

# THE TECHNICAL MATERIEL CORPORATION

700 FENIMORE ROAD PHONE 914-698-4800 TWX 710-566 1100 TELEX 137-358

COMMUNICATIONS

MAMARONECK, N.Y. 10543 CABLE "TEPEI"

ENGINEERS

June 1, 1976

Gentlemen:

You have received the latest model GPR-110 General Purpose Receiver, manufactured by The Technical Materiel Corporation. The receiver meets or exceeds all TMC published specifications.

Several schematics and associated printed circuit diagrams representing reliability improvements were made to the GPR-110 after publication of the technical manual. These diagrams are contained in an envelope attached to the manual. The improvements in design affect the following diagrams:

SYMBOL	OLD	NEW	REPLACE PAGES
<b>z105</b>	СК2039	CK2122	7-21 through 7-24
Z106	CK2040	CK2124	7-25 through 7-28
Z104	CK2042	CK2125	7-17 through 7-20
Z107	CK1885	CK2123	7-29 through 7-32
Z302	CK1884	CK2102	7-89 through 7-92

You will be fully advised of any additional information concerning the GPR-110 as it is published.

If you have any questions on the GPR-110, we invite you to write TMC where your comments will be given our prompt attention.

THE TECHNICAL MATERIEL CORPORATION

### for

REF SYMBOL	DESCRIPTION	TMC PART NUMBER
C1 C2	Capacitor, Fixed, Ceramic Same as Cl	CC131-39
C2 C3 C4 C5 C6 C7 C8	Capacitor, Fixed, Mylar Capacitor, Fixed, Electrolytic Same as Cl Same as Cl Same as Cl Same as Cl	CN112B474K1 CE105-50-16
C9 C10 C11	Capcitor, Fixed, Mica Same as Cl Capacitor, Fixed, Electrolytic	CM112E103J1S CE105-2-50
C12 C13 C14 C15 C16 C17 C18 C19	Same as Cll Same as Cl Capacitor, Fixed, Electrolytic Same as Cl Same as Cl Same as Cl Same as Cl Same as Cl	CE105-15-25
CR1 thru CR8	Semiconductor, Device, Diode	lN463
CR9	Semiconductor, Device, Diode	1N751A
Ll thru L3	Coil, Rf, Fixed	CL275-101
Q1 Q2 Q3 Q4	Transistor Transistor Same as Ql Same as Q2	2N3646 2N1711
R1 R2 R3 R4 R5 R6 R7 R8 R9 R10 R11 R12 R13	Resistor, Fixed, Composition Resistor, Fixed, Composition Same as R8 Resistor, Fixed, Composition Resistor, Fixed, Composition Same as R1 Same as R6	RC07GF152J RC07GF222J RC07GF471J RC07GF332J RC07GF821J RC07GF470J RC07GF151J RC07GF123J RC07GF224J RC07GF4R7J
R14	Same as R3	

## PARTS LIST (cont)

# for

DESCRIPTION	TMC PART NUMBER
Same as R2 Same as R2 Same as R6 Same as R3	
Same as R3 Resistor, Fixed, Composition Resistor, Fixed, Composition Resistor, Fixed, Composition Resistor, Fixed, Composition	RC07GF102J RC07GF103J RC07GF121J RC07GF153J RV124-3-502
Transformer	TF267-4
Microcircuit, Digital	NW202
Microcircuit, Digital	NW212
Microcircuit, Digital Microcircuit, Digital	NW176 NW159
Socket, 16 Pin	TS211-2
Socket, 14 Pin Same as XZ11	TS211-1
	Same as R2 Same as R2 Same as R6 Same as R3 Resistor, Fixed, Composition Resistor, Fixed, Composition Resistor, Fixed, Composition Resistor, Fixed, Composition Resistor, Variable Transformer Microcircuit, Digital Microcircuit, Digital Microcircuit, Digital Socket, 16 Pin Socket, 14 Pin

