick
```

The currently selected SoundFinder category   The currently selected sound
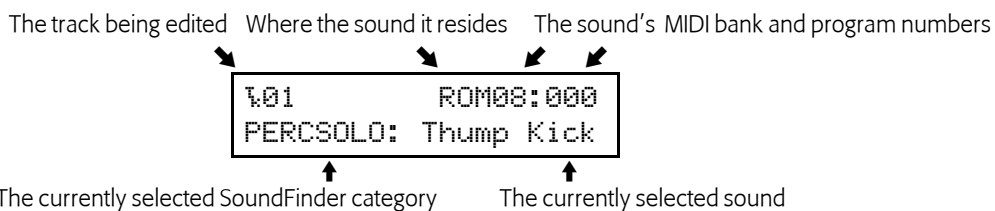
2.   Turn the Sound Type knob to select a different SoundFinder category, if desired.

Tip: To quickly locate all RAM kits, turn the Sound Type knob all the way to the left (to the USER-SND category). To find the sounds that play your waves, turn it all the way right (*CUSTOM).

3.   Turn the Sound Name knob to select a new sound.

Selecting a Track's Sound Using the Essentials Buttons

The ten Essentials buttons provide instant access to 15 0f your favorite sounds. To assign an Essential sound to the currently selected track:

1.   Press the Track Sound button.
2.   Press the desired Essentials button for Essential sounds 0-9, or hold down an upper Essentials button and press the button beneath it for Essential sounds 10-14.
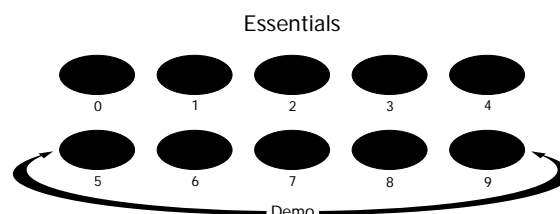
Tip: You can also select Essentials using foot switches—see Chapter 7.

The single Essentials buttons are pre-programmed by ENSONIQ with the following sounds:

Essentials button:	selects:	Essentials button:	selects:
0	Gizmo Kit	5	Vintge Bs 1
1	Dance Kit	6	Sweep Bass
2	HeavyDrmKit	7	Snot-T-Bass
3	Ol'SkoolKit	8	Mono Boy
4	GM Kit	9	Tite'T'Bass

The upper and lower Essentials pairs are programmed to select these sounds:

Essentials pair:	selects:	Essentials pair:	selects:
0 and 5	R. Peggio	3 and 8	PaddedEPno
1 and 6	Classic Syn	4 and 9	Techno Sync
2 and 7	Squared Off		

Programming the Essentials Buttons

You can assign one any of your own favorite sounds to an Essentials button in any of the following ways:

•   Select the desired sound using the Sound Type and Name knobs, hold down the Track Sound button and, while still hold it, press the Essentials button to which you want to assign the sound.
•   Hold down the desired Essentials button and, while still holding it, select the desired sound using the Sound Type and Name knobs.
•   After setting up a foot switch for the selection of Essentials (Chapter 7), select the desired sound using the Sound Type and Name buttons, hold down the Track Sound button and, while still holding it, select the intended Essentials button using your foot switch.

Tip: You can save your current Essentials sound assignments to disk—see Chapter 7.

Tip: To learn how to store Essentials assignments permanently into FLASH memory, see "Save these settings?" in Chapter 7.

Selecting and Playing a Track's Sound Via MIDI

You can select sounds for tracks by sending the ASR-X Pro MIDI Bank Select LSB and Program Change values on each track's MIDI channel (the MIDI channel corresponding to its track number). Sounds can also be played from MIDI on each track's MIDI channel.


Note: Each track *always* receives and responds to MIDI data received on its MIDI channel, regardless of which track is currently selected.

Note: In order for the ASR-X Pro to respond to Bank Select and Program Change messages, its System/MIDI Bank&ProgChgRecv parameter must be set to "On" (see Chapter 7 for more information). In addition, the target track's ProgramChngeRecv and Bank Select Recv parameters must also be set to "On" (these two parameters are described later in this chapter).

