SHEET INDEX

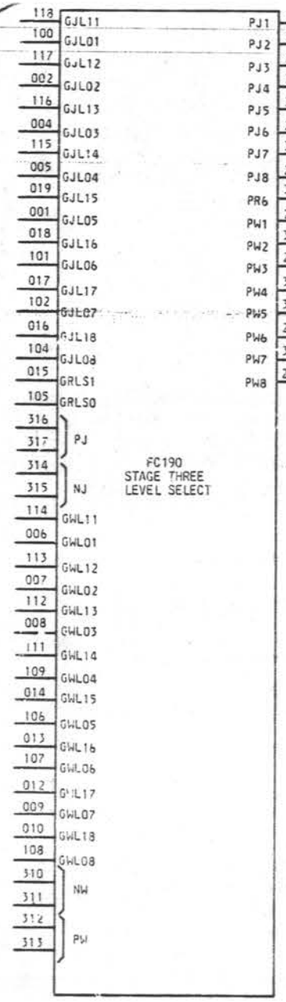
CONTENTS	SHEET NO.	SHEET ISSUE
SHEET INDEX SUPPORTING INFORMATION CURRENT DRAIN USED ON NOTES SYMBOL RECORD OF CHANGES CIRCUIT DESCRIPTION	1	2
CIRCUIT SCHEMATIC COMPONENT LIST	2	2

SYMBOL

STAGE THREE LEVEL SELECT
ELEMENT IDENT
A

TERM.MOD	FUNCT	TERM.	LOC
GJL01	I	100	2A2
GJL02	I	002	2A2
GJL03	I	004	2B2
GJL04	I	005	2B2
GJL05	I	001	2B2
GJL06	I	101	2C2
GJL07	I	102	2C2
GJL08	I	104	2C2
GJL11	I	118	2A2
GJL12	I	117	2A2
GJL13	I	116	2A2
GJL14	I	115	2B2
GJL15	I	019	2B2
GJL16	I	018	2B2
GJL17	I	017	2C2
GJL18	I	016	2C2
GRLS0	I	105	2D2
GRLS1	I	015	2C2
GWL01	I	006	2D2
GWL02	I	007	2E2
GWL03	I	008	2E2
GWL04	I	109	2E2
GWL05	I	106	2E2
GWL06	I	107	2E2
GWL07	I	009	2E2
GWL08	I	108	2E2
GWL11	I	114	2D2
GWL12	I	113	2D2
GWL13	I	112	2E2
GWL14	I	111	2E2
GWL15	I	014	2E2
GWL16	I	013	2E2
GWL17	I	012	2E2
GWL18	I	010	2E2
NJ	I	314	2D3
NJ	I	315	2D3
NW	I	310	2D3
NW	I	311	2D3
PJ	I	316	2D3
PJ	I	317	2D3
PW	I	312	2H3
PW	I	313	2H3
PJ1	O	207	2A9
PJ2	O	307	2A9
PJ3	O	208	2B9
PJ4	O	308	2B9
PJ5	O	306	2B9
PJ6	O	201	2B9
PJ7	O	301	2C9
PJ8	O	202	2C9
PR6	O	302	2C9
PW1	O	206	2D9
PW2	O	305	2E9
PW3	O	205	2E9
PW4	O	300	2E9
PW5	O	304	2E9
PW6	O	204	2F9
PW7	O	303	2F9
PW8	O	203	2F9

SYMBOL



RECORD OF CHANGES				
DWG ISS	PREV FURN	STD	MFR DISC	SEE NOTE

CIRCUIT DESCRIPTION

FUNCTIONS

THIS CIRCUIT PACK PROVIDES TWO PULSE PATH SELECTION CIRCUITS. IN EACH CIRCUIT THE HIGH CURRENT PULSE PATHS ARE CONTROLLED FROM RELATIVELY LOW POWER SIGNALS ON INPUT LEADS. THIS CONTROL IS PROVIDED FOR DUPLICATED CONTROLLERS.

