

# SUTHERLAND HAS GONE...

SUTHERLAND

The **Phono Loco** is loco for users, dealers, reviewers, distributors, and Sutherland Engineering.

More importantly, the **Phono Loco** takes full advantage of it's off-the-chain design freedom. It delivers an exquisitely beautiful performance.

Ron Sutherland



LOCO MASTERMIND

### SUTHERLAND

## **Loco** About

This newest phono preamp from Sutherland is not for everyone. There are several unusual engineering decisions that many will be uncomfortable with. However, those that can get past the obstacles will be rewarded with a life-like, emotionally involving experience.

#### **Cabling Requirements**

The Phono Loco requires a balanced signal connection to the cartridge. There is no RCA type input connector. **Only XLR.** This decision was not made lightly. As the circuitry options were explored, the best choice required a floating input signal. The conventional, single-ended RCA connection would have forced undue circuit complexity and compromises to the signal integrity. In the **Loco**, performance triumphs over convenience and convention.

#### **Loading Options**

**There are no loading options**. The transimpedance input gain stage appears to be a virtual short to the cartridge. The cartridge's output voltage is therefor zero. There is no input voltage. It is the current from the cartridge that is the musical signal.

#### Gain

Conventional voltage amplifiers express gain in dB (as the ratio between the input voltage and the output voltage). With a transimpedance amplifier, input is **current** and the output is **voltage**. For that topology, gain is expressed in Ohms. Gain is approximately **10k Ohms at 1 kHz**.

Most MC cartridges will work well at the medium gain setting. There is also a low (*voltage down 6dB*) setting and a high (*voltage up 6dB*) setting.

#### **Your Dealer**

If your dealer has decided to carry the **Phono Loco**, they will have the knowledge and experience to make it all go smoothly.

