

 PreSonus®

NOTION

■ ■ ■ ■ ■ MOBILE

사용자 매뉴얼



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소개



Notion™ Mobile을 다운로드해 주셔서 감사합니다. Notion Mobile 3.3 사용자 가이드에 오신 것을 환영합니다. 이 가이드를 PDF 문서로 보려면 <https://presonus.com/products/Notion-Mobile/downloads>에서 다운로드하십시오.

10여년 동안 iOS 앱스토어에서 만나볼 수 있었던 Notion iOS는 이제 새로운 기기의 새로운 플랫폼에서 새로운 기회를 제공하는 Notion Mobile로 다시 돌아왔습니다. 이제 iOS (iPhone 및 iPad), Android (스마트폰, 태블릿, 크롬북), Windows (태블릿, Surface, 컴퓨터), 그리고 macOS 어느 기기에서도 자유롭게 넘나들며 곡을 만들어갈 수 있습니다. Notion Mobile은 Google Play Store, Apple iOS 및 macOS App Store, Amazon App Store, Samsung Galaxy Store 및 Microsoft Store와 같은 주요 앱 스토어에서 사용할 수 있습니다.



Notion Mobile은 Notion iOS 혹은 Notion Desktop (macOS, Windows)에서 작성된 Notion 파일과 완벽하게 호환됩니다. 새로운 네트워크 전송 기능(옵션 기능 번들의 일부)을 통해 Notion은 Notion Mobile, Notion 6 데스크탑 또는 Studio One 6을 실행하는 동일한 네트워크(플랫폼에 관계없이)의 모든 장치 간에 직접 점수를 전송할 수 있습니다.

빠른 시작

YouTube에서 이 [빠른 시작 자습서](#) 시리즈를 확인하세요.

Notion Mobile

PreSonus Audio Electronics

8 videos 3,596 views Last updated on Oct 18, 2022

Play all Shuffle

Notion Mobile is a free, industry-leading music composition tool for iOS, iPadOS®, MacOS®, Android™, Windows®, Chrome OS™, and Fire OS mobile devices. You'll effortlessly create dynamic compositions in traditional musical notation or tablature with its intuitive touch-based interface and incredibly broad editing capabilities.

- 1 **Notion® Mobile: FREE on-the-go music creation and notation application**
PreSonus Audio Electronics • 5.3K views • 3 months ago
0:40
- 2 **Introducing Notion Mobile**
PreSonus Audio Electronics • 6.3K views • 3 months ago
6:35
- 3 **Notion Mobile New Features Overview**
PreSonus Audio Electronics • 7.5K views • 3 months ago
12:06
- 4 **Notion Mobile Quick Start Lesson 1: Getting the App**
PreSonus Audio Electronics • 2.5K views • 3 months ago
4:49
- 5 **Notion Mobile Quick Start Lesson 2: Score Setup and Note Entry**
PreSonus Audio Electronics • 4.6K views • 3 months ago
7:28
- 6 **Notion Mobile Quick Start Lesson 3: Playback**
PreSonus Audio Electronics • 1.9K views • 3 months ago
3:18

더욱 충실해진 기능들

사용중인 플랫폼에서 Feature Bundle을 구입하거나 Studio One+ 멤버십에 가입하면 Notion Mobile의 더 많은 기능과 사운드를 사용할 수 있게 됩니다.



우리 플래그십 사보 소프트웨어인 Notion 6 Desktop은 레이아웃 컨트롤, 서드파티 VST 악기 및 이펙트 지원, 라이브 퍼포먼스 모드, 비디오 윈도우, 시퀀서 악보, 스코어 라이브러리, 더욱 심화된 사운드 라이브러리 등 더욱 많은 사보 기능을 제공합니다. MacOS 및 Windows 용 버전을 구입하거나 Studio One+ 멤버십에 가입하여 사용할 수 있습니다.

- [Notion Desktop에 대하여 더 자세히 알아보기.](#)

Studio One+란?

Studio One+



Studio One+는 작곡가를 위한 최고의 툴킷이며 Studio One Professional, 플래그십 DAW(디지털 오디오 워크스테이션), macOS 및 Windows용 Notion Desktop, 수많은 애드온 사운드 및 콘텐츠, 커뮤니티 협업 기능, 독점 교육 비디오 등을 포함합니다.

- [Studio One+에 대하여 더 자세히 알아보기.](#)

PreSonus는 제품의 지속적인 발전을 위해 부단한 노력을 아끼지 않고 있으며 여러분의 의견을 소중하게 생각합니다. 우리가 제품을 끊임 없이 개선시키고 발전시키기 위해서는 진정한 전문가인 우리 고객들의 소리에 귀를 기울여야 한다고 믿고 있습니다. 여러분이 이 소프트웨어를 구입하고 우리를 지원해주신 것에 감사드립니다.

[여기에서 빠른 시작 자습서를 참조하십시오.](#)



설치와 액티베이션

앱스토어에서 Notion Mobile 설치하기

사용하는 기기에 Notion Mobile을 설치하려면 아래 링크를 클릭하거나 해당 기기의 앱스토어에 로그인합니다.

- iOS 기기: [Apple App Store](#)
- macOS 기기: [Apple Mac App Store](#)
- Windows 기기: [Microsoft Store](#)
- Android 기기: [Google Play Store](#) 또는 삼성 갤럭시 스토어
- Amazon 기기: [Amazon App Store](#)

여러분이 사용하려는 기기의 앱스토어에서 'Notion Music'을 검색합니다.

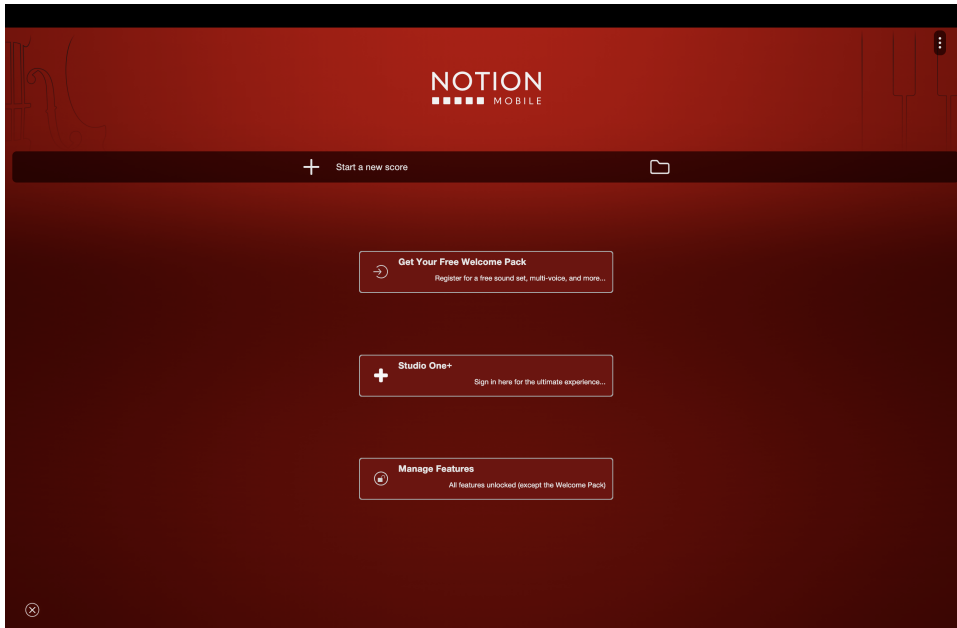
검색결과에서 Notion Mobile 앱 (및 해당 아이콘)을 찾아서 '설치' 버튼을 누릅니다.

저장장치 용량을 절약하기 위해 앱을 최초 설치할 때는 Steinway 피아노 사운드만 다운로드가 이루어집니다. 그 밖의 나머지 사운드는 필요에 따라 추가 또는 제거할 수 있습니다. ('사운드 설치하기' 참조)

업데이트

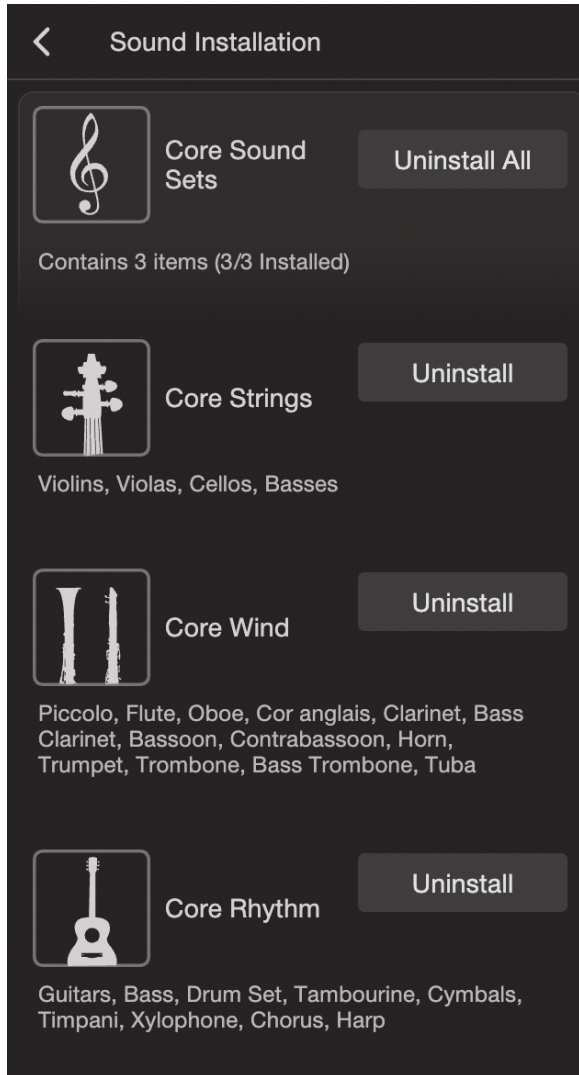
Notion Mobile의 업데이트는 각 기기의 해당 앱스토어에서 이루어집니다. 앱스토어에서 사용자 계정에 접속하거나 Notion Mobile을 다시 검색하여 업데이트를 다운로드 받을 수 있습니다. 앱스토어에서 설치된 앱의 새로운 업데이트가 등록될 때마다 자동으로 업데이트가 이루어지도록 설정할 수도 있습니다.

환영 페이지



Notion Mobile을 처음으로 실행시키면 환영 페이지가 표시됩니다. 여기에서 더하기 버튼을 눌러 첫 번째 악보를 빠르게 생성하거나 포함된 데모 악보 중 하나를 사용해 볼 수 있습니다. 또는 잠시 시간을 내어 인앱 구매를 구매하거나 Studio One+ 멤버십으로 로그인하여 Notion Mobile의 모든 선택적 기능과 사운드를 잠금 해제할 수 있습니다.

사운드 설치하기



Notion Mobile과 함께 번들로 제공되는 특별하게 녹음된 핵심적인 샘플 악기 사운드를 설치하려면 Application Menu의 Sound Installation을 선택합니다. 사용가능한 모든 코어 사운드 또는 원하는 개별 코어 사운드셋을 설치할 수 있습니다. Score Setup 메뉴에서 다운로드 아이콘을 클릭하여 사운드셋을 설치할 수도 있습니다. 사용하는 기기의 저장장치 용량을 확보하기 위해 이 메뉴에서 사운드셋을 제거할 수도 있습니다.

확장 사운드의 잠금을 해제하려면 제공된 링크에서 단일 인앱 구매를 하거나 Studio One+ 멤버십으로 로그인할 수 있습니다. (아래 참조)
Notion을 my.presonus.com에 등록하면 환영팩 사운드셋을 받아 사용할 수 있게 됩니다. 등록은 무료입니다. (아래 참조)

환영팩

독점적인 사운드셋과 멀티보이스 인풋, Notion 포럼의 액세스 등이 포함된 환영팩을 받으려면 앱을 PreSonus에 무료로 등록해야 합니다. 환영페이지의 버튼을 클릭하거나 Application Menu의 Account에서 Register를 선택합니다. 그리고 My.PreSonus 계정에 로그인합니다. 아직 계정이 없다면 링크를 클릭하여 무료로 계정을 생성합니다.

Studio One+/인앱 구매로 잠금 해제

선택적 기능 및 콘텐츠를 잠금 해제하려면 Notion을 사용하는 각 플랫폼(예: Android, Windows, macOS, iOS)에서 인앱 구매를 하거나 Studio One+ 멤버십으로 로그인해야 합니다.

본 제품을 구매하면 필기 인식, 레이아웃 제어, 장치 간 악보 공유를 위한 네트워크 전송, 전체 확장 사운드 세트, 향후 출시될 흥미로운 새 기능을 사용할 수 있습니다.

자신의 my.presonus 계정을 삭제할 수 있나요?

가능합니다. 모든 데이터를 다운로드 받은 후 my.presonus 계정을 삭제할 수 있습니다. 자신의 계정을 삭제하면 등록된 모든 하드웨어 및 소프트웨어 제품 키가 함께 삭제되며 복구되지 않는다는 점에 유의할 필요가 있습니다. [자세한 내용 보기](#).

구입항목의 복원

인앱결제로 구매하여 잠금해제 완료된 기능이나 사운드가 보이지 않는다면 앱의 구매내역을 새로고침 할 필요가 있습니다.

- 인앱결제 구매가 이루어진 계정과 동일한 계정으로 기기에 접속한 상태인지 확인합니다. (이 계정이 일치하지 않는 경우가 가장 흔한 원인입니다!)
- 그 다음으로 현재 이용중인 플랫폼에서 실제로 구매가 이루어진 것인지 확인합니다. 인앱결제는 플랫폼 단위로 개별적으로 이루어집니다. (즉, Android 플랫폼에서 인앱결제가 이루어진 구매내역은 Apple iOS에는 적용되지 않습니다.)
- 마지막으로 Application 메뉴의 Manage Features에서 'Restore Purchase'를 탭 합니다.

언어 선택

현재 사용하는 기기에 설정된 기본 언어가 Notion의 기본 표시 언어가 됩니다. 플랫폼에 따라서는 이 표시 언어를 앱에서 다시 지정할 수도 있습니다. 표시 언어를 다시 지정하려면 Application Menu에서 Language를 선택합니다.

더하기 버튼을 클릭하여 새 점수를 시작하려면 [여기를 클릭하십시오](#).

시작페이지

Notion Mobile의 시작페이지에서 최근 열었보았던 파일을 빠르게 찾아 열 수 있습니다. 최근 열어본 항목에서 특정 파일의 Edit 버튼을 누르면 해당 항목을 목록에서 지우거나 완전히 삭제할 수 있습니다.

플랫폼에 따라서는 파일명에서 오른쪽 클릭하여 최근 열어본 항목에서 지우거나 파일이 위치한 폴더를 열어볼 수 있습니다.

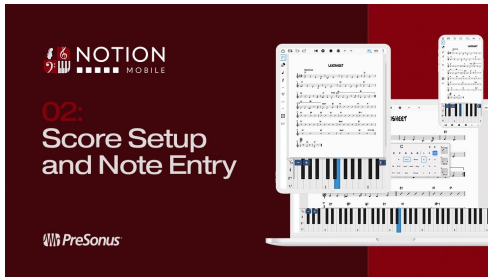
최근 열어본 항목에서 파일을 찾아보려면 Search 아이콘을 탭하고 원하는 파일이 나타날 때까지 파일명을 입력합니다.

기존의 Notion 파일을 열거나 MIDI, MusicXML, 또는 MXL 파일을 임포트하려면 파일브라우저 버튼을 탭합니다. 그러면 시스템 브라우저가 열리고 원하는 문서가 있는 위치를 탐색할 수 있습니다. Notion은 파일을 열거나 임포트한 다음 변경된 사항이 있으면 원래의 위치에 다시 저장하므로 파일의 위치가 변경되지는 않습니다.

시작페이지 오른쪽 상단의 Application Menu에서 Notion의 글로벌 옵션을 열 수 있습니다. 글로벌 옵션에는 다음과 같은 항목이 포함됩니다.