#### for

REF	DESCRIPTION	ТМС
SYMBOL	DESCRIPTION	PART NUMBER
Cl	Capacitor Fixed Comparing	
C1 C2	Capacitor, Fixed, Ceramic Same as Cl	CC100-41
C3		
C4	Capacitor, Fixed, Ceramic Same as C3	CC131-39
C5	Same as C3	
C6	Same as C3	
C7	Same as C3	
C8	Same as C3	
C9	Capacitor, Fixed	
C10	Same as Cl	CX118E5R5N30C1
C11	Same as Cl	
C12		
C12 C13	Same as Cl	
C13 C14	Same as Cl	
C14 C15	Same as Cl	
	Same as C3	
C16	Capacitor, Fixed, Mica	CM111C100J5S
C17	Capacitor, Fixed, Mica	CM111C270J5S
CR1	Cominen Justice D. 1. D. 1.	
	Semiconductor, Device, Diode	1N914
CR2	Semiconductor, Device, Diode	1N756
CR3	Semiconductor, Device, Diode	1N100
CR4	Same as CR3	
Ll	Coil, Rf, Fixed	
L2	Coil, Rf, Fixed	CL275-121
L3	Same as Ll	CL275-100
L4	Coil, Rf, Fixed	GT 075 100
TT	corr, kr, rixeu	CL275-102
Q1	Transistor	2N2368
$\tilde{Q}2$	Same as Ql	2112308
$\tilde{Q}_3^-$	Same as Ql	
~ -		
Rl	Resistor, Fixed, Composition	RC07GF562J
R2	Resistor, Fixed, Composition	RC07GF471J
R3	Resistor, Fixed, Composition	RC07GF470J
R4	Resistor, Variable	RV124-3-103
R5	Resistor, Fixed, Composition	RC07GF242J
R6	Resistor, Fixed, Composition	RC07GF180J
R7	Resistor, Fixed, Composition	RC07GF104J
R8	Resistor, Fixed, Composition	RC07GF101J
R9	Same as R1	1007011010
R10	Resistor, Fixed, Composition	RC07GF102J
Rll	Same as Rl	1007GF 1020
R12	Same as Rl	
R13	Same as R3	
R14	Resistor, Fixed, Composition	RC07GF392J
R15	Same as R2	NC07GE 3920
		1

## PARTS LIST (cont)

#### for

REF SYMBOL	DESCRIPTION	TMC PART NUMBER
R16 R17 R18 R19 R20	Not Used Same as R2 Same as R1 Same as R3 Same as R14	
Tl	Transformer	TR205
Z1 Z2 Z3 Z4 Z5 Z6 Z7	Microcircuit, Digital Microcircuit, Digital Same as Z2 Microcircuit, Digital Microcircuit, Digital Microcircuit, Digital Microcircuit, Digital	NW198 NW212 NW200 NW197 NW213 NW214
Z8 XZ1 XZ2 XZ3 XZ4 XZ5 XZ6 XZ7 XZ8	Microcircuit, Digital Socket, 14 Pin Socket, 16 Pin Same as XZ2 Same as XZ2 Same as XZ1 Same as XZ1 Same as XZ1 Same as XZ1 Same as XZ2	NW187 TS211-1 TS211-2

## for

REF SYMBOL	DESCRIPTION	TMC PART NUMBER
C1 C2 C3 C4	Capacitor, Fixed, Mica Capacitor, Fixed, Ceramic Same as Cl Same as C2	CM111C681J CC131-39
Ll	Coil, Rf, Fixed	CL275-100
R1 R2	Resistor, Fixed, Composition Same as Rl	RC07GF331J
TP1-22	Terminal, Stud	TE127-2
Z1 Z2	Microcircuit, Digital Same as Zl	NW204
Z 3 Z 4 Z 5 Z 6	Same as Zl Microcircuit, Digital Microcircuit, Digital Same as Z5	NW190 NW201
Z 7 Z 8 Z 9	Microcircuit, Digital Same as Z7 Same as Z7	NW209
Z10 Z11 Z12 Z13	Same as Z7 Microcircuit, Digital Microcircuit, Digital Same as Z11	NW187 SN7451N
Z13 Z14	Microcircuit, Digital	NW176
XZ1 thru XZ4	Socket, 14 Pin	TS211-1
XZ5	Socket, 24 Pin Same as XZ5	TS211-3
XZ6 XZ7 thru XZ10	Socket, 16 Pin	TS211-2
XZ11 thru XZ14	Same as XZl	

