

## K SERIES MODULES

Another very important variety of "off-the-shelf" modules is the K series module. These are used in, but not limited to control applications. The number of applications using these modules runs into the hundreds. Representative applications include:

- Computer Based Data Acquisition
- Computer Based Control Systems
- Multiprocessor Systems
- Industrial Data Acquisition and Control
- Analog-to-Digital Conversion and Multiplexer Subsystems
- Digital Input and Output Subsystems
- Gas Chromatography Systems
- N/C Tape Preparation Systems

The combination of the M and K series modules using the "building block" approach with "off-the-shelf" modules is an ideal method of interfacing to the PDP-8/E processor for control applications. For more information and detailed examples, the reader should acquire a free copy of DEC's Control Handbook containing more than 200 pages of instructive material in the field of industrial control.

# appendix

## SPARE PARTS LIST

### PDP8E CUSTOMER RECOMMENDED SPARES

#### Option SP8-EA Kit (First Level) (4K)

DEC PART NO.	DESCRIPTION
M8300	Major Register
M8310	Register Control
M8330	Timing Module
G104	Sense/Inhibit Module
G227	X/Y Driver Module
12-05941	Slide Switch
12-05375	Slide Switch, Momentary
12-5849-13	Handle, Terra Cotta
12-5849-12	Handle, Amber
12-9219	Indicator Bulb
70-06994	Key Switch Assy.
54-9264	Power Supply Module
54-9262	Power Supply Module

#### SP8-EA KIT

#### Option SP8-EC Kit (First Level) (8K)

DEC PART NO.	DESCRIPTION
M8300	Major Register
M8310	Register Control
M8330	Timing Module
G111	Sense/Inhibit Module
G233	X/Y Driver Module
12-05941	Slide Switch
12-05375	Slide Switch, Momentary
12-5849-13	Handle, Terra Cotta
12-5849-12	Handle, Amber
12-9219	Indicator Bulb
70-06994	Key Switch Assy.
54-9264	Power Supply Module
54-9262	Power Supply Module

#### SP8-EC KIT

#### Option SP8-EB (Second Level) (4K)

10-00004	Capacitor
10-00016	Capacitor
10-00024	Capacitor
10-00067	Capacitor
10-00076	Capacitor
10-01610	Capacitor
10-03053	Capacitor
10-05306	Capacitor
10-09678	Capacitor
11-00113	Diode D662
11-00114	Diode IN644
11-05314	1N645
11-09977	1N749A
11-09979	1N1185A
11-10006	1N1201A
11-10181-0	Thyrector
11-10182-0	1N4721
11-10183-0	SCR (h724)
11-10625	Diode Light
12-05375	Switch Rocker
12-09403-01	Fan
12-10072	Terminal
12-10073	Connector Socket
12-10198-0	Relay KVP
12-10199-0	Thermal Relay
12-10626	Switch Slide
12-10627	Switch
13-00204	Resistor
13-00229	Resistor
13-00293	Resistor
13-00317	Resistor
13-00391	Resistor
13-00432	Resistor
13-00439	Resistor

#### Option SP8-ED (Second Level) (8K)

10-00004	Capacitor
10-00016	Capacitor
10-00024	Capacitor
10-00067	Capacitor
10-00076	Capacitor
10-01610	Capacitor
10-03053	Capacitor
10-05306	Capacitor
10-09678	Capacitor
11-00113	Diode D662
11-00114	Diode IN644
11-05314	1N645
11-09977	1N749A
11-09979	1N1185A
11-10006	1N1201A
11-10181-0	Thyrector
11-10182-0	1N4721
11-10183-0	SCR (h724)
11-10625	Diode Light
12-05375	Switch Rocker
12-09403-01	Fan
12-10072	Terminal
12-10073	Connector Socket
12-10198-0	Relay KVP
12-10199-0	Thermal Relay
12-10626	Switch Slide
12-10627	Switch
13-00204	Resistor
13-00229	Resistor
13-00293	Resistor
13-00317	Resistor
13-00391	Resistor
13-00432	Resistor
13-00439	Resistor

PDP8-E OPTION SP8-EB, SP8-ED (SECOND LEVEL) CONT.