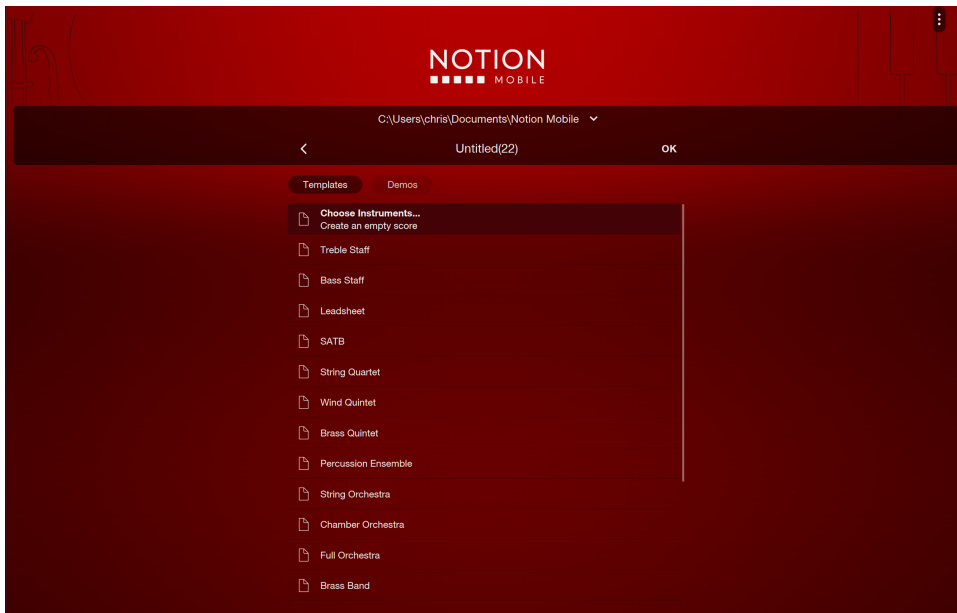
- **오디오 설정옵션**에서는 샘플레이트나 오디오 장치 선택 등을 할 수 있습니다. [오디오 장치](#) 설정에 대한 자세한 내용은 재생 장을 참조하십시오.
- **화면표시옵션**에서는 다크모드 설정이나 아이콘 크기, 팔레트 크기, 사이드 크기 등을 설정합니다. 자세한 내용은 [레이아웃 설정](#) 장을 참조하십시오.
- **편집옵션**에서는 지원되는 스타일러스 펜 등을 사용하는 경우의 자동 모드 전환 및 입력되는 노트의 오디션 기능 등을 설정합니다. 자세한 내용은 [메모 선택 및 입력](#) 장을 참조하십시오.
- **네트워크 옵션**은 샘플레이트나 오디오 장치 등을 포함하여 Notion과 Studio One 도큐먼트를 네트워크 Audio 옵션을 통하여 주고 받을 수 있게 해줍니다. 자세한 내용은 [악보 내보내기 및 인쇄](#) 장을 참조하십시오.
- **사운드 설치**에서 Core 사운드셋을 다운로드하거나 삭제, 또는 옵션 확장 사운드셋의 다운로드 등의 관리를 할 수 있습니다. 자세한 내용은 [설치 및 활성화](#) 장을 참조하십시오.
- **기능관리**에서 PreSonus에 등록하여 웰컴팩을 받을 수 있고 Studio One+ 멤버십에 가입하여 모든 기능과 콘텐츠의 잠금을 해제할 수 있습니다. 자세한 내용은 [설치 및 활성화](#) 장을 참조하십시오.
- **언어**에서 어플리케이션의 언어를 변경할 수 있습니다.
- **About** 화면에서 현재 버전 번호를 확인할 수 있습니다.

[여기에서 빠른 시작 자습서를 참조하십시오.](#)



스코어 설정

새 스코어 만들기



새 악보를 만들려면 Start Page에서 플러스(+) 아이콘을 탭 합니다.

파일명을 입력하라는 지시가 나타납니다.

- 다른 것을 입력하지 않고 그대로 Untitled를 사용해도 무방합니다.
- 처음 설정한 파일명이 악보 화면의 Title에도 그대로 표시됩니다.
- Title은 필요한 경우 두번 연달아 탭하여 개별적으로 편집할 수 있습니다.
- Title을 편집하여 변경하더라도 파일명이 변경되지는 않습니다. (마찬가지로 파일명을 나중에 변경하더라도 Title이 변경되지는 않습니다.)

파일명 상단에는 해당파일의 저장경로가 표시됩니다. 아래쪽 화살표를 누르면 더 많은 옵션이 나타납니다.

- **선택...** 기기의 브라우저를 엽니다. 여기서 파일을 저장할 위치를 지정할 수 있습니다. 플랫폼에 따라서는 새로운 악보를 저장할 클라우드 위치가 제한되어 있을 수도 있지만 일단 저장된 악보를 다른 위치로 이동시켜 그 위치에서 파일이 열리도록 할 수는 있습니다.
- **기본설정 선택** 사용중인 플랫폼에서 Notion 악보를 저장할 기본 위치를 선택합니다.

악기 선택... 기본설정으로 지정되어 OK를 탭 하면 악기 선택도구가 열립니다. 그러나 여기서 템플릿스코어 사용을 선택할 수도 있습니다.

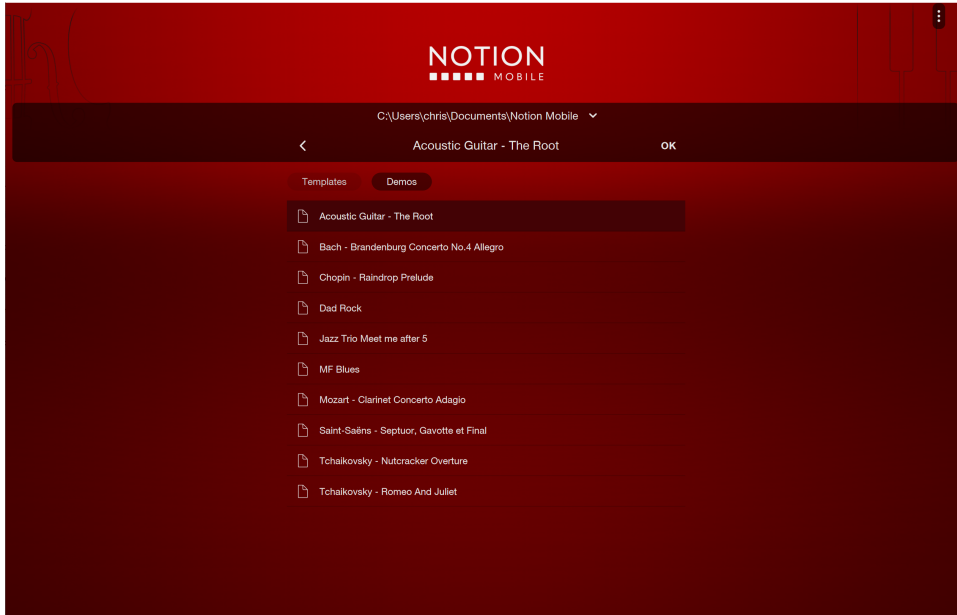
템플릿스코어 사용하기

- 파일명을 입력한 후에도 온스크린 키보드가 표시되어 있다면 숨김처리하고(가능한 경우) 템플릿 목록 전체를 볼 수 있게 합니다.
- 원하는 템플릿을 선택합니다.
- 우측 상단의 OK를 탭 합니다.
- 이 목록에 자신만의 템플릿을 추가할 수도 있습니다 — [악보 저장](#), [인쇄](#), [내보내기](#)

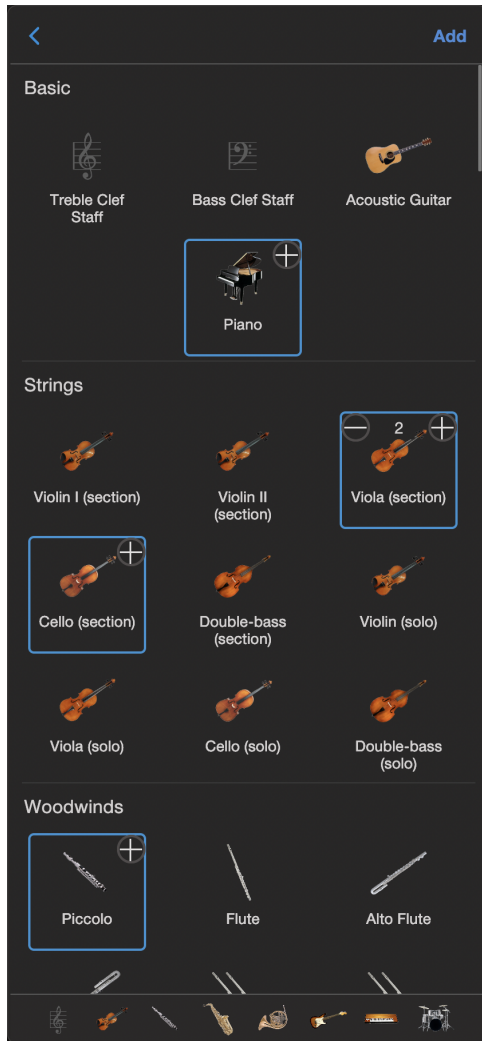
데모 악보 열기

시작 페이지에서 '더하기'(+) 아이콘을 탭하면 '템플릿' 옆에 '데모' 탭이 표시됩니다.

포함된 데모 점수 목록을 보려면 누르십시오. 하나를 선택하여 열고 연주를 시작하십시오. 데모 악보를 변경하면 기본 저장 폴더에 자동으로 복사본이 생성되고 시작 페이지의 최근 항목 목록에 추가됩니다. (원래 데모 악보는 변경되지 않음)



악기 추가

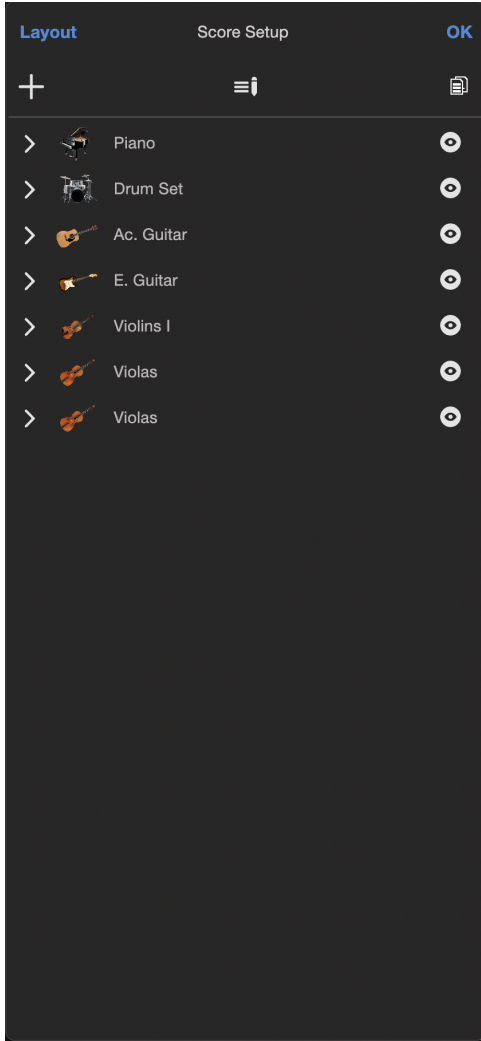


OK를 클릭하고 **악기선택**에서 선택이 이루어지면 악보가 열리면서 동시에 악기 선택도구가 열립니다.

- 악기 목록을 상하로 스크롤합니다. 원하는 악기의 특정 열을 지정하여 바로가기 아이콘을 화면 하단에 설정할 수도 있습니다.
- 악기를 탭하여 선택하고 다시 탭하여 선택 해제합니다.
- 하나 이상의 악기를 선택하려면 악기 옆의 플러스(+) 아이콘을 탭합니다.
- 선택을 완료했으면 오른쪽 상단의 **Add**를 탭합니다.

선택된 악기가 악보에 추가됩니다. 스코어 설정 창이 나타나며 여기에서 악기의 다양한 표시형태와 순서(하단 참조)를 설정할 수 있습니다. 설정에 문제가 없다면 오른쪽 상단의 **OK**를 탭하거나 대화창 바깥부분을 클릭하여 창을 닫습니다.

악기의 추가 및 편집



스코어 설정 창에서 악기를 추가하려면 플러스(+) 아이콘을 탭하여 악기 선택도구를 엽니다.

악기를 삭제하려면 **Edit** 아이콘을 탭하고 악기를 탭하여 선택한 다음 **Delete**를 탭합니다. 악기의 스코어 순서를 변경하려면 우측의 3줄이 그려진 아이콘을 사용하여 악기를 쥐고 드래그하여 원하는 위치에 집어 넣습니다.

스코어 설정 우측의 **Score / Part** 로 폴스코어와 개별 파트의 표시 전환을 할 수 있습니다. 파트를 보고 있을 때는 각 악기 옆의 **eye** 아이콘으로 현재 보고 있는 파트를 변경할 수 있습니다. 폴스코어를 보고 있을 때는 **eye** 아이콘이 폴스코어 자체의 파트표시/숨기기 전환에 사용됩니다.

선택한 악기의 샘플팩이 설치되어 있지 않다면 파란색 곡선으로 그려진 다이아몬드 형태의 아이콘이 나타납니다. 이것을 탭하여 해당 사운드셋을 다운로드할 수 있습니다. 사용하려는 악기의 사운드를 다운로드 혹은 구입하지 않았다면 Notion에서 기본악기로 피아노 사운드로 설정됩니다.

악기 설정

스코어 설정 창에서 선택된 악기의 왼쪽 화살표를 탭하면 더 많은 설정 옵션을 볼 수 있습니다. 다음과 같은 항목이 포함됩니다.

- **악기** - 탭하여 보표의 악기를 변경합니다.
- **악기명칭** - 악기 정식명칭을 변경합니다.
- **악기약칭** - 악기명칭의 약어 표기를 변경합니다.
- **보표형식** - 악기의 보표 표시 형식을 선택합니다.
 - **표준** - 단일 5선 보표를 표시합니다.
 - **TAB** - 악기의 모든 현을 선으로 나타내고 음표의 머리부분에 지판의 번호를 표기하는 기타 악보입니다.

- **표준+TAB** - 2개의 연결된 보표를 사용하여 표준 보표와 TAB 보표를 나란히 놓고 볼 수 있습니다.
- **큰보표** - 왼손과 오른손 연주의 2가지 보표가 연결되어 표시됩니다.
- **드럼세트** - 5선의 타악기 보표로 표시됩니다.
- **단선** - 한 줄 보표로 표시됩니다.
- **TAB 옵션** (상기의 TAB 옵션이 선택된 상태에서만 표시됩니다)
 - **TAB 타입** - 악기 프리셋과 조율방법을 선택합니다.
 - **TAB 스트링** - 악기의 조율방법을 표시합니다. 커스텀 튜닝의 경우 직접 입력하여 편집할 수 있습니다.
 - **TAB의 원표시** - 2분음표와 온음표의 경우 원으로 표기합니다.
 - **TAB의 음표기동 표시** - 타브 표기에서 음표기동을 숨깁니다.
- **보이스 음표기동 모드** - 하나의 보표에 다수의 보이스가 있는 경우 음표기동의 표기 방법을 결정합니다.
 - **상하분리** - 상단 보이스 음표와 하단 보이스 음표기동의 방향 등의 음표를 다루는 기본 방식을 선택합니다.
 - **음표기동 합치기** - 2가지 보이스가 같은 리듬으로 구성되어 있는 경우 2개 음표의 음표기동을 같은 방향으로 표기합니다. 2가지 보이스의 리듬이 서로 달라지면 서로 분리하여 상하로 표기하는 방식으로 되돌립니다.
 - **마디별로 분리** 보이스들의 음표기동을 연결하는 방식으로 다릅니다. 마디 내에 예외가 적용되는 음표가 있다면 해당 마디 내에서는 모두 서로 분리하여 상하로 표기하는 방식으로 되돌려집니다.
- **주요 서명 표시** 이렇게 하면 각 시스템 시작 시 키 서명이 숨겨지고 필요한 경우 음표에 자동으로 우발적인 기호가 추가됩니다. 이것은 프렌치 호른에 가장 일반적으로 사용됩니다.
- **전치** (피치 악기가 선택된 경우에만 표시됨) - 악보 설정에서 조옮김 악기를 선택하면 Notion이 자동으로 설정합니다. 악보에 C로 표기된 음을 연주할 때 어떤 옥타브의 어떤 음으로 연주할 것인지를 수동으로 선택할 수도 있습니다. 예를 들어, F 프렌치호른으로 악보의 C를 연주하면 같은 옥타브 아래의 F로 소리가 납니다. Bb 테너 색소폰으로 악보의 C를 연주하면 같은 옥타브 아래의 Bb으로 소리가 납니다.
- **악기 키 표시** (피치 악기가 선택된 경우에만 표시) 악기의 키를 표시/숨김 처리합니다. 예를 들어 Bb 클라리넷 / Bb Cl.1.

레이아웃 설정

보기 옵션

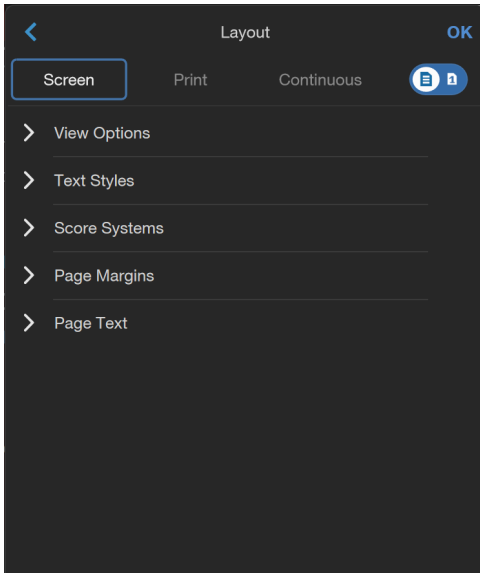
Notion Mobile에서 작곡을 하기 위한 서로 다른 3가지 화면 뷰를 전환할 수 있습니다. 화면 좌측 상단의 **Score Setup** 을 탭하고 **Layout**을 탭합니다. 3가지 뷰 중에서 하나를 선택하고 악보 전체를 볼 것인지 파트 하나를 볼 것인지를 선택합니다. 다른 뷰를 선택할 때마다 화면 바탕의 악보 표시방식이 즉시 바뀌는 것을 확인할 수 있습니다.

- **스크린뷰 [F8]** - 경계선이 없는 화면으로 표시되며 상하 스크롤을 할 수 있습니다.
- **프린트뷰 [F7]** - 인쇄된 상태의 페이지 경계선을 볼 수 있습니다. 이 경계선은 페이지 설정에 따릅니다. 키보드 단축키 **[F7]** 을 반복하여 누르면 Print View에서 페이지가 왼쪽에서 오른쪽으로 이어지게 할지 위에서 아래로 이어지게 할지 방향을 전환할 수 있습니다.
- **연속뷰 [F6]** - 보표가 왼쪽에서 오른쪽으로 연속으로 이어집니다.
- **전체 화면 / 단일 부분 보기 [F5]** - 전체 악보 표시 또는 단일 부분 표시 간 전환

하단에는 다양한 디스플레이 옵션이 나타납니다. 이들 옵션은 현재 선택된 뷰에 적용되는데 모든 옵션이 모든 뷰에 적용될 수 있는 것은 아닙니다. 현재 뷰에서 사용할 수 없는 옵션은 음영처리되어 나타납니다.