The track sound selection display shows you the Bank Select LSB and Program Change values for the displayed sound. You can program these Bank Select and Program Change values into an external MIDI device in order to select the sounds via MIDI later on.

The sound's Bank Select LSB value   The sound's Program Change value

```
⌐01          ROM09:012
BASS-SYN:Barkin'Bass
```
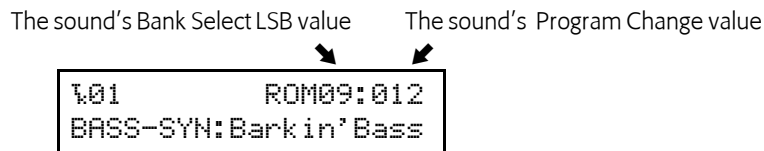
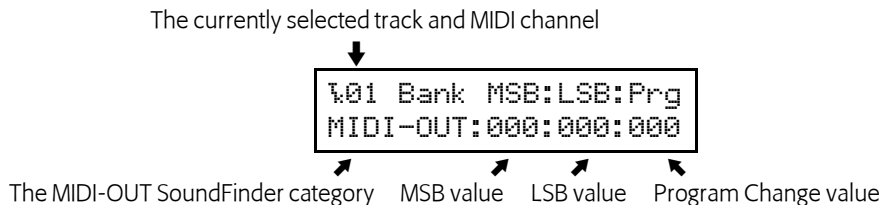### To Select and Play a Track's Sound Via MIDI

1. Set a MIDI device to transmit on the channel of the track whose sound you want to select or play.
2. Send the appropriate Bank Select and Program Change values to the ASR-X Pro.
3. Send note and controller data from your external device to play the track's sound.

Selecting and Programming a MIDI-OUT Sound

You can set up a track to transmit Bank Select, Program Change, note and controller data to an external MIDI device by assigning a MIDI-OUT sound to the track. When a track uses a MIDI-OUT sound, the track will produce no sound on the ASR-X Pro itself—instead, notes played on the pads, as well as data recorded on the track, will be transmitted from the ASR-X Pro on the track's MIDI channel.

To Select and Program a MIDI-OUT Sound

To assign a MIDI-OUT sound to a track, turn the Sound Type knob clockwise all the way to select the MIDI-OUT sound category. The MIDI-OUT category does not require you to select an individual sound as such—instead, its display allows you to set Bank Select MSB and LSB and Program Change values for transmission from the selected track in order to select the desired sound in the external MIDI device.

The currently selected track and MIDI channel

```
⌐01 Bank MSB:LSB:Prg
MIDI-OUT:000:000:000
```

The MIDI-OUT SoundFinder category   MSB value   LSB value   Program Change value

To set a Bank Select or Program Change value to be transmitted, select the desired field by turning the Value knob—the selected field will flash to show that it can be edited. Turn the Value knob to set the desired Bank Select MSB, LSB and/or Program Change value. The values are transmitted as they're set.

Note: Some MIDI devices select banks in response to received Bank Select MSB and/or LSB messages. Consult your external device's documentation to learn which values to use.

Tip: You can assign a MIDI-OUT sound to an Essentials button—when the Essentials button is pressed, the sound's Bank Select LSB and Program Change values will be transmitted.

Quickly Erasing a Track Sound

You can quickly erase a RAM sound from a track by holding down the Track Sound button and, while still holding it, pressing the No button. When the ASR-X Pro asks you if you're sure you want to delete the sound and any references to it, press the Yes button to erase the sound—it will be removed from RAM and replaced by the ROM sound Silence.

Note: Since this feature removes the selected sound and its copies, make sure not to inadvertently erase the original "SMPL X" version of the sound. If you erase this sound, the ASR-X Pro will also delete all copies of the sound, including the final version. Delete only the unwanted copies—if you haven't re-named your sounds using the Memory Manager, these will be the versions whose names end with an underscore and a number. Erase the original version of a sound only when you want to remove it and any sounds based upon it from memory.
