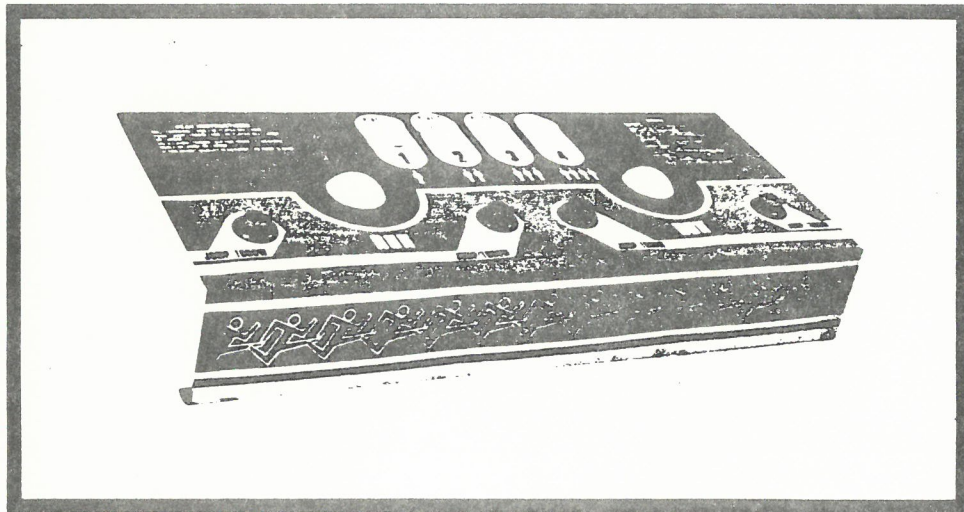


STERN TRACK AND FIELD CONTROL PANEL CONVERSION KIT FOR TRACK AND FIELD



INSTRUCTION MANUAL



Stern Electronics, Inc./700 Chase
Elk Grove Village, Illinois 60007
(312) 981-9600 Telex: 254657



TOLL-FREE
Service No.
(800) 621-6424

STERN T & F CONTROL PANEL CONVERSION KIT FOR TRACK AND FIELD

FORWARD

Your stern kit is designed for ease of installation and will generate increased earnings on your Track & Field game.

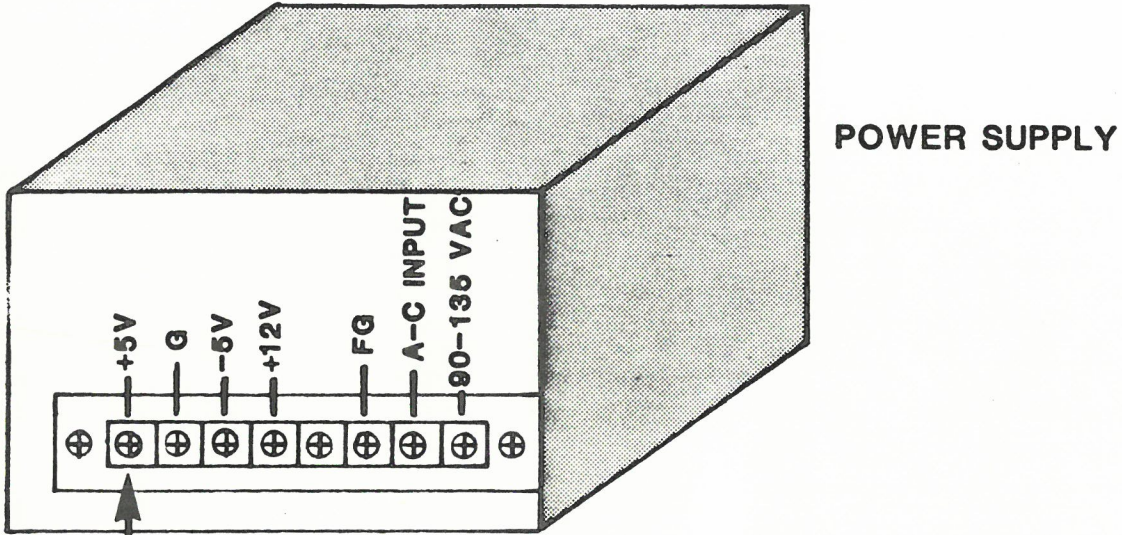
The kit consists of the following:

1. One metal control panel with its attractively screened overlay.
2. Two trac-ball assemblies with an adapter board.
3. Four button assemblies.
4. One control panel cable assembly.
5. Wiring diagram.