우선 설정하려는 표시형식 (스크린/프린트/연속/풀스크린 또는 파트)을 탭하여 옵션을 업데이트합니다.

- 보기 옵션



- **기보 줌** - 스크린뷰의 화면크기를 조정합니다.
- **기보 폰트** - 기보에 사용되는 폰트를 표준 폰트와 재즈폰트 사이에서 전환합니다.
- **기보 크기** - 기보에 사용되는 폰트의 크기를 조정합니다.
- **용지규격** - 용지 크기를 변경하거나 커스텀 사이즈(cm)를 추가합니다.
- **용지방향** - 용지 방향을 가로 또는 세로 방향으로 전환합니다.
- **트랜스포즈 모드** - 트랜스포즈가 적용된 키로 악기를 표기할 때 콘서트 튜닝(C로 표기하되 기음을 옥타브 트랜스포즈) 또는 콘서트 피치(C로 표기하되 실음을 옥타브 트랜스포즈) 보기 사이에서 전환합니다.
- **큐노트 인쇄** - 실제로 인쇄할 때 큐노트를 표시할 것인지 숨길 것인지를 선택합니다.
- **코드 요약** - 악보에 코드가 포함되어 있다면 첫 페이지 하단에 모든 코드의 요약 보기를 표시할지 여부를 선택할 수 있습니다.
- **컷 숨기기** - 표시된 컷을 인쇄시 숨김처리합니다.
- **숨겨진 아이템 표시** - 숨김표시되어 있는 악보의 강약표시와 같은 기호를 모두 표시합니다.
- **여러마디 쉼표 (파트보기에만 적용)** - 파트 악보에서 연속된 여러 마디의 쉼표를 묶어 묶음마디 쉼표로 표기합니다. 묶음마디 쉼표를 적용할 최소 마디수를 미리 지정합니다.

- **연주범위 외의 노트 표시** - 주어진 악기의 연주 범위에서 벗어나는 노트를 빨간색으로 표시합니다. 인쇄시에는 그대로 검정색으로 인쇄됩니다.
- **보이스 색상 표시** - 4가지 보이스를 서로 다른 색상으로 표기하여 시인성을 높입니다.
 - 보이스 1은 원래대로 검정색으로 표시됩니다.
 - 보이스 2는 어두운 보라색으로 표시됩니다.
 - 보이스 3은 밝은 자홍색으로 표시됩니다.
 - 보이스 4는 녹색으로 표시됩니다.
- **텍스트 스타일** - 가사의 글자 모양을 변경합니다. 폰트, 스타일, 크기를 지정할 수 있습니다.
 - **가사** - 가사의 글자 모양을 글로벌 설정으로 변경할 수 있습니다. 폰트, 스타일, 크기를 지정할 수 있습니다. 가사 부분적으로도 커스텀스타일을 적용할 수 있습니다. 단어 위에서 오른쪽 클릭하고 Context Menu>Text를 선택합니다.
 - **텍스트** - 가사의 글자 모양을 변경합니다. 폰트, 스타일, 크기를 지정할 수 있습니다. 텍스트 박스 단위로도 커스텀스타일을 적용할 수 있습니다. 단어 위에서 오른쪽 클릭하고 Context Menu>Text를 선택합니다.
- **스코어 연주라인**
 - **첫 연주라인의 제목** - 첫 연주라인에서 악기명칭을 표기, 악기약칭으로 표기, 악기명 생략 옵션 중에서 한 가지를 선택합니다.
 - **이어지는 연주라인의 제목** - 두 번째 이후부터의 연주라인에서 악기명칭을 표기, 악기약칭으로 표기, 악기명 생략 옵션 중에서 한 가지를 선택합니다.
 - **보표간격** - 보표 사이의 상하 간격을 조정합니다.
 - **연주라인 간격** - 연주라인 사이의 상하 간격을 조정합니다.
 - **브레이크마크** - 옵션표기인 연주라인 브레이크마크 기호(연주라인 사이에 대각선으로 그어진 2줄 기호)의 표시 여부를 선택합니다.
 - **마디수제한** - 각 연주라인에 표시되는 마디 수를 조정합니다. 표시할 음표 수가 너무 많은 경우에는 표시되는 마디 수가 적어질 수 있습니다. 이 문제는 폰트 크기를 줄이는 것으로 해결할 수 있습니다.
 - **마디 번호** - 마디 번호의 표시 유형(시스템별 표시, 마디별 표시, 표시 안 함)을 선택합니다. 마디 번호를 다시 표기하려면 마디 번호를 두 번 탭하고 계속하려는 번호를 입력합니다. 그러면 Notion에서 모든 후속 번호를 조정하고 앞서 번호를 다시 표기한 마디가 나타나면 멈춥니다.
- **페이지 여백** - 페이지 여백을 인치 단위로 조정합니다.
- **페이지 텍스트** - 제목, 저작권정보, 부제, 저작자정보 및 새로운 텍스트 요소와 같은 특정 텍스트 아이템을 추가하거나 편집할 수 있습니다. 줄 바꿈을 추가하려면 Enter 또는 Shift+Enter(플랫폼에 따라 다름)를 사용하십시오.
 - **페이지 텍스트 추가**
 - **타입**
 - **텍스트**
 - **배치**
 - **페이지에 표시**
 - **폰트**
 - **폰트 스타일**
 - **폰트 사이즈**
 - 페이지 텍스트 내용을 제거하려면 해당 내용을 탭하고 **Remove Selected**를 탭합니다.

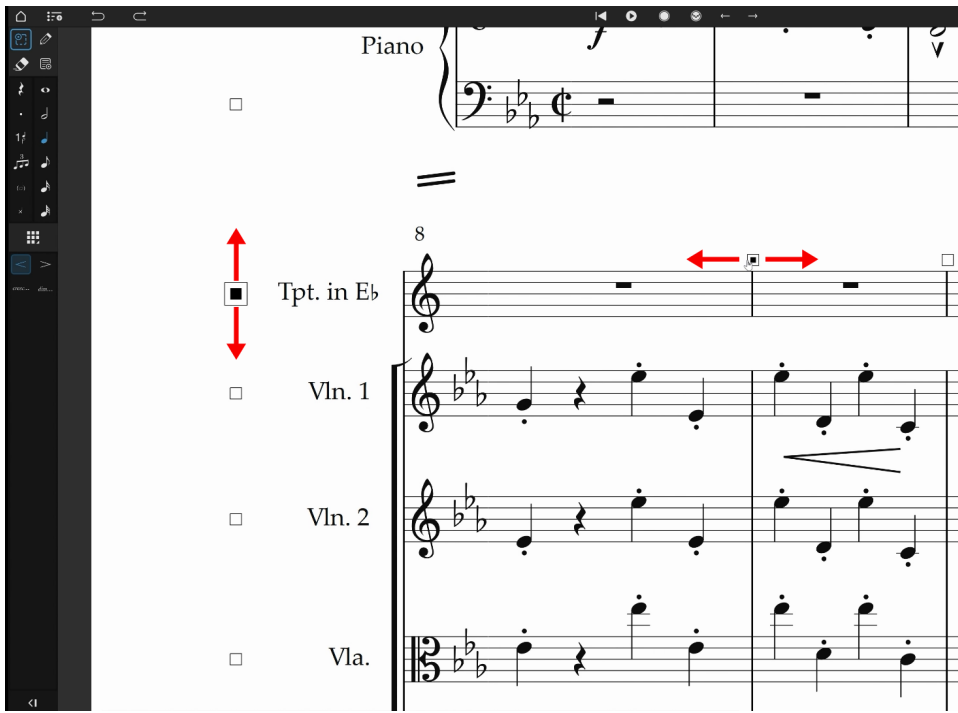
레이아웃 제어

추가 레이아웃 기능은 기능 번들 옵션에 포함되어 있으며 앱 내 구매 또는 유효한 Studio One+ 멤버십을 통해 사용할 수 있습니다.

레이아웃 핸들 표시

이 도구는 악보 설정 > 레이아웃 > 보기 옵션으로 이동하거나 Cmd+Shift+L(macOS 및 iOS) 또는 Ctrl+Shift+L(다른 플랫폼) 바로 가기 키를 통해 사용할 수 있습니다.

레이아웃 핸들이 활성화되면 사각형(또는 끌기 핸들)이 표시되고 이 핸들을 사용하여 보표와 시스템을 세로로 끌고 마디줄을 가로로 끌 수 있습니다. 이 핸들은 인쇄 보기에만 표시됩니다.



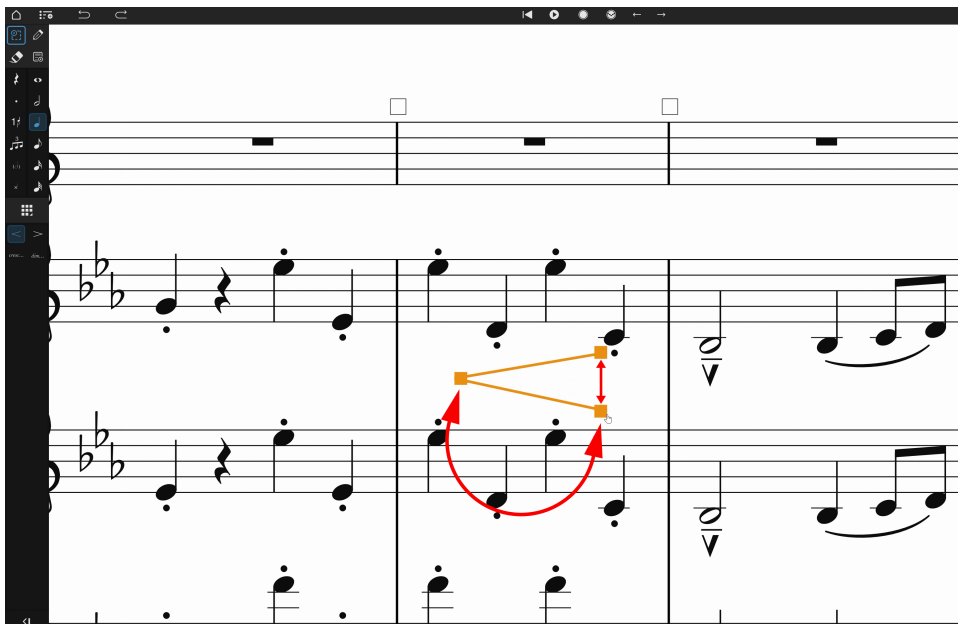
핸들을 끌면 사각형이 채워지면서 수동으로 조정했음을 보여 줍니다. 레이아웃은 전체 악보와 파트 간, 개별 파트 간에 독립적으로 적용됩니다.

간격 재설정

레이아웃 핸들 사각형을 선택하여 삭제 또는 지우개 아이콘을 누르기만 하면 됩니다.

헤어핀 각도

레이아웃 도구가 활성화되면 헤어핀(크레센도 또는 디미누엔도)의 열기 각도 또는 전체 각도를 변경할 수도 있습니다. 이 작업은 인쇄 보기와 화면 보기에서 수행할 수 있습니다.



커스터마이징 뷰

레이아웃 설정의 기본 레이아웃 옵션 외에도 Notion Mobile에는 취향이나 워크플로우에 맞추어 앱을 커스터마이징 할 수 있게 해주는 몇 가지 일반적인 보기 옵션이 있습니다.

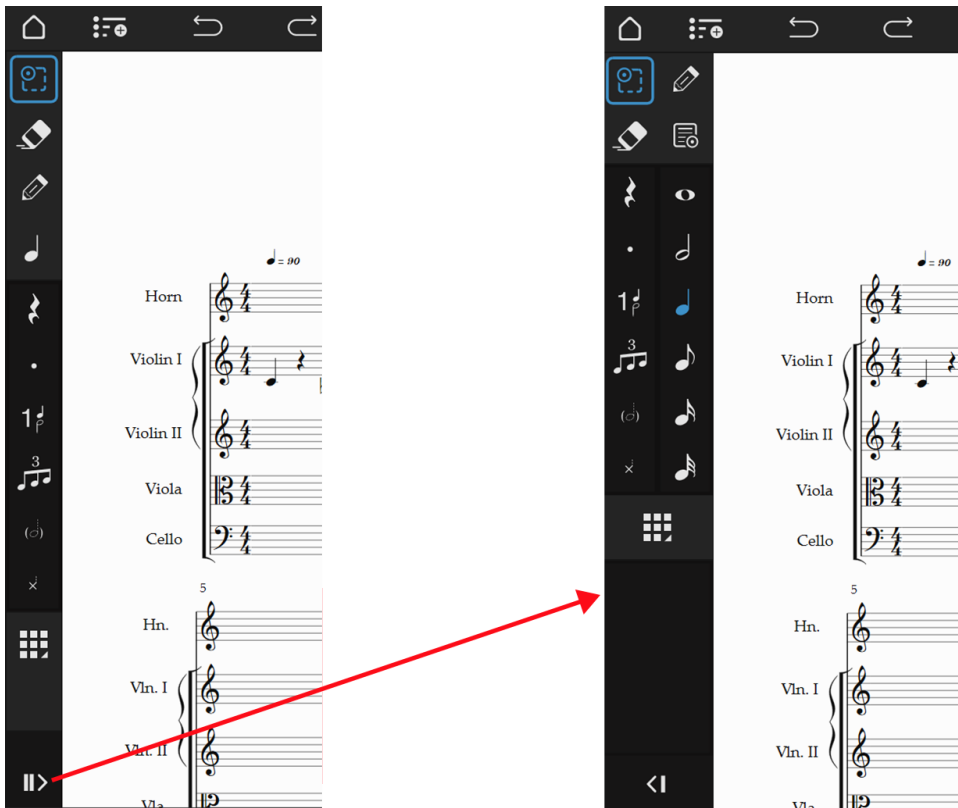
Application Menu (오른쪽에 점 3개로 보이는 아이콘)를 탭하고 옵션을 선택합니다.

다음과 같은 옵션이 나타납니다:

- **라이트컬러 스킴** 앱의 기본 설정은 다크 모드지만 메뉴바, 팔레트, 대화창이나 메뉴를 밝은 색으로 지정할 수도 있습니다.
- **다크스코어** 실제 악보 영역의 색상을 반전시켜 어두운 바탕에 밝은 색 음표로 표시합니다. 어두운 조명에서 화면의 눈부심을 최소화할 수 있습니다.
- **툴 우측배치** 수직 툴 팔레트를 화면의 좌측이 아닌 우측에 배치할 수 있습니다.
- **작은 UI** 팔레트와 트랜스포트의 아이콘 크기를 줄이고 화면 크기와 무관하게 악보의 사용될 공간을 늘려줍니다.

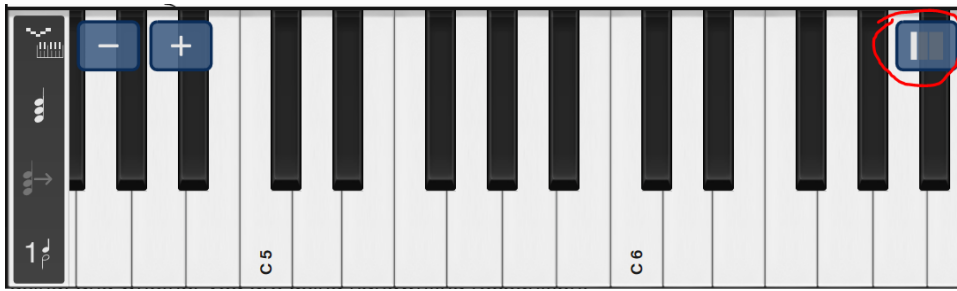
확장 팔레트

표시되는 열의 수를 변경하려면 팔레트 하단에 있는 아이콘을 누릅니다. 화면에 공간이 있으면 두 개의 열을 볼 수 있습니다. 그의 보기에는 영구적인 '필기 도구' 아이콘이 포함되어 있으므로 자동으로 전환되는 스타일러스(예: Apple Pencil 또는 Surface 펜)가 없는 경우 여기에서 필기 모드를 시작/종료할 수 있습니다.



확장 팔레트

화면 키보드의 피아노 건반 너비를 세 가지 너비로 변경할 수 있습니다. [자세한 내용은 음표 입력을 참조하십시오.](#)



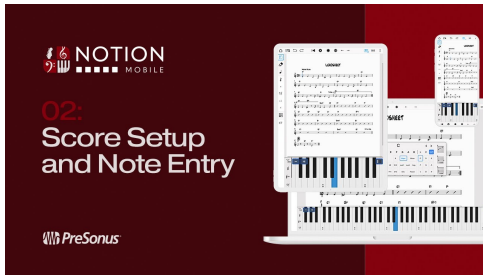
이동/줌

페이지 내에서 자유롭게 이동하거나 줌인/줌아웃을 할 수 있습니다. 사용하는 기기의 종류나 필기인식 모드의 사용여부에 따라 적용방법에 차이가 있습니다.