DEC PART NO.	DESCRIPTION	DEC PART NO.	DESCRIPTION
13-00481	Resistor	13-00481	Resistor
13-00496	Resistor	13-00496	Resistor
13-01420	Resistor	13-01420	Resistor
13-02871	Resistor	13-02871	Resistor
13-02941	Resistor	13-02941	Resistor
13-02955	Resistor	13-02955	Resistor
13-02956	Resistor	13-02956	Resistor
13-04833	Resistor	13-04833	Resistor
13-04855	Resistor	13-04855	Resistor
13-04868	Resistor	13-04868	Resistor
13-05128	Resistor	13-05128	Resistor
13-05252	Resistor	13-05252	Resistor
13-09143-6	Potentiometer	13-09143-6	Potentiometer
13-09143-8	Potentiometer	13-09143-8	Potentiometer
13-10032	Resistor	13-10032	Resistor
13-10071	Resistor	12-10071	Resistor
13-10170	Thermister	13-10170	Thermister
15-01742	Transistor	15-01742	Transistor
15-03100	Transistor	15-03100	Transistor
15-03409-01	MPS6534B	15-03409-01	MPS6534B
15-05321	2N4258	15-05321	2N4258
15-05819	2N3055 Case	15-05819	2N3055 Case
15-09338	2N1613	15-09338	2N1613
15-09632	DEC 2007	15-09632	DEC 2007
15-09649	2N3762	15-09649	2N3762
15-10015	DEC 4008	15-11102	DEC 4011
15-01051	2N3054	15-10151	2N3054
16-09478	Transformer	16-09478	Transformer
16-09651	Transformer	16-09651	Transformer
16-09996	Transformer	16-09996	Transformer
18-09880	Crystal	18-09880	Crystal
18-09880-01	Crystal	18-09880-01	Crystal
19-05521	DEC 1540	19-05521	DEC 1540
19-05547	DEC 7474	19-05547	DEC 7474
19-05575-00	DEC 7400	19-05575-00	DEC 7400
19-05579	DEC 7440	19-05579	DEC 7440
19-05586	DEC 74H40	19-05586	DEC 74H40
19-09004	DEC 7402	19-09004	DEC 7402
19-09055	DEC 7495	19-09055	DEC 7495
19-09056	DEC 74H00	19-09056	DEC 74H00
19-09057	DEC 74H10	19-09057	DEC 74H10
19-09267	DEC 74H11	19-09267	DEC 74H11
19-09373	DEC ML-9601	19-09373	DEC ML-9601
19-09594	DEC 82513-930	19-09594	DEC 82513-930
19-09667	DEC 74H74	19-09667	DEC 74H74
19-09686	DEC 7404	19-09686	DEC 7404
19-09854	DEC 8251-1	19-10046	DEC 7442-1
19-09867	DEC 4007	19-09867	DEC 4007
19-09927	DEC 74H87	19-09927	DEC 74H87
19-09928	DEC 7416	19-09928	DEC 7416
19-09929	DEC 7417	19-09929	DEC 7417
19-09930	DEC 7405	19-09930	DEC 7405
19-09931	DEC 74H04	19-09931	DEC 74H04
19-09932	DEC 7483	19-09932	DEC 7483
19-09934	DEC 8266	19-09934	DEC 8266
19-09935	DEC 8235	19-09935	DEC 8235
19-09936	DEC 74151	19-09936	DEC 74151
19-09937	DEC 74153	19-09937	DEC 74153
19-09955	DEC 7412	19-09955	DEC 7412

PDP8E CUSTOMER RECOMMENDED SPARES  
OPTION SP8-EB, SP8-ED (SECOND LEVEL) CONT.

