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**TECHNICAL MANUAL
PRECISION SOURCE
MODEL CT200**

UNCONTROLLED WHEN PRINTED

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INTERNET: www.radiantpowercorp.com

This manual should be read in its entirety prior
to operation of the CT200 Precision Source

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SECTION I GENERAL INFORMATION

1.1. INTRODUCTION

1.1.1. GENERAL. This manual contains the description, operation and maintenance of the Precision Source Model CT200 manufactured by Dukane Seacom, Inc., 7135 16th Street East, Suite 101, Sarasota, FL 34243 See Figure 1.

1.1.2. SYMBOLS AND ABBREVIATIONS. All symbols and abbreviations used in this manual are in accordance with the ANSI Y14.15 and MIL-STD-12, respectively.

1.2. GENERAL DESCRIPTION

1.2.1. FUNCTION. The CT200 is a power supply and precision calibration source for the TS200 and TS300 Test Sets.

TABLE 1.

PARTS LIST FOR THE CT200

CT200 PRECISION SOURCE SPECIFICATIONS

Size	5.1" x 6.4" x 2.3" (13.0 cm x 16.3 cm x 5.8 cm)
Weight	23.6 ounces (670 grams)

- 1 - CT200
- 1 - Test Set Probe Lead
- 1 - Battery Adapter Lead
- 1 - DC Power Supply
- 1 - Adjuster Tool
- 1 - Instruction Manual
- 1 - Carrying Case



Figure 1. CT200 Precision Source

SECTION II OPERATION

2.1 OPERATION

2.1.1. CT200 SETUP

Looking at the rear panel of the CT200, connect the Test Set Probe lead to the jack labeled 3V. Connect the Battery Adapter lead to the jack labeled BATT. Connect the DC power supply to the jack marked DC Power. See photo below.

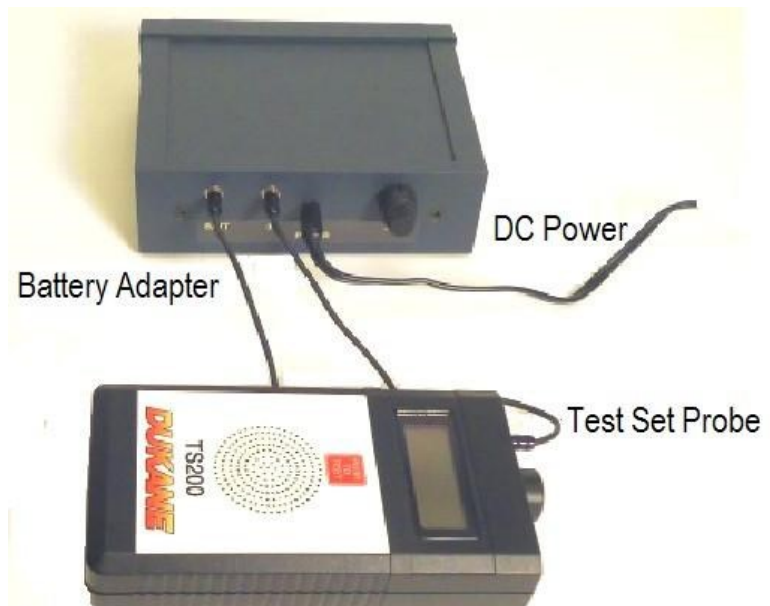
Figure 2. Rear View Test Set Probe Connection



2.1.2. CONNECTION TO THE TS200

Replace the Test Probe Clip connected to the TS200 with the other end of the Test Set Probe lead coming from the jack labeled 3V on the back of the CT200. Remove the 9V battery in the TS200. Connect the other end of the Battery Adapter lead coming from the CT200 jack labeled DC Power to the battery snap connectors in the TS200. Plug the DC Power Supply into an appropriate AC outlet.

*Figure 3. Unit Test Probe Connection
TS200 Shown*



SECTION III TS200 CALIBRATION PROCEDURE

3.1 CALIBRATION

3.1.1. Low battery indication

Connect test leads from CT200 to the TS200 under test (see Section II). Turn on the power using the rocker switch on front of CT200 labeled ON/OFF. Set rocker switch labeled LOW/NORMAL to the “LOW” position. Turn on the TS200 and observe the display. There should be an “LB” (low battery) indication on the left side of the display. Switch the LOW/NORMAL switch to the “NORMAL” position, and observe the display. The “LB” indication will no longer be visible on the display. If either of these conditions is not met, return the TS200 to Dukane Seacom, Inc. for service.

3.1.2. Calibration of the TS200 Volt Meter

Connect test leads from CT200 to the TS200 under test, (see Section II). Turn on the power to the CT200. Set the LOW/NORMAL rocker switch to the “NORMAL” position. Turn on the TS200 and observe the display. The TS200 should display 3.00V. If 3.00V is not displayed turn off power to the TS200 and the CT200.

3.1.3. Remove the four screws from the back of the TS200; this will expose the calibration test potentiometer (see figure below).


Figure 4. Calibration Potentiometer Location TS200 Shown



3.1.4. Adjust the calibration test potentiometer with the Adjuster Tool until the TS200 display reads 3.00V. Reassemble the TS200 housing and attach an approved calibration label. This completes the calibration.

3.1.5. The CT200 requires calibration every 2 years and 3 months. When calibration is required the CT200 must be returned to Dukane Seacom, Inc..

Ship to : Dukane Seacom, Inc.
7135 16th Street East, Suite 101
Sarasota, FL 34243

CAUTION	
	Observe precautions for handling electrostatic sensitive devices. Wear a wrist strap and touch ground to discharge any static before handling.

SECTION IV WARRANTY

Dukane Seacom, Inc. warrants that the Test Set (referred to as the unit) will be free from defects in materials and workmanship, when used under normal operating conditions as determined solely by Dukane Seacom, Inc., for a period of one (1) year from the date of shipment from Dukane Seacom, Inc..

As the sole remedy for breach of the foregoing warranty, Dukane Seacom, Inc. shall repair or replace, at Dukane Seacom, Inc.'s option, any unit, component or part thereof found defective or nonconforming within said one (1) year period from the date of shipment. Customer shall give Dukane Seacom, Inc. notice of any defect or nonconformity and, if so instructed by Dukane Seacom, Inc., customer shall, at its expense, ship the unit, component or part to Dukane Seacom, Inc.. If Dukane Seacom, Inc. determines that the unit, component or part is actually defective or nonconforming, it shall, at its expense, ship a new or a rebuilt unit, component or part to the customer. The customer shall be responsible to perform, at its own expense, any necessary installation work related to any defective or nonworking unit, component or part. The functionality and operational aspects of the unit is determined by the unit operating within the specifications and is dependent of proper maintenance as required to be performed by the customer.

Dukane Seacom, Inc. shall not be liable for any expense or damages resulting from interruptions in the operation of the unit.

Dukane Seacom, Inc. shall not be liable for the cost of any repairs undertaken by the customer or any third party without Dukane Seacom, Inc. prior written authorization.

Dukane Seacom, Inc. shall not be liable for any incidental, special consequential or exemplary damages arising out of the installation, use, testing, servicing or maintenance of any unit, component or part. This warranty is given in lieu of all other warranties, express or implied, included the warranties of merchantability or fitness for a particular purpose.

Dukane Seacom, Inc.'s total liability under this warranty is limited to the remanufacture or replacement of the unit, component or part.