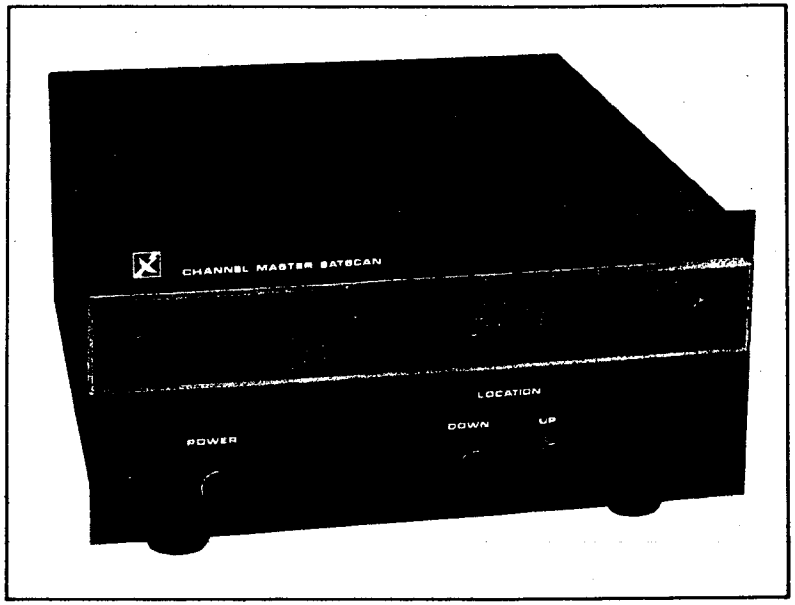
Channel Master®
SATELLITE RECEPTION EQUIPMENT



DELUXE SATSCAN Motorized Antenna Control

INSTALLATION and OWNERS MANUAL

MODEL 6250

SATELLITE RECEPTION EQUIPMENT WARRANTY

One Year Repair or Replace of Defective Products
(Limited Warranty – Labor not Included)

This Channel Master product is guaranteed to be free from defects in material and workmanship under normal use and service. We agree to repair or replace it, at our option, at no charge, if, within one (1) year after the delivery of the unit to the original retail purchaser, it is returned to us through our dealer and distributor with all transportation charges prepaid, and if our examination reveals to our satisfaction that the product is defective. Installation charges for removing or replacing the unit are not covered, and will not be honored by Channel Master under the terms of this warranty agreement.

This guarantee shall not apply to any product which shall have been repaired or altered in any way so as, in our judgment, to affect its stability or durability, nor which has been subject to misuse, negligence or accident, nor has had the serial number altered, affected or removed. This warranty does not cover products that have been impaired by severe weather conditions such as excessive wind, ice, storms, lightning, or other natural occurrences over which Channel Master has no control. Nor shall this guarantee apply to any product which has been operated other than in accordance with the instructions furnished by us.

Claimants under this warranty should present their claim along with the defective product and the Warranty Certificate originally supplied with it, to their supplier immediately upon failure. Non-compliance with any part of this claim procedure or improper registration of the product with Channel Master at the time of its original installation may invalidate this warranty in whole or in part.

This guarantee is in lieu of all other guarantees expressed or implied, and we neither assume nor authorize any representative or other person to assume for us any other liability in connection with the sale of our products.

CHANNEL MASTER
ELLENVILLE, NEW YORK

CONTENTS:

Using the SATSCAN unit and starting from the extreme west end of the satellite belt, locate SATCOM III-R.

Tune the satellite receiver to a horizontally polarized, mid-band channel 12 or 14.

Refering to the TV picture and the receiver's signal strength meter (if present) use the SATSCAN UP/DOWN push buttons to obtain the best picture and record its 3-digit reference number on the card.

Repeat the above procedure for each additional satellite.