- 일반 입력모드 또는 자동 필기모드에서 터치스크린을 사용하는 경우 (애플펜슬이나 서피스펜을 사용하는 경우):
 - 두 손가락으로 터치하여 모아 줌 아웃 또는 벌려서 줌 인
 - 한 손가락으로 터치하고 드래그하여 페이지 스크롤
- 수동 필기모드에서 터치스크린을 사용하는 경우 (일반 스타일러스나 손가락으로 필기입력을 하는 경우):
 - 두 손가락으로 터치하여 모아 줌 아웃 또는 벌려서 줌 인
 - 두 손가락으로 터치하고 드래그하여 페이지 스크롤
- 키보드 단축키를 사용:
 - **[Ctrl +]** 로 줌인
 - **[Ctrl -]**로 줌아웃
 - (macOS 또는 iOS에서는 Ctrl 키 대신 Cmd 키)
- 데스크탑의 경우 마우스 스크롤 사용:
 - 스크롤 휠을 사용하여 수직으로 상하이동
 - **[Shift+스크롤 휠]** 을 사용하여 수평으로 좌우 이동*
 - **[Ctrl+스크롤 휠]** 을 사용하여 줌인/줌아웃

*주: 이 조작이 동작하지 않는다면 Scroll Lock이 켜져 있는지 확인하십시오.

[여기에서 빠른 시작 자습서를 참조하십시오.](#)



노트 입력

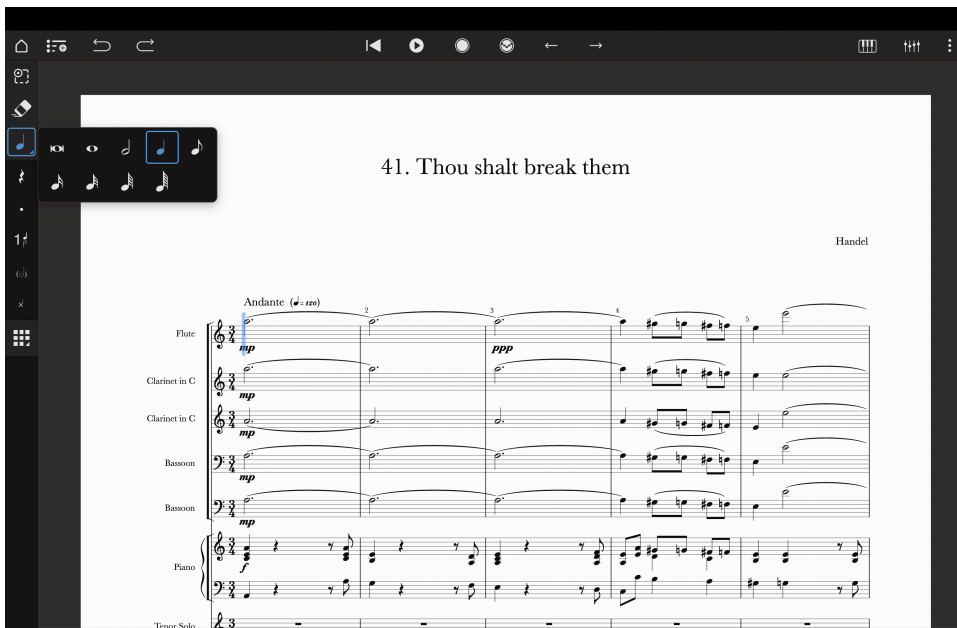
실시간 재생, 손글씨, MusicXML 가져오기 또는 단순히 메모를 탭하는 등 Notion Mobile에 메모를 가져오는 방법에는 여러 가지가 있습니다. 선택한 메모 입력 방법은 선호도뿐만 아니라 컨텍스트에 따라 달라집니다. 예를 들어 빠르고 화려한 악절은 단계 시간으로 더 빠르고 정확하게 입력됩니다. 또한 사용하는 주변기기에 따라 달라질 수 있습니다. 애플펜슬을 사용하거나 연결된 키보드를 사용하여 단축 키로 입력할 수도 있고 MIDI 블루투스 피아노 키보드로 연주하면서 입력할 수도 있습니다.

- 메모를 탭(또는 클릭)합니다.

노트를 입력하는 가장 쉬운 방법입니다.

- 툴 팔레트의 Note Tool 을 탭합니다.
- 스코어 내에서 노트를 입력하려는 부분을 손으로 탭합니다.
- 완성!

길이 바꾸기

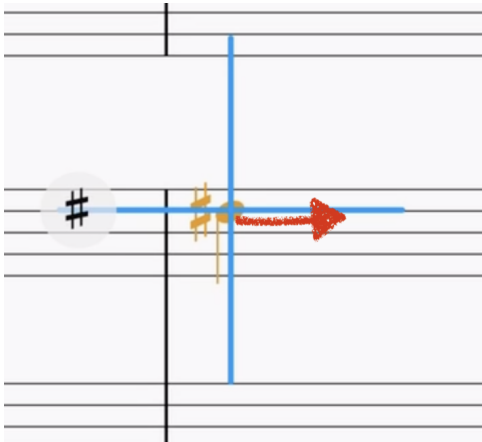
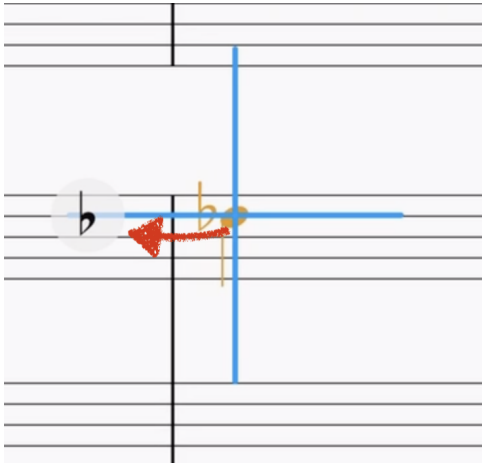


- **Note Tool** 을 탭하여 현재 표시된 길이를 선택합니다.
- 다시 탭하여 선택할 수 있는 모든 노트 길이를 표시합니다.

- 한 번의 제스처로 빠르게 노트 길이를 변경하려면 Note Tool 을 누른 채로 스와이프하여 열고 원하는 길이에서 손을 떼어 결정합니다. 이 조작은 터치스크린을 탭하거나 마우스를 클릭하여 행할 수 있습니다.
- 연결된 키보드(유선 또는 Bluetooth)가 있는 경우 [키보드 단축키](#)를 사용하여 음표 길이를 변경할 수도 있습니다.

노트 입력시 음높이(Pitch) 바꾸기

- 터치스크린에서는 스코어를 길게 누르면 손가락 아래에 조준선이 표시됩니다. 이것을 기준으로 드래그하여 올리거나 내리면서 원하는 음높이로 정확하게 맞출 수 있습니다.
- 길게 누르고 있는 동안 왼쪽 또는 오른쪽으로 움직여 조금씩 움직이면 필요에 따라 # 또는 b과 같은 임시표를 붙일 수 있습니다.
- 드럼악보에 드럼 노트를 입력하는 경우에는 조준선과 함께 드럼 라벨이 표시됩니다 (예를 들어 "Tom 14"). 여기서도 드래그 방향을 약간 왼쪽이나 오른쪽으로 움직이면서 음표머리나 음표기둥 형태를 변경하거나 다른 표기옵션을 선택할 수 있습니다. (예를 들어 "Tom 14 Rimshot")



TAB 악보에 노트 입력

- 원하는 길이를 선택하고 입력하려는 현 위에 탭합니다.
- 텍스트 박스가 나타나고 터치스크린의 경우에는 온스크린 키보드가 나타납니다.
- 프렛 번호를 누르고 Enter를 탭합니다.

쉼표 입력

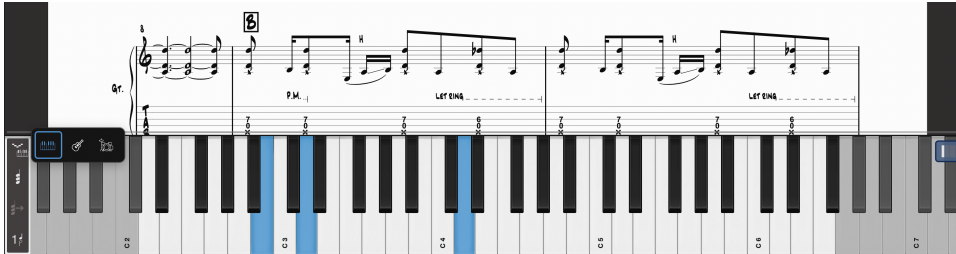
- Note Tool에서 길이를 선택합니다.
- 쉼표 아이콘을 탭합니다.
- 노트 입력으로 되돌아가려면 쉼표 아이콘을 다시 탭하거나 또는 Note Tool을 탭합니다.

- 키보드 단축키로도 쉼표를 입력할 수 있습니다. 음표길이 단축키를 반복하여 누르면 노트와 쉼표를 전환할 수 있습니다.
- 입력되어 있는 노트를 쉼표로 바꾸거나 반대로 입력된 쉼표를 노트로 바꿀 수 있습니다. 원하는 부분을 선택하고 Notes>Toggle Note or Rest를 선택합니다. 혹은 간단히 Shift+Backspace를 탭합니다.

스텝 입력

스텝 입력으로 노트를 하나씩 단계별로 입력할 수 있습니다. 리듬의 길이는 팔레트 Note Tool에서 선택하거나 키보드 단축키(키보드가 연결된 경우)로 선택할 수 있습니다. 음높이는 다양한 방법으로 입력할 수 있습니다.

온스크린 악기로 스텝 입력



- 우측 상단의 온스크린 악기 **피아노 아이콘** 을 클릭합니다.
- 이 아이콘이 파란색일 때 길게 누르거나 스와이프하면 피아노 키보드를 기타 프렛보드나 드럼패드로 재빠르게 변경할 수 있습니다. (악기 자체의 스텝입력 아이콘을 스와이프하여 표시되는 악기를 변경할 수도 있습니다. - 하단 참조)
- 화면 중앙 상단의 메인 트랜스포트 영역 또는 온스크린 악기 좌측 하단에서 스텝입력 아이콘 중 하나를 탭합니다.
- **Note Tool** 또는 키보드 단축키로 원하는 길이를 선택합니다.
- 온스크린 악기를 탭하여 음표를 입력합니다.
- 단음이 아닌 코드를 입력하려면 악기에서 코드 아이콘을 탭하고 악기에서 코드를 쌓아 올립니다. 트랜스포트에서 오른쪽 화살표 아이콘을 탭하여 입력합니다.
- 앞서 입력한 코드를 반복하려면 화살표 표시가 붙은 코드 아이콘을 탭합니다. 이 아이콘은 코드가 하나 입력되고 나면 활성화됩니다.
- 스텝입력시 쉼표를 입력하려면 원하는 길이를 선택하고 팔레트에서 쉼표 아이콘을 탭하거나 키보드 단축키인 스페이스바를 사용합니다.
- 스텝입력시 붙임줄을 추가하려면 붙임줄을 적용할 첫 노트를 입력하고 팔레트의 **Tie Tool**을 탭하거나 키보드 단축키 **T**를 사용합니다.
- 좌우로 탐색하려면 트랜스포트 영역에서 좌우 화살표 아이콘을 사용하거나 내비게이션 키보드 단축키를 사용합니다.
- 조바꿈 악기에 대한 음을 조바꿈 악보에 입력하는 경우 소리가 나는 피치를 연주하도록 선택하거나(직접 조바꿈) Notion이 조바꿈하도록 할 수 있습니다. 녹음 설정>조옮김 입력으로 이동합니다.

피아노키보드

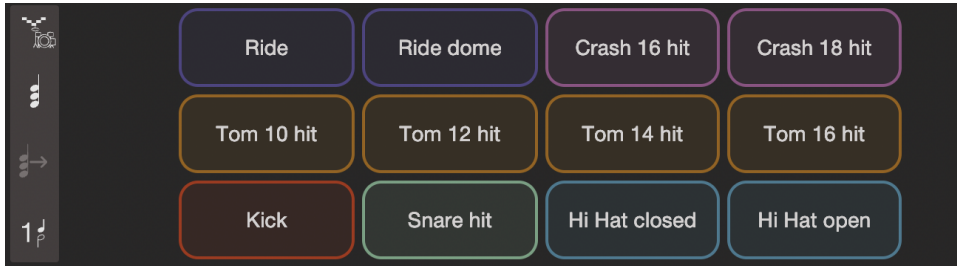


- 옥타브를 변경하려면 +/- 아이콘을 탭하거나 +/- 상단의 키보드를 스와이프 합니다. 키보드를 좌우로 드래그할 수 있는 파란색 스와이프 영역이 나타납니다. 실시간으로 레코딩하는 동안에도 사용할 수 있습니다. (하단 참조)
- 화면 크기나 개인기호에 맞추어 키의 폭을 조절할 수도 있습니다. 화면 폭은 3가지 중에서 선택할 수 있습니다. 폭 지정 아이콘을 탭하여 전환할 수 있습니다.

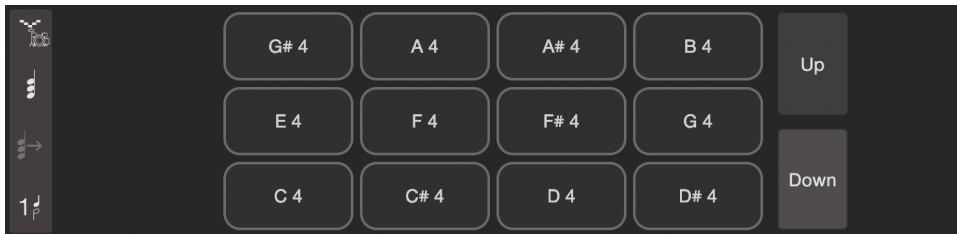
기타 프렛보드

- 프렛보드를 넘기려면 +/- 아이콘을 탭합니다.

드럼패드



- 드럼 악기가 선택되면 12 색상 드럼패드 세트를 사용할 수 있습니다. 드럼패드를 탭하여 노트헤드를 차례로 입력합니다. 가령 트레몰로는 자동으로 추가됩니다.
- 패드에 표시되는 드럼을 변경하려면 패드에서 오른쪽 클릭하거나 길게 누르고 필요한 선택을 하면 됩니다. 기본값으로 돌아가려면 목록에서 스크롤 다운하여 Reset Pads를 선택합니다.
- 음정이 있는 악기가 선택되면 드럼패드 대신 음정과 옥타브가 표시됩니다 (예를 들어 A4). 탭하여 입력할 수도 있습니다. 옥타브를 변경하려면 Up/Down 패드를 탭합니다.



MIDI 악기로 스텝입력

- MIDI 악기를 유선 또는 무선 블루투스로 연결합니다.
- Notion에서 Application Menu>Record Setup에서 드롭다운 목록에 나타나는 자신의 MIDI 악기를 선택합니다.
- 트랜스포트 영역의 화면 상단에서 스텝입력 아이콘을 탭합니다.
- Note Tool 또는 키보드 단축키로 원하는 길이를 선택합니다.
- 장착된 키보드로 노트/코드를 입력합니다.
- 스텝입력시 쉼표를 입력하려면 원하는 길이를 선택하고 팔레트에서 쉼표 아이콘을 탭하거나 키보드 단축키인 스페이스바를 사용합니다.
- 스텝입력시 붙임줄을 추가하려면 붙임줄을 적용할 첫 노트를 입력하고 팔레트의 Tie Tool을 탭하거나 키보드 단축키 T를 사용합니다. 그리고 나서 붙임줄을 연결할 두 번째 노트를 입력합니다.
- 좌우로 탐색하려면 트랜스포트 영역에서 좌우 화살표 아이콘을 사용하거나 내비게이션 키보드 단축키를 사용합니다.
- 조바꿈 악기에 대한 음을 조바꿈 악보에 입력하는 경우 소리가 나는 피치를 연주하도록 선택하거나(직접 조바꿈) Notion이 조바꿈하도록 할 수 있습니다. 녹음 설정>조옮김 입력으로 이동합니다.

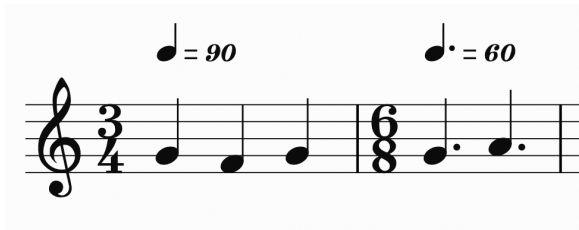
리얼타임 레코딩

Notion에서 리얼타임 레코딩으로 메트로놈 클릭에 맞추어 연주하면서 노트를 입력할 수 있습니다. 간단한 음악에는 가장 편리한 방법입니다. 입력할 노트 구성이 복잡하다면 메트로놈 마크에서 입력 템포를 느리게 변경하거나 스텝입력과 같은 다른 입력방법을 사용하는 것이 좋습니다. 온스크린 악기 또는 연결된 MIDI 악기를 사용하여 입력합니다. 트랜스포트의 레코드 버튼을 눌러 녹음하고 플레이 버튼을 눌러 재생합니다. 녹음을 마치면 Notion이 퍼포먼스를 분석하고 기보로 변환해줍니다.

