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Fluke's warranty obligation is limited, at Fluke's option, to refund of the purchase price, free of charge repair, or replacement of a defective product which is returned to a Fluke authorized service center within the warranty period.

To obtain warranty service, contact your nearest Fluke authorized service center to obtain return authorization information, then send the product to that service center, with a description of the difficulty, postage and insurance prepaid (FOB Destination). Fluke assumes no risk for damage in transit. Following warranty repair, the product will be returned to Buyer, transportation prepaid (FOB Destination). If Fluke determines that failure was caused by neglect, misuse, contamination, alteration, accident, or abnormal condition of operation or handling, including overvoltage failures caused by use outside the product's specified rating, or normal wear and tear of mechanical components, Fluke will provide an estimate of repair costs and obtain authorization before commencing the work. Following repair, the product will be returned to the Buyer transportation prepaid and the Buyer will be billed for the repair and return transportation charges (FOB Shipping Point).

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To register your product online, visit register.fluke.com.

SERVICE CENTERS

To locate an authorized service center, visit: <http://www.fluke.com>.

Or call Fluke using any of the phone numbers listed below:

+1-888-993-5853 in U.S.A. and Canada
+31-40-2675200 in Europe
+1-425-446-5500 from other countries

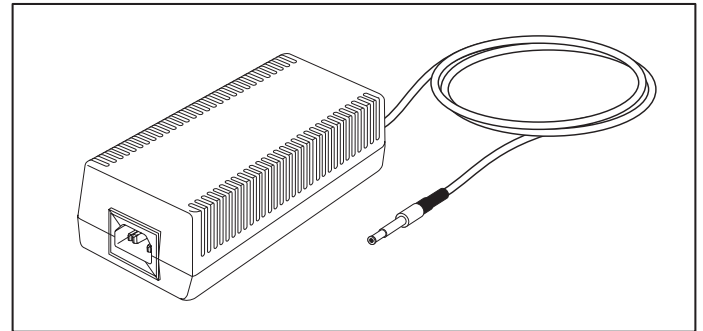
FLUKE®

BC190/820 Universal Mains-Power Adapter

Instruction Sheet

Introduction

The BC190/820 is a universal mains-power adapter for measurement, control, and laboratory equipment. The BC190/820 is intended for operating and charging the Fluke 190-Series ScopeMeter Test Tool. The mains-power adapter is based on the switched-mode concept for high efficiency and low stand-by power consumption. It operates in a wide range of input voltages from 100 Vac up to 240 Vac nominal. Either a locally suitable power cord or a universal mains cable and a set of mains plug adapters are included. The adapter is suitable for most types of mains outlets.



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Figure 1. BC190/820 Mains-Power Adapter

Unpack

This universal mains-power adapter consists of the following items:

- BC190/820 Switch Mode Power Adapter (main unit) with dc cable
- Mains cord with fixed power plug

or

Universal mains cord with male and female connector, set of mains plug adapters (6 qty) for all standard mains outlets, and Brazilian style mains cord adapter (0.25 m / 10 inch approximate).

At delivery of the BC190/820, make sure that the set is complete and all items are undamaged. Contact your supplier if you see any damage.

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Operation

⚠️ Warning

To prevent electrical shock, fire, or personal injury:

- Read these instructions carefully before using the Product.
- Use the Product only with Fluke test tools that have the type number 'BC190' specified for charge and operation.
- Use this Product only as specified.
- Do not open the Product, it has no user-serviceable parts inside.
- Do not use the Product around explosive gas, vapor, or in damp or wet environments.

The power cord connects the power adapter to the mains system. Do not block access to the power cord and power plug, these must remain accessible to the user at all times.

The Product is not equipped with a power switch. Disconnect the mains plug from the mains system when not in use.

In case the power adapter is damaged or any damage is suspected, disconnect from the mains system and have qualified service personnel inspect the Product, before reconnecting to the mains system again.