SATSCAN LOCATOR CARD

SATELLITE	LOCATION	POLARITY
SATCOM II R		NORMAL
GALAXY II		NORMAL
SATCOM IV		NORMAL
COMSTAR DIII		NORMAL
WESTAR III		REVERSE
COMSTAR D1/D2		NORMAL
TELSTAR 301		NORMAL
WESTAR IV		REVERSE
ANIK - D		REVERSE
ANIK - B1		REVERSE
ANIK - A2/A3		REVERSE
SATCOM II		NORMAL
WESTAR V		REVERSE
COMSTAR D4		NORMAL
SATCOM III R		NORMAL
SATCOM I		NORMAL
GALAXY I		NORMAL
SATCOM I R		NORMAL
SATCOM V		NORMAL

(4) SATSCAN Locator Card – Provides the 3-digit reference number used to locate the domestic satellites with the SATSCAN unit. (Filled out during installation, see section II-2)

SATSCAN LOCATOR CARD

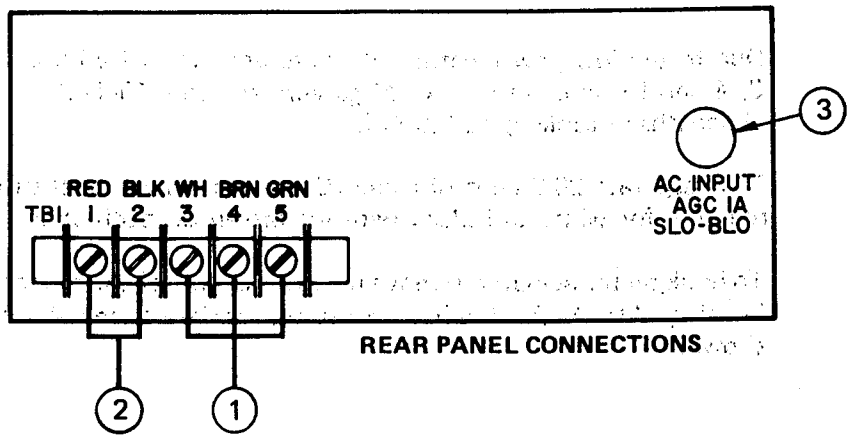
SATELLITE	LOCATION	POLARITY
SATCOM II R		NORMAL
GALAXY II		NORMAL
SATCOM IV		NORMAL
COMSTAR DIII		NORMAL
WESTAR III		REVERSE
COMSTAR D1/D2		NORMAL
TELSTAR 301		NORMAL
WESTAR IV		REVERSE
ANIK - D		REVERSE
ANIK - B1		REVERSE
ANIK - A2/A3		REVERSE
SATCOM II		NORMAL
WESTAR V		REVERSE
COMSTAR D4		NORMAL
SATCOM III R		NORMAL
SATCOM I		NORMAL
GALAXY I		NORMAL
SATCOM I R		NORMAL
SATCOM V		NORMAL

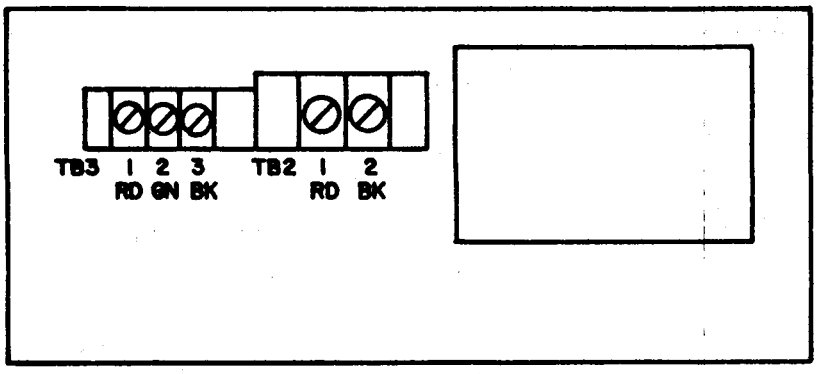
I-2 Rear Panel Connections:

(1) Sensor Output Connection TB-1 – Terminals 3, 4, 5– Provide analog feedback signal to LED digital display. Leads to the 3-terminal potentiometer mounted on the hour jack actuator are connected here.

(2) DC Power Output Connection TB-1, Terminals 1 and 2–Provide DC power to jack actuator motor.

