

CALRAD

45 Series - Miniature Audio Transformers

MINI TRANSISTOR AUDIO TRANSFORMERS

Ideally suited and selected for building or replacement of transistorized equipment. High vacuum impregnation, application of a special coating seals the coils. A special core of hydrogen heat-treated alloy is used. Size $\frac{3}{4}$ " x $\frac{5}{8}$ " x $\frac{5}{8}$ ". Frequency Response: \pm 3dB, 20-25KHz. Specify Part No.



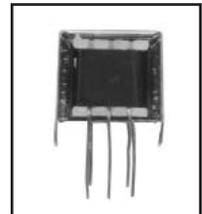
Part. No.	Type	Primary Ohms	Primary DC Res.	Secondary Ohms	Secondary DC Res.	Max Power Rating
45-700	Input	100,000	2K	1000	70 Ω	100Mw
45-701	Output	1200	60 Ω	3.2	.4 Ω	100Mw
45-703	Mic Input	200,000	2.26K	1000	43 Ω	100Mw
45-705	Input	20,000	320 Ω	1000	230 Ω	100Mw
45-707	Driver	10,000	700 Ω	2000 C.T.	127 Ω	100Mw
45-709	Output	500 C.T.	35 Ω	3.2	.27 Ω	100Mw
45-711	Output	1000 C.T.	53.1 Ω	8	.57 Ω	100Mw
45-715	Input	500 Ω	34 Ω	50 K Ω	3.17K Ω	100Mw

Same as above except sub-miniature, type. Size $\frac{1}{2}$ " x $\frac{1}{2}$ " x $\frac{1}{2}$ ". Specify Part No.

45-702	Input	100,000	1K	1000	110 Ω	75Mw
45-704	Output	500 C.T.	35.5 Ω	3.2	.4 Ω	75Mw
45-706	Input	200,000	1.6K	1000	118 Ω	75Mw
45-708	Driver	10,000	736 Ω	2000 C.T.	173 Ω	75Mw
45-710	Output	500 C.T.	32 Ω	8	2 Ω	75Mw

MINI TRANSISTOR AUDIO TRANSFORMERS FOR PRINTED CIRCUIT BOARD MOUNTING

Ideally suited and selected for building or replacement of transistorized equipment. High vacuum impregnation and application of a special coating seals the coils. A special core of hydrogen heat treated alloy is used to give high quality at a low cost. Dimensions $\frac{3}{4}$ " x $\frac{5}{8}$ " x $\frac{5}{8}$ ". Frequency Response: \pm 3dB, 20-25KHz.



Part No.	Type	Primary Ohms	Primary DC Res.	Secondary Ohms	Secondary DC Res.	Max Power Rating
45-712	Driver	10,000	400 Ω	2000 C.T.	100 Ω	200Mw
45-713	Output	500 C.T.	30 Ω	3.2	.4 Ω	200Mw
45-714	Output	1000 C.T.	45 Ω	8	.4 Ω	200Mw

45-698 TRANSFORMER

600 Ω –600 Ω Isolation Transformer–Wire Leads.
 Primary DC Resistance – 47 Ω . Secondary DC Resistance – 60 Ω .
 Frequency Response of \pm 3dB, 20-25KHz. Size: $\frac{1}{2}$ " x $\frac{1}{2}$ " x $\frac{1}{2}$ "
 Max Power Rating: 75Mw



45-698



45-699

45-699 TRANSFORMER

600 Ω –600 Ω Isolation Transformer–P.C. Leads.
 Primary DC Resistance – 47 Ω . Secondary DC Resistance – 60 Ω .
 Frequency Response of \pm 3dB, 20-25KHz. Size: $\frac{1}{2}$ " x $\frac{1}{2}$ " x $\frac{1}{2}$ "
 Max Power Rating: 75Mw

CALRAD

45 Series - AC power + 25-70v line Matching Transformers

45-728 6-VOLT FILAMENT TRANSFORMER

Primary 117 volts AC, secondary 6.3 volts C.T. 1.5 amps. Mounting centers 2³/₈".
Size: 2" x 1⁵/₈" x 1⁵/₈" high. With wire leads. Weight is 12.8 oz.

45-729 12-VOLT SHIELDED FILAMENT TRANSFORMER

Primary 117 volts AC, secondary 12.6 volts C.T. 1 Amp. Mounting centers 2⁵/₈".
Size: 2³/₁₆" x 2¹/₈" x 1⁷/₈" high. With wire leads.

45-730 24-VOLT SHIELDED TRANSFORMER

Primary 117 volts AC, secondary 24 volts C.T. 1 Amp. Mounting centers 2¹⁵/₁₆".
Size: 2⁵/₁₆" x 2¹/₈" x 2⁵/₁₆" high. With wire leads. Weight is 1 lb. 1.3 oz.



45-728, 729, & 730

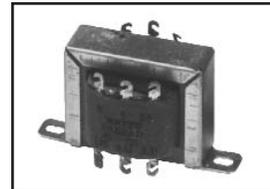
45-731 MULTI-TAPPED TRANSFORMER

Primary 117 volts AC, secondary 24 volts multi-tapped at 6-9-12 volts. 1 Amp. All secondary voltages are DC values after full wave rectified by silicon diodes and filtered. Many combinations of secondary voltages can be obtained from this transformer. Mounting centers 2⁷/₈".
Size: 2¹/₂" x 2" x 2" high. Weight is 12.8 oz.