레코딩 옵션 설정

- Application Menu>Record Options으로 갑니다.
- 필요하다면 연결된 MIDI 악기를 선택합니다.
- 메트로놈 클릭 온/오프를 전환합니다. 레코딩과 플레이백에 모두 적용됩니다.
- 레코딩 전에 Notion에서 몇 마디를 카운트하게 할 것인지 선택합니다.
- 노트 입력 시 Notion이 MIDI 악기를 조옮김할지 여부를 조정하려면 'Transpose Input'을 선택하세요.
- 다음 옵션에서 Notion이 여러분의 퍼포먼스를 분석하는 방법을 결정합니다. 기본설정 상태에서는 MIDI 키보드 입력에 최적화되어 있습니다. Presets 버튼을 탭하면 MIDI Guitar와 MIDI 키보드 사이를 전환할 수 있습니다.
 - **최소 벨로시티 MIDI 벨로시티의 최소 적용값을 1에서 127 사이에서 설정합니다.** Notion이 설정값보다 낮은 레벨의 노트를 무시하게 됩니다.
 - **최소 길이 노트의 최소 길이를 밀리세컨드 단위로 설정합니다.** Notion이 이 길이보다 짧은 노트를 무시하게 됩니다.
 - **스플릿포인트 :** 큰 보표에 노트를 입력하는 경우(피아노나 하프, 마림바와 같이 단일 악기에서 왼손과 오른손을 2가지 보표를 상하로 나누어 표기하는 경우) Notion이 양 손을 구분하여 표기할 기준이 되는 지점을 설정합니다. 기본상태에서는 피아노의 가운데에 해당하는 C4 노트로 설정되어 있습니다.
 - **잇단음표 Notion이 잇단음을 분석에 사용할지를 결정합니다.** (잇단음은 셋잇단음과 같은 음표들 뿐 아니라 그 밖의 다른 그룹의 형태의 의미도 포함합니다.)
 - **멀티채널 기타 :** 멀티채널 MIDI 기타 컨트롤러를 사용하는 경우 Notion이 각 현이 각각 하나의 채널을 적용하도록 지정할 수 있습니다.

기본 메트로놈 클릭 길이



Notion은 메트로놈 클릭을 연주할 때 인쇄된 메트로놈 표시를 따릅니다. 같은 곡에서 박자표가 변경되는 곳이 있을 때 특히 중요한 부분입니다. 예를 들어 곡이 4분음표 = 90 템포에 3/4 박자로 시작했다가 나중에 6/8 박자로 바뀌는 곳이 있다고 가정합니다. 이 바뀌는 부분에 메트로놈 표시가 새로 더해져 있지 않다면 메트로놈은 계속하여 한 마디에 4분음표 3개로 연주하게 되는 것입니다. 이 경우에는 새로운 메트로놈 표시가 박자표와 함께 추가되어야 하며 **점 4분음표 = 60** 과 같이 표기하면 한 마디에 클릭 2번을 듣게 되는 것입니다.

필기인식

노트 입력도구의 하나로 손글씨 입력을 사용할 수 있습니다. Notion의 필기인식 엔진은 손으로 그린 수천가지 음악기호 분석데이터를 토대로 만들어진 MyScript™를 사용합니다. 그러므로 유저가 새로운 커스텀 제스처를 익히거나 유저의 필기 스타일을 소프트웨어에 Notion이 필기입력을 음표, 쉼표, 코드, 조옮김기호, 마디선, 임시표, 박자표, 덧줄, 이음줄, 붙임줄, 음자리표로 변환해줍니다. 모든 아이템의 전체 다이어그램은 하단에서 확인할 수 있습니다. 필기인식은 모든 플랫폼(Windows, macOS, iOS, Android) 및 모든 기기(휴대전화, 태블릿, 컴퓨터)에서 지원하며 스타일러스나 손가락을 사용할 수 있습니다. 액티브 스타일러스를 위한 압력감지 기능도 지원합니다. 터치스크린이 없는 기기에서 Notion Mobile을 사용하는 경우라면 그래픽스 태블릿을 사용하여 필기인식을 사용할 수 있습니다.

필기인식은 표준 5선 보표(예를 들어 단선 타악기 악보나 TAB이 아닌)에서 사용할 수 있습니다. 이 기능은 인앱결제하여 활성화시키거나 Studio One+ 계정에서 활성화시킬 수 있습니다.

액티브 스타일러스(애플펜슬이나 마이크로소프트 서피스펜 등)의 필기인식

Notion이 액티브 스타일러스와 손가락을 자동으로 구분하여 감지합니다.

- 이러한 타입의 스타일러스를 사용하는 경우 필기인식 기능이 자동으로 손가락이 아닌 스타일러스로 노트 입력이나 스코어 내비게이션을 행할 수 있도록 지정해줍니다.
- 수동으로 이 모드 설정을 변경하려면 Application Menu>Options에서 Pencil Handwriting을 'Off'로 바꿉니다. 그리고 나서 확장 팔레트 뷰(Application Menu>Options>Extended Palette)의 Handwriting Tool 아이콘으로 모드를 수동 조작할 수 있습니다.

- 이러한 스타일러스에는 압력감지 기능이 지원되는데 선을 그려 넣을 때 얼마나 힘을 주어 누르는가에 따라 선의 굵기가 다양하게 변화합니다. 이러한 차이는 컨버전 과정에서 무효화되지만 필기감이 더욱 자연스럽게 정밀해지는 이점이 있습니다.
- 애플펜슬 2세대의 경우 눈금 바깥 쪽을 더블탭하여 타이머 설정시간을 기다리지 않고 강제로 인식을 수행하도록 할 수 있습니다.
- 활성 스타일러스를 사용하면 필기 모드에서 여러 개체 주위를 그려서 '올가미'를 선택할 수도 있습니다. Notion이 자동으로 손가락과 애플펜슬을 구분하여 알맞게 모드를 전환해줍니다.

손가락 또는 표준 스타일러스의 필기인식

- 팔레트에서 Handwriting Tool을 탭합니다.
- 이제 약보에 그려 넣을 수 있습니다.
- 한 동안 입력이 없으면 Notion이 필기입력 내용을 분석하고 디지털 기보 모드로 전환합니다.
- 필기인식 모드에서 원치 않는 필기가 이루어지지 않도록 하여 스코어를 탐색하거나 줌인/줌아웃 하려면 두 손가락을 동시에 사용하여 드래그하거나 줌 조작을 합니다.

삭제

필기인식 모드에서 노트를 지우려면 음표머리를 문지르는 것으로 노트를 완전히 삭제할 수 있습니다. 그 밖의 악센트와 같은 아이템도 같은 방법으로 삭제합니다. 또는 아이템을 선택하고 지우개 툴을 사용하는 방법도 있습니다.

보이스

필기인식 모드에서 서로 다른 보이스를 입력할 수 있습니다. 우선 Voice Tool (하단 참조)로 보이스를 선택합니다..

드럼/퍼커션

5선 보표에 드럼세트나 퍼커션 악기의 노트를 입력할 수도 있습니다. 입력내용에 가장 가까운 노트/테크닉/노트헤드가 입력됩니다. 만일 드럼세트 보표의 맨 윗줄(하이햇)에 4분음표를 적었다면 노트헤드가 십자모양으로 자동으로 변환됩니다.

필기인식 딜레이

마지막노트를 입력하고 나서 디지털 기보로의 변환이 이루어지는 타이밍을 조절할 수 있습니다. 입력이 중단되고 나서 변환되기까지의 딜레이 범위는 0초(즉시 변환)에서 최대 10초까지 설정할 수 있습니다.

- Application Menu>Options>Recognition Delay로 갑니다.
- 슬라이더를 움직이면서 자신에게 알맞는 값으로 조절합니다.

필기 입력 힌트

- 노트와 기호를 세밀하게 입력하기 어려울 때는 화면을 약간 줌인하면 도움이 됩니다.
- 액티브 스타일러스를 사용하면 손가락 보다 더 정교하게 입력할 수 있으며 더 자연스러운 압력 감지나 필기감을 느낄 수 있습니다.
- 자신의 사용패턴에 맞추어 다양하게 필기 타이머 설정을 시도합니다.
- 입력방법을 혼합하여 사용합니다 — 예를 들어 노트 입력에는 손가락이나 스텝입력을 사용하고 조음기호에는 애플펜슬을 활용합니다. Notion이 자동으로 손가락과 애플펜슬을 구분하여 알맞게 모드를 전환해줍니다.
- 이미 노트가 입력되어 있는 마디에 노트를 추가하는 경우에는 Notion이 마디 전체를 다시 분석하게 됩니다. 이 때 필기엔진이 지원하지 않는 요소가 포함되어 있는 경우에는 (구밌음 등) 무시되거나 누락될 수도 있습니다. 이러한 경우 해당 요소의 재입력을 피하기 위해서는 다른 입력방법을 선택하는 것이 좋을 수도 있습니다.
- 하프나 피아노와 같이 하나의 악기에 다수의 보표를 묶어 큰 보표로 표기하는 경우에는 보표를 하나씩 따로 입력하는 것이 좋습니다.
- 드럼, 퍼커션, TAB 보표는 지원되지 않습니다!

필기입력 다이어그램

음자리표

마디라인 / 반복

	
음표길이	코드 / 임시표
	
셈표길이	붙임줄 / 이음줄
	
잇단음	조음기호
	
박자표	덧줄
	

보이스 툴

Notion Mobile에서 보표 하나당 4보이스를 입력할 수 있습니다(보이스 3과 보이스 4는 환영팩에 포함되어 있으며 무료로 등록하여 사용할 수 있습니다). 모든 입력방식에서 보이스 1이 기본값으로 지정되어 있습니다. 다른 보이스로 입력하고 싶다면 Voice Tool을 탭합니다. Voice Tool은 메인팔레트에서 열 수도 있고 온스크린 악기의 왼편에서도 열 수 있습니다. 여기서 마지막으로 선택된 두 가지 보이스를 재빠르게 전환할 수 있습니다. 다른 보이스를 선택하려면 길게 눌러 옵션을 열거나 **누르고+스 와이프+해제**합니다.

- 키보드 단축키로도 보이스를 선택할 수 있습니다.
- 이미 입력되어 있는 노트의 경우에는 노트를 선택하고 원하는 특정 보이스로 보냅니다. Context Menu를 열고 **Tools>Send to Voice X**를 선택합니다.
- 이미 두 가지 보이스가 입력되어 있다면 입력된 노트를 두 가지 보이스 사이에서 전환할 수 있습니다. Context Menu를 열고 **Tools>Swap Voices**를 선택합니다.

[여기에서 빠른 시작 자습서를 참조하십시오.](#)

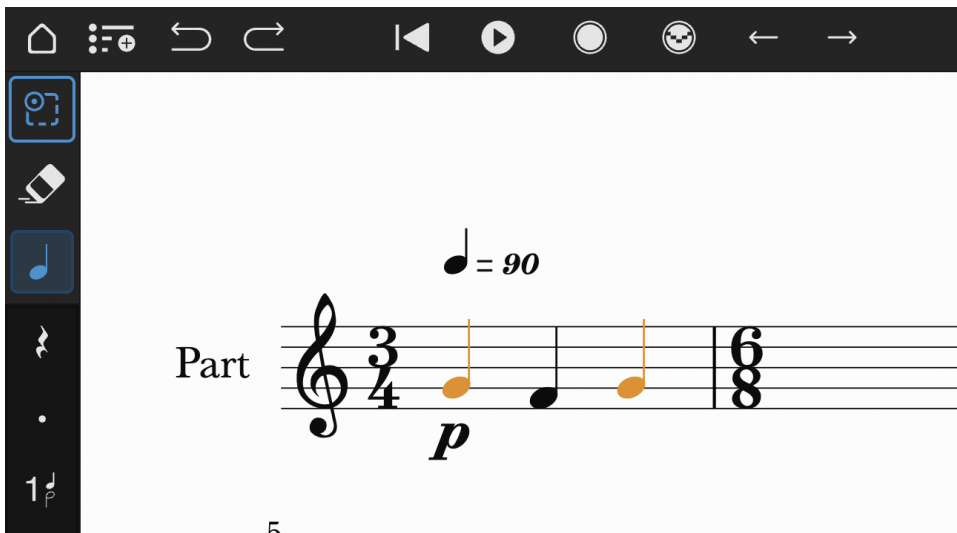


노트의 선택과 편집

You can quickly select and edit in Notion Mobile, and there are various methods of doing so to suit your preferred workflow. Once a selection has been made you can: drag to move the pitch; copy/cut/duplicate; apply an articulation to all notes; change notes to rests; add a dynamic to the left hand side of the selection; change durations by tapping the duration palette; and much more.

Making a selection

Selecting individual elements



- Tap the **Selection Tool**.
- Tap an element (e.g. note, rest, dynamic etc) to select it - the element will turn orange.
- To select multiple non-contiguous elements (i.e. notes that are not next to each other), hold **Shift** as you click the noteheads.

Selecting a range

- With a mouse: Click and drag over the elements you want to select.
- With a touchscreen: Tap the screen and hold briefly, then drag your finger over the elements you want to select.
- To quickly select a whole measure, double-tap or double-click the measure.
- To increase the range, drag the two round handles of the selected area, or hold down Shift while you click to extend the range to the measure you clicked in.
- With an active stylus (or 'lasso select'): whilst in Handwriting Mode, use your active stylus (e.g. Apple Pencil or Surface Pen) to draw around selected elements. Notion will automatically select them.

Remove items from a selection

- **[Shift+Click]** the individual elements
- **[Opt+Shift+Drag]** to remove multiple elements from the selection.

Select All / Part

- To select the whole score, go to Context Menu>Select>Select All (Ctrl+A).
- To select the whole of the current part go to Context Menu>Select>Select Part (Ctrl+Shift+A).
- To Deselect all click away from the selected range, or go to Context Menu>Select>Deselect All (Ctrl+D) (See below for Context Menu).

Changing pitch of a selection

Note that by default, Notion Mobile auditions notes as you drag them so you can hear your changes. You can disable this in Application Menu>Options>Play Notes on Navigation.

Changing pitch of an individual note

- Tap and drag the note up/down to change pitch.
- Tap and drag the note left/right to change the accidental.
- For drumset, tap and drag the note left/right to change the notated playing technique.

Changing pitch of a selection of notes

- Tap on the note head or stem of one of the selected notes then drag up / down to change pitch diatonically.

Adjusting pitch with keyboard shortcuts

- Hold **[Alt/Option]** whilst dragging note(s) up or down to change **only** the accidental whilst keeping the pitch letter the same.
- **[Up/Down]** moves the notes diatonically.
- **[Ctrl/Cmd + Up/Down arrows]** moves the notes chromatically.
- **[Shift+Up/Down arrows]** moves the note(s) by an octave.

Using the Enharmonic tool

- To change enharmonics (e.g. to switch from F# to Gb) for selected note(s), open the Tools Grid, and tap the Enharmonics tool. Alternatively, use the keyboard shortcut; **[E]**.

Changing the duration of a selection

- Tap a rhythmic duration in the palette to change the duration of the selected note(s).
- Use the keyboard shortcut for durations to change the duration of the selected note(s), e.g. **E** for eighth note (note you can use letters or numbers for durations — see Chapter 16, **Keyboard Shortcuts** for more information).

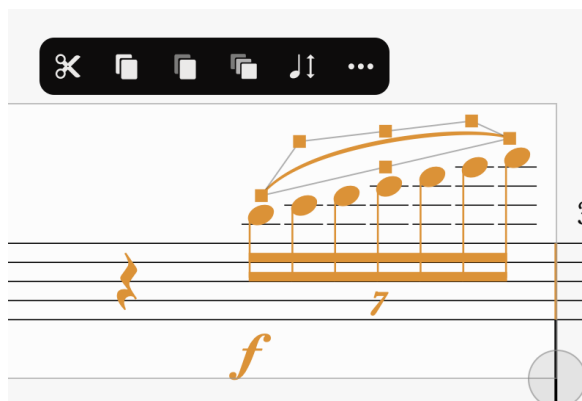
Toggling between notes or rests

- You can quickly make existing notes into rests and vice versa, by using the **Toggle Note or Rest** tool. Make a selection, then go to Context Menu>Tools>Toggle Note or Rest, or use the keyboard shortcut; **[Shift + Del]**.
- When going from rest to note, Notion creates pitches on the middle line — you can then repitch as you wish (see above).

Copy & Paste & More...

You can do a number of things with individually-selected elements or a range of objects. Make your selection first (see above), then:

Edit Dialog

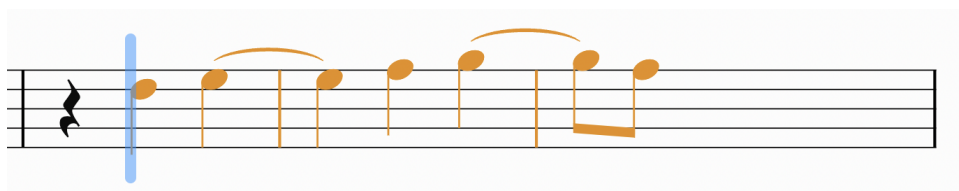
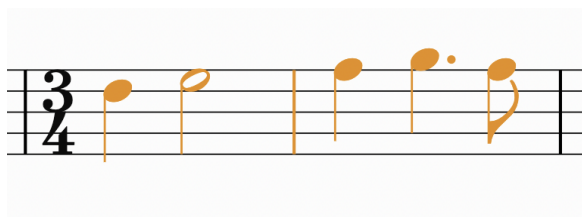


If you've double-tapped a measure to select it, an editing shortcuts dialog pops up. This is a quick way to access the most-used tools once a selection has been made.

- **Cut** cuts the selected music but keeps it on the clipboard ready to be pasted.
- **Copy** copies the selected music, ready to be then pasted where required.
- **Paste** pastes the cut or copied selection at the current cursor position.
- **Duplicate** makes a copy of the current selection and pastes it at the end of the selection
- **Transpose** opens the Transpose dialog.
- ... Opens the full Context Menu (see below).

