

Switchcraft® JACKS AND PLUGS

1/4" PHONE JACKS



LITTEL-JAX® COMMERCIAL PHONE JACKS
2- AND 3-CONDUCTOR

Littel-Jax phone jacks mate with standard commercial phone plugs and are available with .25" and .21" inside diameter bushings.

MIL LITTEL-JAX® PHONE JACKS
2- AND 3-CONDUCTOR MIL-SPEC, MIL-J-641 (E)

MIL jacks mate with MIL-type phone plugs with .25" (6.35mm) or .21" (5.34mm) diameter bushings. Numbers C11 and C12B have a non-turn locating pin which keys the jack to the mounting surface. For low contact resistance applications, jack number C12A has fine silver contacts on shunts and tip springs.

MOUNTING

Chassis/Panel: See Mounting Data drawing below; smallhole is required only for jacks numbers C11 and C12B with non-turn locating pin.

Maximum Panel Thickness: .156" (4mm) for standard .276" (7mm) long bushing; .25" (6.35mm) for .375" (9.5mm) long bushing.

NOTE: For panels thicker than .25" see Thick Panel Phone Jax.

Insulated Mount: See drawing. S1028 flatwasher and Part Number S1029 shoulder washer must be ordered separately for mounting in .437" diameter hole.

NOTE: See Hi-D Jax® for jack specifically designed for insulated mounting without additional washers.

PC Board Mounting: See Recommended PC Board Layout drawing below for jacks with PC terminals. Recommended PC board thickness is .062".

Mounting Centers: 1.188" (30mm) recommended. Centers may vary with jack selected, for example, Number 11 mounts on .813" (20.6mm) and 14B mounts on 1.125" (28.6mm) minimum centers.

PREFIX OPTIONS	SERIES	CIRCUITRY
Blank- 1/4" Commercial Jack	1-Littel Jax®	1- I
C- Accepts Mill Plug		2A- III
FA- .205" Faston Terminals		2B- IV
FAL- .205" Faston Terminals and .375" Long Bushing		3- V
L- .375" Long Bushing		3A- VI
PC- PC Terminals		3B- VII
S- Accepts .206 Diameter Plugs		3E- IX
		4B- XII

TWO CONDUCTOR PART NUMBERS

Part Number	Description	Jack Schematic ¹	Typical Mating Plug
11	Open circuit	I	250
C11	MIL Number M641/6-1	I	440
FA11	.205 inch FASTON terminal	I	250
FAL11	.375 inch long bushing .205 FASTON terminal	I	250
L11	.375 inch long bushing	I	250
12A	Tip shunt	III	250
C12A	MIL Number M641/12-1	III	440
L12A	.375 inch long bushing	III	250
PC12A	PC board mount	III	250
13	Isolated "make" circuit	V	250
13A	Transfer circuit	VI	250
13E	Isolated "break" circuit	IX	250

THREE CONDUCTOR PART NUMBERS

12B	Double open circuit	IV	267
L12B	.375 inch long bushing	IV	267
C12B	MIL number M641/5-1, .250 inch inside diameter	IV	480
13B	Tip shunt	VII	267
14B	Double closed circuit	XII	267

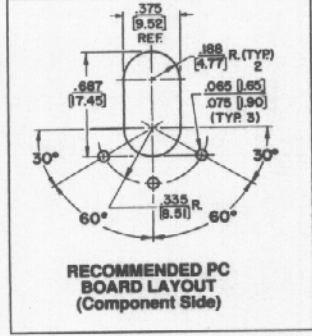
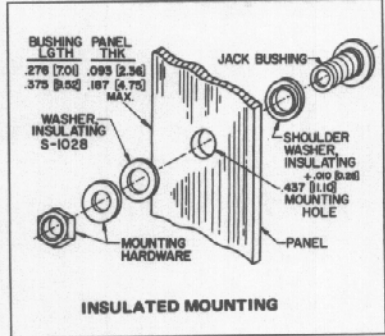
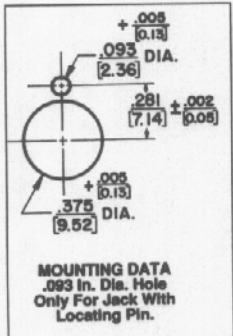
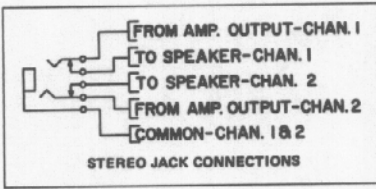
PART NUMBERS

(.210" INSIDE DIAMETER BUSHING)

S11	2 conductor	I	S250
S12A	2 conductor	III	S250
S12B	3 conductor	IV	S267
S13B	3 conductor	VII	S267

1. Refer to jack schematics on pages 79 and 80. Other circuits are available; contact factory.

STEREO JACK CONNECTIONS



DIMENSIONS ARE FOR REFERENCE ONLY $\frac{\text{Inch}}{(\text{mm})}$

1/4" PHONE JACKS (continued)

LITTEL-JAX® COMMERCIAL PHONE JACKS - 2- AND 3-CONDUCTOR AND
MIL LITTEL-JAX® PHONE JACKS - 2- AND 3-CONDUCTOR MIL-SPEC, MIL-J-641 (E)

SPECIFICATIONS

MECHANICAL

Life: Commercial Jacks: 10,000 insertion/withdrawal cycles, minimum. Military Jacks: 20,000 insertions/withdrawals, minimum.

