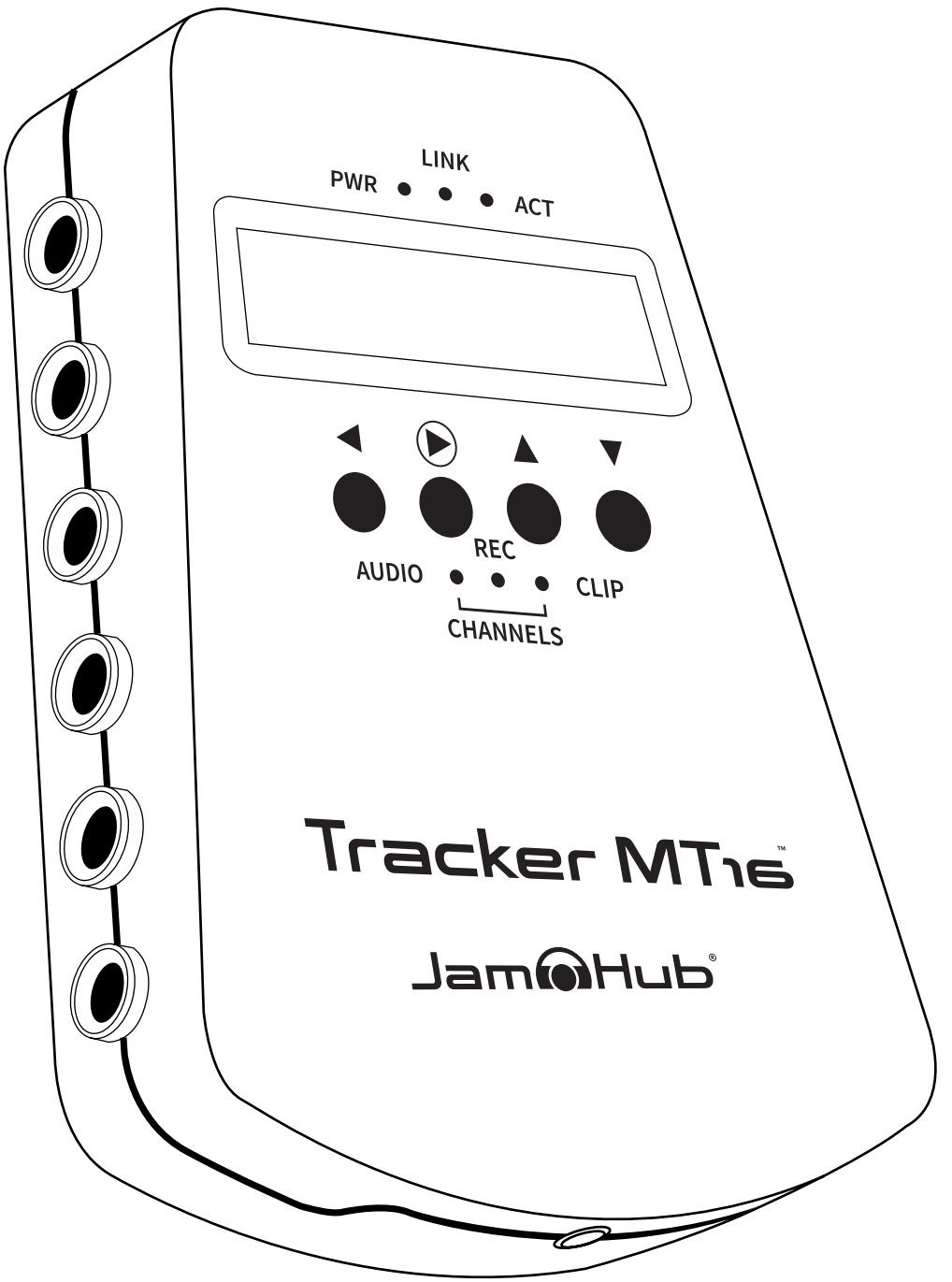
Tracker MT16™

16 CHANNEL MULTITRACK RECORDER



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TRACKER MT16 WELCOME STATEMENT

JamHub's Tracker MT16 lets you capture the energy of your live performance, with unparalleled quality for incredible recordings that let the music shine without being bogged down by room noise and reflection. Thanks for joining the JamHub family with your purchase!