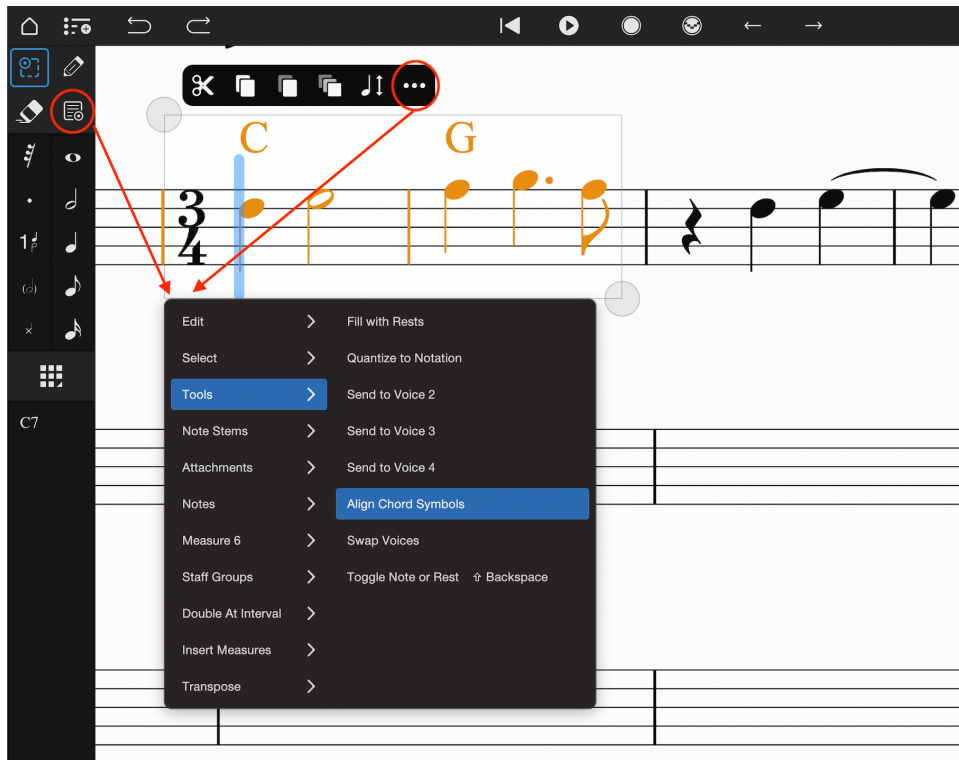
Note that there are keyboard shortcuts for: Cut **[Ctrl+X]** , Copy **[Ctrl+C]** , Paste **[Ctrl+V]** , Paste Insert **[Ctrl+Shift+V]** and Duplicate **[D]**

Paste Reflow



When pasting a copied or cut selection in a different rhythmic position to the original, Notion will reflow the music over the barlines. Notion will rewrite durations and add/remove ties as necessary.

Context Menu



To open the Context Menu, you can either:

1. Right click (or long press on a touchscreen).
2. Double-tap to make a rectangle selection, then tap the three-dot icon. [...]
3. In the Extended palette, tap the Context Menu icon. (To view the two-column Extended Palette, go to the Application Menu > Options)

The Context Menu is adaptive and it will only display tools that are relevant to the contents of the selection — for example, **Align Chord Symbols** in the Tool menu is only visible if there are actually two or more chord symbols within the selection.

Context Menu options include:

Edit

In addition to Cut/Paste/Copy/Duplicate, from the Edit menu you can also:

- **Delete** deletes the selection. Alternatively, use the keyboard shortcut; **[Delete]** , or tap the eraser icon on the palette.
- **Paste Insert** pastes without overwriting any following notes.
- **Paste into Voice x** pastes into another voice. Voices 3 and 4 are available as part of the Welcome pack, available for free on registration.
- **Delete Measures** deletes all measures within a selection.

Select

- **Select All**
- **Deselect All**
- **Select Part**
- **Select Chord Symbols**
- **Select Lyrics**
- **Select Voice x** , where x is voice 1 to 4.
- **Select Highest Notes** - selects the highest notes of chords in a selection.
- **Select Lowest Notes** - selects the lowest notes of chords in a selection.

Tools

- **Fill with Rests** fills the currently-selected region with rests.
- **Fill with Rhythm Slashes** fills the currently selected region with stemless rhythm slashes.
- **Make Tuplet** makes selected notes into a tuplet.
- **Remove Tuplet** removes tuplet from selected notes.
- **Quantize to Notation** adjusts recorded MIDI duration and rhythm to match exactly the notation.
- **Send to Voice x** sends the selected notes into the desired voice. Voices 3 and 4 are available as part of the Welcome pack, available for free on registration.
- **Switch Staff** moves notes from one hand to another in a grand staff instrument. (Note this is not the same as 'Cross-staff' notation where a note is still part of one staff but shows in another - this is available from the palette)
- **Align Fingerings** vertically aligns 2 or more fingering marks.
- **Align Chord Symbols** vertically aligns 2 or more chord symbols above the staff.
- **Swap Voices** if there are two voices present in a selection, this tool will swap notes between the voices.
- **Reset Tab numbers** centers tablature numbers to around the 5th fret.
- **Toggle Note / Rest** turns all selected notes into their equivalent value rest, and vice versa. Or use the keyboard shortcut Shift + Backspace.
- **Remove Measure Rests** removes whole measure rests in a selection.
- **Show/Hide Rests** shows or hides rests.

Articulations

- **Articulations Above / Default / Below** adjusts what side of the notehead an articulation should be shown in the selection
- **Remove Articulations** removes articulations from selection (or keyboard shortcut; **[Ctrl+Backspace]**)

Note Stems

- **Stems Up / Default / Below** changes which side of the notehead the stem should be.
- **Show Stems** shows/hides stems of a note.

Attachments

- **Attachments Above / Default / Below** adjusts what side of the notehead an attachment should be shown in the selection.
- **Show / Hide attachments** shows or hides attachments.
- **Shorten Tempo Marks** abbreviates metronome marks where many may be displayed per measure (after having been imported from a MIDI Tempo Track for example).
- **Remove Tempo Marks**

Notes

- **Show as Rhythm Slash** changes notes to rhythm slashes. Any chord symbols above rhythm slashes will sound in playback. You can also hide the stems of quarter note slashes using Note Stems>Hide Stems as above.
- **Show as Cues** changes notes to cue note size.
- **Show as Ghost Notes** changes notes to ghost notes.
- **Show as Grace Notes** changes notes to Grace Notes.
- **Show Grace Slash** shows/hides the slash on the grace note (=appoggiatura).
- **Set as Tacet** when tacet, the notes will not playback (but still print normally).
- **Remove Accidentals** removes all accidentals from selection of notes.

Measure x (where x is the current measure number)

- **Always / Never Show Measure Number** forces display of the measure number. Even measure numbering is switched off in the overall document options (and vice versa).
- **Force New System** forces a new system from the selected measure
- **Force New Page** forces a new page from the selected measure (in Print View only).
- **Link to Next Measure** always keeps the current measure and the one that follows together in the same system.
- **Regular Measure** turns the measure into a regular measure.

- **Pickup Measure** turns the measure into a pickup measure (or anacrusis). Then enter as many notes or rests you need in the pickup measure.
- **Partial Measure** turns the measure into a partial measure, which enables you to split a long bar over a system for example.

Staff Groups

If you have more than one instrument staff selected, you can group them together in the following ways:

- **Brace Group** creates a 'curly' brace at the start of the system, usually for a grand staff instrument such as piano.
- **Bracket Group** creates a straight bracket at the start of the system, usually to group instruments of the same family together.
- **Barline Group** extends the barline through a number of staves, usually through instruments of the same family.
- **Show Tempo Information** optionally duplicates the metronome mark at the top of each group.

Adjust Dynamics

- **Dynamic Adjustment** adjusts the playback level of printed dynamics. Each whole number represents a dynamic step (e.g. mf, f, ff).
- **Adjust Notated Dynamics** optionally also changes the printed dynamics. If off then this allows you to playback a different dynamic to the printed one.
- **Double at Interval** adds notes to the current selection either above or below the existing notes
 - Choose the interval, the interval quality, and in which octave to add them.
- **Insert Measures** inserts specified number of empty measures into the score.
- **Text Style** can be used to adjust the font, font size and style of the selected text
 - Use Layout Style - uses the default global text style
- **Transpose**
 - Choose the interval, the interval quality, and by how many octaves to transpose
 - Transpose key signature option - if every stave in a system is selected, then you can elect to transpose the key signature as well as the notes.
- **Tuplet** 메뉴에서 사용자 정의 잇단음표를 만들 수 있습니다. (간단한 잇단음표의 경우 도구 메뉴에서 '잇단음표 만들기' 명령을 사용하거나 Ctrl+T를 누릅니다)
 - 음표 그룹을 사용자 정의 잇단음표로 변환합니다(예: 4 공간에 5분음표 넣기).
 - 번호(예: 5)만 표시, 비율(예: 5:4)로 표시 또는 표시 안 함 중에서 선택합니다.
 - 잇단음표 위의 괄호를 표시하거나 숨깁니다.
 - 위, 아래 또는 기본 측면에 잇단음표 번호와 괄호를 강제 적용합니다.

툴그리드 사용

툴그리드 아이콘을 탭하여 열고 사용하려는 툴을 탭합니다. 툴그리드를 손가락으로 누른 상태로 스와이프하여 원하는 툴로 가져가서 손을 떼면 더 빠르게 원하는 툴을 열 수 있습니다. 모든 툴에는 각각의 키보드 단축키가 설정되어 있습니다. 예를 들어 **[C]** 로 음자리표 툴을 열 수 있습니다. 좌/우 화살표 키로 툴그리드를 탐색하고 원하는 툴에서 **Enter**를 탭하여 열 수도 있습니다.

선택된 툴에 다른 옵션이 있다면 툴그리드 아래에 나타납니다. 기본적으로 이들은 단일 열에 정렬되지만 더 큰 장치가 있는 경우 두 개의 열을 사용하는 확장 팔레트를 사용하도록 선택할 수 있습니다. 팔레트 하단에 있는 아이콘을 탭하여 하나 또는 두 열 사이를 전환할 수 있습니다. 선택된 툴의 세부 옵션에도 단축키를 사용할 수 있습니다. 숫자 1-9를 사용합니다. **[Alt+좌/우 화살표 키]** 를 사용해서 세부 옵션을 살펴보거나 메인 툴 키보드 단축키를 반복하여 누르는 것으로도 옵션들을 전환하면서 살펴볼 수 있습니다.

키보드 단축키를 사용하여 낮은음자리표를 선택하는 예시:

- **[C]** 를 입력하여 음자리표를 열고 **[2]** 로 낮은 음자리표를 선택하거나,
- **[CC]** 입력.

선택된 상태에서 스코어에서 예를들어 박자표를 변경하거나 이미 입력된 노트에 스타카토를 붙이는 등 이 툴을 사용하고 싶은 위치를 탭합니다.

툴에 따라서는 선택된 여러 노트들에 적용할 수 있는 것도 있습니다. 예를 들어 다수의 16분음표를 선택한 상태에서 선택된 모든 음표에 스타카토를 적용할 수 있습니다. 셴여림표도 마찬가지로 툴을 선택하고 각각의 노트에 포르테를 적용하거나, 서로 다른 악기 보표를 선택하고 셴여림표를 탭할 수 있습니다. 그러면 선택영역에 포함된 각 악기의 왼쪽에 포르테가 추가됩니다.

툴 선택을 해제하려면 팔레트 상단의 선택 아이콘을 탭하거나 키보드 단축키 **[Esc]**를 누릅니다.

툴 목록:

- **붙임줄**
 - 툴을 선택하고 같은 음정의 두 노트 중 앞의 노트를 클릭한 다음 붙임줄을 추가하거나 제거합니다.
- **조음기호**
 - 악센트, 테누토, 스타카토 조음기호
- **임시표**
 - 샵, 플랫, 더블/레이즈드/로워드 (쿼터톤)
- **인하모닉**
 - 툴을 선택하고 노트를 탭하여 인하모닉 문자를 바꿀 수 있습니다. 가령 F#를 Gb로 바꿉니다.
- **이음줄**
 - 탭하고 드래그하여 입력하거나 선택범위를 정하고 나서 툴을 탭합니다.
- **셴여림표**
 - 탭하여 입력합니다. 여러 보표에 동시에 적용하려면 우선 범위를 선택해야 합니다.
- **크레센도**
 - 탭하고 드래그하여 입력하거나 선택범위를 정하고 나서 툴을 탭합니다.
- **스포르잔도**
- **음자리표**
 - 툴을 선택하고 음자리표를 변경할 마디를 탭합니다. 또는 현재 음자리표를 더블탭하는 것으로도 변경할 수 있습니다.
- **조표**
 - 툴을 선택하고 조표를 변경하려는 마디를 탭합니다. 또는 현재의 조표를 더블탭하는 것으로도 변경할 수 있습니다. 새 조표가 적용되면서 내추럴 기호를 사용할 것인지 여부를 지정할 수 있으며 특정 악기의 보표에만 조표를 적용할 것인지를 지정할 수 있습니다.
 - 조표가 새 연주라인이나 페이지에 적용되면 이전 연주라인의 마지막 단에도 표시됩니다. 이 기호를 숨기려면 조표 위에서 오른쪽 클릭하거나 길게 누른 다음 **Tools>Show End of System Courtesies**를 선택합니다.
- **박자표**
 - 도구를 선택하고 박자 조표를 변경하려는 마디를 탭합니다. 또는 기존 박자표를 두 번 탭하여 편집합니다. 4/4박자 기호 (c) 또는 2/2박자 기호(♩)를 표시하고 선택한 악기 보표에만 박자표를 삽입할지 여부를 선택할 수 있습니다.

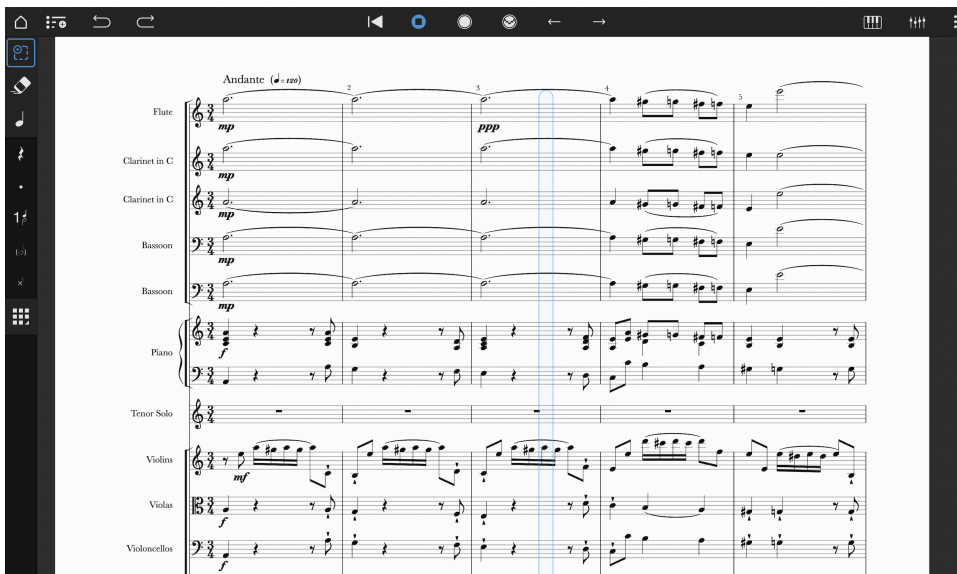
- 꼬리 잇기 패턴을 지정할 수도 있습니다. 예를 들어 7/8의 '3+2+2' 패턴으로 8분음표의 꼬리를 자동으로 이어주려면 '3+2+2'를 입력합니다. 패턴에 비트를 너무 많이 추가하면 경고 표시로 번호가 빨간색으로 변합니다.
- 박자표가 새 시스템 또는 페이지의 시작 부분에 나타나면 호의적 박자표가 이전 시스템의 끝부분에 나타납니다. 호의적 박자표를 숨기려면 박자표를 길게 누르거나 마우스 오른쪽 버튼으로 클릭하여 도구 > 시스템 끝부분에 호의적 박자표 표시로 이동합니다.
- 박자표를 완전히 숨기려면 박자표를 길게 누르거나 마우스 오른쪽 버튼으로 클릭하여 도구 > 박자표 숨기기로 이동합니다.
- **템포**
 - 메트로놈 기호
 - 스윙 제어
 - 아첼레란도/리타르단도
- **세로줄**
 - 세로줄 유형을 탭하여 기존 세로줄을 변경합니다.
 - 마디를 추가로 삽입하려면 단일 세로줄을 선택하고 마디를 추가로 삽입하려는 악보를 탭합니다. 또는 컨텍스트 메뉴 > 마디 삽입으로 이동합니다.
 - 마디 번호를 다시 표기하려면 마디 번호를 두 번 탭하고 계속하려는 번호를 입력합니다. 그러면 Notion에서 모든 후속 번호를 조정하고 앞서 번호를 다시 표기한 마디가 나타나면 멈춥니다.
- **반복**
 - 반복기호 끝을 더블탭하여 다중 반복기호를 입력할 수 있습니다.
 - 첫 번째 엔딩라인을 더블탭하여 다중 반복의 첫 번째 엔딩을 지정할 수 있습니다.
- **텍스트**
 - 텍스트 박스 줄 바꿈을 추가하려면 Enter 또는 Shift+Enter(플랫폼에 따라 다름)를 사용하십시오.
 - 가사 가사를 추가하려면 도구를 선택한 다음 시작하려는 음표 아래를 누릅니다. 입력을 시작하거나 Notion에서 사용하는 텍스트를 시스템 클립보드에 복사한 경우 '붙여넣기'를 선택합니다. 음절에 하이픈을 추가하고 단어의 마지막 음절에 멜리σμα에 밑줄을 추가할 수 있습니다. 더 많은 구절을 추가하려면 기존 구절 아래를 탭하십시오 - 추가할 수 있는 구절의 수에는 제한이 없습니다.
 - 리허설마크
- **코드**
 - 코드 기호와 기타 코드 다이어그램
- **트릴**
- **트레몰로**
- **아르페지오 라인**
- **옥타브 라인**
- **글리산도**
- **재즈폴 / 스쿱**
- **내비게이션 플로우** (DC, Coda 등)
 - 정상적인 연주를 위해 모든 플로우 지시어가 제 자리에 순서대로 표기되어야 합니다. 예를 들어,
 - Segno>Fine>DS al Fine
 - Segno>To Coda>DS al Coda>Coda
- **핑거링 번호**
 - 단일 음표에 핑거링 번호를 추가하거나 코드 위 또는 아래에 수직으로 여러 핑거링을 쌓을 수 있습니다. 대체 손가락을 입력하려면 'Shift'를 누른 상태에서 두 번째 숫자를 입력합니다(플랫폼에 따라 다름). 두 개 이상의 핑거링을 선택한 다음 컨텍스트 메뉴>도구>핑거링 정렬을 선택하여 여러 핑거링을 재정렬할 수 있습니다.
- **장식**
- **페르마타**
 - 툴을 선택하고 탭하여 스코어에 입력합니다.
 - 페르마타/중간휴지/숨표/테누토의 연주방법을 조정하려면 스코어에 삽입된 상태의 기호를 더블탭합니다. 그리고 나서 노트의 길이나 초 단위로 연주 길이를 조정합니다.
- **빔**

