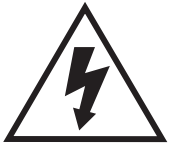
StageScape M20d

Pilot's Guide

Manuel de pilotage
Pilotenhandbuch
Pilotenhandboek
Manual del Piloto
取扱説明書

Important Safety Instructions



CAUTION
RISK OF ELECTRIC SHOCK DO NOT OPEN



WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT REMOVE SCREWS. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THE APPLIANCE TO RAIN OR MOISTURE.

CAUTION: This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of 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.



The lightning symbol within a triangle means "electrical caution!" It indicates the presence of information about operating voltage and potential risks of electrical shock.



The exclamation point within a triangle means "caution!" Please read the information next to all caution signs.

Please Note:
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CE

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Calabasas, CA 91302-1921 USA

The POD, Clifton House, Butler's Leap
Rugby, Warwickshire, United Kingdom, CV 21 3RQ

SERIAL NO: _____

You should read these Important Safety Instructions. Keep these instructions in a safe place

- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water.
- Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- This apparatus shall be connected to a MAINS socket outlet with a protective earthing connection.
- Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer.
- Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.
- WARNING: To reduce the risk of fire or electric shock do not expose this apparatus to rain or moisture.
- The appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.
- Connect only to AC power outlets rated: 100/120V 220/240V 50/60Hz (depending on the voltage range of the included power supply).
- Prolonged listening at high volume levels may cause irreparable hearing loss and/or damage. Always be sure to practice "safe listening."
- Service is required when the apparatus has been damaged in any way, such as:
  - power-supply cord or plug is damaged.
  - liquid has been spilled or objects have fallen into the apparatus.
  - the unit has been exposed to rain or moisture.
  - the unit is dropped or the enclosure is damaged.
  - the unit does not operate normally or changes in performance in a significant way.



Welcome To StageScape M20d

Thank you for purchasing the **StageScape M20d** and welcome to a groundbreaking new paradigm in live sound mixing. Featuring a touchscreen visual mixing environment, StageScape M20d streamlines and accelerates the process of getting great live sound in an intuitive, complete solution that inspires great performances. Massive DSP power delivers comprehensive professional audio processing on every channel. Multi-channel recording, remote control capabilities via one or more iPad® devices, and pristine 32-bit floating point audio quality make the StageScape M20d an ideal mixing solution for live sound. (The M20d remote application is free - iPad® and USB WiFi adapter are not included)

M20d Pilot's Guide

This **M20d Pilot's Guide** will provide you with a basic overview of the features and functionality of your M20d. For more comprehensive details on M20d features and operation, WiFi setup, and recording media requirements, please visit **www.line6.com/manuals** and download the **StageScape M20d Advanced Guide**. While you're online, be sure to register your M20d. Registering sets you up for warranty service, should you have an issue with your M20d, and also qualifies you for special offers, contests and more.

M20d Onboard Help

The M20d's software provides onboard **Help** content, including a **Quick Start Tutorial** to help you set up your M20d. To access the onboard **Help**, select the software **INFO** button [i] in the upper right corner of the touchscreen (Top Panel item **#11** on page 5 of this Pilot's Guide). Then touch the [?] **View Help** button in the **Info Window** and the informative **Help** system will be displayed on the screen.

Visual Mixing

The M20d's visual mixing environment begins with **SETUP** mode and the **Stage View**. As you configure your audio inputs, either by plugging into the auto-sensing XLR and 1/4-inch jacks on the physical I/O panel, or by simply selecting Stage Icons in the touchscreen **Stage Icon Gallery**, a visual representation of your M20d's setup will be automatically configured and displayed on the touchscreen's stage. You can then rename and rearrange the layout of your gear icons to mirror your band's physical stage setup, which makes controlling your live sound mix extremely intuitive.

Your onstage monitors and stereo mains speakers are also automatically configured when you connect them to the M20d's audio outputs. You can easily adjust monitor send levels for every channel, and adjust channel level, pan, mute, solo, and more via the touchscreen software. In **TWEAK** mode you can fine-tune various parameters for any channel, adjust FX settings using the X-Y **Tweak Pad**, or deep dive to adjust individual FX parameters.