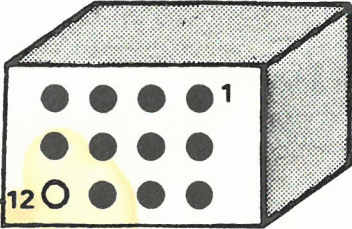
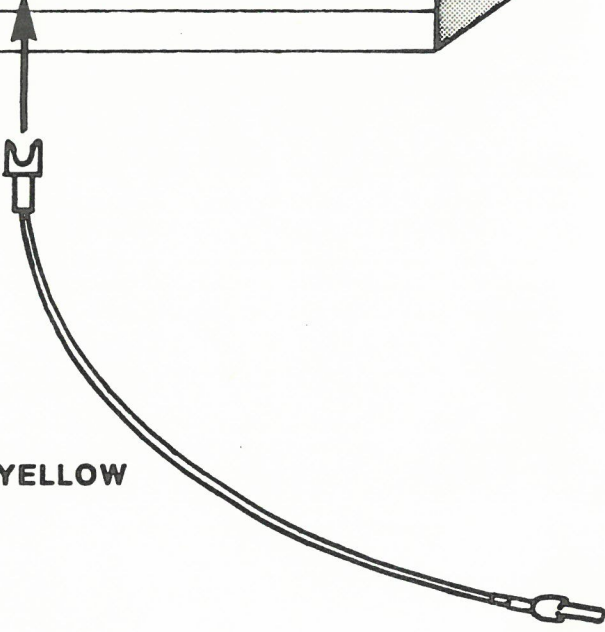
INSTALLATION INSTRUCTIONS

1. Remove 2 wing nuts and carriage bolts on underside of control panel (save the wing nuts and carriage bolts).
2. Tilt control panel up and towards the front of the game.
3. Disconnect control panel harness connector from cabinet harness connector.
4. Remove 4 hinge mounting phillips screws.
5. Lift control panel out of cabinet.
6. Remove 5 carriage bolts which fasten the control panel to the hinge. (save the carriage bolts and hinge).
7. Remove 5 carriage bolts and L-bracket at top of control panel and reinstall on new control panel.
8. Place trac-ball panel in cabinet and fasten the hinge, using 4 phillips screws mentioned in step #4.
9. Install the red-yellow wire socket terminal end into the unused receptacle on the CABINET HARNESS CONTROL PANEL CONNECTOR (pin 12). Install the spade lug end of the red-yellow wire on the +5V. D.C. terminal of the power supply, located in the rear of cabinet, refer to illustration 1.
10. Connect control panel harness connector to cabinet harness connector.
11. Tilt trac-ball panel down and fasten it down with wing nuts from step #1.