- **크로스 보표**
 - 피아노나 하프와 같이 큰 보표를 사용하는 악기에서 노트의 음표기동을 다른 손의 보표까지 연결하여 표기합니다.
- **악기 변경**
 - 이를 통해 동일한 오선 내에서 악기를 변경할 수 있습니다(예: 플루트에서 색소폰으로 목관 악기를 변경하거나 Bb 클라리넷에서 A 클라리넷으로 변경). 변경하려는 위치를 탭한 다음 새 악기를 선택하십시오. Notion은 필요한 경우 소리와 조옮김을 변경하고 적절하게 새로운 조표를 추가합니다. Notion은 또한 믹서에 새로운 채널을 추가하여 동일한 스테프의 악기를 다르게 혼합할 수 있습니다.
- **악기군 테크닉**
 - 현재 선택한 보표에 속한 악기 계열 전체에 적용되는 테크닉(예: 피치카토, 아르코)
- **악기별 테크닉**
 - 현재 선택한 악기 보표에만 적용되는 테크닉(예: 스트레이트 뮤트)
- **기타 특정 테크닉**
 - 기타는 다른 악기보다 다양한 기타만의 고유한 테크닉이 적용되며, 기타 보표를 선택하면 해당 테크닉이 나타납니다.
 - 해머링 온, 풀링 오프, fretboard tap, 핀치 & 탭 하모닉스, 팜 뮤트, 슬랩
 - 슬라이드 업/다운
 - 벤딩, 와미바, 비브라토 벤드를 위/아래로 끌고 조율하여 벤드 범위를 조정하고 왼쪽/오른쪽으로 끌어 타이밍을 조정합니다.
 - 스트링 번호
 - PIMAC 운지법
 - 업/다운 스트로크, 하모닉, 오픈
 - 핑거드, 노르말
- **하프 특정 테크닉**
 - 하프 보표를 선택하면 도구 그리드에 하프 추가 옵션이 나타납니다.
 - 하모닉 기호/l.v. (laissez vibrer)
 - 하프 페달 다이어그램(Ctrl+H). 대화 상자를 사용하여 필요한 튜닝을 선택합니다. 플랫은 상단 열, 내추럴은 중간 열, 샤프는 하단 열입니다. 다이어그램에는 음명이 표시되지만 '다이어그램으로 표시(Show as Diagram)'를 선택하면 표준 하프 페달 다이어그램이 나타납니다. 블록 위치는 페달 위치를 나타내며 D, C, B는 왼발로 그리고 E, F, G, A는 오른발로 작동합니다. Notion은 페달 설정에 따라 하프 클리산도를 연주합니다.
 - 하프 페달 도움말: 하프 다이어그램에서 하프 파트에 빨간색 음표가 있을 경우 페달을 추가로 변경해야 한다는 의미입니다. 하프 페달 도구가 활성화되면 빨간색 음표를 클릭합니다. 그러면 추천 솔루션이 자동 표시된 페달 대화 상자가 열립니다. 하프 다이어그램 자체가 빨간색으로 변할 경우 연주자가 페달을 변경하는데 적힌 것보다 더 많은 시간이 필요하다는 의미입니다. 다이어그램을 미리 가져오거나 악절을 다시 작성하십시오.

[여기에서 빠른 시작 자습서를 참조하십시오.](#)



플레이백



Notion Mobile에는 Notion을 사용하여 Notion 전용으로 애비로드 스튜디오에서 런던 심포니오케스트라와 녹음된 전용 샘플라이브러리가 있습니다.

- [사운드 목록.](#)
- [여기에서 빠른 시작 자습서를 참조하십시오..](#)

Notion Mobile에는 Notion Desktop과 동일한 악기들이 휴대기기의 공간을 절약할 수 있도록 축소된 크기의 라이브러리로 마련되어 있습니다. Notion Desktop에는 Notion Mobile에 포함되어 있는 서브셋과 함께 모든 다이내믹 레이어와 조음기호, 테크닉이 갖추어져 있습니다.

특정 사운드셋이 장치에 설치되어 있지 않다면 해당 악기는 Notion이 자동으로 Steinway Grand Piano로 설정하여 노트를 연주합니다. 이러한 방식으로 풀버전 라이브러리의 설치 없이 모든 기기에서 계속하여 작곡을 진행할 수 있으며 수많은 사진과 귀여운 고양이 동영상으로 가득찬 스마트폰에서는 피아노사운드만으로 작업하고 태블릿에서는 전체 라이브러리를 사용할 수도 있습니다.

스코어를 연주하려면 시작하려는 지점에 커서를 놓고 **Play** 버튼을 누르거나 키보드 단축키 **[스페이스바]** 를 누릅니다. 파란색 커서와 함께 플레이백이 진행됩니다. 연주를 멈추려면 같은 버튼을 한 번 더 누릅니다.

마지막 플레이백이 시작된 지점으로 되돌아가려면 플레이백 도중 또는 멈춘 상태에서 **Rewind** 버튼을 누릅니다. 스코어 맨 앞으로 돌아가려면 (또는 **Return to Zero**), **Rewind** 버튼을 두 번 누르거나 키보드 단축키 **[J]** 를 사용합니다.

플레이백이 이루어지는 동안 스코어의 스크롤링을 보지 않으려면 **Play** 를 누르고 난 후 직접 스코어를 드래그합니다.

몇 개의 악기만 듣고 싶다면 믹스에서 수동으로 음소거 또는 솔로를 하거나 악보에서 간단히 선택할 수 있습니다. Notion은 선택한 악기와 음표만 재생합니다.

플레이백이 이루어지는 동안 메트로놈을 켜거나 끄려면 Application Menu>Record Setup>Metronome을 사용합니다.

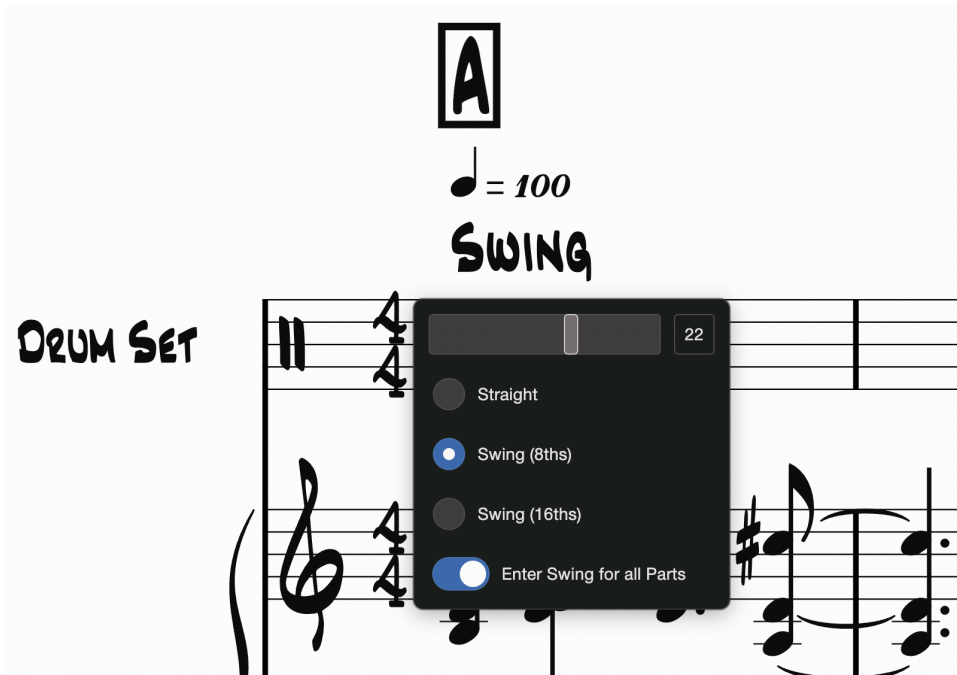
코드기호 플레이백

플레이백이 이루어지는 동안 리듬표시 위의 코드 기호가 해당 리듬에 맞추어 연주됩니다. 조음기호나 붙임줄, 다이내믹 마크를 붙여서 플레이백에 반영할 수도 있습니다. 플레이백에서 코드가 연주되지 않게 하려면 원하는 구간을 선택하고 **타셋으로 설정** 을 선택합니다 (하단 참조).

타셋으로 설정

원하는 구간을 선택하고 Context Menu에서 Notes>Set as Tacet을 선택합니다. 해당 노트가 그레이 음영으로 표시되며 플레이백에서 연주되지 않게 되고 오디오 익스포트에서도 제외됩니다. (인쇄시에는 그대로 검정색으로 인쇄됩니다)

스윙

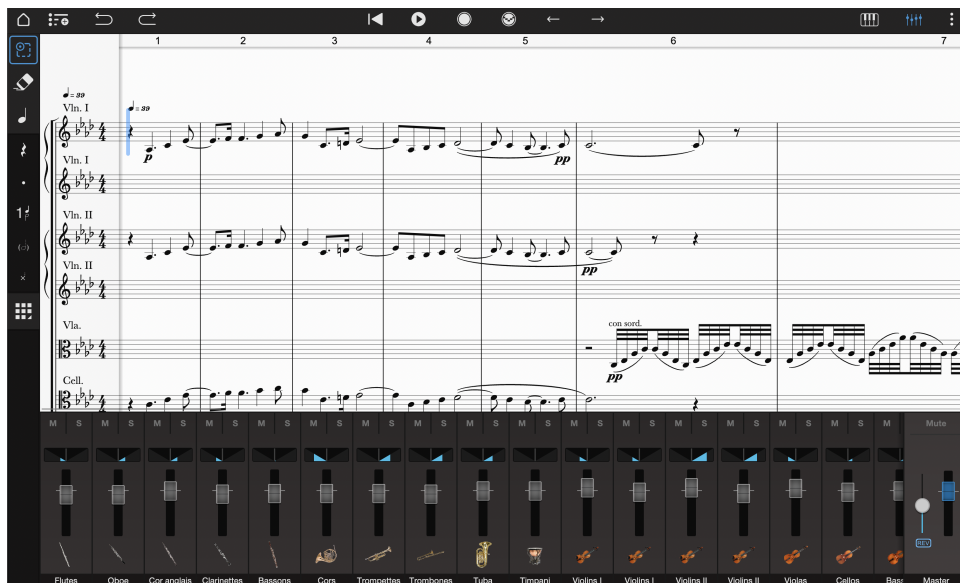


Notion을 스윙 형식으로 연주하도록 지정할 수 있습니다. 8분음표나 16분음표로 작성된 노트들이 셋잇단음의 스윙으로 연주됩니다. Tools Grid를 열고 메트로놈 기호의 팔레트를 선택합니다. 여기서 아래쪽의 Swing 툴 아이콘을 사용할 수 있습니다 (4분음표의 새도우). 또는 키보드 단축키 **[Shift+S]**를 사용할 수도 있습니다.

스코어에서 스윙이 시작될 지점을 탭합니다. Swing 대화창이 열리고 8분음표 혹은 16분음표 스윙 옵션을 선택합니다. 그리고 모든 보표에 스윙을 적용할 것인지 스윙 기호를 표시한 현재 보표에만 적용할 것인지 선택합니다. 스윙 레벨을 선택할 수 있습니다. 센터(값 0)로 맞추면 스트레이트가 됩니다.

- 스윙 플레이백을 취소하려면 대화창에서 **Straight** 를 선택합니다.
- 이미 입력되어 있는 스윙기호를 변경하려면 해당 기호에서 탭하여 스윙 컨트롤 레벨을 조절하거나 두 번 탭하여 스윙 대화창을 다시 열 수 있습니다.

믹서



화면 우측 상단의 믹서 아이콘을 클릭하거나 키보드 단축키 **[Ctrl/Cmd+M]**을 사용하여 열 수 있습니다.

믹서 우측에서 전체 음량과 리버브 컨트롤, 글로벌 뮤트 버튼을 조작할 수 있는 마스터 채널을 볼 수 있습니다.

스코어에 추가된 악기들의 채널이 마스터채널 왼쪽에 표시됩니다. 규모가 큰 스코어에서는 믹서를 좌우로 스와이프하여 모든 악기를 확인할 수 있으며 마스터 채널은 항상 화면의 오른쪽 끝에 고정되어 나타납니다.

채널 컨트롤:

- 솔로 또는 뮤트
- 악기의 패닝을 조절하여 악기 사운드가 왼쪽 또는 오른쪽에서 들려오도록 할 수 있습니다.
- 악기의 음량

일렉트릭 기타의 경우에는 연주시에 적용되는 디스토션의 양을 조절할 수 있는 드라이브 컨트롤을 사용할 수 있습니다.

키보드가 연결되어 있다면 Shift키를 누른 상태로 드래그하여 팬과 볼륨을 세밀하게 조작할 수 있습니다.

오디오 장치

Notion Mobile을 Windows 또는 macOS에서 사용하는 경우 플레이백에 사용될 오디오 장치를 수동으로 선택할 수 있습니다. Application Menu>Audio Setup에 가서 원하는 오디오 장치를 선택합니다.

다른 기기나 플랫폼에서는 Notion Mobile이 기본 오디오 장치를 사용합니다.

악보 저장, 인쇄, 내보내기

Notion Mobile에서 스코어를 인쇄하고, 공유하고, 익스포트 또는 다양한 형식으로 전송할 수 있습니다.

저장

Notion은 작곡 진행 상황을 자동으로 저장하여 문제가 발생할 경우 작업을 복구할 수 있도록 지원합니다. 애플리케이션 메뉴에서 다음과 같은 추가 저장 옵션을 확인할 수 있습니다.

- **저장** 언제든지 수동으로 저장할 수 있습니다. **Ctrl/Cmd+S** 바로 가기 키를 사용할 수도 있습니다.
- **다른 이름으로 저장** 작업을 계속 진행할 수 있는 문서의 복사본이 생성되어 원본 문서가 보존됩니다. **Ctrl/Cmd+Shift+S** 바로 가기 키를 사용할 수도 있습니다. 이 옵션은 복사본이 생성되지만, 원본 문서는 여전히 열려 있는 아래의 내보내기 기능과는 다릅니다.

인쇄

인쇄하려면 Application Menu에서 Print를 선택합니다. 또는 키보드 단축키 **[Ctrl/Cmd+P]** 를 사용해도 됩니다. 이것으로 프린트 대화상자를 열 수 있습니다.

내보내기

익스포트 하려면 Application Menu에서 Export Score를 선택합니다. File Name 항목에서 익스포트될 문서의 파일명을 변경하거나 오리지널 파일명을 유지할 수 있습니다.

그리고 나서 다음과 같은 액션을 선택할 수 있습니다.

- **파일 저장** 지정된 형식으로 지정된 위치에 파일을 익스포트하여 저장합니다.
- **공유...** 표준 모바일 기기의 경우 사용할 수 있는 공유 메뉴가 나타납니다. 여기서 클라우드 서버로 전송하거나 이메일 혹은 소셜 미디어, 그 밖의 다른 지원되는 앱 등으로 보낼 수 있습니다.
- **템플릿으로 저장** 스코어를 현재 형식으로 Notion 템플릿으로 저장하여 New Score 대화창의 템플릿 목록에 나타나게 합니다.
- **전송** 옵션 Feature Bundle의 기능으로 Notion Mobile, Notion Desktop, Studio One Professional 등 PreSonus 어플리케이션이 실행되는 동일 네트워크상의 다른 기기로 직접 전송할 수 있습니다. 기능의 잠금을 해제하고 각 어플리케이션에서 네트워크 전송이 허용되어 있는지 확인합니다. Notion Mobile에서는 Application Menu>Options>Network>Allow receiving documents를 선택합니다.

상기 액션의 선택지에 맞는 익스포트 형식을 사용할 수 있습니다.

- **스코어**
 - Notion 파일
 - MusicXML 파일
 - Compressed MusicXML 파일 (mxl)
 - MIDI 파일
 - PDF 파일
 - 폴스코어
 - 모든 파트스코어를 하나의 PDF에 기록
 - 폴스코어와 모든 파트스코어를 하나의 PDF에 기록
- **오디오**
 - WAV
 - Mp3
 - Feature Bundle에서 사용할 수 있는 오디오 형식:
 - FLAC
 - Opus
 - M4a

각 오디오 포맷에서 적용가능한 비트레이트, 해상도, 샘플레이트, 압축률 등의 세부 익스포트 옵션이 표시됩니다.

