



# DATA FORMAT

MODEL : 36248/36258/MPH 1895

June 08, 2000

1. TOTAL DATA BITS LENGTH : 64BITS

2. DATA FORMAT.

START →

iiii	iiii	iilp	kkkk	cccc	cccc	xxup	kkkk	iiii	iiii	iilp	kkkk	dddd	dddd	zzup	kkkk
------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

iiii : system (security) ID (20bits)

iilp : parity

kkkk: check sum

U : unit (base =1 , handset =0)

cccc : channel number

dddd : command data

xx : sequence of data

zz : sub data

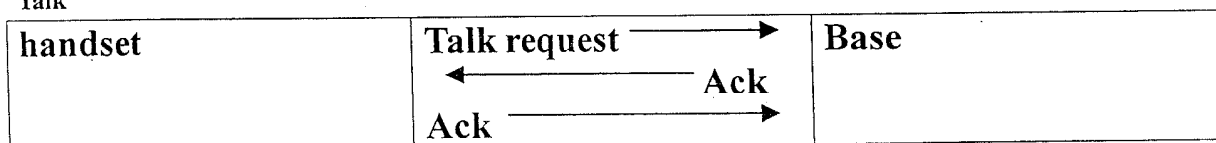
3. System (Security) ID = 20 bits ( 0~1048576)

K BELL

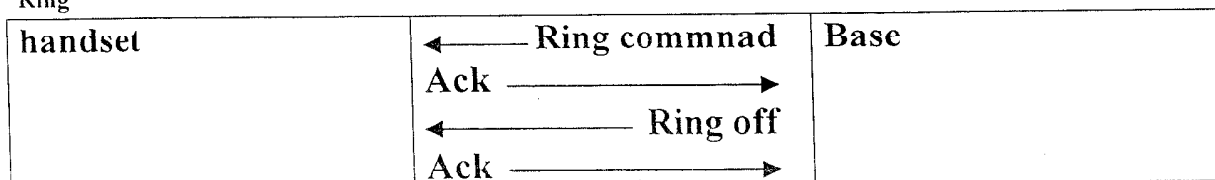
4. ID CODE NUMBER : 1048576

Link sequence.

Talk



Ring



# SPECIFICATION

MODEL : 36248/36258/17PH7895 June 08, 2000

## 1. TX POWER LEVEL.



\*LESS THAN 50mV/meter AT 3.0 METER.

## 2. TX SPURIOUS LEVEL.

\*30 ~ 88 MHz : LESS THAN 100  $\mu$ V/m.

\*88 ~ 216 MHz : LESS THAN 150  $\mu$ V/m.

\*216 ~ 960 MHz : LESS THAN 200  $\mu$ V/m.

\*ABOVE 960 MHz : LESS THAN 500  $\mu$ V/m.

## 3. DATA DEVIATION.

\*FSK 1600 BPS.

\*DEVIATION :  $\pm 10$  kHz ( TOLERANCE  $\pm 1.0$  kHz )

## 4. CHANNEL.

\*40 CHANNEL

## 5. CHANNEL SPACE.

\*150 kHz.

## 6. FREQUENCY TABLE.

\*REFER TO THE ATTACHED #1.

**AUTOMATIC CHANNEL SELECTION MECHANISM**  
**MODEL 36240/36247/36248/36258/MPH7895**

During the activation of Talk, the Handset receiver scans for free channels from its Default channel (about 80ms for channel) and stores the status to its memory. Once a free channel is found, the Handset transmits the Talk instruction to Base.

Likewise, the Base receiver continuously scans for free channels from its Default channel (about 120ms per channel) and stores the status to its memory. Once the Base receiver received the instruction from the Handset, it will stop from scanning and transmits the acknowledgement data.

Each unit has a different Default Channel. it is generated from the unit's ID.

If all of transmit channels of Handset and Base are occupied (all busy), Handset and Base will link on the Default channel.