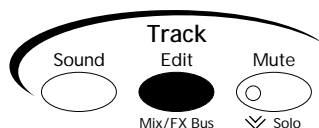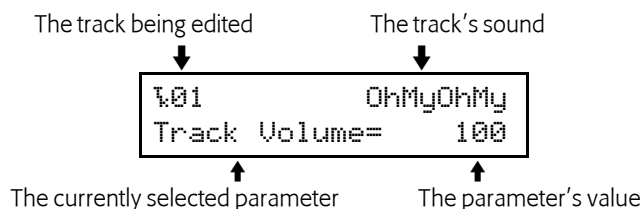

Editing Track Parameters

Editing a track's parameters—and therefore determining the behavior of its sound—involves the same technique regardless of the parameter being edited.

To Edit a Track Parameter

1. Press the Track Edit/Mix/FX Bus button in the Track section of the ASR-X Pro front panel.

2. Turn the Parameter knob to select the track parameter you'd like to edit.

    All of the track parameter displays show the track number and currently selected sound on the top line, and the selected parameter and its value on the bottom line:

The track being edited — The track's sound

```
╲01            OhMyOhMy
Track Volume=     100
```

The currently selected parameter — The parameter's value

3. Turn the Value knob to change the setting of the selected parameter .

Overrides and Offsets

ASR-X Pro sounds are made up of layers of waves. Track parameters allow you to easily change the settings in all of a sound's layers at once by altering them in one of two ways. Each track parameter is either:

*   an override, which sets all of the layers in the currently selected sound to the absolute value you set.
*   an offset, which raises or lower the programmed values by the amount you set.

Overrides set all of a sound's layers to the same absolute value for the selected parameter.

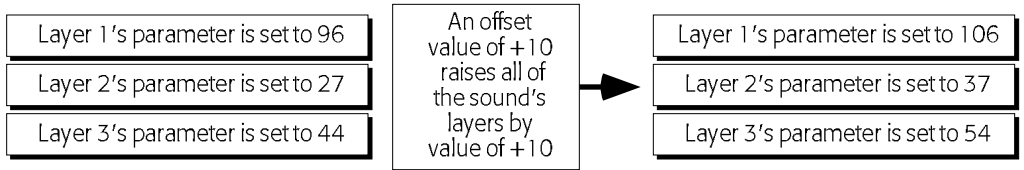| Layer 1's parameter is set to 96		An override value of 10 changes all of the sound's layers to a setting of 10	→	Layer 1's parameter is set to 10
Layer 2's parameter is set to 27				Layer 2's parameter is set to 10
Layer 3's parameter is set to 44				Layer 3's parameter is set to 10
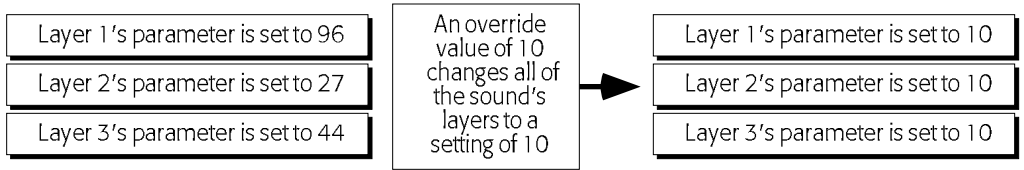
When an override parameter is set to "Prog," the originally programmed setting for each layer is retained.

Offsets are typically used to affect all of a sound's layers at once, retaining their different settings for the selected parameter in relation to one other. Offset parameters offer values that have positive/negative aspects (shown with a "+" or "-"). When an offset is set to "0," the originally programmed value for each layer is in effect.

Layer 1's parameter is set to 96		An offset value of +10 raises all of the sound's layers by value of +10	→	Layer 1's parameter is set to 106
Layer 2's parameter is set to 27				Layer 2's parameter is set to 37
Layer 3's parameter is set to 44				Layer 3's parameter is set to 54

Note: Offsets adjust layer parameters only within the parameters' legitimate ranges—they can't force them beyond those limits. If a track offset parameter appears to be having no effect, it's likely that the setting for the parameter in the sound's layers has already reached its maximum or minimum setting.