Mechanical Shock: Military Jacks: Per MIL-STD 202, method 213, Test Condition H (75g).

Vibration: Military Jacks: Per MIL-STD-202, method 213, (10-55 Hz).

Insertion/Withdrawal Forces: (see charts below)

COMMERCIAL JACKS

Plug Diameter (inches)	.210	.250
Insertion (maximum)	7 lb.	7 lb.
Withdrawal (minimum)	1 lb.	1 lb.

MILITARY JACKS

Part Number	C11	C12A	C12B
Insertion (maximum)	6 lb.	7 lb.	6 lb.
Withdrawal (minimum)	2 lb.	3 lb.	1.5 lb.
Withdrawal (maximum)	7 lb.	7 lb.	5 lb.

ELECTRICAL

Contact Resistance: Commercial Jacks - .030 ohms maximum (initial), .050 ohms maximum (after humidity, durability exposure). Per MIL-STD-202E. Military Jacks - .010 ohms maximum (initial), .020 ohms maximum (after life), .10 ohms maximum (after salt spray).

Insulation Resistance: Commercial Jacks - 10,000 MΩ minimum (initial), 1,000 MΩ minimum (after humidity). Military Jacks - 10,000 MΩ minimum (initial), 1,000 MΩ minimum (after humidity, durability exposure).

Dielectric Withstanding Voltage: 500 V, 60 Hz (rms) AC.

Contact Rating: 1 A, 25 V DC.

ENVIRONMENTAL

Thermal Range: Commercial Jacks; -55°C to +85°C (non-operating); -20°C to +65°C (operating). Military Jacks; -55°C to +85°C (non-operating); -40°C to +65°C (operating).

Thermal Shock: Commercial Jacks - Per MIL-STD 202, method 107. Military Jacks - Per MIL-STD 202, method 107.

Humidity: Commercial Jacks - Per MIL-STD 202, method 106. Military Jacks - 0% to 95% operating and non-operating.

Salt Spray: Commercial Jacks - Per MIL-STD 202, method 101. Military Jacks - Per MIL-STD 202, method 101 (48 hours).

Moisture Resistance: Military Jacks - Per MIL-STD 202, method 106 (240 hours).

MATERIAL

Mounting Bushing: Nickel-plated copper alloy.

Insulation: Rigid plastic.

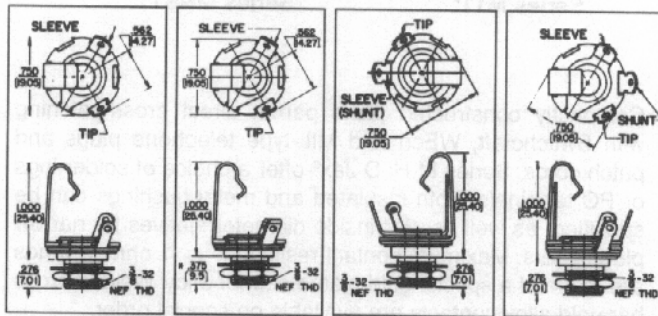
Springs: Special copper alloy. Integral contacts are standard in the isolated switching circuits; fine silver contacts in C12A switching circuit.

Sleeve Terminal: Copper alloy.

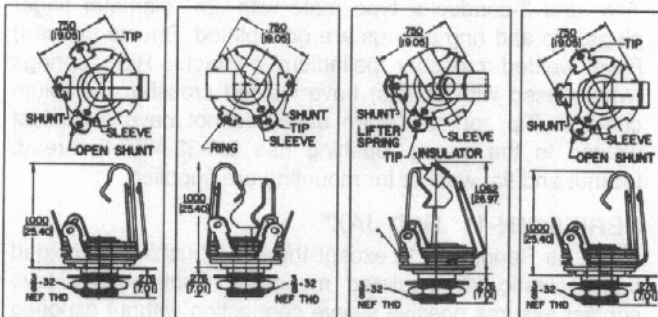
Hardware: Supplied with one Number P10001 copper alloy nickel-plated hex nut, and one Number 51022 steel nickel-plated washer - except copper alloy nickel-plated washer Number S10451 supplied on C11, C12A and C12B.

*Commercial jacks feature integral contacts. Integral contacts should not be used where low contact resistance is a requirement.

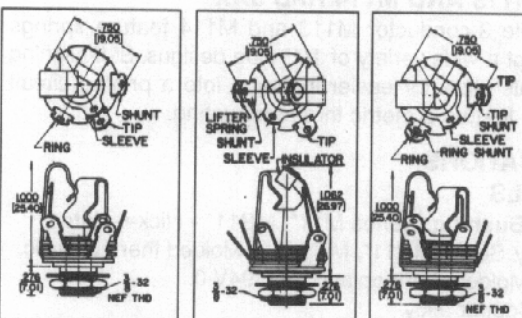
Littel Jax® Jacks



11, L-11, C-11, S-11 FA-11, FAL-11 12 12-A, L-12A 12A, L-12A
*.276" for No. FA-11 S-12A, SC-12A S-12A, SC-12A



PC-12A 12B, C12B 13 13A
S-12B, SC-12B



13B, S-13B 13E 14B

DIMENSIONS ARE FOR REFERENCE ONLY Inch
(mm)