DETAILED DESCRIPTION

IN THE UPPER CIRCUIT THE HIGH AMP CURRENT FLOWS INTO THE PJ LEAD AND OUT ONE OF THE LEADS PJ1-8,PR6. THE PARTICULAR PATH USED IS SELECTED BY APPLYING 13 VOLTS TO ONE OF THE INPUT LEADS GJL01-08, GJL11-18, GRLS0,1 AND GROUNDING LEAD NJ.

IN THE LOWER CIRCUIT THE HIGH AMPLITUDE CURRENT PULSE FLOWS INTO ONE OF THE LEADS PW1-8 AND OUT THE PW LEAD. ONE OF THE EIGHT PATHS IS SELECTED BY APPLYING 13 VOLTS TO ONE OF THE INPUT LEADS GWL01-08, GWL11-18 AND GROUNDING LEAD NW.

NOTES:

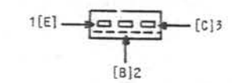
1. UNLESS OTHERWISE SPECIFIED:
   RESISTANCE VALUES ARE IN OHMS
   CAPACITANCE VALUES ARE IN MICROFARADS
   VALUES PRECEDED BY THE SYMBOL + (PLUS) OR - (MINUS) ARE IN VOLTS.
2. POWER AND GROUND TERMINALS FOR INTEGRATED CIRCUITS:

IC CODE	GRD TERM.			

3. BATTERY AND GROUND TERMINALS FOR THIS CIRCUIT PACK ARE AS FOLLOWS:

FUNCTION	TERMINAL

4. THE TERMINAL NUMBER ARRANGEMENT OF THE 85A TRANSISTOR IS:



5. CLOSEST HORIZONTAL MOUNTING CENTERS IS 0.750 INCH.
6. INITIAL USE OF THE FC190 CIRCUIT PACK IS IN SD-3H110-01.

DWG ISSUE	DATE ISSUE	DRAWN	APPD
1	12-12-75	LRE	LDW LEG
		LRE	RFG
201	8-4-77	NA-TAB	LDW EN
		LRE	RFG

SYSTEM USED ON	DESIGN CONTROL
NO. 3 ESS	IH

CURRENT DRAIN: 0 mA

SHEET INDEX NOTES

1. FOR SINGLE REISSUES, A CHANGED OR NEW SHEET WILL BE ASSIGNED THE SAME ISSUE NUMBER AS SHEET 1.
2. FOR CONCURRENT REISSUES, A CHANGED OR NEW SHEET WILL BE ASSIGNED THE HIGHEST ISSUE NUMBER AFFECTING THAT SHEET.
3. THE ISSUE NUMBER OF SHEET 1 IS RECOGNIZED AS THE ISSUE NUMBER OF THE WHOLE DRAWING.

SUPPORTING INFORMATION

CATEGORY	NUMBER
CONNECTOR ON FRAME	947A 947C OR 947E
CIRCUIT PACK INFORMATION DRAWING	
SERIES FOR LATEST CLASS "A" CHANGE	
ACCEPTABLE SERIES	3

1T11

FC190 CIRCUIT PACK
STAGE THREE LEVEL SELECT CIRCUIT

AT&TCO STANDARD

DWG SIZE	ISSUE
6S	2D1

BELL LABORATORIES | CPS-FC190 | 2 SHEETS

5262-038775 PRINTED IN U.S.A.