The 12 hardware encoders are color coded according to their currently assigned functions, and are user-customizable for controlling various parameters. **Multi-band Feedback Suppression** is available for every input channel, and 4 **Master FX** engines add to each individual channel's FX possibilities. Additionally you can extend the M20d's visual mixing paradigm by controlling any of the touchscreen software's functions via WiFi using an iPad®.

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M20d Features

- 12 high-performance, digitally controlled, auto-sensing mic/line combi inputs (XLR or 1/4-inch)
- 4 additional auto-sensing line inputs
- 2 digital streaming inputs direct from computer, USB drive or SD card
- Stereo line input for integrating MP3 players or other sound sources
- 4 auto-sensing monitor outputs on balanced XLR connectors
- 2 auto-sensing main outputs on balanced XLR connectors
- L6 LINK multi-channel digital networking for integrating L6 LINK-enabled speaker systems
- 7-inch touchscreen visual mixing environment including X-Y Tweak Pad for multi-parameter FX control
- Remote control capability via one or more iPad® devices via an optional USB WiFi adapter
- Multi-channel recording to computer, USB drive or SD card
- Quick-capture recording to internal memory for performance sound check
- Internal 32-bit floating point audio processing
- Massive DSP power provides parametric and dynamic EQs, gates, delays, limiters, multi-band compressors and more
- Multi-band feedback suppression on every mic input
- 4 stereo master FX engines including reverbs, delays, vocal doubler and more
- Save and recall virtually unlimited I/O setups, scenes, and channel processing presets

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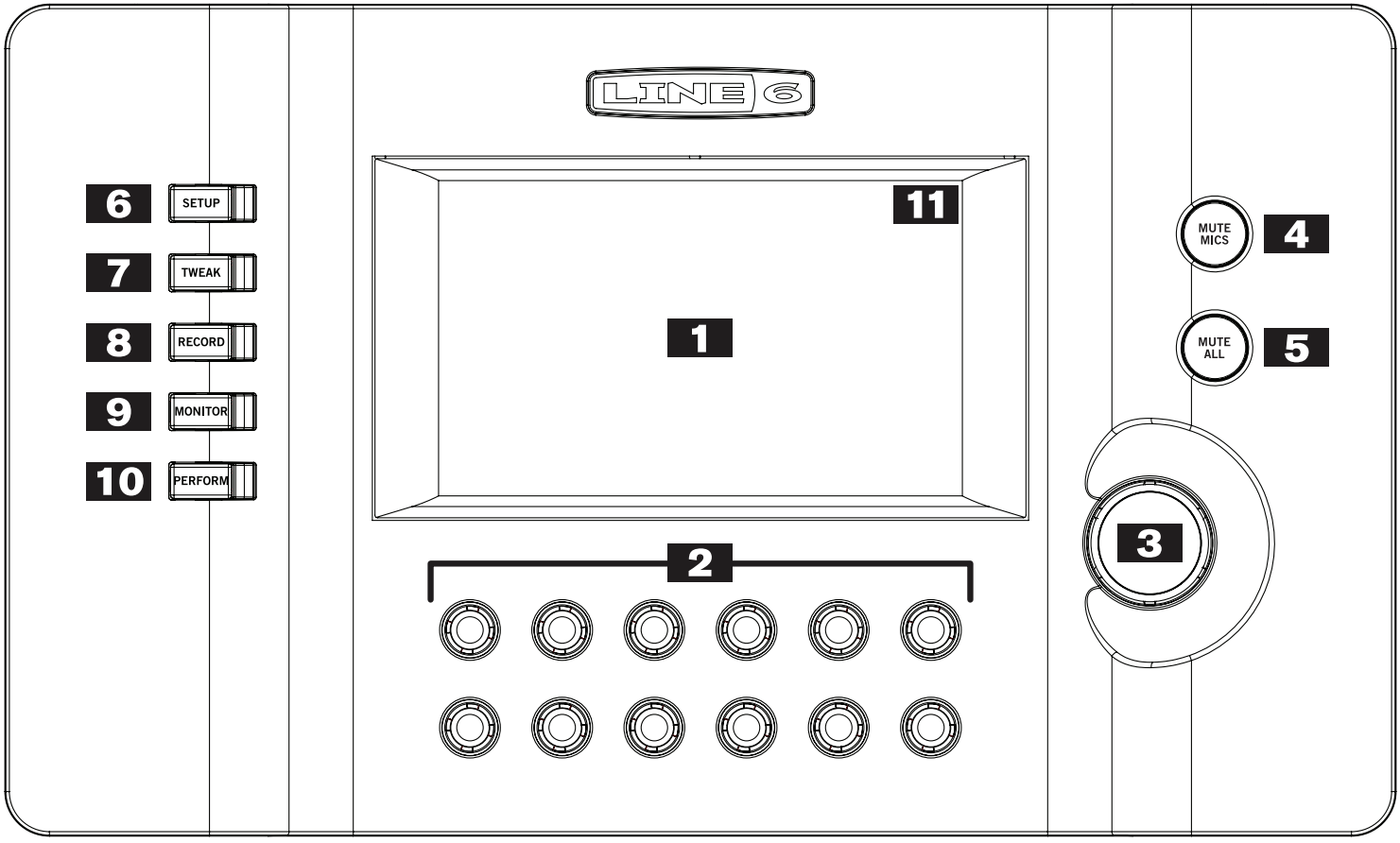
Top Panel Controls