45-720 or 45-720L (5-25V) 45-722 or 45-722L (10-25V) 5 AND 10 WATT, 25 VOLT MATCHING LINE TRANSFORMERS (SPECIFY WITH OR WITHOUT LEADS)

Universal 25 volt 5 & 10 watt audio line transformers for chassis or speaker mounting. Can be connected to an audio amplifier to enable proper line and speaker impedance. Matches 4 to 8 ohm speakers. Taps of 0.312, 0.625, 1.25, 2.5, 5 watts for the 45-720. Taps of 0.625, 1.25, 2.5, 5, 10 watts for the 45-722. Weight for 45-720 is 6.5 oz. Weight for 45-722 is 10.4 oz.



45-720, 721, 722, 723, 726, & 727 Without leads.

45-721 or 45-721L (5-70V) 45-723 or 45-723L (10-70V) 5 AND 10 WATT, 70 VOLT MATCHING LINE TRANSFORMERS (SPECIFY WITH OR WITHOUT LEADS)

Universal 70 volt 5 & 10 watt audio line transformer for chassis or speaker mounting, can be connected to an audio amplifier to enable proper line and speaker impedance. Matches 4 to 8 ohm speakers. Taps of 0.31, 0.62, 1.25, 2.5, 5 watts for the 45-721. Taps of 0.625, 1.25, 2.5, 5, 10 watts for the 45-723. Weight is 9.6 oz.



45-720L, 721L, 722L, 723L, 726L, & 727L With leads.

45-726 or 45-726L 10 WATT, 25 VOLT, 70 VOLT COMBINATION LINE TRANSFORMER (SPECIFY WITH OR WITHOUT LEADS)

Taps of .65, 5, 10 watts at 25 volt. Taps of 0.25, 1.25, 5 watts at 70 volt. Weight is 10.5 oz.

45-727 or 45-727L 30 WATT MATCHING LINE TRANSFORMER (SPECIFY WITH OR WITHOUT LEADS)

Taps of 10, 20, 30 watts at 25 volt. Taps of 10, 20, 30 watts at 70 volt. Weight is 10.2 oz.

45-788 50 WATT, HI-POWER MATCHING TRANSFORMER 45-789 100 WATT, HI-POWER MATCHING TRANSFORMER

These hi-power matching transformers are used to convert 8 ohm, low impedance to 70 volt line high impedance. It is applicable for all types of multi-speaker installations. Two are required for stereo applications. Weight for 45-788 is 1 lb. 14.3 oz. Weight for 45-789 is 4 lbs. 4.6 oz.

Specifications for 45-788 and 45-789:

Primary Tap Common, (From Main Amplifier - 8Ω)
Efficiency 85% min.
Secondary Tap 45-788 Common, 70 V (100 ohms), 50 watts
Base 45-788..... 2⁹/₁₆" x 2⁵/₁₆"
Height 45-788 2³/₁₆"

Frequency Response (-2dB) 30-20,000 Hz
Terminal Solder-type
Secondary Tap 45-789 Common, 70 V (50 ohms), 100 watts
Base 45-789 3³/₄" x 2³/₄"
Height 45-789 3¹/₈"



45-788 & 789

45 Series - AC-DC Adapter Information

Regulated Versus Unregulated DC Power Supplies

Regulated power supplies provide a cleaner power source and provide more protection to the devices it's connected to. Regulated power supplies are not always the best or most economical way to go, some devices or products have their own regulators and protection circuits built-in, in this case a regulated power supply would not be necessary and the un-regulated power supply would be the best choice. Always check with the manufacturer of a product or look at the adapter that your replacing and make the correct selection. Most specifications are listed on the adapter.

Regulated power supplies will maintain a near constant voltage over the load range of the power supply and will provide a cleaner DC output with less AC ripple. Regulated power supplies also offer short circuit and current foldback protections. You can always use a regulated power supply in place of a non-regulated power supply as long as the voltage and current specifications match. Example: 12Vdc at 1 amp power supply will maintain a near constant voltage from a 100ma load to a 1 amp load. If more than 1 amp of current is exceeded the power supply will shutdown and go into current foldback.

An un-regulated power supply will usually provide a higher output voltage than is listed and the current load against the power supply will cause this voltage to move up or down depending on the load. the DC output signal will contain much higher levels of AC ripple on the output. Never use a un-regulated power supply in place of a regulated power supply, damage to the device connected may result. Example: A 12Vdc power supply with no load would read about 14-15Vdc as you load the power supply down to near 1 amp the voltage would be around 10-12Vdc./ if you exceed the 1 amp the power supply would continue to operate but the voltage would continue to drop until the power supply gets to hot and fails.

Important AC Adapter information

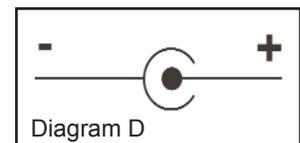
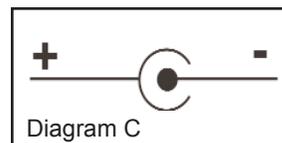
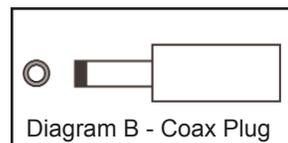
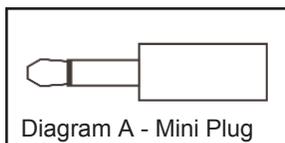
Voltage: The voltage of the portable device and adapter must match. Some adapters have a DC output, and others have an AC output. Be sure you use the correct type of adapter, or damage will result.