DEC PART NO.	DESCRIPTION	DEC PART NO.	DESCRIPTION
19-09971	DEC 6380A	19-09971	DEC 6380A
19-09972	DEC 6314	19-09972	DEC 6314
19-09973	DEC 97401	19-09973	DEC 97401
19-09981	UA723C Volt Reg	19-09981	UA723C Volt Reg.
19-10010	DEC FSA2501	19-10010	DEC FSA2501
19-10011	DEC 7486	19-10011	DEC 7486
19-10391	DEC 5314	19-10391	DEC 5314
19-10392	DEC 5380	19-01392	DEC 5380
19-10394	DEC 5384	19-01394	DEC 5384
19-10624	DEC 74L54	19-10624	DEC 74L54
90-07208	Fuse	19-10973	R-C Network
90-08386-0	Fuse	90-07208	Fuse
90-08387-0	Fuse	90-08386-0	Fuse
90-08388-0	Fuse	90-08387-0	Fuse
90-08389-0	Fuse	90-08388-0	Fuse
90-08390-0	Fuse	90-08389-0	Fuse
12-10089	Socket	90-08390-0	Fuse
12-10090	Housing	12-10089	Socket
		12-10090	Housing
	SP8-ED KIT		SP8-EB KIT

PDP8M CUSTOMER RECOMMENDED SPARES

OPTION SP8-MA KIT (FIRST LEVEL) (4K)	OPTION SP8-MC KIT (FIRST LEVEL) (8K)		
M8300	Major Registers Module	M8300	Major Registers Module
M8310	Registers Control Module	M8310	Registers Control Module
M8330	Timing Module	M8330	Timing Module
G104	Sense/Inhibit Module	G111	Sense/Inhibit Module
G227	X/Y Drive Module	G233	X/Y Drive Module
11-10625	Light Emitting Diode	11-10625	Light Emitting Diode
12-10626	Slide Switch	12-10626	Slide Switch
12-05375	Slide Switch, Momentary	12-05375	Slide Switch, Momentary
12-05849-06	Handle, Russett Orange	12-05849-06	Handle, Russett Orange
12-05849-13	Handle, Terra Cotta	12-05849-13	Handle, Terra Cotta
54-09728	Regulator Board Assy.	54-09728	Regulator Board Assy.
	SP8-MA KIT		SP8-MC KIT

PDP8F CUSTOMER RECOMMENDED SPARES

OPTION SP8-FA KIT (FIRST LEVEL) (4K)	OPTION SP8-FC KIT (FIRST LEVEL) (8K)		
M8300	Major Registers Module	M8300	Major Registers Module
M8310	Registers Control Module	M8310	Registers Control Module
M8330	Timing Module	M8330	Timing Module
G104	Sense/Inhibit Module	G111	Sense/Inhibit Module
G227	X/Y Drive Module	G233	X/Y Drive Module
11-10625	Light Emitting Diode	11-10625	Light Emitting Diode
12-10626	Slide Switch	12-10626	Slide Switch
12-05375	Slide Switch, Momentary	12-05375	Slide Switch, Momentary
12-5849-12	Handle, Amber	12-5849-12	Handle, Amber
12-5849-13	Handle, Terra Cotta	12-5849-13	Handle, Terra Cotta
54-09728	Regulator Board Assy.	54-09728	Regulator Board Assy.
	SP8-FA KIT		SP8-FC KIT

**PDP8F—PDP8M CUSTOMER RECOMMENDED SPARES**  
**OPTION SP8-MB, SP8-MD (SECOND LEVEL)**  
**OPTION SP8-FB, SP8-FD (SECOND LEVEL)**