1. **Touchscreen –** This full color touchscreen is your window into the power of the M20d.

2. **Multi-Function Encoders –** These twelve push-knobs light up when active, changing color and brightness depending on their current function. Generally they control the one or two rows of parameters along the bottom of the screen, such as channel volume, monitor volume or effects settings.

3. **Master Volume –** This hardware encoder sets the overall output level of the M20d.

4. **Mute Mics Button –** Press **MUTE MICS** to mute all Mic inputs. Then you can optionally un-mute one or more inputs as desired. This can be helpful when the band goes on break, for example, and you want one microphone to remain active for announcements.

5. **Mute All Button –** Press **MUTE ALL** to mute all audio to the Monitor Outs, Main Outs, and L6 LINK-connected speakers. Note that audio to the **Phones** output is not muted.

6. **Setup Button –** Press **SETUP** to configure your inputs and outputs and gain access to the **Stage Icon Gallery**.

7. **Tweak Button –** Press **TWEAK** to access deeper parameters such as tone and effects settings for the selected icon on the M20d's stage.

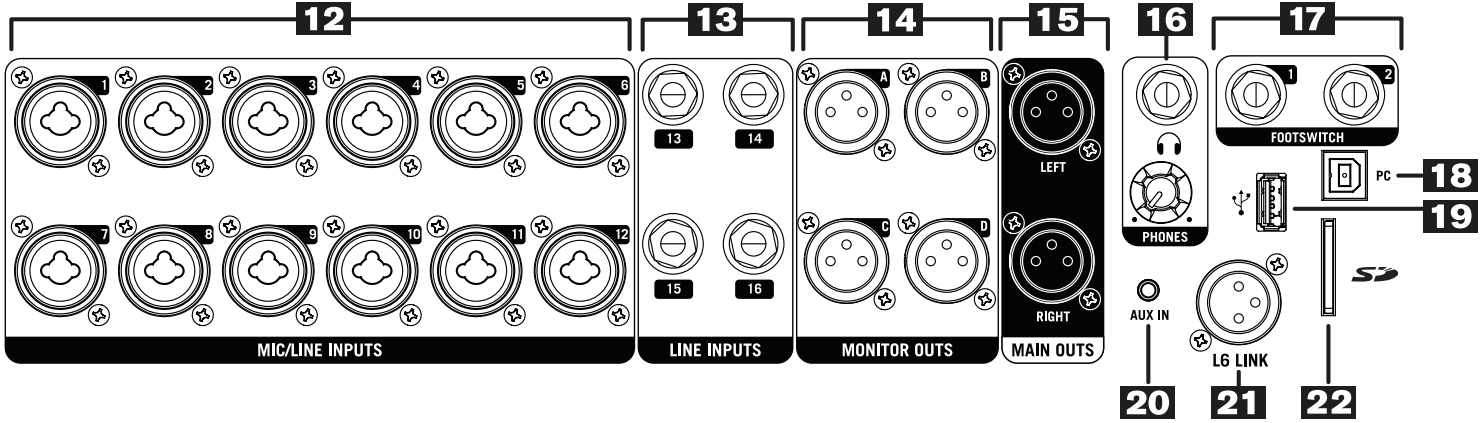
8. **Record Button –** Press **RECORD** to access controls for recording your performance; the M20d can record up to 16 channels plus the main mix.

