



Date: 19.09.1993

## CO - LP300 LIGHTPOWER



## MANUAL



Description:

CO-LP300 Lightpower is an AC-power supply for the cuelights in a radio- or television-studio. It can deliver a maximum of 3 Amp. 24VAC to the lights. It is, as shown in schematic on page 6, divided into 3 main sections each fused with 1.6AT Fuses.

It contains of a 24VAC source, 24VDC power supply for the relays, 4 relays for the STUDIO-, CONTROLROOM-, DIRECT- and LINE-functions. There is an input for the relays where You can choose to use common earth, common + or use an external +24VDC source for switching.

NB! In order to be able to run the relays with common earth or common + we could not install protection diodes on the coils of the relays. One have to have that in mind when using any kind of semiconductor to do the switching of the relays. There is two outputs, A and B, arranged in such a way that You should use a 4-way cable to each section of lights (PFK4x0.50mm<sup>2</sup>). The Combicon connectors on the outputs is capable of handling high currents, but do not connect or disconnect them with the power on. NB!

The lightpower will deliver between 24 and 28 VAC to the bulbs depending on the line voltage and how much current You draw. We recommend the use of 28V bulbs, that will give almost as high intensity as the use of 24V bulbs on a 24VDC regulated supply, but will increase the lifetime of the bulbs considerably.

CO-LP300 goes nicely together with the CO-SCC103 Studio Control Center and the CO-SL143EG Studio Lineamplifier. Here is a suggestion to how You can connect those three together to give You the ultimate of lightindication. We are using two PFK4x0.22mm<sup>2</sup> cables, one between the LYS-connector of the CO-SCC103 and the Lightpower input, and one between the LIGHT-connector of the CO-SL143EG and the Lightpower input.

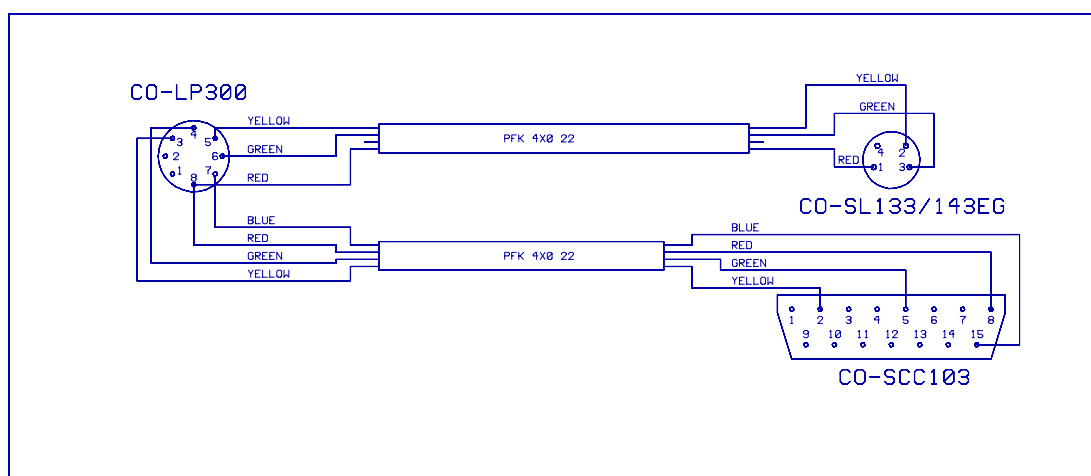


Fig.1: Suggestion on how to connect the Studio Line Amplifier, the Studio Control Center and the Lightpower together



## CONNECTIONS

**OUTPUTS:** COMBICON DFK-CONNECTORS

<i>TO</i>	<i>FUNCTION</i>	<i>LIGHTCOLOR</i>	<i>PIN NO.</i>
<b>1. STUDIO</b>	COMMON		A 1
	STUDIO REDLIGHT	(RED)	A 2
	CONTROLROOM REDLIGHT	(YELLOW)	A 3
	STUDIO WHITELIGHT	(WHITE)	A 4
<b>2. CONTROLROOM</b>	COMMON		A 5
	CONTROLROOM REDLIGHT	(RED)	A 6
	STUDIO REDLIGHT	(YELLOW)	A 7
	CONTROLROOM WHITELIGHT	(WHITE)	A 8
<b>3. INSERT</b>	COMMON		A 9
<b>(CONTROL-ROOM)</b>	NC		A 10
	DIRECT	(GREEN)	A 11
	LINE	(WHITE)	A 12
<b>4. CORRIDOR A</b>	COMMON		B 1
<b>(STUDIO-DOOR)</b>	STUDIO REDLIGHT	(RED)	B 2
	CONTROLROOM REDLIGHT	(YELLOW)	B 3
	LINE	(WHITE)	B 4
<b>5. CORRIDOR B</b>	COMMON		B 5
<b>(CONTROL-ROOM DOOR)</b>	STUDIO REDLIGHT	(YELLOW)	B 6
	CONTROLROOM REDLIGHT	(RED)	B 7
	LINE	(WHITE)	B 8
<b>6. OFFICE</b>	COMMON		B 9
	STUDIO REDLIGHT	(RED)	B 10
	CONTROLROOM REDLIGHT	(YELLOW)	B 11
	LINE	(WHITE)	B 12



**INPUT:** NEUTRICON RP8 CONNECTOR

<b><i>FUNCTION</i></b>	<b><i>PIN NO.</i></b>
<b><i>GND</i></b>	1
<b><i>+ 24 VOLT</i></b>	2
<b><i>STUDIORELAY</i></b>	3
<b><i>CONTROLROOMRELAY</i></b>	4
<b><i>DIRECTRELAY</i></b>	5
<b><i>LINERELAY</i></b>	6
<b><i>RELAYS COMMON</i></b>	7
<b><i>NC</i></b>	8

The Neutricon connector is supplied as parts. To assemble: First solder each contact-element to the cable, then slide the elements into the body of the connector. You must mount all elements in the connector, even the unused.