STAGE THREE LEVEL SELECT CIRCUIT

COMPONENT LIST

CAPACITOR

DESIG	CODE
[17]C1-C17	KS-20736,L1, .1

DIODE

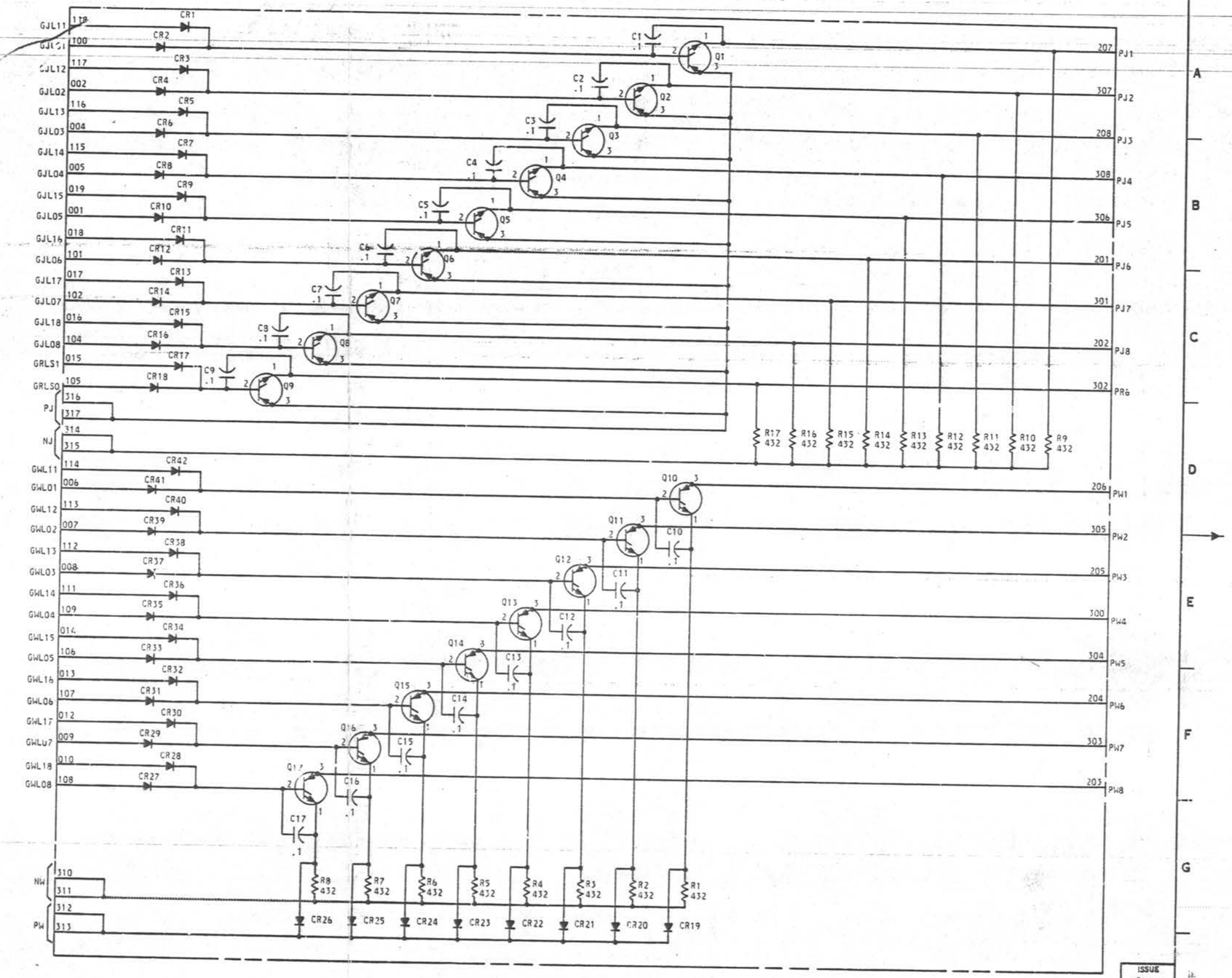
DESIG	CODE
[18]CR1-CR18	4568
[8]CR19-CR26	5338
[16]CR27-CR42	4568

RESISTOR

DESIG	CODE
[17]R1-R17	KS-20810,L1A, 432

TRANSISTOR

DESIG	CODE
[17]Q1-Q17	85A



ISSUE 2D1

FC190 CIRCUIT PACK

BELL TELEPHONE LABORATORIES INCORPORATED

CHG SIZE 6S

CPS-FC190 SHEET 2

PRINTED IN U.S.A.