5 VOLT CONNECTION

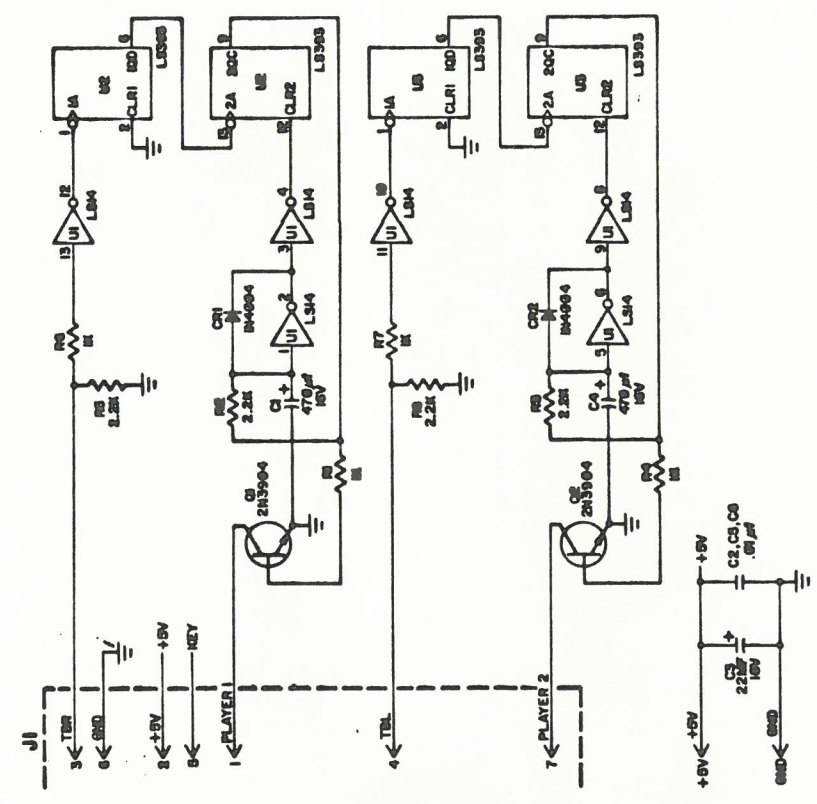


RED - YELLOW



PIN # 12
CABINET HARNESS CONTROL PANEL CONNECTOR

REVISIONS		REV.	DATE	BY	CHK.
A	ISSUED E. I. 03330				
B	R5 AND R6 WERE L3K4				
C	CHANGED 200 OUTPUTS TO 20C				
	ON US AND US E. I. 03400				



LS393	M	7
LS14	M	7
I.C. TYPE		PN NO.
+5V		GND

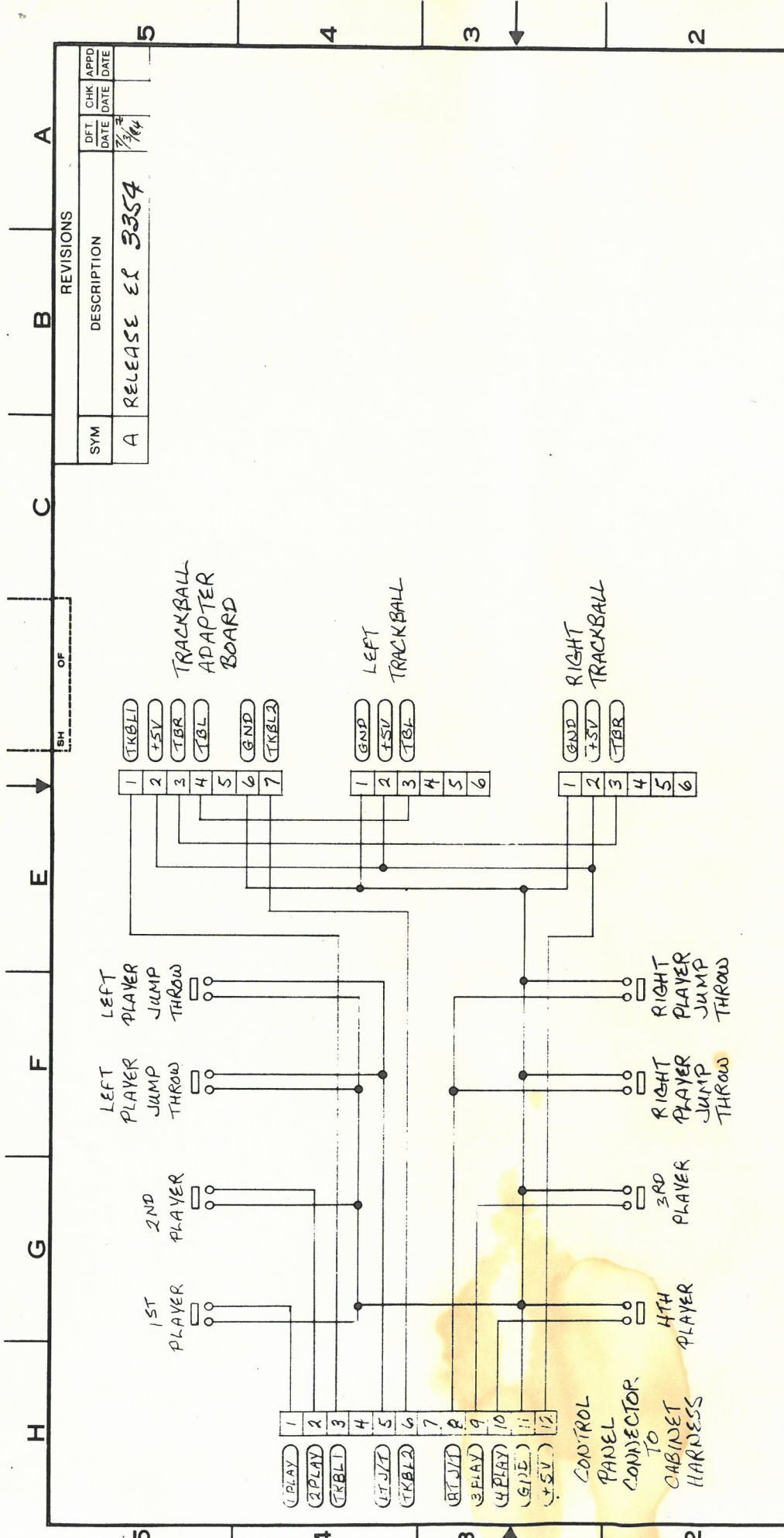
URI
 UNIVERSAL RESEARCH LABORATORIES, INC.
 700 CHASE AVENUE
 ELK GROVE VILLAGE, ILLINOIS 60007