INTRODUCTION

This guide is intended to get you up and recording with your new JamHub Tracker MT16. To get the most out of your experience, please read the full manual thoroughly. If this copy is lost, a copy of the manual can always be downloaded at *www.JamHub.com*. Please direct any support requests to *support@JamHub.com*.

Safety Precautions

Do not let your Tracker MT16 become submerged in water, or otherwise get wet. Do not expose your Tracker MT16 to extremes of temperature, such as in the freezer or near an open flame. Use only the JamHub provided and approved AC adapter. Opening the plastic housing will void the warranty, and expose the user to the possibility of injury and electrical shock. Electrical Interference

For your safety, the Tracker MT16 has been built with maximum protection against external interference and the emission of internal electromagnetic radiation. However, equipment or materials that are highly susceptible to interference or that are prone to electromagnetic emissions should not be placed near the Tracker MT16 during operation, as it is still possible, though unlikely, for data to become corrupted.

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FCC Warning

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- *Reorient or relocate the receiving antenna.*
- *Increase the separation between the equipment and receiver.*
- *Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.*
- *Consult the dealer or an experienced radio/TV technician for help.*

Declaration of Conformity:

JamHub hereby declares that this Tracker MT16™ Multitrack Recorder is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

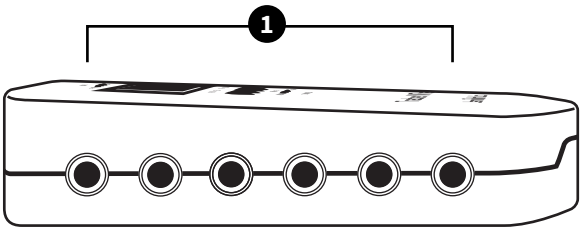
CE 2200

WHAT'S IN THE BOX?

- » Tracker MT16
- » Tracker MT16 Protective Case
- » 16GB class 10 SD RAM Card
- » 5V DC Adaptor
- » JamHub Connect Cable
- » Quick Start Guide

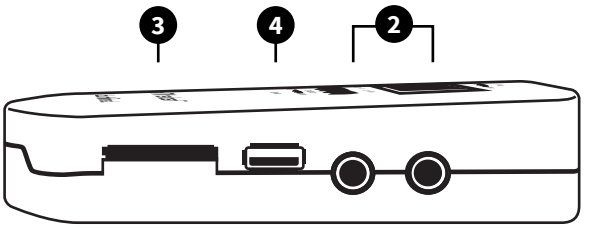
Know Your Connections

Your new Tracker MT16 has a multitude of connection options…



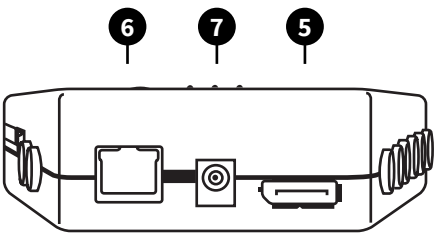
Left Side:

1. **6 Built-in Mono Inputs** – recording to channels 1-6



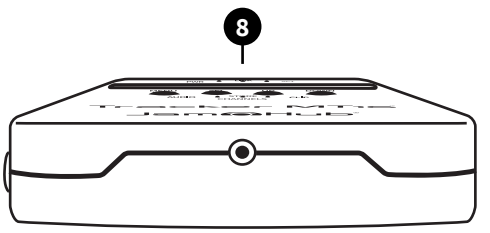
Right Side:

2. **2 Built-in Stereo Inputs** – recording to channels 7-10
3. **SD Card Slot** – for all formatted class 10 SD cards
4. **USB Slot** – for computer updates and file transfer



