



NOTES:

1. MATERIALS:
HOUSING - BLACK ANODIZED ALUMINUM
COMPONENT END PANELS - BLACK ANODIZED ALUMINUM
CORNER GUARDS - TPE, BLACK
2. LASER ETCHED WHITE TEXT AND ARTWORK.
3. POWER REQUIREMENTS FOR PHANTOM LIFT FEATURE:
44-52 VOLTS (DC) PHANTOM POWER (P48)
4. THIS PRODUCT IS RoHS COMPLIANT.

CONTROLS:

INPUT:

1/4" (6.3mm) MONO PHONE JACK. ACCEPTS SIGNALS FROM INSTRUMENTS.

THRU:

1/4" (6.3mm) MONO PHONE JACK. WIRED IN PARALLEL WITH INPUT.

-20dB PAD:

TOGGLE SWITCH. REDUCES INPUT SIGNAL LEVEL AN ADDITIONAL 20dB FOR LINE LEVEL SIGNALS.

MIC OUTPUT:

3 PIN MALE XLR. PROVIDES BALANCED, LOW IMPEDANCE MIC LEVEL OUTPUT. WIRED PIN-1 GROUND, PIN-2 HOT, PIN-3 COLD.

GROUND LIFT MODE:

RECESSED SLIDE SWITCH. USE TO SELECT WHICH FORM OF GROUND CONTROL TO USE.

MANUAL MODE - ENABLES CONTROL OF THE GROUND LIFT FROM THE DI USING THE TOGGLE SWITCH.

48V MODE - ENABLES REMOTE CONTROL OF THE GROUND LIFT FROM THE CONSOLE USING 48 VOLT PHANTOM POWER.

PHANTOM POWER **OFF**: XLR PIN-1 GROUNDED
PHANTOM POWER **ON**: XLR PIN-1 LIFTED

LIFT/GND:

TOGGLE SWITCH. FUNCTIONAL ONLY WHEN IN **MANUAL** GROUND LIFT MODE.

LIFT PIN1: XLR PIN-1 LIFTED
GND: XLR PIN-1 GROUNDED

LED:

ILLUMINATES BLUE (INDICATING XLR PIN-1 IS LIFTED) WHEN PHANTOM POWER IS ENGAGED. FUNCTIONAL ONLY WHEN IN 48V MODE.

CUSTOMER DRAWING

UNLESS OTHERWISE SPECIFIED					THIS DRAWING DESCRIBES A DESIGN CONSIDERED PROPRIETARY IN NATURE, DEVELOPED AND MANUFACTURED BY SWITCHCRAFT INC. AND IS RELEASED ON A CONFIDENTIAL BASIS FOR IDENTIFICATION PURPOSES ONLY.				
1. ALL DIMENSIONS IN INCHES					SIZE	WIDTH	MULT	LBS/M	TEMPER
- TWO PLACE DECIMALS ±0.02					FINISH				MATERIAL
- THREE PLACE DECIMALS ±0.005					FIRST USED ON				SPEC No.
					SCALE				
					DATE DRAWN	BY	CHKD	APVD	
					12-6-10	BHM	JEB	TJK	
					11-20-12				
					NAME				PART No.
					INSTRUMENT DIRECT BOX WITH PHANTOM LIFT, RoHS				SC900CT
					REVISIONS				REV
REV	ECO NUMBER	DATE	BY	APVD	DO NOT SCALE DRAWING				D

SC900CT Instrument Direct Box

Audio Specifications

Switchcraft®

Parameter	Performance	Conditions
Frequency Response	20Hz - 20kHz	+/-0.3dB, ref 1kHz
Total Harmonic Distortion + Noise	< 0.008% < 0.3%	at 1kHz, +4dBu Input, 22kHz Bandwidth at 20Hz, +4dBu Input, 22kHz Bandwidth
Maximum Input Level	+19dBu	at 20Hz with 1% THD+Noise
Input Impedance	> 110kΩ	at 1kHz
Output Impedance	< 20Ω	at 1kHz
Common Mode Rejection Ratio (CMRR)	> 90dB > 80dB	at 60Hz, Lifted at 60Hz, Grounded
Deviation from Linear Phase	< 4° < 1° < 9°	at 20Hz at 1kHz at 20kHz
Voltage Gain	-22dB -42dB	+/-1dB +/-1dB with 20dB pad engaged
Pad Attenuation	20dB	+/-1dB

Notes: All measurements were taken with a 25Ω unbalanced source and measured from the XLR with a 1kΩ balanced load.
Specifications subject to change without notice.

CUSTOMER DRAWING

SCALE 1:1	Switchcraft®	
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1/4" INPUT

1/4" THRU

-20dB PAD
TOGGLE SWITCH

IMPEDANCE MATCHING
TRANSFORMER,
FULLY SHIELDED

XLR OUTPUT
(LOW-Z)

RF FILTER

MANUAL MODE
XLR PIN-1 GROUND LIFT
TOGGLE SWITCH

GROUND LIFT MODE
SLIDE SWITCH

MANUAL

48V

PHANTOM LIFT CIRCUIT
FOR 48V MODE

XLR PIN-1 LIFTED FROM
INPUT GROUND WHEN
48 VOLT PHANTOM
POWER IS ENGAGED.

LED ILLUMINATES WHEN
LIFTED IN 48V MODE

PATENT PENDING

CUSTOMER DRAWING

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DRAWN BY BHM	PART No. SC900CT	REV D

SolidWorks CAD File