



# iFace

## Portable Audio Player Interface

### Features:

- Properly interfaces consumer-grade portable audio players and laptop computers to professional sound systems
- Stereo mini (1/8") input jack and individual RCA left and right input jacks provided
- Transformer-isolated XLR male output jacks provided
- Stereo/mono switch sums inputs to create a true stereo output or a mono audio output feed from either XLR connector
- Rugged "Uni-Box" construction provides protection and EMI/RMI shielding

## Description

The Pro Co iFace Portable Audio Player Interface is a roadworthy aluminum-housed device that allows simple and reliable connection of stereo -10dBV audio devices such as MP3 players, Apple iPods, laptop computers and consumer-type CD and DVD players to the balanced microphone inputs of professional audio mixing consoles.

The iFace provides both a 3.5 mm (1/8") and recessed left/right RCA inputs for easy connection with standard patch cables and a stereo/mono switch to provide passive summing to a dual mono feed where required.

The outputs are isolated via audiophile-grade Pro Co MBT-1 Microphone Bridging Transformers and appear on standard 3-pin XLR male connectors. The transformers offer wide

bandwidth and low distortion and phase shift, and are magnetically shielded in mu-metal cans and electrostatically isolated with dual Faraday shields. The result is near-ideal rejection of common-mode signals from all sources of RFI and EMI, including radio pickup, SCR dimmers and 60 Hz hum.

The ruggedly constructed "Uni-Box" enclosure is formed of extruded aluminum side channels and 16-gauge steel top, bottom and end plates, designed to protect switches and connectors from accidental damage while also providing magnetic shielding for the circuitry. Industrial-grade connectors and switches provide trouble-free reliability even in abusive situations such as remote broadcast and recording operations.

## Controls:

**STEREO INPUT:** 3.5mm (1/8") phone jack accepts signals from unbalanced stereo sources including desktop and notebook computers and MP3 and DVD players with nominal -10 dBV outputs.

**INPUT IMPEDANCE:** Approximately 1.0 kohm.

**LEFT/RIGHT INPUTS:** Recessed RCA jacks wired in parallel to the STEREO mini input.

**STEREO/MONO SWITCH:** Provides resistive mixing to combine stereo sources for mono output for applications where stereo operation is not required.

**LEFT/RIGHT OUTPUTS:** Male 3-pin XLR-type output jacks for connection to standard balanced microphone inputs of professional audio mixers. Recommended input impedance: 1.0 kohm minimum.



# PRO CO *TradeTools*™ • iFace • Portable Audio Player Interface

## Typical Performance:

- VOLTAGE LOSS (@ 1.0 kHz):**  
1.0 dB
- INPUT IMPEDANCE:**  
1050 ohm @ 1.0 kHz
- SECONDARY SOURCE IMPEDANCE:**  
270 ohm @ 1.0 kHz
- TOTAL HARMONIC DISTORTION:**  
< .1% 30 Hz-20 kHz @ -15 dBv output
- FREQUENCY RESPONSE (Re:1.0 kHz);**  
+ .2dB @ 20 Hz  
- .6dB @ 20 kHz  
- 4dB @ 65 kHz
- INSULATION:**  
> 600V winding/shield/winding

## Engineering Specifications:

The portable audio impedance-matching unit shall be suitable for interfacing one (1) stereo unbalanced -10dBV line-level source to one (1) or two (2) balanced or floating low-impedance (1.0 kohm nominal) microphone preamplifier inputs. There shall be one (1) 3.5mm stereo input jack, wired in parallel to two (2) recessed RCA-type jacks. These inputs shall be provided with a miniature rocker-type switch and resistive summing network to provide signal combining for monaural operation as required. There shall be two (2) Pro Co MBT-1 Microphone Bridging Transformers. The magnetic shield of the transformer shall be connected to the enclosure. The primary electrostatic shields of the transformers shall be connected to the unbalanced input connectors and to the enclosure. The secondary electrostatic shields shall be connected to pin 1 of the appropriate XLR-type output connector.

The enclosure shall be constructed in the Pro Co "Uni-Box" design with 16-gauge steel black zinc finish top and bottom plates, 16-gauge black texture powder-coated steel end plates and black anodized aluminum side channels. Control functions shall be identified by a printed Lexan top panel overlay. Switches shall be of the miniature "rocker" type and shall be recessed. The enclosure shall be provided with two (2) miniature handles at front and back and four (4) non-conductive feet. The dimensions of the unit shall be 4.875" D x 4.375" W x 1.75" H (123.8mm D x 111.1 mm W x 44.4mm H).

The portable audio player impedance-matching unit shall be a Pro Co iFace.

## Pro Co Model MBT-1 Transformer

The MBT-1 is a carefully designed, custom-built 1:1 microphone bridging transformer whose characteristics are optimized for use with balanced low-impedance microphones or similar sources.

Special winding techniques and a high-permeability (80% nickel) core lamination preserve full frequency response while minimizing signal losses and other "loading" effects. Separate electrostatic shields for primary (input) and secondary (output) windings reduce capacitive coupling of ground-borne electrical noise between main and stage monitor or recording mixers, eliminating annoying 60-Hz hum and buzz. The source impedance of the MBT-1 is very similar to that of a low-impedance microphone to ensure proper matching to the input circuitry of the mixer. The result is clean transient response (no overshoot or ringing) and low distortion even at low frequencies and high input levels.

