

In-Ear Monitor (IEM) Mobile Setup Proposal

This document outlines a comprehensive mobile IEM setup designed specifically for your touring band's requirements. The system is designed to be portable, reliable, and within the \$3,000 budget while meeting all specified needs: Support for 2 vocalists with independent mixes Analog mixing board with onboard compression, reverb, and delay RF wireless transmission for mobility Easy transportation and quick setup Professional-grade components for consistent performance

Equipment Recommendations

Shure PSM300 2-Channel IEM System **Price:** \$1,099.99 **Source:** Sweetwater The Shure PSM300 is a professional-grade wireless IEM system that provides clear, stereo sound with up to 300 feet of wireless range. This system includes: P3T-Rackmountable stereo transmitter 2 P3R bodypack receivers 2 SE215 earphones with multiple ear tips Rackmount kit and all necessary cables The PSM300 operates in the reliable 470–542 MHz frequency range and offers excellent audio quality with minimal latency, making it ideal for live performance applications.

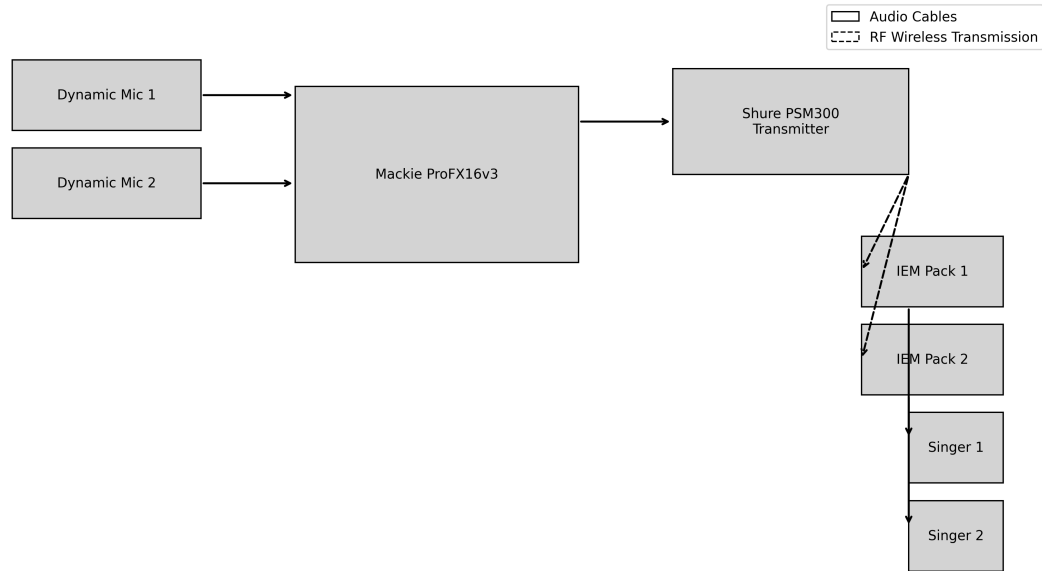
Mackie ProFX16v3 16-Channel Analog Mixer **Price:** \$499.99 **Source:** Sweetwater The Mackie ProFX16v3 is a professional analog mixer with built-in digital effects including compression, reverb, and delay. Key features include: 16 channels with Onyx mic preamps Built-in ReadyFX™ effects processor with 16 presets 2 FX sends for creating custom monitor mixes USB connectivity for recording Durable metal chassis for road use This mixer perfectly meets your requirement for an analog board with digital effects processing capabilities, allowing you to create independent vocal mixes with the desired processing for each singer.

Cables and Accessories To complete the setup, the following cables and accessories are included: 2 XLR cables (20ft) - \$40.00 2 1/4" TRS cables (10ft) - \$30.00 Power conditioner/surge protector - \$80.00 Cable management kit (velcro ties, gaff tape) - \$25.00 Flight case for mixer and accessories - \$150.00 IEM transmitter rack case - \$120.00 Portable folding table (for side-stage setup) - \$60.00

Signal Flow Diagram

The following diagram illustrates the signal flow for the IEM system:

IEM System Signal Flow Diagram



Cost Breakdown

The following table shows the complete cost breakdown for the IEM mobile setup:

Item	Quantity	Unit Price	Total
Shure PSM300 IEM System	1	\$1,099.99	\$1,099.99
Mackie ProFX16v3 Mixer	1	\$499.99	\$499.99
XLR Cables (20ft)	2	\$20.00	\$40.00
1/4" TRS Cables (10ft)	2	\$15.00	\$30.00
Power Conditioner	1	\$80.00	\$80.00
Cable Management Kit	1	\$25.00	\$25.00
Flight Case (Mixer)	1	\$150.00	\$150.00
IEM Transmitter Rack Case	1	\$120.00	\$120.00
Portable Folding Table	1	\$60.00	\$60.00
			\$2,104.98
			\$178.92
			\$2,283.90

Conclusion This IEM mobile setup provides a professional, reliable solution that meets all your requirements while staying well within the \$3,000 budget. The total cost of \$2,283.90 leaves room for additional accessories or future upgrades. The system is designed for easy transportation and quick setup at various venues, with dedicated cases for protection during transit. The analog mixer with digital effects allows for the creation of independent vocal mixes with compression, reverb, and delay as requested. As your IEM Tech, I will ensure proper setup and operation at each venue, regardless of whether the setup area is side stage, by the FOH mixer, or elsewhere.