#### for

		ТМС
REF SYMBOL	DESCRIPTION	PART NUMBER
STRUC		
Cl	Capacitor, Fixed, Ceramic	CC100-29
C2	Capacitor, Variable	CV112-3
C3	Capacitor, Fixed, Mica	CM111C100J5S
C4	Same as Cl	
C5	Capacitor, Variable	CV112-7
C6	Same as C3	
C7 C8	Same as C5 Capacitor, Fixed, Mica	CM111F101G5S
C8 C9	Same as C3	
C10	Same as C8	
Cll	Same as C5	
C12	Same as C8	
C13	Not Used	
C14	Capacitor, Fixed, Mica	CM111E020D5S
C15	Same as Cl	
C16	Same as Cl	
- 1	Coil, Rf, Fixed	CL275-102
L1 L2	Coil, Rf, Fixed	CL275-3R3
L2 L3	Coil, 3 Tapped	CL296-2
	Coil, Rf, Fixed	CL275-1R0
L5	Same as L3	
L6	Same as L4	
L7	Coil, 2 Tapped	CL296-1
	Transistor	2N1745
Q1 Q2	Transistor	2N2368
Q3	Same as Q2	
20		
Rl	Resistor, Fixed, Composition	RC07GF123J
R2	Resistor, Fixed, Composition	RC07GF473J
R3	Resistor, Fixed, Composition	RC07GF221J RC07GF682J
R4	Resistor, Fixed, Composition Resistor, Fixed, Composition	RC07GF222J
R5 R6	Resistor, Fixed, Composition Resistor, Fixed, Composition	RC07GF121J
R0 R7	Resistor, Fixed, Composition	RC07GF100J
R8	Resistor, Fixed, Composition	RC07GF332J
R9	Same as R6	
R10	Same as R4	
Rll	Not Used	
R12	Resistor, Fixed, Composition	RC07GF471J
Yl	Crystal	CR119-53R5
	1	

## for

REF SYMBOL	DESCRIPTION	TMC PART NUMBER
Cl thru	Capacitor, Fixed, Ceramic	CC131-39
C3 C4 thru	Capacitor, Fixed, Ceramic	CC100-29
C6 C7 C8 C9	Capacitor, Fixed, Mica Same as C4 Same as C4	CM111E471J1S
CR1	Semiconductor, Device, Diode	1N914
Ll L2	Coil, Rf, Fixed Coil, Rf, Fixed	CL275-100 CL275-103
Ql thru Q4	Transistor	2N3646
R1 R2 R3 R4	Resistor, Fixed, Composition Resistor, Fixed, Composition Same as R2 Same as R2	RC07GF392J RC07GF102J
R5 R6	Resistor, Fixed, Composition Same as R2	RC07GF682J
R7 R8 R9 R10 R11	Resistor, Fixed, Composition Resistor, Fixed, Composition Resistor, Fixed, Composition Resistor, Fixed, Composition Same as R2	RC07GF272J RC07GF152J RC07GF470J RC07GF331J
R12 R13	Resistor, Fixed, Composition Same as R12	RC07GF101J
R14 R15	Resistor, Fixed, Composition Same as R9	RC07GF242J
TPl	Terminal, Stud	TE127-2
Y1 Y2	Crystal Same as Yl	CR119-7R0
Zl	Microcircuit, Digital	NW166
XZ1	Socket, 14 Pin	TS211-1