



OWNER'S MANUAL

RC2000
Full-Function
Remote Control

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P/N 845

MODEL RC2000

INSTALLATION INSTRUCTIONS

INSTALLATION PREVIEW

The appropriate sequence for installing the remote control is as follows:

- **First** - Determine the mounting location and make the cutout that will accept the RC2000.
- **Second** - Feed the ribbon cable from the RC2000 to the inverter.
- **Third** - Connect the cable to the com port adapter and attach it to the inverter.

LOCATION

- The RC2000 should be installed in a dry location. Make certain that it will not be exposed to saltwater spray or extreme condensation. If possible, mount so that its indicator lights can be seen at a distance.
- The RC2000 is designed to be flush mounted. It is therefore suitable to be mounted in an instrument panel or bulkhead. The unit requires 1.5 inches of clearance behind its front panel. The RC2000 requires a 3 x 4.5 inch cutout.

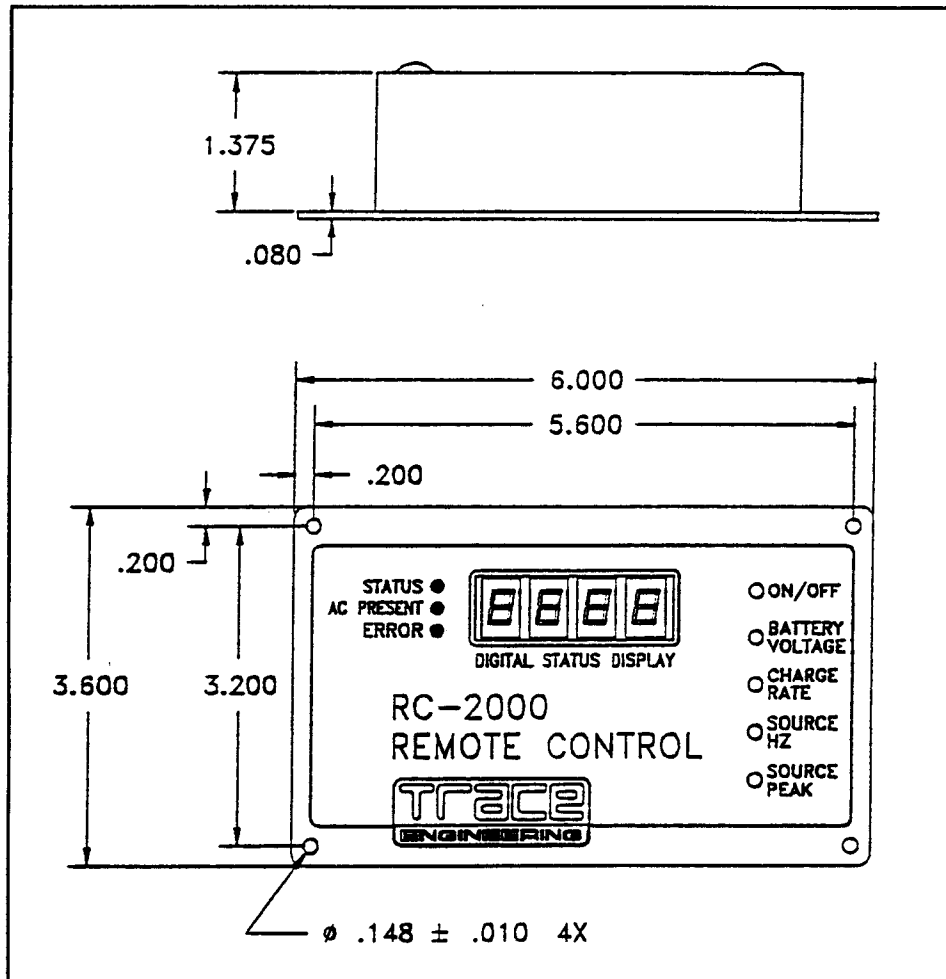
INSTALLATION PROCEDURE

While the installation is not complicated, it is important to pay attention to the following instructions. Improper installation of the RC2000 can cause the inverter to fail.

- **Step 1** - Examine the installation diagram on the last page of these instructions. This shows how the com port adapter connects to the side of the inverter. Don't mount the com

port adapter just yet.

- Step 2 - Disconnect the negative battery cable.
- Step 3 - Make a 3 x 4.5 inch cutout for the RC2000 at the desired location. (See face plate drawing below.)
- Step 4 - Feed the conductor ribbon cable from the mounting location to the inverter.



