

TAPCO Blend 16 Quick-Start Guide

Before you begin, please make sure that you read the safety instructions on page 2 of the owner's manual (on the supplied CD-ROM).

The Blend 16 mixer is perfect for small to medium-sized live sound reinforcement applications, keyboards and synths, video, and project studio applications.

The USB port on the Blend 16 makes it easy to get audio from your mixer to your computer-based DAW. And we've included a CD-ROM with the full version of Tracktion, our easy-to-use multitrack recording and sequencing software (for the PC or Mac). Refer to the installation instructions on the software CD-ROM to install Tracktion on your computer.

This quick-start guide includes a list of features, a getting-started guide on the inside pages, and a typically lovely hookup diagram for a stereo PA system.



Here's a quick glance at all the features packed into this mixer:

8 mono mic/line channels, with:

- XLR microphone input jack
- 1/4" TRS instrument input jack
- 1/4" TRS insert jack
- Variable input gain with Level Set indicator LED
- Low Cut switch
- Phantom power (globally switched to all XLR)
- 3-band EQ with variable mid frequency
- Pre-fader aux (monitor) send
- Post-fader aux (effects) send
- Pan control
- Mute
- Overload LED
- Assign to subgroup 1-2, 3-4, and main mix bus
- Solo
- 60 mm level fader control

4 stereo line channel pairs, with:

- Left and right 1/4" TRS line input jacks
- Variable input gain with Level Set indicator LED
- 3-band EQ
- Pre-fader aux (monitor) send
- Post-fader aux (effects) send
- Pan (balance) control
- Mute
- Overload LED
- Assign to subgroup 1-2, 3-4, and main mix bus
- Solo
- 60 mm level fader control
- Ch 13/14 has a switchable internal phono preamp for converting phono-level signals from turntables into line-level and adding it to the main mix.
- Ch 15/16 can route the USB stereo output from a computer's DAW output to the main mix. For example, you can add the audio output from Tracktion onto the main mix.

Master section, with:

- 1/4" TRS Aux 1/Mon and Aux 2/Effects send outputs and controls
- RCA tape in and tape out
- Power LED and Phantom power LED indicator
- BNC Lamp connector
- 1/4" Stereo Headphones jack
- Stereo Graphic EQ with bypass, assignable to main mix or monitors
- 16 Internal effects (each with 16 variations) with bypass, bypass LED, input level and overload LED
- USB Output Level control with overload LED, and assign from main mix or Subs 1-2
- Control room and Headphones select from: main mix, CD/Tape, Sub 1-2, or Sub 3-4
- FX Return to Aux 1 control (monitor)
- FX Return to main mix control
- CD/Tape to main mix control
- 8-segment stereo LED VU metering
- Solo LED
- Each subgroup can be assigned to Left and/or Right of main mix
- 60 mm fader for each subgroup and main mix

Rear Panel section, with:

- AC Power Switch and Phantom Power Switch
- IEC AC Power Cord Socket
- Universal power supply accepts AC mains voltages from 100 to 240 VAC
- Balanced 1/4" TRS and XLR stereo main outputs
- 1/4" TRS main inserts
- 1/4" TRS control room outputs
- Four 1/4" TRS subgroup outputs
- USB connection
- Internal antique steam-powered calliope for authentic circus/carnival atmosphere
- OK, we made that last one up



Getting Started

The following steps will help you set up your mixer, and get the levels and adjustments just right. Please follow the instructions in the order they are presented, rather like following the instructions for mixing a Lemon Bundt cake, or running a nuclear power station, for example.

ZERO THE CONSOLE:

1. Turn everything off, including the mixer's rear panel POWER switch and PHANTOM POWER switch.
2. Turn down all channel strip GAIN, AUX SEND 1, and AUX SEND 2 knobs.
3. Center the channel strip EQ and PAN knobs.
4. Turn down the MASTER FX RETURNS and AUX SENDs, CONTROL ROOM, PHONES and other level knobs.
5. Move all FADERS fully down.
6. Center the Stereo Graphic EQ sliders.
7. Make sure all push buttons are in the **up** position.

CONNECTIONS:

1. Connect speakers to your amplifier's outputs (unless you have powered speakers with built-in amplifiers).
2. Plug all the sound system components into suitable AC outlets, properly grounded and capable of delivering correct voltage and adequate current.
3. Make connections from your mixer's MAIN MIX outputs to your amplification system's line inputs.
4. Connect your microphones and instruments to the mixer: Connect microphones to the mono channel MIC jacks. (For condenser microphones, you may have to turn on the PHANTOM POWER switch, so read your Mic's documentation.) Connect instruments directly to the INST 1/4" inputs, and line-level sources (synthesizers, guitar effects, preamps) to the stereo channel LINE IN 1/4" inputs.
5. Connect the USB port to an open USB port on your computer, using the cable provided. Two channels of audio can be sent to your computer for recording, and two channels can return onto the main mix from your Tracktion or other DAW software. See "USB and the Blend 16" on page 19 of the owner's manual for more details about using the mixer with a computer.
6. Zero the console, as described above.
7. Turn on your components' power switches, leaving the amplifier (or powered speakers) until last.
8. Now you are ready to set the levels.