Current: Current of the adapter must be equal or more than the current required by the portable device 1000ma =1 amp.

Plug Type: The plug on the adapter must fit the jack on the portable device for proper operation. There are many different sizes available, common sizes are 2.5mm, 3.5mm O.D. plugs and look like the connector in diagram A. 1.8mm, 2.1mm, 2.5mm O.D. coax plugs look like the connector in diagram B.

Polarity: the positive and negative (+, -) must match the polarity of the portable device. Most DC input must have symbols nearby that look like the one pin diagrams C and D. Diagram C means that the outside of the jack is positive (+) and the inside is negative (-). Diagram D means the reverse.

The adapter's plug must match the portable device's DC input jack or damage may result to the AC adapter or portable device. The positive terminal on the adapter's plug must connect to the positive and the negative terminal on the adapter's plug must connect to the negative.



AC Adapter Plug Changes

Custom molded plugs are available for power supplies of 100 pcs. or more, we can hand solder plugs on small quantities from 1 to 50 pcs. Please check with your Calrad sales representative for details.

CALRAD

45 Series - AC Adapters

Technical drawings and specifications are available for these power supplies. Please ask your Calrad sales representative for details.

All DC adapters with coax power plugs are wired positive center unless specified otherwise.

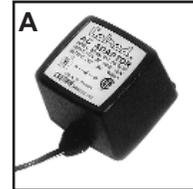
All DC adapters with 3.5mm power plugs are wired tip positive unless specified otherwise.

AC TO DC ADAPTERS

45-754 multi plugs, 6 ft. cord, UL & CSA app.....	Style C.....	Input 117 Vac, Output 3,4,5,6,7,5,9,12 Vdc, 800 mA
45-756 3.5 mm plug, 7 ft. cord, UL & CSA approved	Style A	Input 117 Vac, 60 Hz, Output 6 Vdc, 300 mA
45-757 3.5 mm plug, 7 ft. cord, UL & CSA approved	Style A	Input 117 Vac, 60 Hz, Output 9 Vdc, 300 mA
45-757-2.5 2.5 mm plug, UL & CSA approved.....	Style A	Input 117 Vac, 60 Hz, Output 9 Vdc, 300 mA
45-765 3.5 mm plug, 6 ft. cord, UL & CSA approved	Style A	Input 117 Vac, 60 Hz, Output 9 Vdc, 500 mA
45-766 3.5 mm plug, 6 ft. cord, UL & CSA approved	Style A	Input 117 Vac, 60 Hz, Output 9 Vdc, 1.0 Amp
45-746 3.5 mm plug, 6 ft. cord, UL & CSA approved.....	Style A	Input 117 Vac, 60 Hz, Output 12 Vdc, 300 mA
45-746-2.1 2.1 mm plug, UL & CSA approved.....	Style A	Input 117 Vac, 60 Hz, Output 12 Vdc, 300 mA
45-750 2.1mm coax plug, 6ft cord, UL & CSA app.....	Style A	Input 117 Vac, 60 Hz, Output 12 Vdc, 200 mA
45-761 3.5 mm plug, 6 ft. cord, UL & CSA approved	Style A	Input 117 Vac, 60 Hz, Output 12 Vdc, 500 mA
45-761-2.1 2.1 mm plug, UL & CSA approved.....	Style A	Input 117 Vac, 60 Hz, Output 12 Vdc, 500 mA
45-763 3.5 mm plug, 6 ft. cord, UL & CSA approved	Style A	Input 117 Vac, 60 Hz, Output 12 Vdc, 800 mA
45-763-2.5 2.5mm coax plug, 6 ft. cord,UL & CSA app	Style A	Input 117 Vac, 60 Hz, Output 12 Vdc, 800 mA
45-763-S 3.5 mm plug, 6 ft. cord, UL & CSA approved.....	Style A	Input 117/220 Vac, 60 Hz, Output 12 Vdc, 800 mA
45-751 2.1mm coax plug, 6 ft. cord, UL & CSA app.....	Style A	Input 117 Vac, Output 12 Vdc, 1.2 amp
45-772 3.5 mm plug, 6 ft. cord, UL & CSA approved	Style A	Input 117 Vac, 60 Hz, Output 18 Vdc, 200 mA
45-773 2.1mm coax plug, 6 ft. cord, UL & CSA app.....	Style A	Input 117 Vac, 60 Hz, Output 18 Vdc, 500 mA
45-767 3.5 mm plug, 6 ft. cord, UL & CSA approved	Style A	Input 117 Vac, 60 Hz, Output 24 Vdc, 400 mA
45-767-2.1 2.1 mm plug, 6 ft. cord, UL & CSA approved.....	Style A	Input 117 Vac, 60 Hz, Output 24 Vdc, 400 mA
45-762 2.1mm plug, 6 ft. cord, UL & CSA app	Style A	Input 120 Vac, Output 24 Vdc, 600 mA

Please note plug changes are available for most power supplies but this action negates the UL rating. Please contact your Calrad Representative for details