- Step 5 - Mount the RC2000 in place.
- Step 6 - Remove the inverter's com port cover.
- Step 7 - Insert the 14 pin connector into the com port

adapter box. The cable is oriented such that it is leading away from the side of the inverter.

- Step 8 - Plug the com port adapter's 26 pin connector into the inverter's com port. Do not force. If properly aligned, the connector will insert easily. Make certain that the ribbon cable is leading toward the back of the inverter. Ensure that both rows of pins on the printed circuit board align with the two rows of sockets on the connector. If there is already an option installed that is using the inverter's com port, the option will have a replacement com port. Use the option's replacement com port for this step rather than the inverter's.

WARNING - Ensure that the connector is properly oriented and that the pins are not misaligned. If the pins are not correctly aligned, the inverter may fail!

- Step 9 - Using the two of the Phillips head screws supplied, mount the com port adapter to the side of the inverter. The mounting holes in the adapter are aligned to match the spacing in the ventilation slots on the inverter's side. Check the installation drawing.
- Step 10 - Double check that the pins on the 26 pin connector are properly aligned. If you are not certain, do not proceed. When you are certain that the connector is correctly in place, connect the battery cable.

OPERATION

INDICATOR LIGHTS

There are three LED indicator lights. These lights report the operating mode of the inverter.

- **Status** - This light serves two functions. It indicates when the

inverter is in the standby mode by blinking rapidly. This light is on continuously when the inverter is delivering full output voltage. When the inverter is off the light is off. When either of the other two lamps are on, the status light will blink slowly.

- **AC Present** - When the inverter is turned on and connected to an AC source such as a generator or public power, this indicator lights.
- **Error** - This light responds during an error condition. The possible conditions are over current, high temperature, high battery or low battery. Check at the inverter to determine the source of the error light.

DIGITAL VOLTMETER

The digital voltmeter or DVM is read by pressing the button located next to the desired function listed on the right side of the panel. Most of the functions pertain to battery charging.

- **Battery Voltage** - Reads average battery voltage while in standby or inverter mode. Operates with the inverter on or off.
- **Charge Rate** - Reads average battery charge rate.
- **Source Hz** - This is the frequency of the grid or generator which is supplying the power to charge the batteries.
- **Peak Volts In** - Reads the peak voltage of the AC source that is delivering power to the inverter while it is in its battery charger mode. In order for the battery charger to deliver its rated current, it must be supplied with 164 peak volts. If the source voltage is sinusoidal, then the RMS equivalent is 117 VAC ($164/1.41 = 117$). If the peak voltage is above 200 volts, the meter will read "OFL". This condition is dangerous to household appliances, ie, TVs, VCRs, etc.

SPECIFICATIONS

GENERAL

Dimensions Height. 3.6 inches
Width. 6.0 inches
Depth 1.5 inches
Power Consumption065 watts

DVM (12VDC version)

Frequency 40 to 70 Hz \pm 3 digits
Battery Voltage. 9 to 16 volts \pm 3 digits
Peak AC Input Voltage. . . 100 to 199 volts \pm 2%
Charge Rate 0 to 20 amps \pm 10%
. 20 to 40 amps \pm 5%
. 40 to 52 amps \pm 10%

DVM (24VDC version)

Frequency 40 to 70 Hz \pm 3 digits
Battery Voltage. 20 to 32 volts \pm 3 digits
Peak AC Input Voltage. . . 100 to 199 volts \pm 2%
Charge Rate 0 to 20 amps \pm 10%
. 20 to 40 amps \pm 5%
. 40 to 52 amps \pm 10%

DVM (32VDC version)

Frequency 40 to 70 Hz \pm 3 digits
Battery Voltage. 24 to 60 volts \pm 3 digits
Peak AC Input Voltage. . . 100 to 199 volts \pm 2%
Charge Rate 0 to 20 amps \pm 10%
. 21 to 80 amps \pm 5%
. 80 to 120 amps \pm 10%

DVM (36VDC version)

Frequency 40 to 70 Hz \pm 3 digits
Battery Voltage. 28 to 52 volts \pm 3 digits
Peak AC Input Voltage. . . 100 to 199 volts \pm 2%
Charge Rate 0 to 15 amps \pm 10%
. 16 to 30 amps \pm 5%

. 31 to 40 amps \pm 10%

DVM (48VDC version)