9. **Monitor Button –** Press **MONITOR** to enter Monitor Mix Mode; in this mode you can adjust stage monitor send levels for all channels.

10. **Perform Button –** Press **PERFORM** to enter Perform Mode; this mode "locks down" various operations to prevent accidental changes during performance.

11. **Info Button –** With the M20d powered on, touch the software **INFO** button [i] in the upper right corner of the touchscreen display to open the **Info Window**, which gives you access to the onboard **Help** system and several other functions such as **Quick Capture** and **System Settings**. As noted previously, select the [?] **View Help** icon to access the **Quick Start Tutorial**, which will assist you in setting up your M20d.

Input/Output Panel Connections



12. Mic/Line Inputs – Connect microphones or line-level equipment to these twelve combi inputs (XLR or 1/4-inch). For mics that require phantom power, 48V phantom power can be enabled for each row of six inputs from the touchscreen software. Each input jack senses whether an XLR or line input is connected, then the touchscreen software adds a microphone or line input icon to the stage accordingly, as well as a **Controller Strip** for each input. A controller strip is similar to a traditional mixer's channel strip, in that it displays each channel's gain level, encoder position, mute, solo or record enable button (depending on current mode), as well as the channel's name. Controller strips are displayed at the bottom of the touchscreen in two rows of six, aligned with the twelve hardware encoders.

13. Line Inputs – Connect 1/4-inch line-level equipment such as keyboards, DJ mixers, drum machines or guitar modelers here. These line inputs are auto-sensing, so whenever a jack is plugged in, the touchscreen software adds a line input icon to the stage, as well as a controller strip.

14. Monitor Outputs – Connect these XLR outputs to your powered, analog stage monitor speakers. These jacks are auto-sensing, so whenever a monitor is plugged in, the touchscreen software adds a monitor icon to the stage, as well as a controller strip.

15. Main Outputs – Connect these XLR outputs to your powered, analog main speakers to hear your stereo mix. Overall level of the Main Outs is controlled by the Master Volume knob on the top panel.

16. **Phones –** Connect 1/4-inch stereo headphones here. Headphones volume is set by the adjacent dedicated **Phones** knob. Always use safe listening practices, starting with a low level, then turning up from there if you need more volume.

17. **Footswitch Inputs –** Connect up to two latching or non-latching footswitches here. Footswitch control preferences can be accessed in the touchscreen software.

18. **USB PC –** This USB jack lets you connect to a computer for direct recording and playback using your existing computer recording software. Download the **M20d Advanced Guide** online at www.line6.com/manuals for additional details.

19. **USB Host –** Attach a USB 2.0 hard drive here to record and play back multichannel audio sessions using the M20d's built-in recording and playback software. You can also use USB storage to save and recall M20d Presets, or store MP3 and WAV files, which the M20d can play as backing tracks or music between sets. For remote control using an iPad®, plug in a WiFi adaptor here. NOTE: not all WiFi adapters may be compatible. Please see the **M20d Advanced Guide** at www.line6.com/manuals for compatibility guidance.

20. **Aux Input –** This stereo 1/8-inch input is for connecting the audio output of an MP3 player, portable CD player, or mobile device. This input is auto-sensing, so whenever a jack is plugged in, the touchscreen software adds an aux input icon to the stage, as well as a controller strip.

21. **L6 LINK™ –** This connection provides a powerful, proprietary link between various L6 LINK-compatible products, enabling easy, reliable, one-cable connectivity. In the case of M20d, L6 LINK-connected speakers can be daisy-chained, allowing all products to sync and communicate uniquely with each other using the M20d as the master device.