DEC PART NO.	DESCRIPTION	DEC PART NO.	DESCRIPTION
10-00004	Capacitor	15-10196	2N5302
10-00016	Capacitor	15-10706	GPS—A55 or MPS—A55
10-03053	Capacitor	15-10765	TRIAC MAC 11-3
10-05306	Capacitor	15-11102	DEC 4011
10-09678	Capacitor	16-09478	Transformer
11-10324	Solid State Lamp	16-09651	Transformer
11-10714	12A Diode Bridge NSS3514	16-09996	Transformer
12-09355	Switch, Micro	18-09880	Crystal
12-05033	Fan Boxer	18-09880-01	Crystal
12-10043	Switch, Miniature Rotary	19-05521	DEC 1540
12-10073	Connector, 40 Terminal	19-05547	DEC 7474
12-10627	Rotary Switch	19-05586	DEC 74H40
12-10790	Switch, DPST N.O	19-09004	DEC 7402
12-10824	Thermostat	19-09055	DEC 7495
12-10830-5	Circuit breaker 5 AMP	19-09056	DEC 74H00
12-10830-7	Circuit Breaker, 7 AMP	19-09057	DEC 74H10
13-00229	Resistor	19-09267	DEC 74H11
13-00317	Resistor	19-09373	DEC ML-9601
13-00439	Resistor	19-09594	DEC 82513-930
13-01420	Resistor	19-09667	DEC 74H74
13-02871	Resistor	19-09686	DEC 7404
13-02941	Resistor	19-09705	DEC 8881
13-02955	Resistor	19-09867	DEC 4007
13-02956	Resistor	19-09927	DEC 74H87
13-03156	Resistor	19-09928	DEC 7416
13-04833	Resistor	19-09929	DEC 7417
13-04855	Resistor	19-09930	DEC 7405
13-04868	Resistor	19-09931	DEC 74H04
13-05128	Resistor	19-09932	DEC 7483
13-05252	Resistor	19-09934	DEC 8266
13-05872	Resistor	19-09935	DEC 8235
13-10032	Resistor	19-09936	DEC 74151
13-10071	Resistor	19-09937	DEC 74153
13-10709	Resistor	19-09955	DEC 7412
15-03409-01	MPS6534B or 2N3133	19-09971	DEC 6380A
15-05321	2N4258	19-09972	DEC 6314A
15-09338	MPS6531 or 2N1613	19-09973	DEC 97401
15-09632	DEC 2007	19-10010	DEC FSA2501
15-09649	2N3762	19-10011	DEC 7486
19-09594	DEC 8251	19-10046	DEC 7442-1
15-10015	DEC 4008	19-10973	R-C Network
15-10151	RCA 40372 (2N3054)	90-7221	Fuse
		90-07226	Fuse
		90-08389	Fuse

SP8-MB KIT, SP8-FB KIT  
 SP8-MD, SP8-FD KIT

**CUSTOMER RECOMMENDED ASR-33 SPARES**  
**OPTION LT33-B TELETYPE**

DEC PART NO.	DESCRIPTION
29-11424	Circuit Board
29-11495	Tape Sprocket
29-11443	Lever Universal
29-11144	Fuse
29-11367	Brush (Distrib.)
29-11412	Drive Gear
29-11417	Driven Gear
29-11411	Belt
29-11376	Shaft
29-11375	Bearings
29-11374	Bearings
29-17473	Ribbon

LT33-B KIT

**CR8-E/CM8-E RECOMMENDED SPARE PARTS**  
**(FIRST LEVEL)**

DEC PART NUMBER	DESCRIPTION
19-9971	IC DEC 6380
19-9705	IC DEC 8881
19-9704	IC DEC 314
19-9373	IC DEC 9601
19-9686	IC DEC 7404
19-9594	IC DEC 8251
19-9050	IC DEC 7475
19-9004	IC DEC 7402
19-5580	IC DEC 7450
19-5579	IC DEC 7440
19-5577	IC DEC 7420
19-5576	IC DEC 7410
19-5575	IC DEC 7400
19-5547	IC DEC 7474

SP8-CR KIT

**CR8-E/CM8-E RECOMMENDED SPARE PARTS**  
**(SECOND LEVEL)**

DEC PART NO.	DESCRIPTION
16-5528	Delay line, 30 ns
10-0025	Capacitor, 560 pF, 100V, 5% DM
10-0016	Capacitor, 100 pF, 100V, 5% DM
10-0067	Capacitor, 6.8µF, 35V, 20% S. TANT.
10-1610	Capacitor, 0.01µF, 100V, 20% DISK
70-7252	Cable, Card Reader Interface

SP8-CS KIT

**OPTION LT33-ST TOOL KIT**

DEC PART NO.	DESCRIPTION
29-12521	8 oz. Scale
29-12522	32 oz. Scale
29-12602	64 oz. Scale
29-12520	Set of gauges
29-12523	Offset screwdriver
29-12524	Offset screwdriver
29-12525	8 Crochet hook
29-12526	12 Crochet hook
29-12527	Spring hook push
29-12528	Spring hook pull
29-12529	Screw holder
29-11418	Handwheel adap
29-12540	Handwheel
29-12553	Contact adjustment
29-12554	Gauge
29-12555	Gauge
29-12556	Bending tool
29-11498	Gauge
29-12558	Extractor
29-12559	Tweezer
29-12560	Tommy Wrench
29-12561	Tommy Wrench
29-12562	Key lever remover