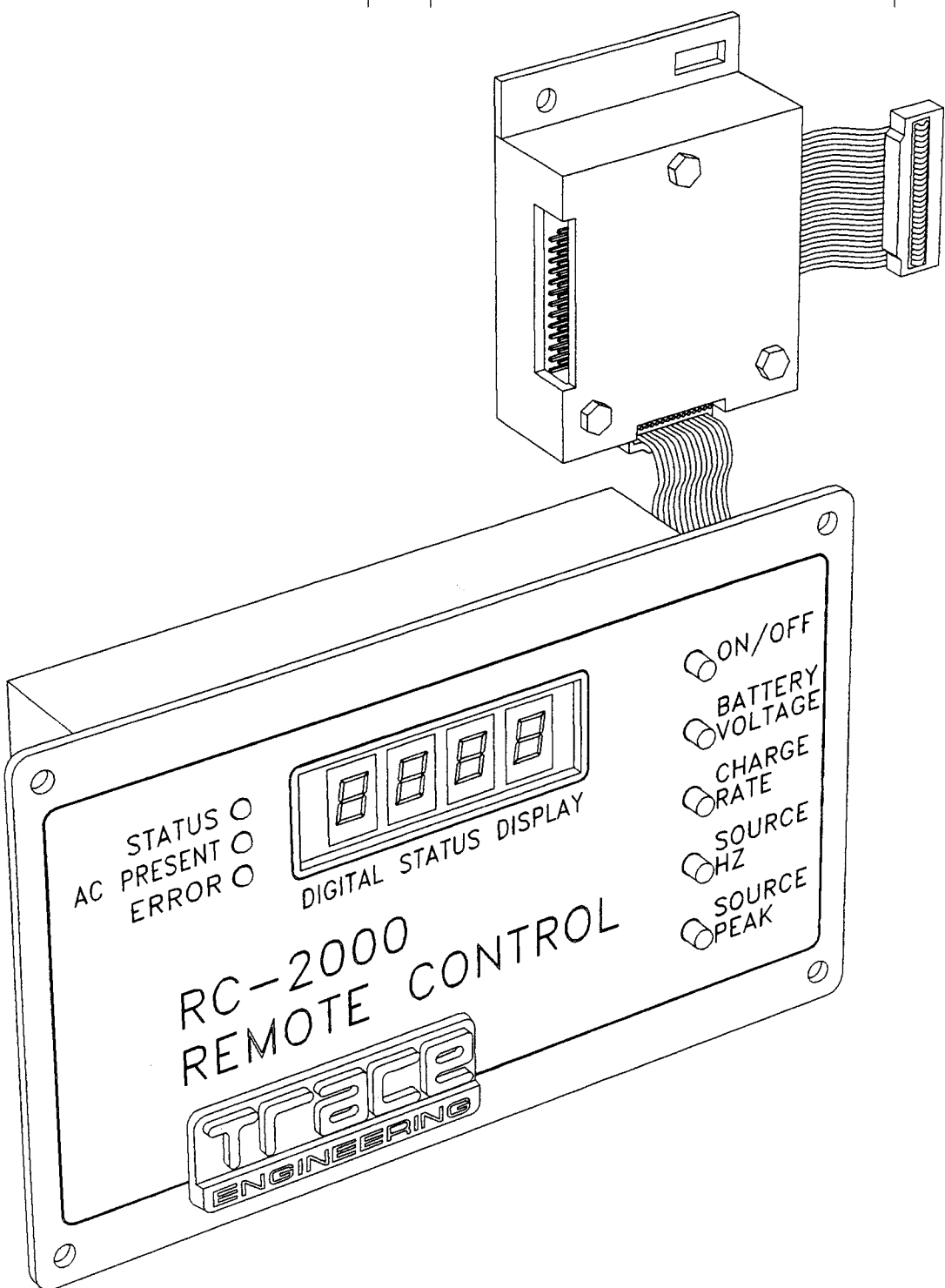
Frequency 40 to 70 Hz \pm 3 digits
Battery Voltage. 40 to 64 volts \pm 3 digits
Peak AC Input Voltage. . 100 to 199 volts \pm 2%
Charge Rate 0 to 10 amps \pm 10%
. 11 to 20 amps \pm 5%
. 21 to 25 amps \pm 10%

220 VAC MODELS

Peak AC Input Voltage. . 200 to 400 volts \pm 2%

All specifications subject to change without notice.