Back:

5. **Ethernet Port 10/100** – high-speed internet access for upload and download
6. **DC Adapter Input** – for use with the included 5V DC adapter
7. **JamHub Connect Cable Port** – to plug your Tracker MT16 directly into your JamHub studio



Front:

8. **⅛" Headphone Jack** – for instant playback of individual tracks

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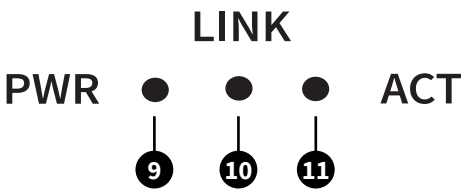
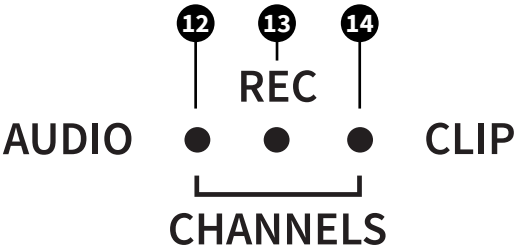
A Plethora of Lights





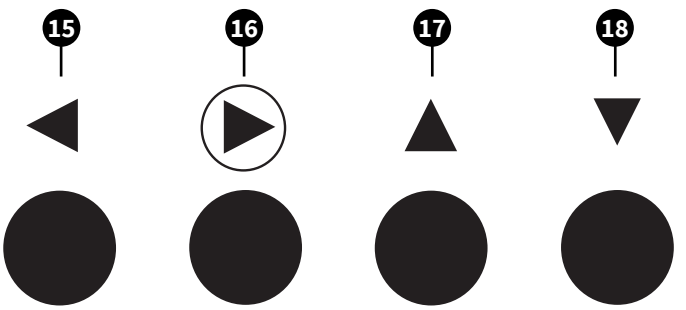
Above Display Lights:

9. **PWR** - Your Tracker MT16 is powered on with proper line voltage and ready for use.
10. **LINK** – Network connectivity has been successfully established and you are ready to upload or download data.
11. **ACT** – Displays real-time data packet activity in and out of your Tracker MT16.

Channel Lights:

12. **AUDIO** – Record mode is set to on and all selected tracks will be recorded once the ▶ button is pressed.
13. **RECORD** – You are capturing sound!
14. **CLIP** – Audio is beyond appropriate levels on one or more channels and one or more channels will need to be lowered at the source.
    Note:
    Any single channel will set the clip light off letting you know that that channel is clipping (distorting) the sound before it gets to the TrackerMT16 inputs. Please lower the level at the source until all channels in the TrackerMT16 is no longer clipping.

A Selection of Buttons



15. ◀ – Press menu to move back one level in the menu hierarchy. Holding down the menu button for 2 seconds will take you to the top menu.
16. ▶ – Selects your current menu option and starts a new recording when the Record Mode is set to On. Hold ▶ down for 3 seconds to save new settings for a selected menu function.
17. ▲ – Navigates up the menu or character hierarchy
18. ▼ – Navigates down the menu or character hierarchy

TRACKER CONNECTIONS

Powering Your Tracker MT16

Plug your Tracker MT16 into the wall using the provided 5V DC Adapter. When your Tracker MT16 is powered on, the **PWR** light will turn blue and the LCD will display, *"Initializing, please wait…"* Your Tracker MT16 is a fully functioning UNIX computer, so it will take a moment to boot up. Once the device is ready to go, you will see the **RECORD** menu.

Connecting Your Tracker MT16 to a Mixer

Your Tracker MT16 is designed to connect to a variety of devices, and can be hooked up in 1 of 3 ways: using the on-board inputs, using the available breakout cable, and using the JamHub Connect cable.

Connect your Tracker MT16 directly to any mixer using the direct out, patch, or Insert Jack. The Insert Jack is a specially designed jack for the send and return of effects loops: rarely used but highly prized space on a mixer.

