MOON Amplification is proud to bring you this quality Organ Circular Connector to Line-Level Adapter Cable built in our own workshop from rugged industrial grade parts. You can depend on it for years of live performance. We would rather hear your music, but if there is anything about this adapter cable that does not meet your expectations, please let us know at **info@moonamp.com**.

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# Organ Circular Connector to Line-Level Adapter Cable

Instructions for Installation and Use

**MOON Amplification inc** 

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## Organ Circular Connector to Line-Level Adapter Cable

This adapter cable is designed to connect the proprietary interface used on many tonewheel organs to a standard line-level audio input, such as found on audio mixers, musical instrument amplifiers and the MOON Amplification skamp mixer/kontroller.

#### Background

Tone-wheel organs with 5-pin and 6-pin connectors had audio signals and AC power lines in a single cable that runs from the organ console to the speaker cabinet. To combat hum pickup by the audio lines, the organ output is set to a very high level and arranged as a balanced signal across two pins. Often the rotary speaker speed was controlled by a large DC Voltage imposed on the audio signal. The audio signals must be attenuated and conditioned before connecting to a line-level audio input or damage to the equipment may occur.

More recent tone-wheel and clone-wheel organs often have an 11-pin circular connector interface. This connector does not have AC power on it, but there are other signal lines that may cause interference. The high Voltage audio signal is maintained, but in this case it is unbalanced with only a single audio signal and a ground used. The audio signal must be attenuated before connection to a line-level audio input.

#### Caution!

5-pin or 6-pin organ connectors often have AC mains power on two of the pins and 300 Volts DC on another pin. If you are not properly equipped to test such signals, please arrange for the appropriate help.

#### MOON Amplification Adapter Cable Design

This adapter cable uses the highest quality circular connector with a fully insulated backshell with secure cable clamp. There are no connections to the AC power pins for your safety.

A miniature circuit board in the backshell holds the components that attenuate the high Voltage audio signal to line-level and block the DC control Voltages.

The XLR connector for balanced cables or phone plug for unbalanced cables are a high quality Neutrik brand connector for years of trouble-free service.

#### Instruction for Use

Please turn off power to the organ and turn down the level control on the line-level input before connecting the cable. Turn on power to the organ and set controls for a normal output. Slowly increase the level control on the line-level input to the desired

level. Beware that the signal coming from an electro-mechanical organ may have considerable key-clicks and other transients, so some adjustment of high frequency response may be desirable. Experience has shown that organs modified with a thirdparty phone plug audio tap box introduces a hum causing groundloop. Unplugging the cable from the audio tap box should kill the hum

### Information for reference

The following pinouts are supplied for your reference and to indicate the wiring of this adapter cable. These pinouts assume the standard used by Hammond organs. Other brands of organs may have a different pinout. Also, beware that some organs may have been modified over their lifetime to interface with nonstandard tone cabinets.

#### 5-Pin Organ Connector

Pin 1 - Audio +	XLR pin 2
Pin 2 – No connection	
Pin 3 - Chassis ground	XLR pin 1
Pin 4 – No connection	
Pin 5 - Audio -	XLR pin 3

#### 6-Pin Organ Connector

Pin 1 - Audio +	XLR pin 2
Pin 2 – Chassis ground	XLR pin 1
Pin 3 – No connection	
Pin 4 – No connection	
Pin 5 – No connection	
Pin 6 - Audio -	XLR pin 3

#### 11-Pin Organ Connector

Pin 1 – Audio	Phone plug tip
Pin 2 – No connection	
Pin 3 – No connection	
Pin 4 – Signal ground	Phone plug sleeve
Pin 5 – No connection	
Pin 6 - No connection	
Pin 7 - No connection	
Pin 8 – No connection	
Pin 9 – No connection	
Pin 10 - No connection	
Pin 11 – No connection	