LT33-ST KIT

**DB8-E RECOMMENDED SPARE PARTS**

DEC PART NO.	DESCRIPTION
19-05547	IC DEC 7474
19-05575	IC DEC 7400
19-05579	IC DEC 7440
19-09486	IC DEC 384
19-09594	IC DEC 8251
19-09686	IC DEC 7404
19-09973	IC DEC 97401
19-09971	IC DEC 6380
19-09972	IC DEC 6314

SP8-DB KIT

SPARE MODULES

Module Part No.	Used In Option Number	Description
A231	AD8-E	A/D Converter
AB41	AD8-E	A/D Converter
A232	AM8-E	8-Channel Mux
MB43	CR8-F (CM8-E)	Card Reader Optical Mark Card Reader
M8326	DB8-E	Interprocessor Buffer
M882	DK8-EA	Real-Time Clock (Line)
M883	DK8-EC	Real-Time Clock (Crystal)
M860	DK8-EP	Real-Time Clock (Programmable)
M518	DK8-EP	Real-Time Clock (Programmable)
M7104	RK8-E	DECpack Control
M7105	RK8-E	DECpack Control
M7106	RK8-E	DECpack Control
M839	DP8-E	Synchronous Modem
M866	DP8-E	Synchronous Modem
M863	DR8-E	12-Channel Buffered I/O
M8350	KA8-E	Positive I/O Bus
M8360	KD8-E	Data Break Interface
M884	KG8-E	Redundancy Check
M8340	KE8-E	Extended Arithmetic Element
M8341	KE8-E	Extended Arithmetic Element
M849	KK8-E	RFI Shield
M8300	KK8-E	Major Registers
M8310	KK8-E	Major Registers Control
M8320	KK8-E	Bus Loads
M8330	KK8-E	Timing Generator
M8335	VT8-E	DEC Display Control
M8336	VT8-E	DEC Display Control
M8337	VT8-E	DEC Display Control
M8342	LS8-E	Line Printer
M8650	KL8-E	Teletype Control
M8650 YA	KL8-EX	Asynchronous Interface (EIA Levels)
M8652 YC	KL8-F	Asynchronous Interface (Double Buffered)
M8653	KL8-M	Modem Control
M848	KP8-E	Power Fail & Auto Restart
M8329	LC8-E	DECwriter Control
M841	LE8-E	Line Printer Control
M847	MI8-E	Bootstrap Loader
G104	MM8-E	Sense Inhibit
G111	MM8-EJ	Sense Inhibit 8K
G227	MM8-E	X-Y Drivers 4K
G233	MM8-EJ	X-Y Drivers 8K
H220	MM8-E	Memory Stack (4K)
H212	MM8-EJ	Memory Stack (8K)
G105	MP8-E	Sense Inhibit
M880	MR8-EA	256 ROM
M840	PC8-E	Reader, Punch Control
M868	TD8-EH (TD8-EM)	OMNIBUS DECtape Control OMNIBUS DECtape Control
M8321	TM8-E	MAGtape Control
M8322	TM8-E	MAGtape Control
M8323	TM8-E	MAGtape Control
M8327	TM8-E	MAGtape Control
M869	VC8-E	Display Generator
M885	VC8-E	Display Generator
H724(a)	P.S.	Power Supply (PDP8E)
M935	OMNIBUS Connector	Connector Module
M842	XY8-E	XY Plotter Control

KG8-E RECOMMENDED SPARE PARTS

DEC PART NO.	DESCRIPTION
19-09704	IC DEC 314
19-09485	IC DEC 380
19-05575	IC DEC 7400
19-09004	IC DEC 7402
19-09686	IC DEC 7404
19-05576	IC DEC 7410
19-05580	IC DEC 7450
19-05547	IC DEC 7474
19-10011	IC DEC 7486
19-09594	IC DEC 8251
19-09615	IC DEC 8271
19-09705	IC DEC 8881
19-10035	IC DEC 74197
10-00016	Capacitor, 100 pF, 100V, 5%
10-01610	Capacitor, 0.01 $\mu$ F, 100V, 20% DISC
10-00027	Capacitor, 820 pF, 100V, 5%
13-00293	Resistor, 330 $\Omega$ , 1/4W, 10%
13-01401	Resistor, 750 $\Omega$ , 1/4W, 5%
13-00271	Resistor, 220 $\Omega$ , 1/4W, 5%