SET THE LEVELS:

1. You can set the levels without hearing the sounds, but if you prefer, connect a set of headphones to the PHONES jack.

2. Choose one of the microphones or instruments connected to the mono MIC or INST inputs.
3. Press that channel's SOLO switch **in**.
4. Have a wandering musician make some noise. If it's a microphone connected to that channel, sing sweetly at the normal volume. If it's a synthesizer, play it at its normal output level.
5. While making music, turn up that channel's GAIN knob until the nearby LEVEL SET LED starts blinking.
6. With SOLO pushed in, you should see the meters grooving along with the music (and the RUDE SOLO light blinking).
7. If the GAIN is set correctly, the sound levels should be nicely hovering around the 0 dB LEDs. If the average seems to be higher, turn down the GAIN. If it seems too low, turn it up.
8. Carefully turn up the PHONES knob and listen.
9. If necessary, apply channel EQ changes.
10. Turn down the PHONES knob.
11. Release the SOLO switch for that channel.
12. Repeat steps 2 through 11 for all other active channels, until all the GAINs are set correctly. You can repeat this procedure later, if needed. Once you get going, you will be surprised how quickly you can set up all the levels.

MAKING THE MIX:

1. Make sure all levels are set correctly, as described in the previous section.
2. Set the SOURCE SELECT switch to MAIN MIX, so your meters (and headphones) will receive the main mix.
3. Add an active channel to the main mix by pressing the L-R switch near the bottom of that channel strip.
4. Turn that channel's FADER up to the **U** mark (0 dB).
5. Carefully turn up the MAIN MIX FADER and listen to the glorious sounds in your main speakers.
6. Repeat steps 3 and 4 until all active channels are added to the main mix. As you add each instrument, shout out its name loudly like this: "Introducing Billy-Bob Beauregarde-Baker on Big Bass Banjo."
7. Carefully adjust the channel FADERS and the Graphic EQ to suit the main mix to your delicate audio senses.
8. To use the internal processor, adjust each channel's AUX SEND 2 FX control to send signals to the processor. Adjust the FX INPUT LEVEL knob so the internal processor is not overloaded (FX OL LED off). Add the processed signal to the main mix using the FX RETURN TO MAIN MIX knob.

9. Now that you have a rough mix going, you may need to readjust the MAIN MIX FADER to a comfortable listening level. The meters should indicate by lighting most of the green LEDs when music is playing, and occasionally light the yellow.

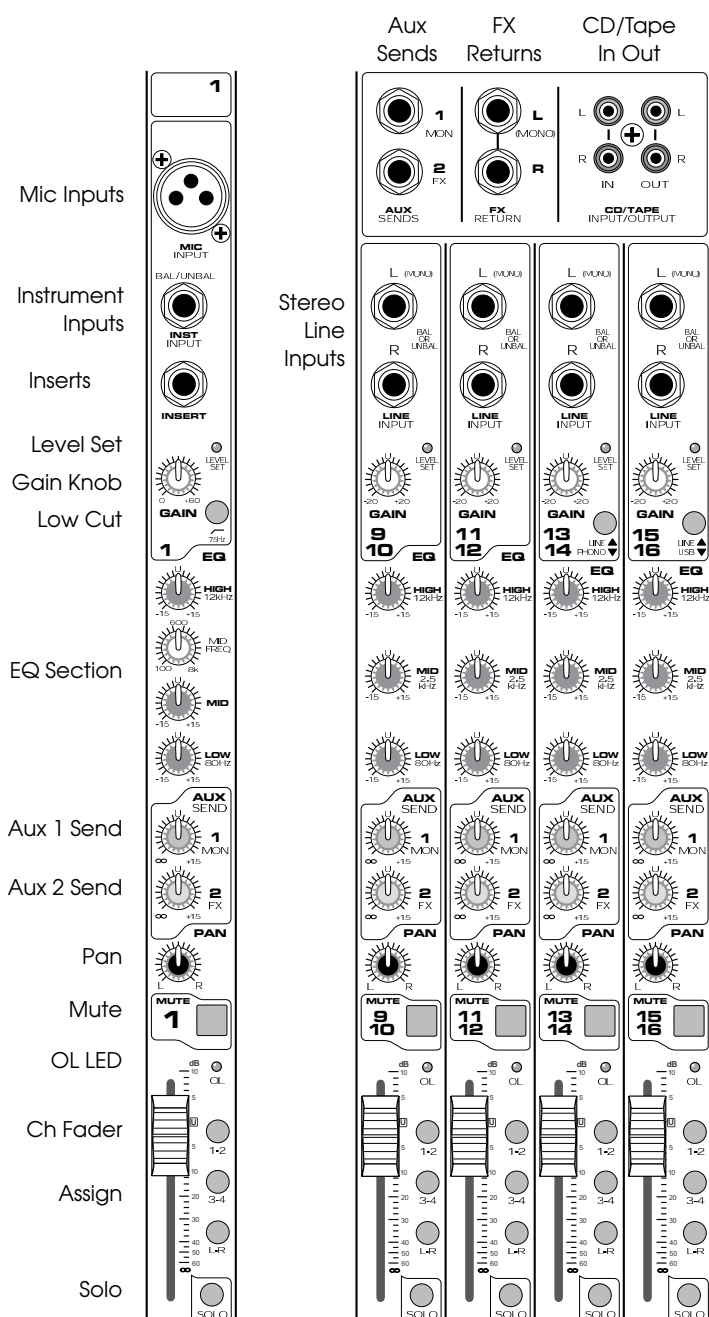
10. Depending on how much time you have, keep tweaking. Walk the room to see how it sounds away from your mixer. Keep tweaking FADERS and EQ as needed. Watch out for any OL overload LEDs blinking, as the band plays on.