Editing Track Parameters Via MIDI

Track parameters can be edited via MIDI in two ways. Some of the parameters, such as Track Volume, Mix (Expression) and Pan correspond to standard MIDI sound controllers, and can be adjusted by sending the ASR-X Pro values for the relevant controllers. In addition, most of the track parameters can be edited using special registered and non-registered MIDI parameters (RPNs and NRPNs). To learn more about RPNs and NRPNs, see Chapter 9.

What Each Track Parameter Does

Track Volume

The Track Volume parameter allows you to override the loudness ceiling programmed into the selected track's sound. A Volume setting of 127 will leave the sound's level set as it was programmed. Lower values will reduce the sound's loudness—down by 96dB at a value of 0.

Track Volume can also be edited via MIDI with controller #7 (Volume) messages.

Mix (Expression)

The Mix (Expression) parameter can raise or lower the level of the sound on the selected track, but only as high as the maximum set by the Track Volume parameter.

You can set an acceptable loudness ceiling for a sound with the Track Volume parameter, and use the Mix (Expression) parameter to adjust its level without worrying that it will ever become too loud.

Mix (Expression) can also be edited via MIDI with controller #11 (Expression) messages.

```
═══ TrackVolume setting ═══
            127
             |
             |
      Mix (Expression)
             |
             |
             0
```
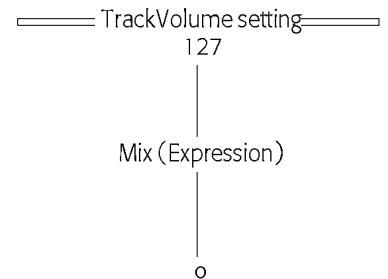
Vol/Mix Polarity

The Vol/MixPolarity parameter reverses the manner in which the selected track's sound will respond to Volume and Mix (Expression) messages received via MIDI. When set to +Pos, the sound will respond normally: higher Volume and Mix (Expression) values will result in greater loudness. When set to -Neg, higher Volume and Mix (Expression) values will lower the level of the sound.

Track Pan

ASR-X Pro sounds are programmed to be heard in specific places in the left/right stereo field. By adjusting the Track Pan setting, you can offset the stereo placement of the currently selected track's sound. A value of Center 00 will leave the sound panned as it was programmed. Lower values will shift it to the left, and higher values will move it to the right. If components within the sound are panned differently, their relative positions will be maintained as the sound is shifted in either direction.

-64 Left   +63 Right

00
Center

Track Pan can be edited via MIDI with controller #10 (Pan) messages.
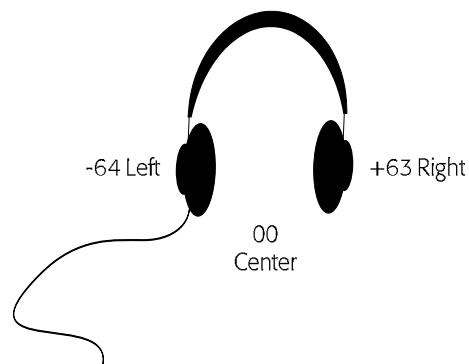
FX Bus

The FX Bus parameter allows you to assign the selected track—and its sound— to the current sequence's insert or global reverb effects, or left un-effected, or "dry." This is accomplished by assigning the track to an FX (for "effect") bus. (Using the ASR-X Pro Effects is described in Chapter 4.) You can select:

• Prog—to have the sound of each pad use its own FX Bus setting in a kit sound, or to have a standard sound use its Alt Bus setting.
• Insert—to send the selected track's sound to the sequence's insert effect.
• LightReverb—to add a minimal amount of global reverb to the selected track's sound.
• MediumReverb—to add a greater amount of global reverb to the selected track's sound.
• WetReverb—to add the maximum amount of global reverb to the selected track's sound.
• Dry—to leave the selected track's sound un-effected, or "dry."

Note: When an X-8 output expansion board has been installed, an additional four busses become available. These stereo FX busses, AuxOut1, AuxOut2, AuxOut3 and AuxOut4 allow you to send a track's sound directly to the auxiliary outputs. To use the auxiliary busses as separate mono busses, pan the tracks routed to them hard left or hard right (see "Track Pan" above).

MIDI controller #91 can be used to select one of the reverb busses or the dry bus for any track other than the insert control track. This is accomplished by sending the ASR-X Pro a controller #91 value on the track's MIDI channel. When the track receives a controller #91 value of:

• 0, it will be assigned to the Dry FX bus.