22. **SD Card Slot –** Insert a high quality, fast SD memory card here to record and play back multichannel audio sessions, using the M20d's built-in recording and playback software. As with a USB drive, you can also use SD cards to save and recall M20d Presets, or store MP3 and WAV files for M20d playback. Please see the **M20d Advanced Guide** at www.line6.com/manuals for guidance on SD card speed, class and formatting requirements.

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Quick Start Tutorial Overview

The following is an overview of the content provided in the M20d software **Quick Start Tutorial**:

Setup Mode

- Press SETUP to enter Setup Mode, then plug a dynamic mic into Mic Input #1; a generic mic icon will automatically appear on the stage, assigned to Channel 1; the controller strip for Channel 1 will also appear automatically; the XLR jack image on the I/O Panel for Mic Input #1 will be highlighted, indicating a valid Mic Input connection
- Plug a powered mains speaker into Mains Out L; its XLR jack image on the I/O Panel will be highlighted, indicating a valid Mains connection
- Replace the generic mic icon on the stage with a "Female Vocal" icon; you do this by first selecting the generic mic icon, then selecting the Female Vocal icon in the Stage Icon Gallery; this will result in the Female Vocal icon replacing the generic mic icon on the stage

Perform Mode

- Press PERFORM to enter Perform Mode; the controller strips are now taller and a Mute button is displayed for each assigned controller strip
- Adjust the Female Vocal mic level by turning hardware encoder #1, which is color coded to match the Female Vocal's controller strip #1; the controller strip dynamically displays the mic level as you adjust it; touch the controller strip Mute button to mute the vocal; touch it again to un-mute

Tweak Mode

- Select the Female Vocal stage icon then press TWEAK to enter Tweak Mode to view the Female Vocal channel's FX settings
- Select the "Tone" FX tab; the Tone X-Y Tweak Pad will be displayed on the screen
- Make the Female Vocal sound brighter by sliding your finger on the X-Y Tweak Pad towards the upper right corner
- Adjust the Pan position of the Female Vocal by turning hardware encoder #1, which is color coded to match the displayed Pan position indicator

Advanced Tweak

- Touch the "Advanced Tweak" button in Tweak Mode to display the Advanced Tweak FX parameters
- Select the "EQ" FX tab and adjust the high shelf filter by turning the color coded hardware encoder associated with it
- Adjust the low frequency filter by adjusting its color coded hardware encoders

Input Trim

- Manually adjust the Input Trim for the Female Vocal channel
- Engage Auto-Trim; the Auto-Trim process will be explained in detail in the Quick Start Tutorial

Feedback Suppression

- Engage Feedback Suppression for the Female Vocal channel
- Set the Feedback Suppression type to Vocal Mic

Monitor Mixing

- Enter Setup Mode; plug a monitor into **Monitor Outs A**; a monitor speaker icon appears on the stage and a Monitor controller strip is displayed
- Press MONITOR to enter Monitor Mix Mode; adjust the monitor send level for the Female Vocal channel by first selecting the monitor icon on the stage then turning the hardware encoder for the Female Vocal channel; adjust the Monitor level by adjusting its encoder

Record Mode

- Press RECORD to enter Record Mode; the Record transport will be displayed; all inputs display Record enable buttons
- Connect a high quality storage device such as a USB 2.0 hard drive to the M20d's **USB Host** connector (item **#19** on page 7 of this Pilot's Guide); arm the Female Vocal channel for recording; press Record and record some vocal audio
- Stop recording and play back your performance; adjust channel settings as the audio plays back

Building Your Stage View

- Enter Setup Mode again and add more inputs by dragging various icons from the Stage Icon Gallery to the stage
- Arrange your gear icons on the stage to mirror your live band's stage setup
- Rename one or more icons to personalize them to your band members

Quick Capture

- Touch the Info button on the touchscreen - the Info Window will open; press the Quick Capture button to display the Quick Capture controls
- Press Record to capture up to 20 seconds of audio performance to the M20d's internal memory; play it back; it will loop continuously; press stop

Miscellaneous

- Other topics such as Presets, Scenes, Utilities and L6 LINK systems are included in the Quick Start Tutorial