A FEW PRECAUTIONS:



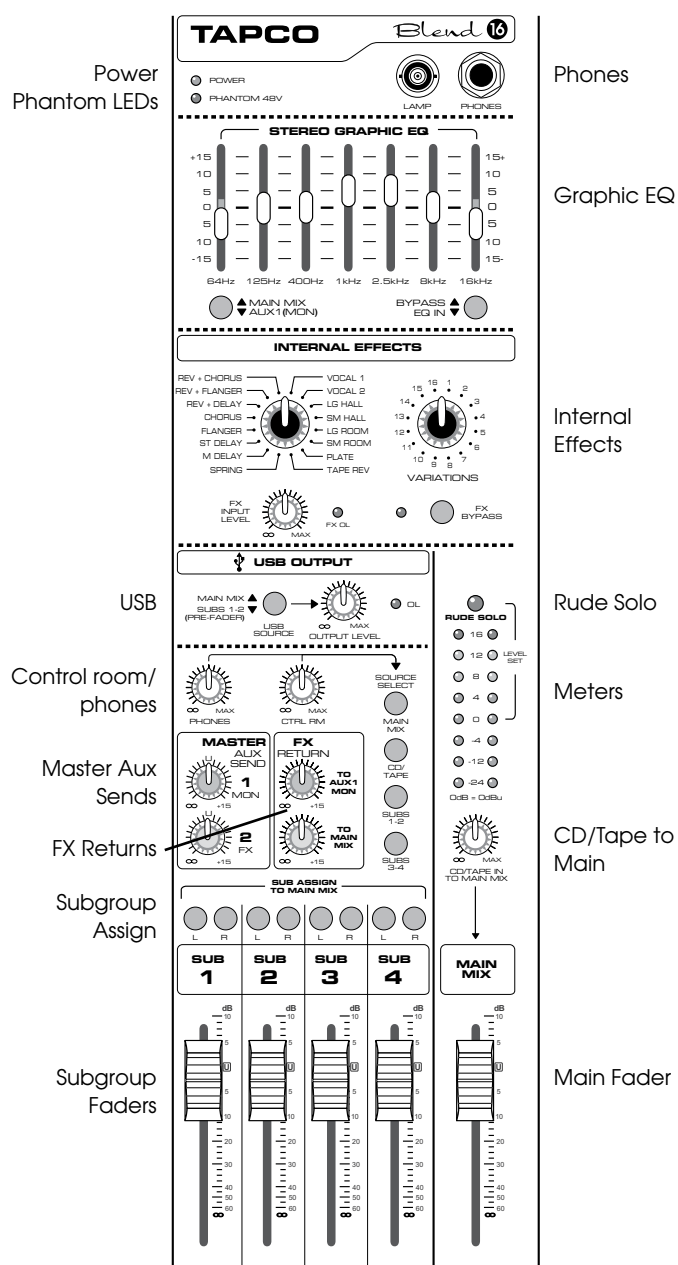
Never listen to loud music for prolonged periods. Please see the Safety Instructions on page 2 of the owner's manual (on the CD) for information on hearing protection.

- Only plug your amplifier's speaker-level outputs into speakers, never to the mixer.
- Never use guitar cables to connect amplifiers to speakers. Next thing, you'll be running with scissors.
- Before making connections to an external amplifier, or reconfiguring an amp's routing, turn the amp's level (gain) controls down, turn the power off, make the changes, turn the power back on, and then turn the level controls back up.
- When you shut down your equipment, turn off any external amplifiers first. When powering up, turn on the amplifiers last.
- Save the shipping box and packing material! The box can also be turned into a unique hat for attending Audio Society meetings, or stepping out in style.



Mono Ch 1-8

Stereo Ch. 10-16



Master Section

Hookup Diagram

Stereo PA system