• 1-40, it will be assigned to the LightReverb FX bus.
• 41-80, it will be assigned to the MediumReverb FX bus.
• 81-127, it will be assigned to the WetReverb FX bus.

TrackMIDIOut

When a track's TrackMIDIOut parameter is set to "Enable," the track can transmit MIDI data on its corresponding MIDI channel when it uses a MIDI-OUT sound." When the parameter is set to "Disable," no MIDI data for the track will be transmitted from the pads or sequencer.

Note: The ASR-X Pro intelligently transmits a track's Bank Selects and Program Changes only when they're different from the last ones transmitted from the track.

Pitch Bend Up and Pitch Bend Down

The Pitch Bend Up and Pitch Bend Down parameters allow you to separately set how you want the selected track's sound to respond to up and down Pitch Bend messages received via MIDI.

Pitch Bend Up and Pitch Bend Down can be set to:

• 1-12dn or 1-12up—to lower or raise the pitch of the selected track's sound by 1 to 12 equal-temper semitones when Pitch Bend up or down messages are received via MIDI.
• Prog—to respond to received up or down Pitch Bend messages according to the programming in the track's sound.
• Sys—to use the global system Pitch Bend Up or Down values (see Chapter 7 for details).
• Off—to ignore received up or down Pitch Bend messages.

Tip: Each track provides a filter—the Pitch Bend Recv parameter—that you can use to disable or enable its response to Pitch Bend messages received via MIDI. This parameter is described later in this chapter.

Octave Shift

The Octave Shift parameter allows you to shift, by octaves, the pitch at which the selected track will play its sound. A setting of 0oct means the sound will play at its programmed octave tuning value. You can tune the sound up or down by a maximum of four equal-temper octaves.

Semitone Shift

The Semitone Shift parameter allows you to shift, in semitone steps, the pitch at which the selected track will play its sound. A setting of 0st means the sound will play at its programmed semitone tuning value. You can shift the sound upward by as much as 63 equal-temper semitones or downward by 64 semitones.

Fine Tuning

The Fine Tuning parameter allows you to re-tune the sound on the selected track by cents. A setting of 0cents means the sound will use its programmed fine tuning value. You can lower or raise the sound's fine tuning by -50 to +49 cents. 100 cents equals one semitone.

PitchTbl

ASR-X Pro contains a variety of non-standard tunings, or pitch tables. The PitchTbl parameter allows the selected track's sound to use one of these special tunings.

Tip: Each track in the ASR-X Pro has its own PitchTbl parameter that determines the pitch table to be used by the sound on the track. By setting each track to a different pitch table, you can program the ASR-X Pro's tracks to produce 16 different tunings at once!

The PitchTbl parameter can be set to:

• Prog—to use the pitch table the sound was originally programmed to use.
• Sys—to use the global system pitch table. (See Chapter 7 to learn about designating a system-wide pitch table.)
• One of the pitch tables built into the ASR-X Pro.

Chapter 9 provides a list of the built-in ASR-X Pro pitch tables.

Tip: With the proper software, you can also design your own pitch table on a computer, and transmit it to the ASR-X Pro via MIDI. "About RAM Pitch Tables" in Chapter 9 provides detailed information on creating your own pitch tables.

Glide Mode

The Glide Mode parameter allows you to set the glide characteristics of the selected track's sound. The parameter can be set to:

•   Prog—so that gliding from note to note will occur according to the sound's programming.
•   Off—so that no gliding will occur.
•   On—so that all of the layers in the sound will glide from note to note.

Note: When this parameter is set to "On"—enabling gliding in the selected track's sound—adjust the Glide Time parameter (described below) to set the speed at which the track's sound will glide from note to note.

If the Glide Mode parameter is set to "Prog" or "Off," the parameter can also be toggled on or off via MIDI by sending MIDI controller #65 (Portamento) values to the ASR-X Pro on the selected track's MIDI channel. Values of 64 or above will turn glide on; values of 63 or lower will turn it off (there is no way to select the Prog setting via MIDI). When controller #65 is used for this purpose, the ASR-X Pro display will not show that the parameter has been reset—it will simply happen. In order to return control of the Glide Mode parameter to the ASR-X Pro's front-panel, a controller #65 value of 63 or less must be sent to the ASR-X Pro on the selected track's MIDI channel.