To use:

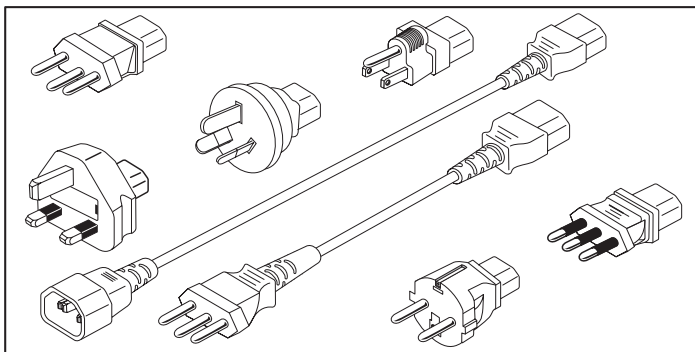
1. Connect the mains plug adapter to the universal power cord.
2. Connect the cable to the Battery Charger/Power Adapter.
3. Connect the power plug adapter to the mains system.
4. Connect the dc plug to the instrument.

The Product operates and charges the Fluke instrument from local line voltage. Any power supply connected to the ScopeMeter test tool introduces a certain capacitive coupling between the test tool and ground through the power supply circuitry. This capacitive coupling can affect ScopeMeter measurements. The BC190/820 main unit is equipped with dedicated decoupling networks to reduce possible effects of such capacitive coupling during measurements.

For an optimal decoupling from ground, especially if low-level measurements are made, it is recommended to work in battery-operated mode without any power adapter connected. See the ScopeMeter User Manual for safety information before making any measurements.

Note

Always fully charge the instrument battery before storing the test tool.



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Figure 2. Universal Cable and Mains Plug Set

Specifications

Input

Nominal input voltage	100 Vac to 240 Vac, $\pm 10\%$
Input current	0.35 A at max. load
Nominal input frequency	50/60 Hz $\pm 10\%$
Mains inlet	IEC 60320-1 type C14

Output

Output voltage	18 Vdc $\pm 5\%$
Output current	0 mA to 840 mA
Output cable length	2 m (6.5 ft)
Output connector	5 mm outer diameter, per DIN45232
Output polarity	Inner contact negative, outer contact positive

Physical characteristics

Dimensions of main unit	79 mm x 149 mm x 49 mm
Housing material	Heat resistant ABS
Color (housing and cable)	Black
Weight	0.35 kg
IP Rating	IEC 60529:IP40

Environmental

Operating temperature	0 °C to 50 °C (32 °F to 122 °F), up to 90 % rel. humidity, no condensation
Storage temperature	-40 °C to +70 °C, 10 to 95 % rel. humidity
Max. altitude	2000 m (6562 ft) above sea-level

Included accessories

Power cord	Localized power cord with mains plug or universal cord with set of power plugs
Universal Mains cord	Length 1.5 m (5 ft), male to female
Power plug adapters included	US-style, UK-style, European ('Schuko'), Chinese/Australian, Italian, Swiss, Brazilian (adapter cord)

General

Safety approval	600 V CAT IV acc. IEC/EN 61010-1 for Measurement, Control and Laboratory use.
EMC compatibility	EN 61326-1; FCC (47 CFR 15)

Symbols

International electrical symbols used on the Product and in this document are explained below.

	Risk of danger. Important information.
	Double Insulated
	DC (Direct Current)
	Hazardous voltage. Risk of electrical shock.
	Conformité Européenne
	Energy Efficiency level V
	This product complies with the WEEE Directive (2002/96/EC) marking requirements. The affixed label indicates that you must not discard this electrical/electronic product in domestic household waste. Product Category: With reference to the equipment types in the WEEE Directive Annex I, this product is classed as category 9 "Monitoring and Control Instrumentation" product. Do not dispose of this product as unsorted municipal waste. Go to Fluke's website for recycling information.
	Conforms to relevant South Korean EMC Standards.
	Conforms to relevant North American Safety Standards.