SP8-KG KIT

KM8-E RECOMMENDED SPARE PARTS

DEC PART NO.	DESCRIPTION
19-05575	IC DEC 7400
19-09705	IC DEC 8881
19-09615	IC DEC 8271
19-09935	IC DEC 8235
19-09934	IC DEC 8266
19-09594	IC DEC 8251
19-09667	IC DEC 74H74
19-05547	IC DEC 7474
19-05577	IC DEC 7420
19-05576	IC DEC 7410
19-09686	IC DEC 7404
19-09056	IC DEC 74H00
19-09486	IC DEC 354A
19-09972	IC DEC 6314A
13-00365	Resistor 1K, 1/4W, 5%
10-01610	Capacitor 0.01 MF DISK, 20%
10-05306	Capacitor 6.8 $\mu$ F, 35V, 10%

SP8-KM KIT

KP8-E RECOMMENDED SPARE PARTS

DEC PART NO.	DESCRIPTION
11-09991	Diode, AZ1-1/4M, 6.8V
11-00114	Diode, D664
11-05275	Diode, D672
15-03100	Transistor, 3009B
15-03409-01	Transistor, DEC 6534B
19-05547	IC DEC 7474
19-05575	IC DEC 7400
19-05576	IC DEC 7410
19-09004	IC DEC 7402
19-09050	IC DEC 7475
19-09373	IC DEC 9601
19-09486	IC DEC 384
19-09705	IC DEC 8881
19-09971	IC DEC 6380
19-09972	IC DEC 6314

SP8-KD KIT

LC8-E RECOMMENDED SPARE PARTS

DEC PART NO.	DESCRIPTION
19-10394	IC DEC 5384
19-10392	IC DEC 5380
19-10391	IC DEC 5314
19-10046	IC DEC 7442
19-9929	IC DEC 7417
19-9973	IC DEC 97401
19-9686	IC DEC 7404
19-9056	IC DEC 74H00
19-9004	IC DEC 7402
19-5580	IC DEC 7450
19-5579	IC DEC 7440
19-5575	IC DEC 7400
19-5547	IC DEC 7474
10-1610	Capacitor, 0.01 $\mu$ F, 100V, 20% Disk
10-0067	Capacitor, 6.8 $\mu$ F, 35V, 20% Tant
10-0024	Capacitor, 47 pF, 100V, 5% DISK
70-8417	Signal Cable

SP8-LC KIT

M18-E (M847) RECOMMENDED SPARE PARTS

DEC PART NO.	DESCRIPTION
19-10436	IC DEC 74123
19-09004	IC DEC 7402
19-05547	IC DEC 7474
19-09935	IC DEC 8235
19-10041	IC DEC 74164
19-05575	IC DEC 7400
19-09705	IC DEC 8881
19-09686	IC DEC 7404
19-09485	IC DEC 380
19-09486	IC DEC 384
15-03100	Transistor, DEC 3009B
11-00114	Diode, D664
13-01423	Resistor 6.8K, 1/4W, 5%
10-00006	Cap., 0.01 $\mu$ F, 100V, 20%

SP8-MI KIT

**DK8-EA/DK8-EC—(M882/M883) RECOMMENDED SPART PARTS(FIRST LEVEL)**

DEC PART NO.	DESCRIPTION
19-9705	DEC 8881
19-9704	DEC 314
19-9485	DEC 380
19-9051	DEC 7490
19-9050	DEC 7475
19-9004	DEC 7402
19-5589	DEC 7470
19-5576	DEC 7410
19-5575	DEC 7400
19-5547	DEC 7474
19-9486	DEC 384
	SP8-DK KIT