(3) Fuse – 1 AMP, Slo-Blo





MODEL 6197 12V SATSCAN
REAR PANEL

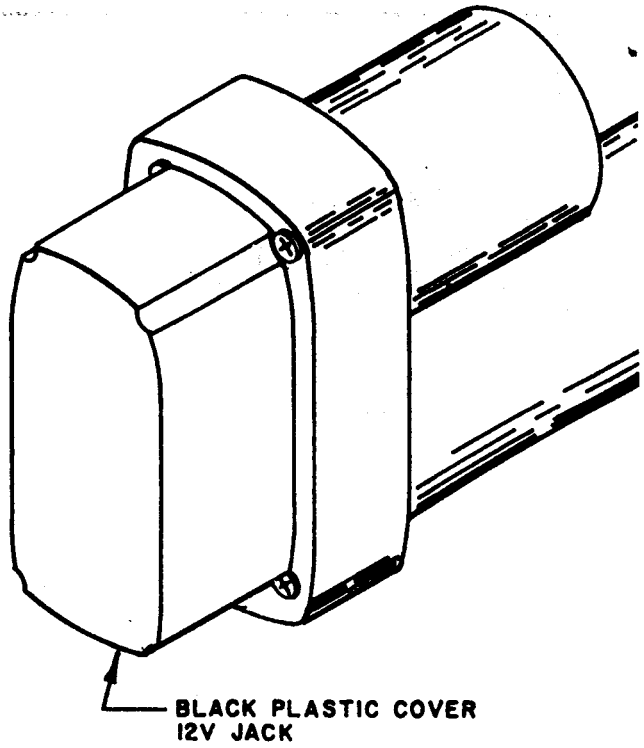
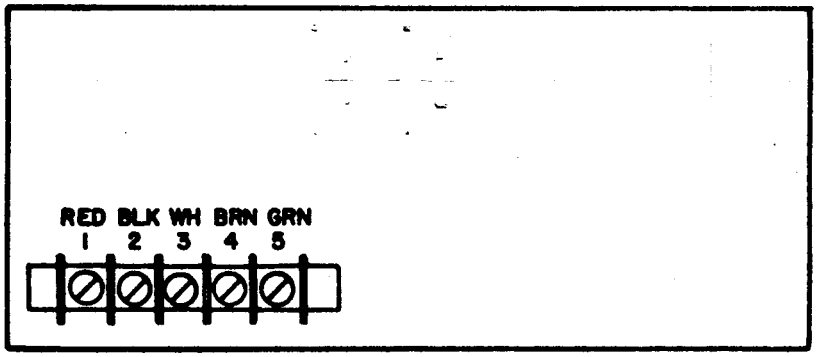