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ON-BOARD INPUTS

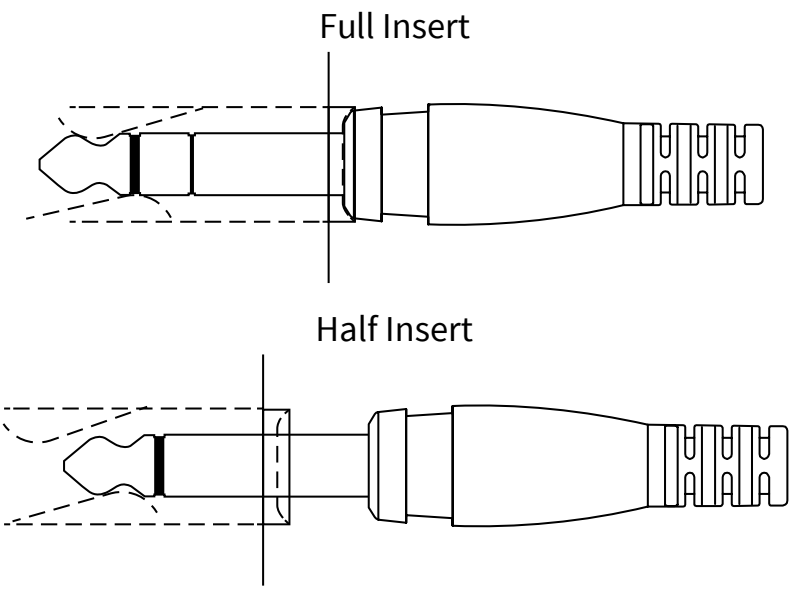
Your Tracker MT16 has 6 mono and 2 stereo built in jacks. Use these to record directly from any audio source. The mono inputs will record to Channels 1-6, and the stereo inputs will record to Channels 7-10.

Using Mono Cables with the Insert Jack

The easiest way to record live audio from a mixer will be through the Insert Jacks. If you are using mono cables to plug your Tracker MT16 into the Insert Jacks, you must use a “Half Insert.”

Why a Half Insert?

Insert Jack signals have 3 components: a Send, a Return, and a Ground. If you fully insert a mono cable, the lack of a Return will cause the signal to ground out. By using the Half Insert technique, you will ensure that only the Send continues through the mixer and you will not shut off the channel strip. If the Channel stops making sound in your mixer, you have fully inserted the cable.



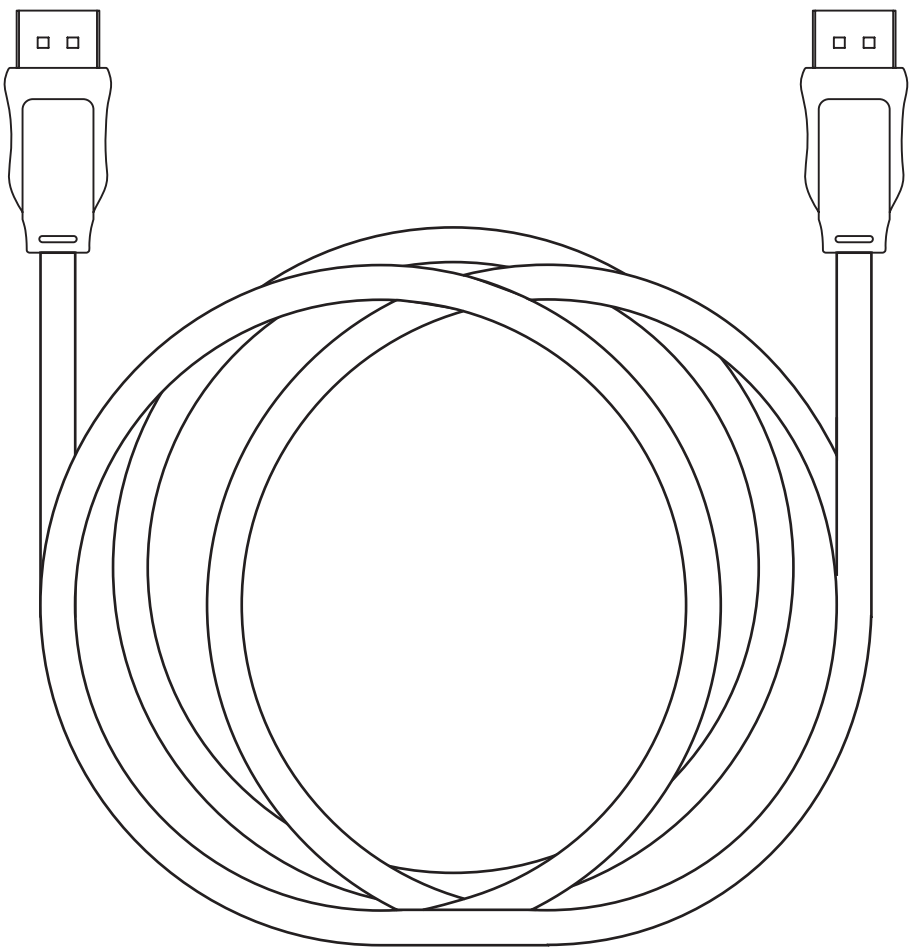
Using Stereo Cables with the Insert Jack