Style

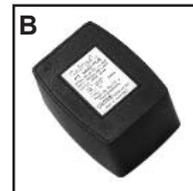


Cord

Style



Style



Screw Terminals

Style



Screw Terminals

AC TO AC ADAPTERS

45-776 2.1mm coax plug, 6 ft. cord, UL & CSA approved.....	Style A.....	Input 117 Vac, Output 9 Vac, 1 Amp
45-768 3.5mm plug, 6 ft. cord, UL & CSA app.....	Style A.....	Input 117 Vac, Output 12 Vac, 830 mA
45-768-2.5 2.5mm coax plug, 6 ft. cord, UL & CSA app.....	Style A.....	Input 117 Vac, Output 12 Vac, 830 mA
45-775 screw terminals, UL approved	Style B	Input 117 Vac, Output 12 Vac, 3.3 Amp 40Va
45-760 screw terminals, UL approved	Style D	Input 117 Vac, Output 16 Vac, 700 mA
45-764 2.1mm coax plug, 6 ft. cord, UL & CSA app.....	Style A.....	Input 117 Vac, Output 16 Vac, 1.1 Amp
45-777 screw terminals, UL approved	Style B	Input 117 Vac, Output 16 Vac, 2.5 Amp 40Va
45-774 screw terminals, UL approved	Style B	Input 117 Vac, Output 24Vac, 1.6 Amp 40 Va
45-774-50 screw terminals, UL approved	Style B	Input 117 Vac, Output 24Vac, 2 Amps 50 Va

Case style may vary on AC adapters

45-769

11.5 VOLT DC, 1.95 AMP DESK TOP POWER SUPPLY

For use with personal computers, TV games, printers, communications, etc. Input 117 Vac (60 Hz). UL and CSA approved. AC cord is 5 ft. and DC 6ft. cord

Specifications

Dimensions:2 1/2" W x 3 5/8" H x 2 5/8" D
Power Plug ...2.1 mm coax (positive center)
Color Black



45-752

12 VOLT DC REGULATED 1.2 AMP ADAPTER-WALL MOUNT

Plugs directly into standard 117 Vac wall outlet, solid state, IC regulated. 6 ft. cord with 2.1 x 5.5mm coax plug, UL approved.

Specifications

Dimensions3 1/8" W x 4 1/4" H x 2 3/8" D
Color Black



45-753A

110-220 MULTI-VOLTAGE AC ADAPTER

110-220Vac Switch with (7) Voltage options: 500 mA. output. 117 Vac. input. 1.5V, 3V, 4.5V, 6V, 7.5V, 9V, 12V. DC. Polarity switchable with 6 plug options of 3.5mm, 1.3mm X 3.5mm, 1.7mm x 4.0mm, 2.1mm X 5.5mm, 2.5mm X 5.5mm, 1.75mm X 4.75mm. UL & CSA approved. 6ft. cord length.

Specifications

Dimensions2.1"W x 3.05" H x 2.05"D
Color Black



45-752A

12Vdc ADAPTER-WALL MOUNT

Plugs directly into standard 117Vac wall outlet. Non-UL approved version of 45-752. Comes with screw terminals. 12Vdc, 1.2 amp (A) regulated.

Specifications

Dimensions 2 5/8" W x 3 1/4" H x 2 1/4" D
Color Black



Screw Terminals



45-753

45-753 Same as 45-753A but with different plug options. Comes with 2.5mm, 3.5mm, 9V Battery Snap, 5.5mm x 2.5mm, 5mm x 2.1mm, 3.5mm x 1.3mm coax plugs

CALRAD

45 Series - AC Adapters & Power Supplies

Technical drawings and specifications are available for these power supplies. Please ask your Calrad sales representative for details.

WALL MOUNT REGULATED SWITCH MODE POWER SUPPLY

45-600 12Vdc, 1.2A

Input voltage 110Vac. Outputs 12Vdc regulated at 1.2 amps. 6' cord. Short circuit/over, voltage protection.

45-601 12Vdc, 1.5A

Operates from 110Vac to 220Vac automatically switches for each voltage. Output 12Vdc regulated at 1.5 amps. 6' cord. Short circuit/over, voltage protection.

45-605 5Vdc, 2.8A

Input voltage 110Vac to 220Vac. Output 5Vdc regulated at 2.8 amps. 6' cord. Short circuit/over, voltage protection.

45-610 24Vdc, 750ma

Operates from 110Vac to 220Vac automatically switches for each voltage. Output 24Vdc regulated at 750 ma. 6' cord. Short circuit/over, voltage protection.

Specifications:

Dimensions2.05"W x 1.35" H x 1.35"L
Power Plug 2.1 mm coax (positive center)
Color Black

New Item

45-840

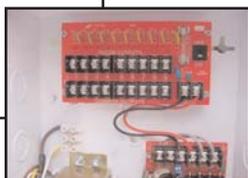
DC POWER SUPPLY FOR CCTV AND ACCESSORIES

Total maximum supply current at 12Vdc and each channel output is fused at 1.1 amp. This DC power supply centralizes the power sources for multiple DC powered CCTV cameras and/or accessories. The power input, power transformer, D regulator and all independently-fused power outputs are enclosed in one heavy duty easy to install metal enclosure.

Specifications:

Power:

Input: 120Vac, 60Hz,
Adjustable Vdc Output: 9 Outputs @6/12/24Vdc
UL Approved Power Transformer
Main Fuse Rated 5.0 Amps @ 250Vac
Spare Fuse Included
6 Foot Power Cord



DESKTOP REGULATED SWITCH MODE POWER SUPPLY

These units operate on 110Vac to 220Vac and automatically switches for each voltage.