FIG. 2



MODELS 6250 & 6251 36V SATSCAN
REAR PANEL

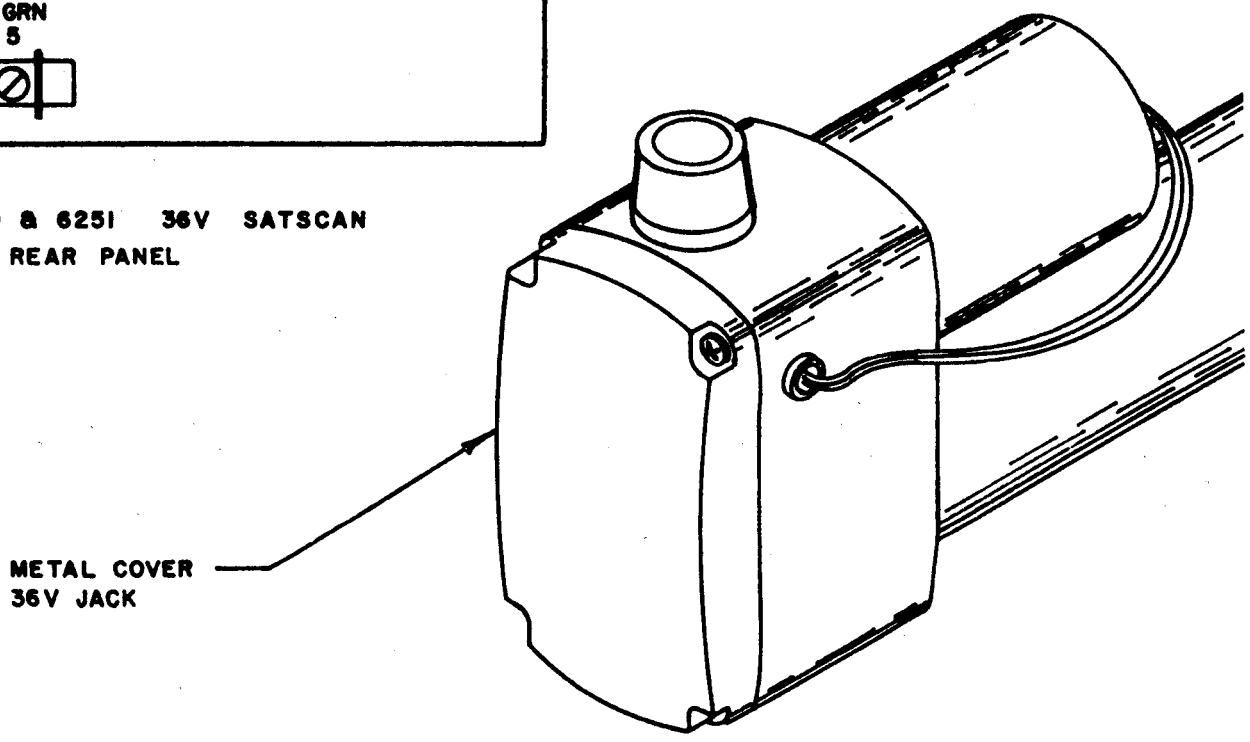
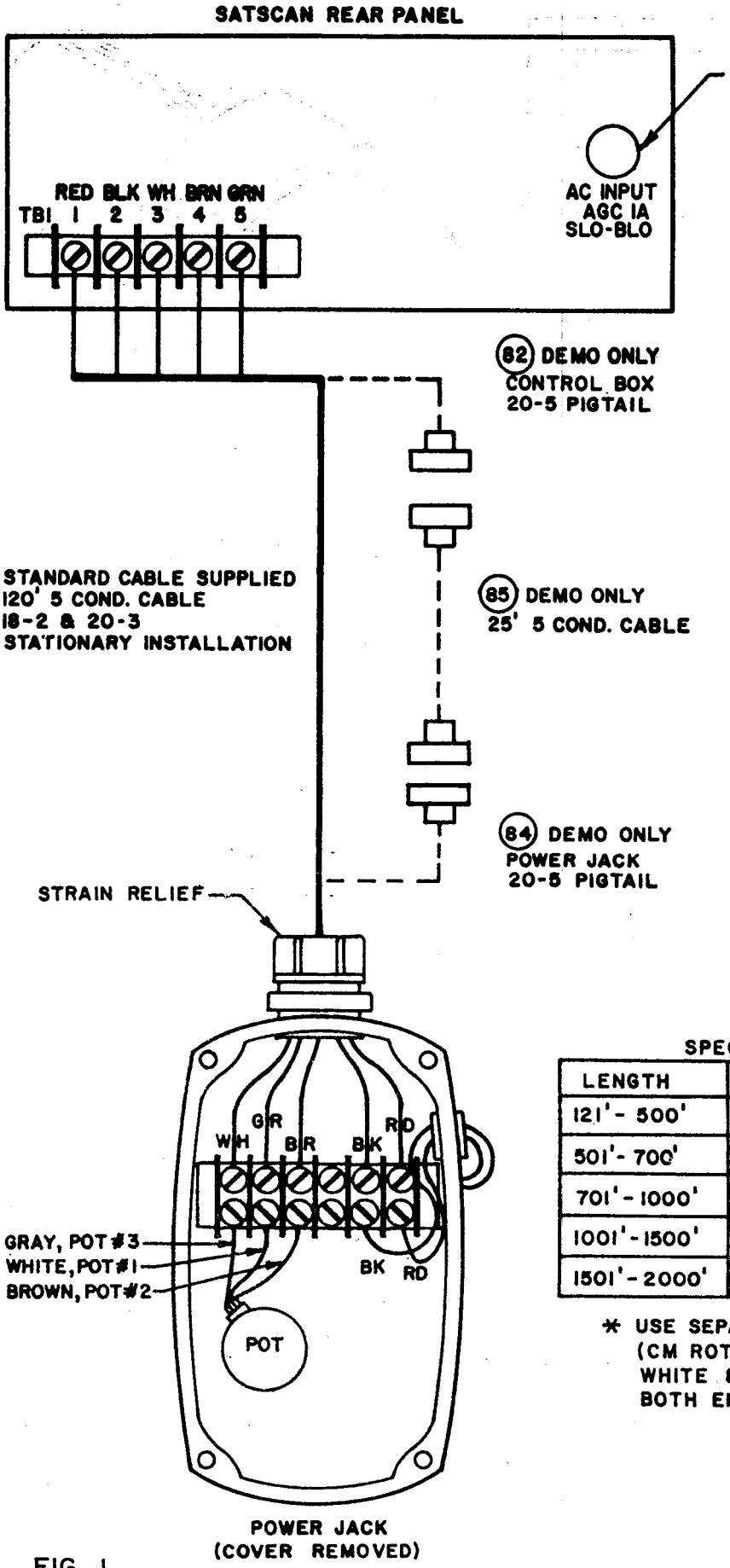


