



Video Equipment Rentals

## Mackie Onyx 1640 16-Channel Mixer

### **Q. What makes the Onyx Microphone Preamps so special?**

A. Since the Onyx Preamp is designed for use at "real world" gain settings, it will handle anything from +22 dB line level down to microvolt-level signals from a ribbon mic, without adding noise! With its clean sound, impressive headroom and dynamic range you can almost hear the carpet patterns. Connect whatever mic you like into the Onyx preamp, and rest assured, you will get transparency, headroom and detail that's simply unrivaled.

### **Q. What is "Planet Earth" Power?**

A. This refers to the Onyx mixers ability to accept anything from 90V to 265V and 47Hz to 400Hz (yes, 400Hz - if you need to plug your Onyx mixer into a Boeing 747's electrical system, you can). The power supply is designed to provide greater electro-magnetic isolation, better protection against AC line noise, greater reliability, and your Onyx mixer will continue to deliver high-definition mixes regardless of voltage sags or peaks.

### **Q. Do the Onyx mixers have instrument inputs?**

A. Yes. The first two channels on each Onyx mixer are selectable between Mic and instrument inputs. The instrument input is an unbalanced high impedance (Hi-Z) input that works quite well for guitars. This means you won't need a direct box to connect your guitar to the mixer for recording or practice. Pretty cool, huh? However, you WILL need a direct box for long cable runs in a live situation as this is an unbalanced connection and you could risk getting extra noise in your system. Also note: you can plug other line level devices into these inputs if needed.

### **Q. Can the Rotopod feature be found on any Onyx mixers?**

A. Yes. The Onyx 1640 is equipped with the famous Mackie Rotopod! This allows you to rotate the inputs and outputs to the back or bottom of the mixer right out of the box. With the optional Rotopod kit, you can also rotate the jacks to the top of the console. Quite handy for setting the unit in a rack or on a table top!

### **Q. How many spaces in my rack will the mixer take up?**

A. The 1220 takes up 10 rack spaces, the 1620 takes 12 spaces, and the 1640 has variable configurations with the Rotopod, so it takes anywhere from 12-17 spaces. With the pod rotated to the bottom of the unit, it takes 12 spaces. The default configuration (pod facing back) is 14 spaces, and the pod facing up (so the jacks are on top) is 17 spaces. The latter (pod facing up) requires our optional Rotopod kit, which is available for order from your Mackie dealer.

### **Q. The Recording Outs use a strange connector on them. What is that, how is it used, and how is it wired?**

A. This connector is generally referred to as a DB-25 connector and is the exact same connection found on Mackie hard disk recorders such as the HDR24/96 and other various digital recording products from other manufacturers. To make the connection to a recorder, you may need a DB-25 breakout cable. These generally have the DB-25 connector on one end then fan out to 8 balanced 1/4" TRS or XLR cables. You could also connect straight through using a DB-25 to DB-25 cable should you be using an HDR24/96 or other recorder with DB-25 inputs. DB-25 cables are available from most major cable manufacturers; check with your local Mackie dealer for more details. Our DB-25 connectors follow the Tascam pinout commonly followed as an industry standard. Details on exactly how the pins are wired can be

found in Appendix B in the Onyx Owner's Manual, which is available for free download off our website.

**Q. Where do the Recording Outs and Firewire output take their signal from in the channel strip? How about the Firewire output from the Mains?**

A. Both outputs (Recording Out and Firewire) are Post-Gain, Pre-Insert, Pre-EQ, Pre-Mute, Pre-Fader. The Main Out tap is Pre-Main Mix fader. This allows for the greatest possible flexibility in both live and recording studio scenarios. When you're using the mixer for live sound, you can record your show without having to worry about changes to the FOH system showing up on your recording. In the studio, this configuration allows you to record the cleanest signal possible while allowing you to apply EQ, compression, and effects during mixdown.

**Q. With which audio software applications will the Onyx FireWire card work? What are the recommended system requirements?**

A. The Onyx FireWire Card supports ASIO/WDM for Windows XP and Core Audio for Mac OSX.3 or later. Any audio application that supports these standard formats will in turn support the FireWire Card. While a lot of computer hardware out there will work just fine with the Firewire card, it's probably a good idea to have hardware that meets or exceeds these specs:  
Recommended System Requirements:

- Mac: OSX.3 or later\*, G4 Processor, available Firewire connector, dedicated audio drive, 256 MB Ram or more
- PC: Win XP, Intel P4 or AMD Athlon Processor, available Firewire connector, dedicated audio drive, 256 MB Ram or more

**Q. Which sampling rates does the FireWire card support?**

A. The Onyx FireWire Card will support 44.1, 48, 88.2, and 96k at 24 bit.

**Q. How can I hear the Onyx FireWire returns through my Onyx mixer?**

A. An additional button labeled FireWire will select the 2-track FireWire return as an audio source for the control room/phones matrix.

**Q. Can the same Onyx FireWire Card be used in any of the Onyx mixers?**

A. The Onyx FireWire card is the same for the Onyx 1220, 1620, and 1640. The card provides 14x2 I/O with the Onyx 1220, and 18 x 2 I/O with the Onyx 1620 and 1640.

**Q. How much latency will be introduced when using the Onyx FireWire Card?**

A. At the lowest setting, the latency of the Onyx FireWire Card can be virtually imperceptible. Having a good amount of processing power and RAM for your computer is also a good idea. (See above question for system requirements.)

**Q. In what applications would the Onyx FireWire Card be useful?**

A. The ability to add FireWire I/O to an analog mixer has a lot of cool applications.

- Live: Simultaneously capture a multi-track recording of a band on your laptop while utilizing the Onyx mixer for PA and monitor mixes.
- Studio: You no longer need a separate mixer and computer interface for all of your instruments and microphones.
- Recording: You can now configure up to 6 separate (mono) headphone mixes with no latency for headphone mixes while tracking a band.