키보드 단축키

Notion Mobile에는 다양한 플랫폼에서 사용할 수 있는 키보드 단축키가 내장되어 있습니다.

- 숫자 1-9는 노트의 길이만을 나타내는 것은 아닙니다. 선택된 툴에서 임의의 옵션을 선택할 수 있습니다.
 - 예를 들어 음자리표 **[C]** 를 입력하고 **[2]** 를 입력하여 낮은 음자리표로 만들 수 있습니다.
 - 예를 들어 **[<]** 를 입력하여 조준선을 만들고 **[4]** 로 '디크레센도...'를 입력합니다.
- **[Esc]** 를 누르면 선택툴로 되돌아가고 커서는 사라집니다.
- Notion의 길이 단축키(가령 **[E]** 로 8분음표)는 Application Menu>Options>Edit>Letters for Duration에 있습니다.
- Mac 시스템에서는 아래 열거된 단축키의 **[Ctrl]** 키 대신 커맨드 **[Cmd]** 를 사용하고 **[Alt]** 대신 **[Opt]** 키를 사용합니다.

키보드 단축키 - 길이		
기본	대체키 (Options Menu> Letters for Duration)	길이 (침표입력을 위한 전환 키)
1		겹음표/겹음침표
2	w	온음표/온음침표
3	h	2분음표/2분침표
4	q	4분음표/4분침표
5	e	8분음표/8분침표
6	s	16분음표/16분침표
7	t	32분음표/32분침표
8		64분음표/64분침표
9		128분음표/128분침표
.		점
T	Alt + t	붙임줄
Alt + 2-9		잇단음표 입력
Alt + 1		잇단음표 제거

키보드 단축키 - 전체	
Esc	선택 툴
1에서 9까지	툴 옵션 (노트/침표 길이 등)
Alt + 좌/우 커서	이전/다음 툴 선택

A	아르페지오
B	플랫 전환
C	음자리표
D	복제
E (또는 길이 문자를 사용하는 경우 Alt + E)	인하모닉
F	포르테 전환
G	꾸밈음/고스트 전환
H (또는 길이 문자를 사용하는 경우 Alt + H)	트레몰로 (슬래시)
I	마디라인
J	템포 툴
K	조표
L	가사
M	박자표
O	옥타브
P	피아노 전환
R	템포변경
S (또는 길이 문자를 사용하는 경우 Alt + S)	이음줄
T (또는 길이 문자를 사용하는 경우 Alt + T)	붙임줄
W (또는 길이 문자를 사용하는 경우 Alt + W)	핑거링
X	노트헤드 전환
Shift + B	빔 툴
Shift + C	코드
Shift + D	페르마타
Shift + F	메조포르테
Shift + G	벤드
Shift + H	트레몰로 (빔)
Shift + I	악기 변경

Shift + J	점프 마크
Shift + K	텍스트 박스
Shift + L	글리산도 포르타멘토
Shift + M	메트로놈
Shift + N	기타 테크닉
Shift + O	스트링 테크닉
Shift + P	메조 피아노
Shift + Q	플렉킹
Shift + R	리허설마크
Shift + S	스윙
Shift + T	트릴
Shift + U	재즈 밴드
Shift + V	비브라토
Shift + W	왜미 바
Shift + X	크로스 보표
Shift + Y	슬라이드
Shift + Z	아르코 피치카토
Ctrl + A	모두선택
Ctrl + Shift + A	부품 선택
Ctrl + B	마지막 코드 반복 (스텝 단위)
Ctrl + C	복사
Ctrl + D	모두 선택해제
Ctrl + E	익스포트
Ctrl + Shift + F	부착물 뒤집기
Ctrl + G	스코어 설정
Ctrl + H	하프 다이어그램
Ctrl + L	레이아웃/보기 메뉴

Ctrl + Shift + L	레이아웃 핸들 표시
Ctrl + M	믹서
Ctrl + N	새 도큐먼트
Ctrl + O	열기
Ctrl + P	인쇄
Ctrl + Q	나가기
Ctrl + R	스텝 레코딩
Ctrl + Shift + R	실시간 레코딩
Ctrl + S	저장
Ctrl + Shift + S	다른이름으로 저장
Ctrl + T	잇단음표 만들기
Ctrl + V	붙여넣기
Ctrl + Shift + V	끼워넣기
Ctrl + W	닫기
Ctrl + X	컷
Ctrl + Y / Ctrl + Shift + Z	다시실행
Ctrl + Z	되돌리기
0	내추럴
#	샵
-	테누토
^	악센트
.	점/스타카토
<	크레센도
>	디미누엔도
Ctrl + 1	보이스 1
Ctrl + 2	보이스 2
Ctrl + 3	보이스 3

Ctrl + 4	보이스 4
Ctrl + .	선택된 노트에 점 추가
Del	삭제
백스페이스	삭제
Shift + 백스페이스	노트와 쉼표 전환
커서 화살표	노트 단위로 탐색
Ctrl + Backspace	조음기호 제거
Ctrl + 커서 화살표	마디 단위로 탐색
노트가 선택된 상태에서 커서 업/다운	노트를 다이아토닉 음계로 트랜스포즈
노트가 선택된 상태에서 Ctrl + 커서 업/다운	노트를 반음계로 트랜스포즈
노트가 선택된 상태에서 Shift + 커서 업/다운	옥타브 단위로 노트를 트랜스포즈
Alt + 드래그 노트 업/다운	임시표만 변경
Alt + Home (또는 Alt+Fn+왼쪽화살표)	홈페이지
Ctrl + +	줌인
Ctrl + -	줌아웃
[F5]	점수 및 선택한 부분 전환
[F6]	연속 뷰
[F7]	페이지뷰 전환
[F8]	스크린뷰
[스페이스]	시작/정지
,	리턴투제로
:	엔딩 반복
%	마디반복 전환
*	페달마크 전환

사운드 목록

Notion Mobile의 사운드 라이브러리는 오직 Notion을 위해 애비로드 스튜디오에서 런던 심포니 오케스트라에 의해 녹음된 것입니다. 또한 Steinway 피아노와 클래식 기타 샘플도 더해졌습니다. 그 밖의 기타와 드럼 샘플은 미국의 그래미상 수상 아티스트들에 의해 녹음되었습니다. 파이프오르간과 합창 사운드는 Soundiron의 라이선스로 수록되어 있습니다.

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사운드셋 이름 / 내용

빌트인

- 그랜드피아노 (Steinway)

환영팩 - 등록 후 무료 다운로드

- 솔로 바이올린 (1698 Antonius Stradivarius)
- 솔로 비올라 (16세기 Antonio Brenzi)
- 솔로 첼로 (c.1710 Matteo Gofriller)
- 솔로 베이스 (1840's Thomas Kennedy)
- 알토 색소폰 (Selmer)
- 테너 색소폰 (Selmer)
- 글로켄슈필 (Bergerault)

코어 스트링 (무료)

- **바이올린 I & 바이올린 II** (포함섹션: 1698 Antonius Stradivarius, 1701 Johannes Tononi, 1708 Daniel Parker, 1725 Antonio Maria Lavazza, 1725 Spiritus Sarsana, 1730 Paulo Antonio Testore, 1736 Guarneri, 1764 Richard Duke, 18th century Jean-Baptiste Viillaume, 1907 Pierre Hel, 2003 Alexander Tzankow)
- **비올라** (포함섹션: 1876 Boullangier, 1823 Matthew Hardi, 1880s Joseph Hill ("The Joseph Hill"의 손자), 1998 John Dilworth, 1912 Antoniazzi Romeo, 1756 North Italian Instrument, 1975 Antonio Capela, 1900 Nicholas Malthuis – Orleans, 16세기 후반 Antonio Brenzi).
- **첼로** (포함섹션: 1899 Briggs, 1793 Celianatis, 1821 Thomas Kennedy – 런던, 1804 William Forster, 1822 Gilkes, 2000 Robert Hawsell, c.1710 Matteo Gofriller)
- **베이스** (포함섹션: 1840's Thomas Kennedy, 1770 Forster, 1870 Shaw, 1839 Thomas Kennedy, 1850 Vuillaume, 1765 Lorenzo Carcassi)

코어 윈드 (무료)

- 피콜로 (Zentner black wood)
- 플루트 (Yamaha)
- 오보에 (Howarth)
- 잉글리시 호른 (Howarth)
- 클라리넷 (Buffet RC Prestige)
- 베이스 클라리넷 (Buffet)
- 바순 (Heckel)
- 콘트라바순 (Mollenhauer)
- 호른 (Paxman)
- 트럼펫 (Yamaha Xeno)
- 트럼본 (Conn)

- 베이스 트럼본 (King)
- 튜바 (Besson Sovereign)

코어 리듬/퍼커션 (무료)

- 어쿠스틱 기타
- 일렉트릭 베이스
- 일렉트릭 기타
- 드럼세트
- 탬버린
- 스네어드럼 (Ludwig)
- 서스펜디드 심벌 (Zildjian)
- 크래시 심벌 (Zildjian)
- 베이스 드럼 (B+H)
- 팀파니
- 실로폰 (Adams)
- 코러스 (Soundiron의 Olympus Micro 콰이어)
- 하프 (Hornbacher)

섹션사운드 (애드온)

- 바순 듀오
- 클라리넷 듀오
- 클라리넷 섹션
- 플루트 듀오 (Powell / Yamaha)
- 플루트 섹션
- 오보에 듀오
- 호른 섹션
- 트럼본 섹션 (Conn / King)
- 트럼펫 섹션

윈드 (애드온)

- Eb 클라리넷 (Buffet + glass mouthpiece)
- 알토 플루트 (Yamaha)
- 베이스 플루트
- 콘트라베이스 클라리넷
- 바셋 호른
- 오보에 다모레
- 베이스 오보에
- 바리톤 색소폰 (Selmer)
- 소프라니노 색소폰 (Selmer)
- 소프라노 색소폰 (Selmer)
- 콘트라베이스 색소폰 (Tubax)
- 유포니엄 (Besson)
- 피콜로 트럼펫
- 베이스 트럼펫

- 소프라노 트럼펫
- 뷰글
- 코넷
- 바그너 튜바
- 알토 트럼본

재즈 우드워드 (애드온)

- 재즈 알토 색소폰 (Selmer)
- 재즈 바리톤 색소폰
- 재즈 클라리넷
- 재즈 소프라노 색소폰
- 재즈 테너 색소폰 (Selmer)

재즈 브라스 (애드온)

- 재즈 트럼펫 1
- 재즈 트럼펫 2
- 재즈 베이스 트럼본
- 재즈 테너 트럼본

키보드 + 그 밖의 기타 (애드온)

- 일렉트릭 피아노
- 클라비넷
- 테크노 신스
- 오르간 (Soundiron의 Lakeside Organ)
- 쉐레스테 (Schiedmayer)
- 하프시코드 (Robert Goble & Son, 1972)
- 밴조
- 클래식 기타 (Greg Smallman)
- 만돌린
- 업라이트 베이스
- 우쿨레레 (Collings)

퍼커션 (애드온)

- **사운드이펙트 번들** (채찍, 뼈꾸기, 톱니바퀴, 사이렌, 자동차 경적, 호루라기, 샴페인 병, 오리 소리, 박수, 윈드 머신, 레인스틱, 교회 종, 천둥 시트)
- **퍼커션 번들** (템플 블록, 와인잔, 핸드벨, 콘서트 탐, 톰, 앰글로켄, 나이팅게일 휘슬, 사자 포효, 보드란, 플렉사톤, 슬라이드 휘슬, 시즐 심벌즈, 구이로, 카바사, 탐탐, 마라카스, 캐스터네츠, 차시시, 간자, 드럼 스틱, 브레이크 드럼, 차이니즈 심벌즈, 핑거 심벌즈, 벨 트리, 해머, 바이브라슬랩, 화분, 쿠이카, 통나무 드럼, 아고고, 비브라스틱, 리드 파이프, 오션 드럼, 기차 호루라기, 워터 징, 테너 드럼, 피콜로 스네어, 모루, 모래 블록, 사이드 드럼)
- 크로탈
- 마림바 (Adams 5 oct)
- 로토탐
- 튜볼라벨 (/차임) (Musser)
- 튠드 공
- 비브라폰 (Musser)

- 클라베스
- 카우벨
- 공 (Paiste)
- 슬레이 벨
- 스플래시 심벌
- 트라이앵글
- 우드블럭
- 봉고

Acknowledgements

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- mpg123 MP3 Decoder
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zlib

zlib.h -- interface of the 'zlib' general purpose compression library version 1.2.12, March 27th, 2022

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Jean-loup Gailly Mark Adler

jloup@gzip.orgmadler@alumni.caltech.edu

Expat XML Parser

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PCRE is a library of functions to support regular expressions whose syntax and semantics are as close as possible to those of the Perl 5 language.

Release 8 of PCRE is distributed under the terms of the "BSD" licence, as specified below. The documentation for PCRE, supplied in the "doc" directory, is distributed under the same terms as the software itself.

The basic library functions are written in C and are freestanding. Also included in the distribution is a set of C++ wrapper functions.

THE BASIC LIBRARY FUNCTIONS

Written by: Philip Hazel

Email local part: ph10

Email domain: cam.ac.uk

University of Cambridge Computing Service,
Cambridge, England.

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Ogg Vorbis

FLAC Free Lossless Audio Codec

libogg

libvorbis

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Opus Audio Codec and opusfile Library

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LAME MP3 Encoder - lame.sourceforge.net

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Version 2, June 1991

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[This is the first released version of the library GPL. It is numbered 2 because it goes with version 2 of the ordinary GPL.]

Preamble

The licenses for most software are designed to take away your freedom to share and change it.

By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users.

This license, the Library General Public License, applies to some specially designated Free Software Foundation software, and to any other libraries whose authors decide to use it.

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When we speak of free software, we are referring to freedom, not price.

Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library, or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you.

You must make sure that they, too, receive or can get the source code.

If you link a program with the library, you must provide complete object files to the recipients so that they can relink them with the library, after making changes to the library and recompiling it.

And you must show them these terms so they know their rights.

Our method of protecting your rights has two steps: (1) copyright the library, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the library.

Also, for each distributor's protection, we want to make certain that everyone understands that there is no warranty for this free library.

If the library is modified by someone else and passed on, we want its recipients to know that what they have is not the original version, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents.

We wish to avoid the danger that companies distributing free software will individually obtain patent licenses, thus in effect transforming the program into proprietary software.

To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License, which was designed for utility programs.

This license, the GNU Library General Public License, applies to certain designated libraries.

This license is quite different from the ordinary one; be sure to read it in full, and don't assume that anything in it is the same as in the ordinary license.

The reason we have a separate public license for some libraries is that they blur the distinction we usually make between modifying or adding to a program and simply using it.

Linking a program with a library, without changing the library, is in some sense simply using the library, and is analogous to running a utility program or application program.

However, in a textual and legal sense, the linked executable is a combined work, a derivative of the original library, and the ordinary General Public License treats it as such.

Because of this blurred distinction, using the ordinary General Public License for libraries did not effectively promote software sharing, because most developers did not use the libraries.

We concluded that weaker conditions might promote sharing better.

However, unrestricted linking of non-free programs would deprive the users of those programs of all benefit from the free status of the libraries themselves.

This Library General Public License is intended to permit developers of non-free programs to use free libraries, while preserving your freedom as a user of such programs to change the free libraries that are incorporated in them.

(We have not seen how to achieve this as regards changes in header files, but we have achieved it as regards changes in the actual functions of the Library.) The hope is that this will lead to faster development of free libraries.

The precise terms and conditions for copying, distribution and modification follow.

Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, while the latter only works together with the library.

Note that it is possible for a library to be covered by the ordinary General Public License rather than by this special one.

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0. This License Agreement applies to any software library which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Library General Public License (also called "this License").

Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms.

A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language.

(Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it.

For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope.

The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it).

Whether that is true depends on what the Library does and what the program that uses the Library does.

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You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) The modified work must itself be a software library.
- b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.
- c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.
- d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application.

Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole.

If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works.

But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library.

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Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library".

Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library".

The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library.

The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work.

(Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also compile or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License.

You must supply a copy of this License.

If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License.

Also, you must do one of these things:

a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library.

(It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

c) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

d) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it.

However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system.

Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities.

This must be distributed under the terms of the Sections above.

b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

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Version 2.1, February 1999

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To protect each distributor, we want to make it very clear that there is no warranty for the free library.

Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program.

We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder.

Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License.

This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License.

We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library.

The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom.

The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License.

It also provides other free software developers Less of an advantage over competing non-free programs.

These disadvantages are the reason we use the ordinary General Public License for many libraries.

However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard.

To achieve this, non-free programs must be allowed to use the library.

A more frequent case is that a free library does the same job as widely used non-free libraries.

In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software.

For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow.

Pay close attention to the difference between a "work based on the library" and a "work that uses the library".

The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

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c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.

d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application.

Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

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(Executables containing this object code plus portions of the Library will still fall under Section 6.)

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libsamplerate

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Version 1.1

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AAC's HE-AAC and HE-AAC v2 versions are regarded as today's most efficient general perceptual audio codecs. AAC-ELD is considered the best-performing full-bandwidth communications codec by independent studies and is widely deployed. AAC has been standardized by ISO and IEC as part of the MPEG specifications.

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5.CONTACT INFORMATION

Fraunhofer Institute for Integrated Circuits IIS

Attention: Audio and Multimedia Departments - FDK AAC LL

Am Wolfsmantel 33

91058 Erlangen, Germany

www.iis.fraunhofer.de/amm

amm-info@iis.fraunhofer.de

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