FIG. 3



INSTRUCTIONS:

1. ASSEMBLE JACK TO ANTENNA MOUNT WITH STRAIN RELIEF POINTING DOWNWARD.
2. ROUTE CABLE BETWEEN POWER JACK AND CONTROL UNIT IN CONDUIT OR DIRECT BURIAL LEAVING SLACK FOR JACK MOVEMENT.
3. STRIP OUTER JACKET " AND STRIP INDIVIDUAL WIRES 3/8" ON BOTH ENDS OF 5 CONDUCTOR CABLE. CHECK STRIPPED AREAS FOR INSULATION AND CONDUCTOR DAMAGE.
4. REMOVE JACK END COVER, INSERT CABLE THROUGH WATERTIGHT STRAIN RELIEF, CONNECT WIRES TO TERMINAL BLOCK AND REPLACE JACK COVER.
5. ATTACH WIRES TO SATSCAN TERMINAL BLOCK.
6. CAUTION: 12V CONTROLS & JACKS SHOULD NOT BE INTERMIXED WITH 36V CONTROLS & JACKS. FIG. 2 DESCRIBES 12V CONTROL & JACK, WHILE FIG. 3 DESCRIBES 36V CONTROL & JACK.

SPECIAL LENGTH CABLES

LENGTH	10' ANTENNA	12' ANTENNA
121'- 500'	16-2 *	14-2 *
501'- 700'	14-2 *	14-2 *
701'- 1000'	14-2 *	12-2 *
1001'- 1500'	12-2 *	12-2 *
1501'- 2000'	10-2 *	10-2 *

* USE SEPARATE 20-3 CONTROL CABLE (CM ROTOR). SUBSTITUTE RED WIRE FOR WHITE & BLACK WIRE FOR BROWN ON BOTH ENDS.

FIG. 1

INSTALLATION WIRING DIAGRAM
SATSCAN MODELS 6250 & 6251
36V

SECTION II
INSTALLATION

WARNING: Installation should be done by a qualified Technician ONLY!

II-1 Connection of Model 6250 Deluxe SATSCAN to the Hour Jack Actuator Motor

The Actuator Motor is part of the Hour Jack which is located on the polar mount and supply voltage is fed to it from the SATSCAN unit via a 5 conductor cable (2 cables are used at lengths over 200 ft., one 2 conductor, one 3 conductor). Terminals labeled WH (White), BRN (Brown), and GRN (Green) supply analog feed back to the Satscan LED Digital Display. Terminals labeled RD (Red) and BLK (Black) provide DC voltage levels from 34 to 38 volts under load (see figure 2.2).

Depending on cable length between control and motor, it will be necessary to use different size wire on power terminals labeled red and black (see chart – figure 2.1).

FIG. 2.1 SPECIAL LENGTH CABLES

LENGTH	10' ANTENNA	12' ANTENNA
201' – 500'	16 - 2 *	14 - 2 *
501' – 700'	14 - 2 *	14 - 2 *
701' – 1000'	14 - 2 *	12 - 2 *
1001' – 1500'	12 - 2 *	12 - 2 *
1501' – 2000'	10 - 2 *	10 - 2 *

Due to the low power nature of the sensor circuit (terminals 3, 4 and 5) on control box. 20 ga. wire will be sufficient for all lengths of cable up to 2,000 ft.

*Use separate 20-3 control cable (CM Rotor 9554)-substitute red wire for white and black wire for brown on both ends.

To hook up the actuator, remove the rear portion of the motor housing. Attach the 5 wires to the appropriate terminals as shown.