45-602 12Vdc, 2.5A

Output 12Vdc regulated at 2.5 amps. 6' cord. Short circuit/over, voltage protection.

45-603 12Vdc, 4.1A

Output 12Vdc regulated at 4.1 amps. 6' cord. Short circuit/over, voltage protection.

45-611 24Vdc, 1.2A

Output 24Vdc regulated at 1.2 or 2 amps. 6' cord. Short circuit/over, voltage protection.

Specifications:

Dimensions 2.93"W x 1.25"H x 5.1"L
Power Plug, 2.1 mm coax (positive center)
Color Black



45-755 UNIVERSAL SWITCHING ADAPTER REGULATED DC POWER SUPPLY

Switching regulator circuit. Light weight design. Adjustable slide switch voltage selector with 3, 4.5, 6, 7.5, 9, and 12Vdc. Over/under voltage protection. Short circuit protection. Input voltage of 100-120Vac. Output current 1A. 6" cable length. Color: black. Plug sizes: 2.35x0.7mm mini, 3.5x1.35mm coax, 4x1.75mm coax, 4.74x1.75mm coax, 3.5mm male, 5.5x2.1mm coax, and 5.5x2.1mm coax.

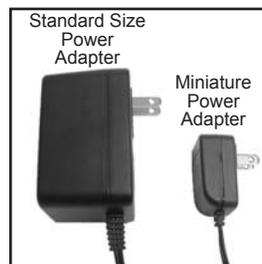


45-650 UL LISTED UN-REGULATED MINIATURE POWER ADAPTERS

The mini adapter is available in output voltages from 3Vdc to 24Vdc, 117Vac in. These power supplies offer high efficiency and are very small for the amount of output current. Short circuit/over voltage protection. 6' cord with 2.1mm coax plugs, positive center. Other plug types and configurations available, ask your Calrad representative for details. Weight 36 grams.

Size: .88"d x 1.8"H x 1.3"W.

45-650-3	3Vdc.....	.6A
45-650-4.5	4.5Vdc.....	.8A
45-650-6	6Vdc.....	1A
45-650-7.5	7.5Vdc.....	1.2A
45-650-9	9Vdc.....	1.2A
45-650-12	12Vdc.....	1.2A
45-650-15	15Vdc.....	1.2A
45-650-18	18Vdc.....	1A
45-650-24	24Vdc.....	.8A



45 Series - DC Converters & AC Power Cords

45-748 DC TO DC MULTI- CONVERTER FOR CARS

12 Vdc. input to 3V, 4.5V, 6V, 7.5V, 9V, 12V at 800 mA output. Polarity switchable with multi plugs. Regulated. Fuse protected at 2 amps. Cigarette lighter plug on 6" cable. Output cable is 5 ft. Color: black. Plug sizes: 3.5mm, 1.1 x 2.5mm, 2.5 x 5.5mm, 1.35 x 3.5mm, 1.7 x 4.0mm, 2.1 x 5.5mm



45-749 DC TO DC MULTI- CONVERTER FOR CARS

12 Vdc. input to 3V, 4.5V, 6V, 7.5V, 9V, 12V at 2 amp output. Polarity switchable with multi plugs. Fuse protected at 2 amps. Cigarette lighter plug on 5 ft. cord. Output cable is 1 ft. Color: black. Plug sizes: 3.5mm, 1.1 x 2.5mm, 2.5 x 5.5mm, 1.35 x 3.5mm, 1.7 x 4.0mm, 2.1 x 5.5mm



45-820 LIGHTER PLUG

Fused lighter plug with 6 detachable plugs. 12 ft. coiled cord with multi plugs on the other end. Fuse protected at 2 amps.



45-821 LIGHTER PLUG

Fused lighter plug with LED indicator. 6 ft. cord with 2.5mm right angle coax plug on the other end. Fuse protected at 5 amps. With positive center.



45-824 UL APPROVED AC POWER CORD

Polarized AC power cord with square/round end with two slots for use with many portable audio and video equipment.



45-822 UL APPROVED AC POWER CORD

Polarized AC power cord with round/round end with two slots for use with many portable audio and video equipment.



AC COMPUTER POWER CABLE

55-782-11 ft.
55-782-1.51.5 ft.
55-782-22 ft.
55-782-33 ft.
55-782-66 ft.
55-782-1212 ft.

3-Prong AC computer cable. Has grounded AC plug on one end and computer plug on other end. (18 gauge, Black).



AC COMPUTER POWER CABLE (RIGHT ANGLE)

55-782RT-1.518 Inches
55-782RT-33 ft.
55-782RT-66ft.

3-Prong AC computer cable. Right Angle, three pin AC plug to computer jack on other end. 18 gauge, Black.



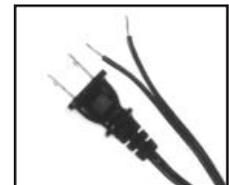
55-783 AC EXTENSION CABLE

3-Prong AC computer extension cable. Has AC plug on one end and computer jack on other end. (18 gauge, 6 ft. long, Black).



55-784 AC POWER CABLE

2-Prong, AC Replacement Cable Wire. Heavy Insulation. 18 gauge, 6 ft. long, color is black



55-785-33 ft.
55-785-66 ft.

RIGHT ANGLE POWER CABLE
Right angle 3-prong AC computer cable. Has AC plug on one end and right angle computer IEC plug. 18 gauge, 6 ft. long, color is black.