The Tracker MT16’s built-in inputs are designed to allow you to use stereo cables, or TRS cables, without any special consideration. Simply plug your cables fully into the insert jacks and the Tracker MT16’s inputs, arm your channels, and record. Note that stereo cables plugged into an insert jack will avoid the need to use a half insert, but will only record a mono signal.

Connecting Your Tracker MT16 to a JamHub Studio

Your Tracker MT16 comes with one JamHub Connect cable to connect to any JamHub studio. Simply plug the JamHub Connect cable into the JamHub Connect port on the back of your Tracker MT16, and plug the other side into any of the SoleMix™ remote ports on your JamHub studio.

When recording from a JamHub studio, it is important to note that the Tracker MT16 will be recording up to 7 stereo channels of live audio, and that the microphone and instrument inputs on each SoleMix section are summed before being recorded. So if you have a guitar and a microphone plugged into Section 1 (blue) of your JamHub studio, the Tracker MT16 will record these as 1 stereo signal, rather than 2 separate audio sources. The global effects (the FX bus) in your JamHub studio will be recorded in a separate stereo channel should you want it during postproduction.



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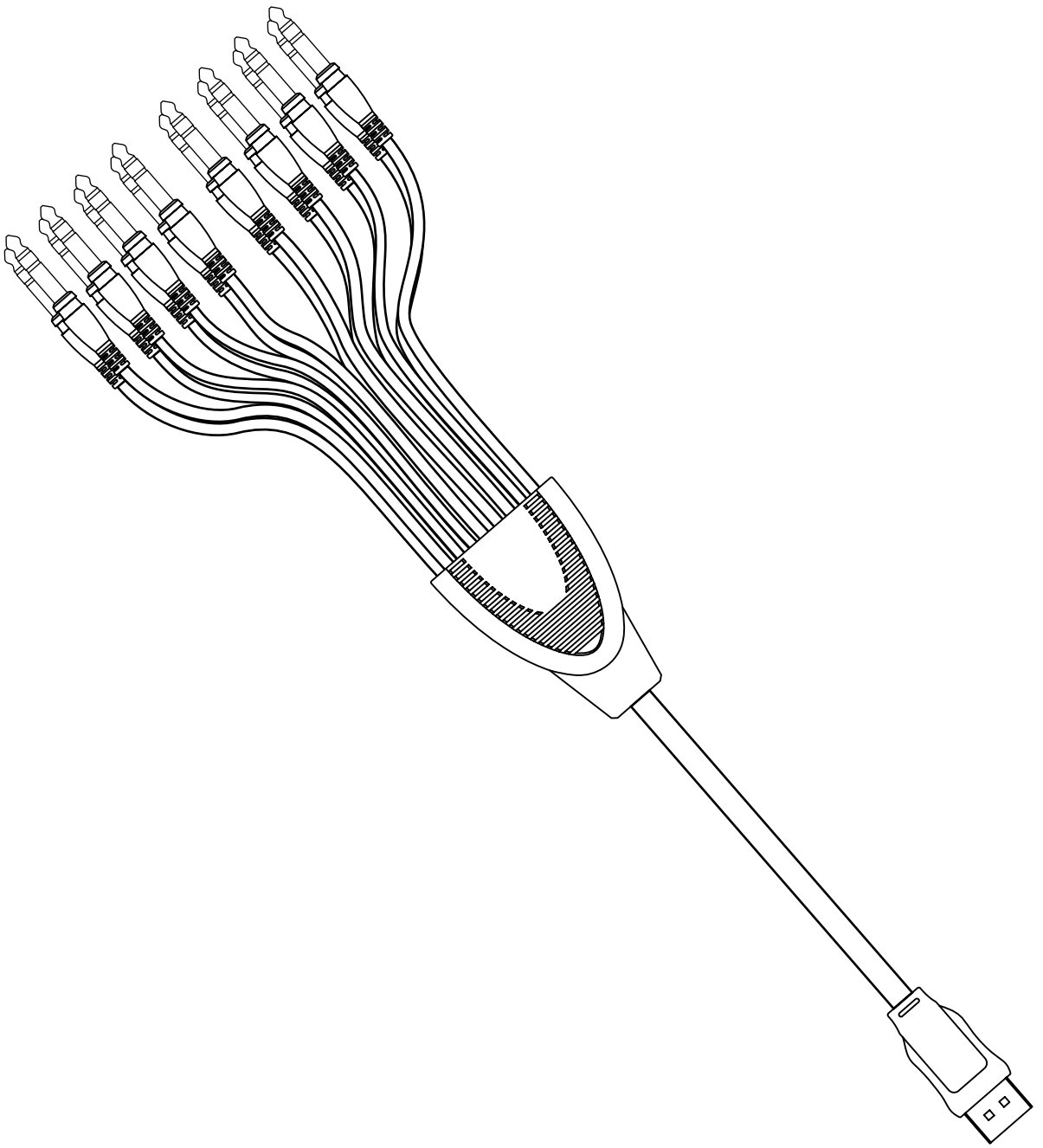
Using the Tracker MT16 Breakout Cable