Glide Time

When a track's sound is programmed to glide from note to note, the Glide Time parameter allows you to adjust the speed at which its notes will glide from one to the next. The parameter can be set anywhere from -64 to +63. A value of 0 means that the sound will glide at its programmed speed. Higher values will slow the sound's glide, and lower values will cause it to speed up.

Delay Offset

The Delay Offset parameter can be used to increase the amount of time it will take for a track's sound to be heard after it receives a key down message, either from a pad or via MIDI. If a sound has been programmed with a delay time, the delay offset will lengthen that delay time by up to 2500 milliseconds (ms). If a sound has no programmed delay time, the Delay Offset parameter can delay it up to 2500ms. If the parameter is set to 0ms, no delay time will be added to the sound.

SyncLFO&Noise

The SyncLFO&Noise parameter allows you to alter the behavior of any LFOs and noise generators in the selected track's sound that are programmed to be synchronized to the ASR-X Pro's sequencer or to incoming MIDI clocks. The parameter can be set to:

•   Prog—to allow the synchronized LFOs and noise in the track's sound to behave as programmed.
•   Normal—to de-synchronize any synchronized LFOs and noise in the track's sound.
•   1/1 to 1/32T—to set the rhythmic relationship of any synchronized LFOs and noise in the track's sound to the ASR-X Pro's system tempo, or to incoming MIDI clocks. A "T" following a number signifies a triplet value.

Tip: The System/MIDI ClockSource parameter determines whether the ASR-X Pro sequencer or MIDI clocks will control synchronized LFOs or noise. See Chapter 7.

Normal LFO Rates

The Normal LFO Rates parameter allows you to raise or lower the programmed speed of any unsynchronized LFO's in the selected track's sound. The parameter can be set from -64 to +63. A value of 0 means the track's sound will retain its programmed LFO rate. A value other than 0 will be added to or subtracted from the sound's originally programmed rate.

LFO Depth

The LFO Depth parameter allows you to increase or decrease the programmed depth of the LFO's in the selected track's sound. The parameter can be set from -64 to +63. A value of 0 means the track's sound will retain its programmed LFO depth. A value higher than 0 will increase the depth of the sound's LFOs, while values below zero will reduce it.

LFO Delay Time

The LFO Delay Time parameter allows you to lengthen or shorten the delay programmed for any of the LFOs in the selected track's sound. The parameter can be set from -64 to +63. A value of 0 means the track's sound will retain its programmed LFO delay setting. Any value above 0 will lengthen the sound's LFO delay times, while any values below 0 will shorten them.

Amp Env Attack

The Amp Env Attack parameter allows you to lengthen or shorten the attack times of amplitude envelopes within the selected track's sound. The parameter can be set anywhere from -64 to +63. A value of 0 will leave the attack times of amplitude envelopes within the track's sound behaving as programmed. Values above 0 will lengthen the attack times, while values below 0 will shorten them.

Amp Env Decay

The Amp Env Decay parameter allows you to lengthen or shorten the decay times of amplitude envelopes within the selected track's sound. The parameter can be set anywhere from -64 to +63. A value of 0 will leave the decay times of amplitude envelopes within the track's sound behaving as programmed. Values above 0 will lengthen the decay times, while values below 0 will shorten them.

Amp Env Release

The Amp Env Release parameter allows you to lengthen or shorten the release times of amplitude envelopes within the selected track's sound. The parameter can be set anywhere from -64 to +63. A value of 0 will leave the release times of amplitude envelopes within the track's sound behaving as programmed. Values above 0 will lengthen the release times, while values below 0 will shorten them.

Filter Cutoff

The Filter Cutoff parameter allows you to raise or lower the filter cutoff settings programmed into the selected track's sound. The parameter can be set anywhere from -64 to +63. A value of 0 will leave the cutoff settings in the track's sound unchanged. Values above 0 will raise the cutoff settings, while values below 0 will lower them.