CALRAD

45 Series - Desktop & Lab Style Power Supplies

45-734 MULTI-VOLTAGE 2 AMP REGULATED POWER SUPPLY

Binding post on the output comes with a 6 ft. cord with six detachable plugs. Comes with ON/OFF switch.

Specifications:

Size..... 3 1/2" W x 3" H x 5 1/2" D
 Input..... 120 Vac, 60hz
 Fuse..... 0.5 amp
 Voltage Out..... 3, 4.5, 6, 7.5, 9, 11.5Vdc
 Weight..... 3.4 lbs.



45-735A POWER SUPPLY

5 AMP SURGE/3 AMP CONTINUOUS DUTY

Converts 117 Vac, 60 Hz to 13.8 Vdc regulated. Automatic Short Circuit Protection. Fuse Protection. Current Limiting Protection. UL approved. 6 ft. AC cord.

Specifications:

Size..... 4 3/4" W x 3 1/4" H x 8 1/4" D (Including Terminals)
 Ripple..... 200mv ripple full load
 Line Regulation..... 1.4%
 Weight..... 6.2 lbs.



45-778 10 AMP REGULATED SWITCHING POWER SUPPLY

This state-of-the-art power supply gives increased power handling. This new technology gives increased power handling and efficiency at low heat dissipation. Built-in over load and over voltage protection. 6 ft. AC cord.

Specifications:

Size..... 5.5" L x 6" W x 3.25" H
 Input..... 105-128 Vac
 Output..... 13.8 Vdc
 Output Current..... 10A (surge 12A)
 Over Voltage..... Short Circuit Protection
 Ripple 75 mV at 80% load; Max output ripple 200 mV
 Switching Frequency..... Q, 35-40 kHz
 Line Regulation Output..... 1%
 Operating Temperature..... 0°C through 50°C
 Weight..... 3.3 lbs.



45-732

0-30 vdc ADJUSTABLE, 5 amp REGULATED DIGITAL POWER SUPPLY

Adjustable power supply ideal for providing power to all types of analog and digital circuits. Easy to read digital LCD voltage and current meters. Course and Fine controls for accurate adjustments. Red LED indicators show power and current foldback settings. Comes with binding posts for easy connect of cable or test probes and chassis mounted carrying handle.

Specifications:

Input Voltage 110-220 Vac ± 10% 50-60 Hz Switchable
 Output Voltage..... 0-30 Vdc, Regulated
 Output Current..... 5 Amps
 Size..... 5" W x 6" H x 10 1/2" D
 Volt Meter..... LCD 1% +2 digits; meter 2.5 degree
 Amp Meter... LCD 2% +2 digits; meter 2.5 degree
 Weight..... 14 lbs.



45-733

0-30 vdc ADJUSTABLE, 10 amp REGULATED DIGITAL POWER SUPPLY

Same specifications as 45-732 except for having an output current of 10 amps. UL or non UL.

Specifications:

Input Voltage 110-220 Vac ± 10% 50-60 Hz Switchable
 Output Voltage..... 0-30 Vdc, Regulated
 Output Current..... 10 Amps
 Size..... 6 1/2" W x 10" H x 11 1/2" D
 Volt Meter..... LCD 1% +2 digits; meter 2.5 degree
 Amp Meter... LCD 2% +2 digits; meter 2.5 degree
 Weight..... 26 lbs.



45 Series - Lab Style Power Supplies & Isolation Transformers

45-736 BI-POLAR 0-30 Vdc ADJUSTABLE/5 amp, 5 volt/3amp FIXED REGULATED DIGITAL POWER SUPPLY

Similar to the above meters, except for having two sets of course controls and two sets of binding posts. Front panel switched are provided for Single or Bipolar configurations.

Specifications:

Input Voltage	110-220 Vac ± 10% 50-60 Hz Switchable	Two Volt Meters	LCD 1% +2 digits; meter 2.5 degree
Two single output adjustable voltage	0-30 Vdc, Regulated	Two Amp Meter	LCD 2% +2 digits; meter 2.5 degree
Output Current single ended	5 Amps each	Weight	28 lbs.
Size	10" W x 6½" H x 14" D		



45-742A 0-30Vdc 5 AMP REGULATED DIGITAL POWER SUPPLY

Both Amps and Volts are variable. Complete with ON/OFF switch. Uses 3 amp fuse and is short circuit protected.

Specifications:

Load Regulation at 1%	20-30V	Voltage Regulation	1% max, input
Load Regulation at 1.5%	10-20V	Output	115-120V rated load
Load Regulation at 2%	0-10V	Current Limiter	Adjustable
Weight	13.4 lbs.	Size	9" W x 4½" H x 10½" D



45-744 LAB-TYPE DC VARIABLE POWER SUPPLY 0-30 Vdc

Lab-type, variable power supply with built-in current limiting and short circuit protection. Voltage and Current are adjustable from 0-30 Vdc, 0-5 Amps by separate controls on the front panel. Large full scale meters for accurate display of Voltage and Current.

Specifications:

Input Voltage	110-120 Vac	Line Regulation	0.01%
Output Voltage	0-30 VDC, Adjustable	Weight	11 lbs.
Output Current	0-5 Amps, Adjustable	Size	8½"W x 4½"H x 8¼"D

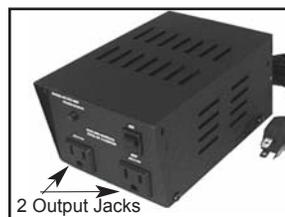


45-739 300 WATT ISOLATION TRANSFORMER

Isolation between different electrical circuits. Front panel On/Off switch. Power LED indicator. 6 ft. AC cord.