To gain full access to the Tracker MT16's 16 channels of recording power, you will need to use JamHub's Tracker MT16 Breakout Cable *(sold separately)*, which plugs easily into the JamHub Connect port located next to the AC Adapter Input, and seamlessly connects you to your mixing desk through the Insert Jacks.



SAVE THE MUSIC

How Your Tracker MT16 Saves Files

The Tracker MT16 saves files onto the included SD card. When recording in *"Split Mode"*, each channel's recording is saved as an individual WAV file, MP3 or ALAC file. Most Digital Audio Workstations (DAWs) will open a WAV or MP3, you will need to check with your DAW manufacturer to find out if ALAC compression formats are compatible. In addition, the Tracker **COMBINE** mode will save all tracks recorded in a single WAV file that can be transferred easily across the Internet to Bandlab. Bandlab will decode and breakout tracks recorded and will prepare them for mixing.

Formatting Your SD Card

To format a new SD Card for your Tracker MT16, go to **SETTINGS**, then scroll through the menu to the Format SD option and press ▶.
Be aware that reformatting an SD Card will wipe any preexisting data off that card and you will lose any files stored on it.

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RECORDING

Preparing to Record

Before you record, you will need to set Record Mode, Sample Rate, and Audio Format and arm the individual channels you wish to record. These options can all be found in the Settings Menu.