**DK8-EA/DK8-EC—(M882/M883) RECOMMENDED SPARE PARTS (SECOND LEVEL)**

DEC PART NO.	DESCRIPTION
18-9880	Crystal (M883 only)
16-9651	Pulse Transformer (M883 only)
10-9678	Capacitor 0.047 $\mu$ F, 16-15 20%
10-1610	Capacitor 0.01 $\mu$ F, 100V, 20%
10-0016	Capacitor 100 pF, 100V, 5%
10-0014	Capacitor 68 pF, 100V, 5%
10-0011	Capacitor 47 pF, 100V, 5%
10-0006	Capacitor 10 pF, 100V, 5%
10-1765	Capacitor 0.005 $\mu$ F
	SP8-DL KIT

**KA8-E RECOMMENDED SPARE PARTS**

DEC PART NO.	DESCRIPTION
15-03100	Transistor, DEC 3009B
19-09705	IC DEC 8881
19-10010	IC DEC 2501
19-09971	IC DEC 6380
19-09921	IC DEC 7417
19-09928	IC DEC 7416
19-09686	IC DEC 7404
19-09373	IC DEC 9601 (M835 only)
19-09486	IC DEC 384
19-09004	IC DEC 7402
19-05578	IC DEC 7430
19-05577	IC DEC 7420
10-05576	IC DEC 7410
19-05575	IC DEC 7400
19-05547	IC DEC 7474
11-00114	Diode D664
11-00113	Diode D662
BC0BJ-10	Cable, 10 ft.
19-10436	IC DEC 74123 (M8350 only)
	SP8-KA KIT

**KD8-E RECOMMENDED SPARE PARTS**

DEC PART NO.	DESCRIPTION
10-01610	Capacitor 0.01 $\mu$ F, 100V, 20%
11-00113	Diode D662
19-05575	IC DEC 7400
19-05579	IC DEC 7440
19-09004	IC DEC 7402
19-09057	IC DEC 74H10
19-09267	IC DEC 74H11
19-09971	IC DEC 6380
19-09486	IC DEC 384
19-09615	IC DEC 8217
19-09667	IC DEC 74H74
19-09686	IC DEC 7404
19-09972	IC DEC 6314
19-09973	IC DEC 97401
19-09928	IC DEC 7416
19-09934	IC DEC 8266
19-09955	IC DEC 7412
19-10010	IC DEC 2501
	SP8-KD KIT

**KE8-E RECOMMENDED SPARE PARTS**

DEC PART NO.	DESCRIPTION
19-05585	IC DEC 7476
19-05576	IC DEC 7410
19-09955	IC DEC 7412
19-10018	IC DEC 74193
19-09934	IC DEC 8266
19-09267	IC DEC 74H11
19-05635	IC DEC 74H20
19-05586	IC DEC 74H40
19-09486	IC DEC 384
19-09004	IC DEC 7402
19-09667	IC DEC 74H74
19-09059	IC DEC 74H30
19-09973	IC DEC 97401
19-09485	IC DEC 380
23-001A1	IC Encoded ROM (Drives ROM 11—18)
23-002A1	IC Encoded ROM (Drives ROM 21—28)
19-09930	IC DEC 7405
19-09705	IC DEC 8881
19-05575	IC DEC 7400
19-09686	IC DEC 7404
19-09062	IC DEC 74H53
19-10011	IC DEC 7486
19-09935	IC DEC 8235
13-00295	Resistor 330 $\Omega$ 1/4W, 5%
13-00365	Resistor 1K 1/4W, 5%
13-00317	Resistor 470 $\Omega$ 1/4W, 10%
10-000067	Capacitor 6.8 $\mu$ F, 5V, 20%
	Solid Tantalum
10-01610	Capacitor 0.01 $\mu$ F, 100V, 20%
	Ceramic Disk
	SP8-KE KIT

**RECOMMENDED MR8-E SPARE PARTS**

DEC PART NO.	DESCRIPTION
15-05321	Transistor DEC 4258
15-03100	Transistor DEC 3009B
11-00114	Diode D664
19-10047	IC DEC 74145
19-10046	IC DEC 7442
19-09705	IC DEC 8881
19-09688	IC DEC 846
19-09667	IC DEC 74H74
19-09486	IC DEC 384
19-09971	IC DEC 6380
19-09267	IC DEC 74H11
19-09056	IC DEC 7402
19-05576	IC DEC 7410
19-05575	IC DEC 7400
	SP8-MR KIT