SATSCAN REAR PANEL

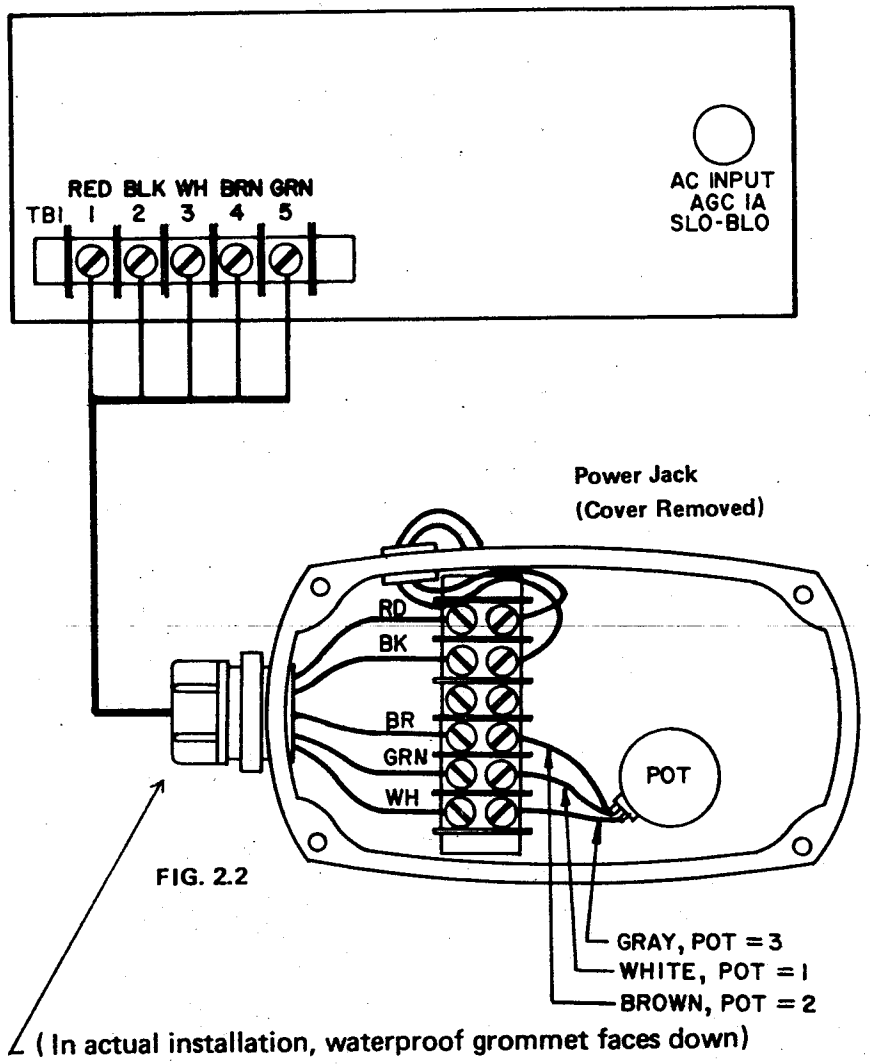


FIG. 2.2

(In actual installation, waterproof grommet faces down)

II-2 Completion of SATSCAN Locator Card:

A convenient reference for satellite locations, the SATSCAN Locator Card comes pre-printed with the names of the satellites in their correct order. Spaces have been left in case of future additions.

SECTION 1
OPERATION

The Channel Master Model 6250 SATSCAN motorized antenna control provides quick and accurate remote antenna orientation with convenient LED Digital Read Out for locating domestic satellites in the Clark orbital belt.

The UP and DOWN push buttons activate the motorized hour angle jack for antenna orientation when finding the satellites.

The LED DIGITAL DISPLAY refers to the relative position of the antenna.