Arming Channels

In the Channels menu, scroll through the numbered channels and switch those you wish to record to On or Off using the ▶ button.

Menu Top

- » **Setting → Audio → Channels 1-16**
- » Choose channels to record by turning them **ON** or **OFF**.
- » Hold ▶ for 3 seconds to save.
- » Channels are now armed and ready for recording

NOTE: Save space on your SD Card by turning off unused channels. Why record dead air if you don't have to?

Record Modes - Split or Combine

Your files may be saved as a single track WAV, MP3 or ALAC file using split mode, or all 16-channels will be saved as a combined WAV which will appear as one file but open up as 16 channeled tracks using Bandlab cloud or the Combine decode utility that is included on every Tracker SD card from the factory.

Menu Top

- » **Setting → Audio → Record Mode**
- » Choose Split or Combine using ▲ or ▼ buttons
- » Save by pressing ▶ on the desired option, an '*' indicates the current setting

Sample Rate – 44.1KHz, 48KHz, 96KHz

Set your sample rate according to your recording needs, but note that sampling rates are calculated by the speed of the media storage device connected. If you try to record at higher frequencies than the device supports, the Tracker MT16 will not allow you to select that rate.

Menu Top

» **Setting → Audio → Sampling Rate**

» Choose **44.1KHz, 48KHz** or **96KHz** using ▲ or ▼ buttons

» Save by pressing ▶ on the desired option, an **'*'** indicates the current setting

Audio Formats - WAV, MP3, or ALAC

Tracker MT16 supports WAV, MP3 and ALAC file formats. WAV files are more commonly used for high quality recordings. Sending large WAV files across a network maybe to slow, so you can try MP3 or ALAC. Both compress the native WAV file into a compact file package that can be sent on slow network links. To decode them, please check with you DAW manufacturer user manual for more information.

Menu Top

» **Setting → Audio → Audio Format**

» Choose WAV, MP3 or ALAC using ▲ or ▼ buttons

» Save by pressing ▶ on the desired option, an **'*'** indicates the current setting

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Record - ON/OFF

The Tracker MT16 uses the highest quality analog to digital (A/D) converters in the industry, ensuring that you get high quality recordings every time. Setting the Record option to **ON** will turn on the A/D converters and prepare them for recording. With your Tracker MT16 armed for recording, you will see the **AUDIO** LED light turn on and the LCD will display a time counter, audio format and sampling rate.

Menu Top

» Record **ON/OFF**

» Choose Record **ON** or **OFF** using ▲ or ▼ buttons

» Save by pressing ⏵ on the desired option, an **'*'** indicates the current setting

Recording

Once you have armed your Tracker MT16 for recording, you can begin capturing audio by pressing ⏵. The **RECORD** light will illuminate while you are recording, and the counter will indicate how long you have been recording. In addition, you will see the sampling rate and audio format of the file being recorded. The default name of the recording will be **TAKE#**, where "**#**" increases with each new recording.

To stop recording, press ⏵ again. Your Tracker MT16 will remain armed for recording until you press ◄.

Menu Top

» Record **ON**

» Press ⏵ to start and stop recording

» Pressing stop will finalize the recorded file by displaying *"Encoding…"* if **SPLIT** mode was selected.

» Combine mode recording is the quickest and the highest quality mode for recording more than 6 channels at a time.

NOTE: Wait until encoding is complete to avoid any loss of recorded files.

SETTINGS

How to Set Up Your Wireless Network – WiFi

Wireless options are located in the WiFi menu, under Settings. You can turn the Tracker MT16's wireless uploading capabilities on and off, select your network, and enter a password should your network require one.

Menu Top

- » **Settings → Network → WiFi**
- » Press ▶ to change WiFi **ON** or **OFF**
- » Press ▼ for SSID
- » Press ▶ to scan for available WiFi routers or devices
- » Use ▲ or ▼ button to scroll through desired network to connect
- » Press ▶ to select the desired network
- » Press ▼ and enter your password using the ▲, ▼ to scroll character location, then press ▶ and use ▲ and ▼ to change letters and numbers.
- » Save your password by holding down ▶ for 3 seconds
- » You are now connected, use Status menu to check link and strength of connection

What is BandLab™?