**RECOMMENDED MP8-E SPARE PARTS**

DEC PART NO.	DESCRIPTION
15-02155	Transistor DEC 1008
15-01881	Transistor DEC 2219
15-03100	Transistor DEC 3009B
15-10062	Transistor DEC 3734
15-09649	Transistor DEC 3762
15-10015	Transistor DEC 4008
15-0532	Transistor DEC 4258
15-03409-01	Transistor DEC 6534B
19-05575	IC DEC 7400
19-05590	IC DEC 7401
19-09004	IC DEC 7402
19-09686	IC DEC 7404
19-05580	IC DEC 7450
19-05547	IC DEC 7474
19-10724	IC DEC 74180
19-09056	IC DEC 74H00
19-09057	IC DEC 74H10
19-09267	IC DEC 74H11
19-05586	IC DEC 74H40
19-09967	IC DEC 74H74
19-09704	IC DEC 314
19-09485	IC DEC 380
19-09486	IC DEC 384
19-09594	IC DEC 8251
19-09705	IC DEC 8881
	SP8-MQ

**TD8-E RECOMMENDED SPARE PARTS (SECOND LEVEL)**

DEC PART NO.	DESCRIPTION
19-09004	IC DEC 7402
19-05590	IC DEC 7401
19-05578	IC DEC 7430
19-05576	IC DEC 7410
19-05575	IC DEC 7400
19-05547	IC DEC 7474
15-09338	Transistor DEC 6351
11-00114	Diode, D664
11-00113	Diode, D662
	SP8-TE KIT

**RECOMMENDED MP8-E SPARE PARTS (SECOND LEVEL)**

DEC PART NO.	DESCRIPTION
12-10043	Rotary Switch
16-09651	Transformer 8010
16-09996	Transformer 6501
16-09478	Transformer 1775
16-09559	Delay Line, 100ns
13-10032	Resistor, 16.9 ohm, 6W, 1%
13-02858	Resistor, 100 ohm, 1/8W, 1%
13-02956	Resistor, 196 ohm, 1/8W, 1%
13-05114	Resistor, 348 ohm, 1/8W, 1%
13-02955	Resistor, 750 ohm, 1/8W, 1%
13-03114	Resistor, 1K ohm, 1/8W, 1%
13-02871	Resistor, 1.21K ohm, 1/8W, 1%
13-04833	Resistor, 1.96K ohm, 1/8W, 1%
13-04856	Resistor, 4.64K ohm, 1/8W, 1%
13-04885	Resistor, 9.09K ohm, 1/8W, 1%
13-02941	Resistor, 14.7K ohm, 1/8W, 1%
13-03156	Resistor, 34.8K ohm, 1/8W, 1%
13-05128	Resistor, 56.2K ohm, 1/8W, 1%
13-05252	Resistor, 68.1K ohm 1/8W, 1%
13-10071	Thermistor, 1K, 1%
11-05275	Diode D672
11-00114	Diode D664
11-09991	Zener Diode 1/4M6, 8AZ1
19-10010	Diode Pack DEC 2501
	SP8-MP KIT

**TD8-E RECOMMENDED SPARE PARTS**

DEC PART NO.	DESCRIPTION
19-10436	IC 74123
19-09935	IC 8235
19-09931	IC DEC 74H04
19-09929	IC DEC 7417
19-09712	IC DEC 8242
19-09705	IC DEC 8881
19-10391	IC DEC 5314
19-09686	IC DEC 7404
19-09615	IC DEC 8271
19-09594	IC DEC 8251
19-10394	IC DEC 5384
19-10392	IC DEC 5380
19-09054	IC DEC 7493
19-09050	IC DEC 7475
	SP8-TD KIT

**XY8-E RECOMMENDED SPARE PARTS**

DEC PART NO.	DESCRIPTION
15-03409-1	Transistor DEC 6534B
15-03100	Transistor DEC 3009B
19-09705	IC DEC 8881
19-09704	IC DEC 314
19-09686	IC DEC 7404
19-09594	IC DEC 8251
19-09373	IC DEC 9601
19-09485	IC DEC 380
19-05577	IC DEC 7420
19-05576	IC DEC 7410
19-05575	IC DEC 7400
19-05547	IC DEC 7474
13-000391	Resistor 1.5K, 1/4W, 5%
	SP8-XY KIT