Filter Resonance

The Filter Resonance parameter allows you to raise or lower the resonance settings programmed into the selected track's sound. The parameter can be set anywhere from -64 to +63. A value of 0 will leave the resonance settings in the track's sound unchanged. Values above 0 will increase the resonance settings, while values below 0 will lower them.

Filt Env Attack

The Filt Env Attack parameter allows you to lengthen or shorten the attack times of filter envelopes within the selected track's sound. The parameter can be set anywhere from -64 to +63. A value of 0 will leave the attack times of filter envelopes within the track's sound behaving as programmed. Values above 0 will lengthen their attack times, while values below 0 will shorten them.

Filt Env Decay

The Filt Env Decay parameter allows you to lengthen or shorten the decay times of filter envelopes within the selected track's sound. The parameter can be set anywhere from -64 to +63. A value of 0 will

leave the decay times of filter envelopes within the track's sound behaving as programmed. Values above 0 will lengthen the decay times, while values below 0 will shorten them.

Filt Env Release

The Filt Env Release parameter allows you to lengthen or shorten the release times of filter envelopes within the selected track's sound. The parameter can be set anywhere from -64 to +63. A value of 0 will leave the release times of filter envelopes within the track's sound behaving as programmed. Values above 0 will lengthen the release times, while values below 0 will shorten them.

Amp&Filt Env Vel

The Amp&Filt Env Vel parameter allows you to increase or decrease the velocity sensitivity of the amplitude and filter envelopes within the select track's sound. The parameter can be set anywhere from -64 to +63. A value of 0 will not change the responsiveness of the amplitude and filter envelopes in the track's sound. Values above 0 will increase the effect of velocity upon the sound's envelopes, while lower values will decrease its impact.

Key Range Lo, Key Range Hi

The Key Range Lo and Key Range Hi parameters allow you to limit the pitches that the sound on the selected track will play. The Key Range Lo parameter sets the lowest note that will play, while the Key Range Hi parameter sets the highest. Either parameter can be set anywhere from A0 to C8. Middle C is C4. (Some MIDI controller manufacturers refer to Middle C as C3—if you're playing the ASR-X Pro from an external MIDI device, check the device's manual.)

Note: A sound's Key Range Lo value should not be set above its Key Range Hi setting, nor should its Key Range Hi value be set below its Key Range Lo setting.

VelocityRange Lo, VelocityRange Hi

The VelocityRange Lo and VelocityRange Hi parameters allow you to set an allowable velocity range for the selected track. When the track receives velocity values from the pads or via MIDI that fall outside of that range, the track's sound won't play. The VelocityRange Lo parameter sets the lowest allowable velocity; the VelocityRange Hi parameter sets the highest. Either parameter can be set from 0 to 127.

Note: A sound's VelocityRange Lo value should not be set above its VelocityRange Hi setting, nor should its VelocityRange Hi value be set below its VelocityRange Lo setting.

VelocityMode

It's not uncommon for different components of ASR-X Pro sounds to be heard only when the pads are struck, or MIDI notes are received, with particular velocities. The Velocity Mode parameter provides a way to alter sounds so you can reliably produce these values and, therefore, the sounds those velocities produce. When the Velocity Mode parameter is set to any value other than Normal, velocities that fall within the sound's velocity window (see the VelocityRange Lo, VelocityRange Hi parameter description above) are automatically converted to the velocity set with the Velocity Mode parameter. The possible settings for the parameter are Normal, and Fix 001 through Fix 127.

PressureMode

The ASR-X Pro responds to channel and polyphonic pressure messages that it receives via MIDI. The PressureMode parameter allows you to determine how the track's sound will respond to MIDI pressure messages. You can set this parameter to:

- Off—so that the track's sound will not respond to keyboard pressure. If pressure has been assigned as an insert effect modulation source, that response to pressure is also disabled.

- Auto—so that the track's sound will respond to whichever type of pressure the ASR-X Pro receives via MIDI.
- Channel—so that the track's sound will only respond to channel pressure.
- Key—so that the track's sound will only respond to key pressure.