BandLab is your world of musical collaboration in the cloud, and the easiest way to upload, store, and edit all your Tracker MT16 recordings. Find out more about wireless uploading online by visiting *www.BandLab.com* for your account today!

How to Link to Your BandLab™ Account

To link your Tracker MT16 to your BandLab account for convenient wireless uploading, storage, and access, you will first need to visit *www.BandLab.com* to sign up for an account. Once successfully signed up, go to your account screen and follow the instructions for finding the Authentication Token in the BandLab Cloud menu and your Ehernet MAC address on Settings menu of your Tracker MT16.

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BandLab Cloud

Menu Top

» **Settings → BandLab Cloud →**

» Press ▶

» AuthToken: XXXX (this number is unique for every Tracker MT-16)

» **Settings → Status**

» Press ▶, use ▲ and ▼ to scroll to Ethernet MAC Address

» Sign up for Bandlab, go to the account screen and enter your authentication token and UID (Ethernet MAC address)

» Go to the Tracker MT-16's Settings menu and find BandLab Cloud

» Use ▼ and ▲ in the Connection Status menu switch between online and offline modes. When your Tracker MT16 is online, you will be able to upload files wirelessly to BandLab.

» While uploading, you will see a % Done indicator on the home screen. Do not unplug or disconnect your Tracker MT16 until this indicator reads 100%.

PLAY

How to Listen to a Recording

At the top menu find Play. Turn the player ON using the ⏵ button, and you will be taken to a menu full of your recordings. Use the ▲/▼ buttons to navigate to the file you wish to review, and press ⏵ to start. Press ⏵ again to stop.

Menu Top

» **Play**

» Navigate using the ▲ and ▼ button to your recorded file

» Press ⏵ to play, press ⏵ to stop playing

Note: Play function only supports single track playback

Ethernet 10/100 Mbps

The Tracker MT16 has a built in high speed Ethernet port to connect to wired network(s) up to 100Mbs. The advantage of a wired network is higher upload and download receive and transfer rates to the Internet as long as your network can support it. In addition, this port will be used for software updates and can be used to stream audio files real-time to a network storage device.

Menu Top

» **Settings → Network → Ethernet**

» **DHCP: ON** (all network configuration is automatic)

» **DHCP: OFF** (all network configuration is manually entered, see your network administrator for more details)

» **Static IP:**

» **Static IP mask:**

» **Static Gateway:**

» **Static DNS:**

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Status

The Tracker MT-16 has a status menu for all devices connected to the Internet. It provides software revision numbers, SD memory space availability and MAC addresses used for identification of each Tracker MT16 on the World Wide Web.

Menu Top

- » **Settings → Status**
- » **DHCP: OFF** or **ON**
- » **WiFi: OFF** or **ON**
- » **WiFi IP**: (the IP address provided by a network when DHCP is on)
- » **Eth IP**: (the IP address provided by a network or manually added by the user)
- » **IP Mask**: (the IP mask provided by a network or manually added by the user)
- » Default Gateway: (the default gateway or router provided by a network or manually added by the user)
- » **DNS** (domain name server IP address)
- » **Eth MAC addr**: (the unique WiFi MAC address of the Tracker MT-16)
- » **WiFi MAC**
- » **Code rev**: (Current software code installed in the Tracker MT-16)
- » **SD Memory** (Available memory for recording)

Supported Storage Devices

Class 10 SD Card, formatted with drivers

Firmware Updates

Remote wireless when connected to BandLab, or Ethernet or WiFi

Troubleshooting

Support staff available for remote troubleshooting

Support staff are available for remote troubleshooting of your Tracker MT16 by contacting JamHub Corp.

1-800-JAM-HUBS

support@JamHub.com

Warranty

1 year

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