Specifications:

Wattage	300 watt
Size	4¼"W x 3½"H x 6¼"D
Weight	7.5 lbs.



45-743 500 WATT ISOLATION TRANSFORMER

Isolation between different electrical circuits. Front panel On/Off switch. Power L.E.D. indicator. 6 ft. AC cord.

Specifications:

Wattage	500 watt	Protection	5 amp fuse
Input Voltage	117 Vac with ON-OFF switch	Cord	6 ft.
Output Voltage	117 Vac	Size	5½"W x 4½"H x 7½"D
Isolation	± 5% 60 Hz	Weight	14 lbs.



CALRAD

45 Series - Variable Transformers & DC-AC Inverters

45-740 VARIABLE OUTPUT VOLTAGE REGULATOR

Adjustable output from AC line, 0 to 130 volts. Input 117 volts, 5 Amps. Current rating apply over full range of output voltage.

Specifications:

Dimensions...6 1/2" diameter (Including Terminals)
5 1/2" deep (Knob to Base)
Weight..... 9.2 lbs.



45-741 VARIABLE OUTPUT VOLTAGE REGULATOR

5 amp isolated supply w/ volt meter. Fuse protected with On/Off switch and AC volt meter scale 0-150 Vac.

Specifications:

Input Voltage..... 110-120 Vac
Dimensions..... 5"W x 6 1/2"H x 6 1/4"D
Output Voltage ... 0-130 Vac, adjustable
Weight..... 10 lbs.



45-830 RECHARGABLE BATTERY PACK

This battery pack provides 12Vdc at 6.5Amh, comes complete with black leather carrying case, battery, and UL AC charger. A female cigarette lighter plug is supplied for connections to various 12V devices, fuse protected. UL/CSA approved.

Specifications:

Battery Type..... Lead Acid 112V, 6.5Amh Plug..... Male Cigarette
Charger 117Vac in to 12Vdc, 500mA Fuse protected..... 15A Agc
Case Size..... 6 1/4"(W) x 4 3/4"(H) x 2 1/2"(D)



DC to AC POWER INVERTERS

Car cigarette plug power inverters. Now you can operate most AC appliances such as camcorders, computers, fax machines and portable TVs from the DC current of your car's battery. This unit is fully portable and gives you a standard AC outlet wherever your car is. These units plug into a cigarette plug and changes your car's DC into AC with 3 prong AC outlets. Units come with low battery alarm and auto shutdown. Overload and short circuit protection. Input polarity reverse protection by fuse. High surge current capability makes it easy to start TV, motors and other inductive loads.

New Item

45-900 DC to AC POWER INVERTER 80 WATTS

Changes DC to AC power, cigarette lighter plug style. Comes with illuminated On/Off switch and single 3 prong AC outlet.

SPECIFICATIONS:

Input:	12 Vdc	Efficiency:	90%
Output:	115 Vac	Fuse	10 Amp
Continous Power	80 Watts	Weight.....	.60 lbs
Peak Power:.....	150 Watts	Dimensions	4.5" x 2.35" x 1.37" (LxWxH)



New Item

45-901 DC to AC POWER INVERTER 100 WATTS

Comes with illuminated On/Off switch, single 3 prong AC outlet and 6 ft. cord.

SPECIFICATIONS:

Input:	12 Vdc	Efficiency:	90%
Output:	115 Vac	Fuse	20 Amp
Continous Power	100 Watts	Weight.....	1.1 lbs
Peak Power:.....	200 Watts	Dimensions	6.9" x 2.95" x 1.57" (LxWxH)



New Item

45-902 DC to AC POWER INVERTER 150 WATTS

Comes with illuminated On/Off switch, single 3 prong AC outlet and 6 ft. cord.

SPECIFICATIONS:

Input:	12 Vdc	Efficiency:	90%
Output:	115 Vac	Fuse	20 Amp
Continous Power	150 Watts	Weight.....	1.1 lbs
Peak Power:.....	300 Watts	Dimensions	6.1" x 2.75" x 1.57" (LxWxH)



45 Series - Transformers & Inverters

New Item

45-903 DC to AC POWER INVERTER 300 WATTS

Comes with illuminated On/Off switch, dual 3 prong AC outlets and 6 ft. cord.

SPECIFICATIONS

Input:	12Vdc	Efficiency:	90%
Output:	115Vac	Fuse	30 Amp
Continuous Power	300 Watts	Weight.....	0.8 kg
Peak Power:.....	600 Watts	Dimensions	5.9" x 4.13" x 1.77" (LxWxH)



New Item

45-904 DC to AC POWER INVERTER 500 WATTS

Comes with illuminated On/Off switch, three 3 prong AC outlets and 18 inch battery terminal leads for both unit and car.

SPECIFICATIONS

Input:	12Vdc	Efficiency:	90%
Output:	115Vac	Fuse	30 Amp x 2
Continuous Power	500 Watts	Weight.....	1.1 kg
Peak Power:.....	1000 Watts	Dimensions	7.90" x 5.1" x 2.35" (LxWxH)



New Item

45-905 DC to AC POWER INVERTER 1000 WATTS

Comes with illuminated On/Off switch, three 3 prong AC outlets and 18 inch battery terminal leads for both unit and car.