REVISIONS			
LTR	DESCRIPTION	DATE	APPRVD

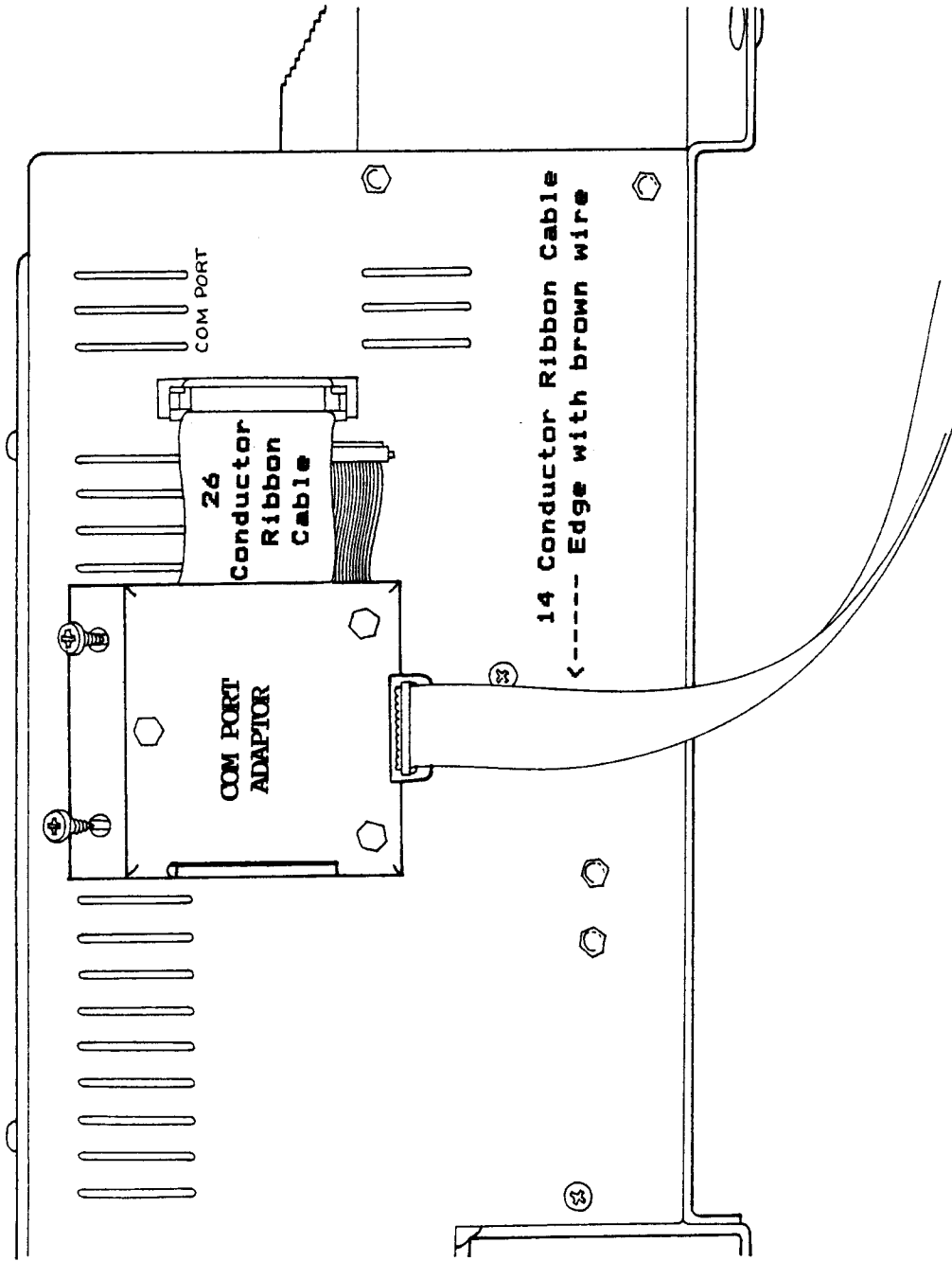


RELEASE STATUS NONE

TOLERANCES ARE:
 LINEAR
 XX = ±
 XXX = ±.010
 ANGULAR ± 2'
 BREAK ALL SHARP EDGES
 ALL ANGLES/BENDS 90°
 ALL DIMS PER ANSI Y14.5
 ALL MACHINED SURFACES
 THIS TECHNICAL DATA IS
 CONSIDERED PROPRIETARY
 AND SHALL NOT BE DISCLOSED
 WITHOUT THE PERMISSION
 OF TRACE ENGINEERING.

DRAWN	M. MOUSE	DATE	4-30-90
MECH	M. ANGELO		
ELEC			
MFG			
PURCH			
APPRVD			

Trace ENGINEERING		5917 195TH ST NE ARLINGTON, WA. 98223	
TITLE RC2000 ISO			
SIZE	A	DRAWING NO.	
SCALE	none	REV	-
		SHEET 1 OF 1	



INSTALLATION DIAGRAM



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