ProgramChngeRecv

The ProgramChngeRecv parameter enables or disables the selected track's response to received MIDI Program Change messages. The parameter can be set to "On" or "Off."

Bank Select Recv

The Bank Select Recv parameter enables or disables the selected track's response to received MIDI Bank Select messages. The parameter can be set to "On" or "Off."

Data Entry Recv

The Data Entry Recv parameter enables or disables the selected track's response to received Data Entry (controller #6) messages. The parameter can be set to "On" or "Off."

Pitch Bend Recv

The Pitch Bend Recv parameter enables or disables the selected track's response to received Pitch Bend messages. The parameter can be set to "On" or "Off."

Mod Wheel(1) Recv

The Mod Wheel(1) Recv parameter enables or disables the selected track's response to received Mod Wheel (controller #1) messages. The parameter can be set to "On" or "Off."

FootPedal(4) Recv

The FootPedal(4) Recv parameter enables or disables the selected track's response to received Foot Pedal (controller #4) messages. The parameter can be set to "On" or "Off."

Volume(7) Recv

The Volume(7) Recv parameter enables or disables the selected track's response to received Volume (controller #7) messages. The parameter can be set to "On" or "Off."

Pan(10) Recv

The Pan(10) Recv parameter enables or disables the selected track's response to received Pan (controller #10) messages. The parameter can be set to "On" or "Off."

Expressn(11) Recv

The Expressn(11) Recv parameter enables or disables the selected track's response to received Expression (controller #11) messages. The parameter can be set to "On" or "Off."

Sustain/SostRecv

The Sustain/SostRecv parameter enables or disables the selected track's response to received Sustain or Sostenuto (controllers #64 and #66, respectively) messages. The parameter can be set to "On" or "Off."

SysCTRL1 Recv, SysCTRL2 Recv, SysCTRL3 Recv, SysCTRL4 Recv,

The SysCtrl1 Recv, SysCtrl2 Recv, SysCtrl3 Recv and SysCtrl4 Recv parameters enable or disable the selected track's response to received MIDI messages for any of the special user-assignable SysCTRLs (see Chapter 7 to learn more about these definable controllers). The parameters can be set to "On" or "Off."

Muting and Soloing a Track

The Mute/Solo button provides an easy way to enable or disable the playback of the tracks in a sequence. You can silence, or *mute*, the selected track—or you can *solo* the track by silencing all of the tracks except the selected track.
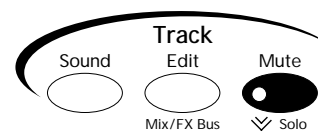
Tip: The sequencer will automatically record track mutings and un-mutings if they're performed while the track being muted or un-muted is being recorded.

Muting and Soloing from the Front Panel

- To mute the currently selected track, press the Mute button once—the Mute LED will light, and the word "mute" will appear in the display to show that the selected track has been silenced.

```
↓01 mute    ROM08:000
PERCSOLO: Thump Kick
```

- To unmute the currently selected track, press the Mute button once—the Mute LED will turn off and the track will once again be audible.
- To solo the currently selected track, double-click the Mute button—the Mute LED will flash, and the word "solo" will flash in the display.

```
↓01 solo    ROM08:000
PERCSOLO: Thump Kick
```

- To un-solo the currently selected track, press the Mute button—the Mute LED will turn off and any tracks that were audible prior to soloing the track will once again be audible.
- To solo groups of tracks—this is called a *group-solo*—select each of the tracks in turn and double-click the Mute button for each track.
- To remove the currently selected track from a group-solo, double-click the Mute button.

The ASR-X Pro solo is intelligent in that it remembers if any tracks in the sequence were already muted prior to soloing, and restores them to that state when the solo is disengaged. When a track is soloed, and any track other than the soloed track is selected, the display will flash the word "mute." Tracks that were already silenced before the solo was engaged will show a non-flashing "mute."

Muting Tracks via MIDI

Tracks can be muted via MIDI by sending a controller #119 message on the channel whose number corresponds to the track you want to mute. The track will respond to a controller #119 value of:

- 127 by muting the track.
- 000 by un-muting the track.
- 064 causes a track that's part of a group-solo to be removed from the solo group.