SPECIFICATIONS

Input:	12Vdc or 24Vdc	Efficiency:	90%
Output:	115Vac	Fuse	30 Amp x 3
Continuous Power	1000 Watts	Weight.....	1.95 kg
Peak Power:.....	2000 Watts	Dimensions	10.45" x 5.9" x 2.35" (LxWxH)



STEP-UP/ DOWN TRANSFORMERS

PORTABLE STEP-DOWN TRANSFORMERS

Can be reversed for use as step-up transformers. No isolation from primary to secondary.

45-780	220 Vac - 110 Vac, 50 Watt	45-792	117 Vac or 100Vac, 500 watts
45-781	220 Vac - 110 Vac, 100 Watt		Cord in on 117 Vac side
45-782	220 Vac - 110 Vac, 200 Watt	45-793	117 Vac or 100 Vac, 950 watts
45-783	220 Vac - 110 Vac, 300 Watt	45-801	220 Vac - 110 Vac, 1300 watt
45-784	220 Vac - 110 Vac, 500 Watt		220-110 only cord in on 220 side
45-786 ...	220 Vac - 110 Vac, 2000 Watt		
	grounded binding post for input and output		
45-787 ...	220 Vac - 110 Vac, 3000 Watt		
	with binding post for input and output		



PORTABLE STEP-DOWN TRANSFORMERS

Can be reversed for use as step-up transformers. No isolation from primary to secondary.

Switchable - has both 220 & 110 sockets. Comes with grounded socket with an ON/OFF switch and a 5A, 5mm x 20mm fuse. Weight is 19 lbs.

45-781A ..	220 Vac - 110 Vac, 100 Watt	45-783A	220 Vac - 110 Vac, 300 Watt
45-782A .	220 Vac - 110 Vac, 200 Watt	45-784A	220 Vac - 110 Vac, 500 Watt
45-800 ..	220 Vac - 110 Vac, 1000 watts	45-785A ..	220 Vac - 110 Vac, 1000 Watt

3 prong grounded both sides - 220-110 only



CALRAD

45 Series - AC Plug Adapters & Travel Transformers

Technical drawings and specifications are available for these cables. Please ask your Calrad sales representative for details.

New Item

45-670 12 Vdc CAR CHARGER WALL ADAPTER

Battery operated digital electronic devices, such as cell phones, laptop computers and electric games have become exceedingly popular. All are incredible devices that share a common problem for their users; the need for regular recharging of the batteries. This never presents a problem at home, as each device comes equipped with a battery recharging device. However, by their very nature, these are portable devices used primarily "on the road".

A car charger is available for most of these products, however travelers are stuck charging their phone in the car. At times this is a real nuisance. Calrad has developed a stylish, lightweight AC to DC converter with folding AC prongs for those of you who do not care to travel to the office, on a business trip, or on a vacation with your home charger. Leave this converter in your car or briefcase for the unexpected times your batteries need to be recharged.

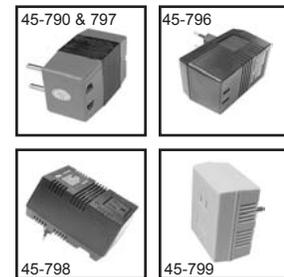


Cigarette Lighter Jack

PORTABLE TRAVEL TRANSFORMERS

Travel transformers for use throughout the world, small and lightweight.

- 45-790** in 117 Vac - 100 Vac, 100 watts
- 45-791** .. in 100 Vac - 117 Vac, 60 watts
- 45-795** .. in 220 Vac - 110 Vac, 50 watts
- 45-796** .. in 110 Vac - 220 Vac, 50 watts
- 45-797** ... in 220 Vac - 110 Vac, 55 watts
- 45-798** . in 220 Vac - 110 Vac, 100 watts
- 45-799** in 220 Vac - 110 Vac, 1600 watts



AC PLUG ADAPTERS

Travel plug adapters for use throughout the world. Ask Calrad for a requirements chart for the countries.



- 45-810**
220 VAC to 110 VAC AC polarized USA female Plug
- 45-811**
110 VAC to 220 VAC AC Plug
- 45-812**
Australia to polarized USA female and Europe.
- 45-813**
USA to UK, 15 amp. Europe.
- 45-815**
UK to USA or Europe.
- 45-816**
German Plug to USA Jack, 9 1/2" overall. Grounded.
- 45-817**
UK Plug to USA Jack, 7 1/2" overall. Grounded.
- 45-818**
All countries input to 2 prong European output.

45-822 round/round end.

45-824 square/round end
UL APPROVED AC POWER CORD
Polarized AC power cord with either round/round or square/round end options with two C slots in the middle. For use with many portable audio and video equipment.



45-758 3 amp REGULATED BATTERY CHARGER & POWER SUPPLY

For alarm system power and automatic recharging of back-up batteries. LED power indicator, 2.5 amp continuous and 3 amp peak power. Input 16Vac to programmable output 6/12/24Vdc. Fuse protected. Comes with battery leads. 6 Position Barrier Strip. Mounts with double stick tape.



Size: 3.8" x 2.85" x 1.45"
L x W x H

45-759 1.2 amp REGULATED CHARGER BOARD ONLY

16Vac in, 12Vdc out. Fuse protected. 4 Position Barrier Strip, for alarm system power and automatic recharging of back-up batteries. Fuse protected. Mounts with double stick tape.



Size: 3.75" x 3" x 1"
L x W x H