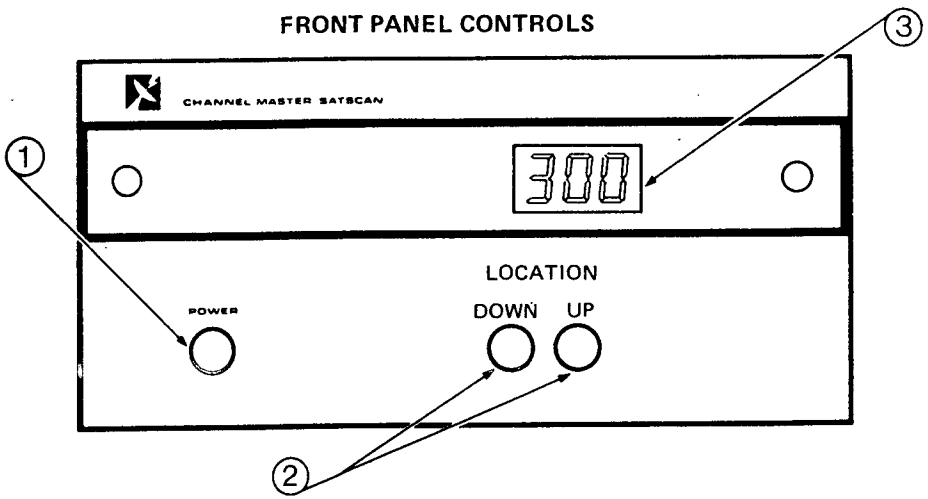
I-1 Front Panel Controls and Display:

(1) Power — Push for Power "ON." Push for Power "OFF."

(2) Location Selection, Down, Up — Pushing the appropriate button decreases or increases the digital read-out indicating dish movement through the orbital arc. If either button is held in past the limits of antenna rotation, the unit will automatically override the push buttons and turn off the activator motor.

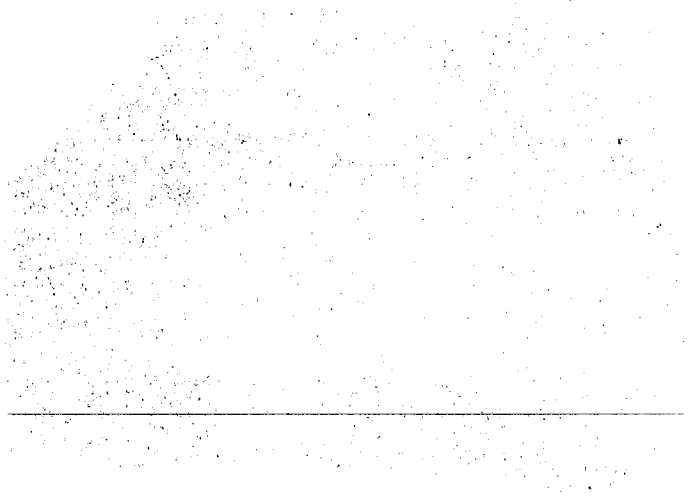
(3) LED Digital Read-Out — A 3-digit display that refers to the relative position of the dish and gives the operator exact repeatability when locating the various satellites.

FRONT PANEL CONTROLS



SPECIFICATIONS:

CONSOLE:	
Display	3-digit, LED
Sensor Method	Pulse modulation analog to digital conversion
Disital Display Accuracy	.35 degrees of the arc
Sensing Analog Update	200 MS Conversion rate
Automatic Shutoff	2 precision voltage comparators
CONTROLS:	
Front Panel	
Power	On/Off
Position Locator	UP/DOWN
Rear Panel	
Sensor Output and Actuator DC Output	5-lug terminal block behind cover
Prime Power Fuse	120 VAC, 50 to 60 cycles 1 Amp Slo-Blo
ACTUATOR:	
Rated Load	1500 lbs.
Jack Stroke	16" Minimum
Traverse Time	30 sec. nominal
Current Draw	
10 ft. antenna	2.0 Amps typical
12 ft. antenna	2.5 Amps typical
Motor	36 Volt,DC, permanent magnet
Brake	Motor braking, electronic stops and a fail safe built in slip clutch at each end of full stroke.
Power	Nominal voltage at motor 34-38 Vdc
ENVIRONMENTAL (ACTUATOR JACK):	
Temperature	
Operating	-30°C to +60°C



NOTICE TO CUSTOMER

Use of this device may violate Section 605 of the Communications Act of 1934, as amended, through the unauthorized interception and divulgence of radio communications; or the use of radio communications for one's own benefit where there is not entitlement to its receipt.

The customer is responsible for compliance with all local, state, and federal governmental laws and regulations including, but not limited to construction, placement and use.