**SCHEMATIC, TRACK BALL
 ADAPTER P.C. BOARD**

DWG PART NO 34C-2810-S
 REV C

DR. T. MERAD 6/25/64
 APP'D
 MODEL TBA-1000
 SCALE 1:1
 DO NOT SCALE DRAWING

THESE DRAWINGS AND SPECIFICATIONS ARE THE EXCLUSIVE PROPERTY OF UNIVERSAL RESEARCH LABORATORIES, INC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF UNIVERSAL RESEARCH LABORATORIES, INC. THIS DOCUMENT IS UNCLASSIFIED AND IS IN THE PUBLIC DOMAIN.



REVISIONS		DFT DATE	CHK DATE	APPD DATE
SYMBOL	DESCRIPTION	7/3/84		
A	RELEASE EL 3354			

		UNIVERSAL RESEARCH LABORATORIES, INC. A SUBSIDIARY OF STERN ELECTRONICS 700 CHASE AVENUE ELK GROVE VILLAGE, ILLINOIS 60007	
NAME TRACK & FIELD TRACKBALL CONVERSION WIRING DIAGRAM		REV. A	
DWG NO. B	PART NO. 34B-143-WD	SCALE NONE	DO NOT SCALE DRAWING
DR. Z	CHK. 7/3/84	APPD. [Signature]	MODEL
TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS: 1/64 ANGULAR: 1/2° CONCENTRICITY: .008 T.I.M.		DECIMALS 2 PLACE ± .010 3 PLACE ± .005 4 PLACE ± .0005	
ALL MACHINED SURFACES REMOVE BURRS & SHARP EDGES AFTER PLATING.		ALL DIMENSIONS ARE AFTER PLATING.	
THESE DRAWINGS AND SPECIFICATIONS ARE THE EXCLUSIVE PROPERTY OF URL/A STERN ELECTRONICS COMPANY. ISSUED IN STRICT CONFIDENCE AND SHALL NOT BE REPRODUCED OR COPIED, OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT THE MANUFACTURE OF ARTICLES FOR UNIVERSAL RESEARCH LABORATORIES INC.			