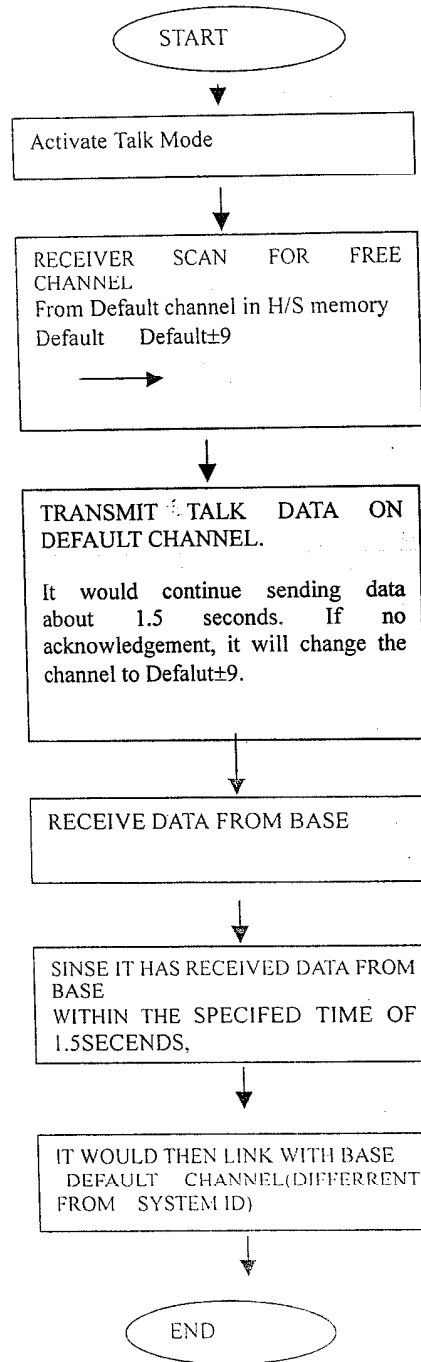
**K BELL**

BASE			HANDSET		BASE			HANDSET	
CH	TX	RX	TX	RX	CH	TX	RX	TX	RX
1	2400.45	2472.45	2472.45	2400.45	20	2403.45	2475.45	2475.45	2403.45
2	2400.60	2472.60	2472.60	2400.60	21	2403.60	2475.60	2475.60	2403.60
3	2400.75	2472.75	2472.75	2400.75	22	2403.75	2475.75	2475.75	2403.75
4	2400.90	2472.90	2472.90	2400.90	23	2403.90	2475.90	2475.90	2403.90
5	2401.05	2473.05	2473.05	2401.05	24	2404.05	2476.05	2476.05	2404.05
6	2401.20	2473.20	2473.20	2401.20	25	2404.20	2476.20	2476.20	2404.20
7	2401.35	2473.35	2473.35	2401.35	26	2404.35	2476.35	2476.35	2404.35
8	2401.50	2473.50	2473.50	2401.50	27	2404.50	2476.50	2476.50	2404.50
9	2401.65	2473.65	2473.65	2401.65	28	2404.65	2476.65	2476.65	2404.65
10	2401.80	2473.80	2473.80	2401.80	29	2404.80	2476.80	2476.80	2404.80
11	2401.95	2473.95	2473.95	2401.95	30	2404.95	2476.95	2476.95	2404.95
12	2402.10	2474.10	2474.10	2402.10	31	2405.10	2477.10	2477.10	2405.10
13	2402.25	2474.25	2474.25	2402.25	32	2405.25	2477.25	2477.25	2405.25
14	2402.40	2474.40	2474.40	2402.40	33	2405.40	2477.40	2477.40	2405.40
15	2402.55	2474.55	2474.55	2402.55	34	2405.55	2477.55	2477.55	2405.55
16	2402.70	2474.70	2474.70	2402.70	35	2405.70	2477.70	2477.70	2405.70
17	2402.85	2474.85	2474.85	2402.85	36	2405.85	2477.85	2477.85	2405.85
18	2403.00	2475.00	2475.00	2403.00	37	2406.00	2478.00	2478.00	2406.00
19	2403.15	2475.15	2475.15	2403.15	38	2406.15	2478.15	2478.15	2406.15
*	2403.30	2475.30	2475.30	2403.30	39	2406.30	2478.30	2478.30	2406.30
					40	2406.45	2478.45	2478.45	2406.45

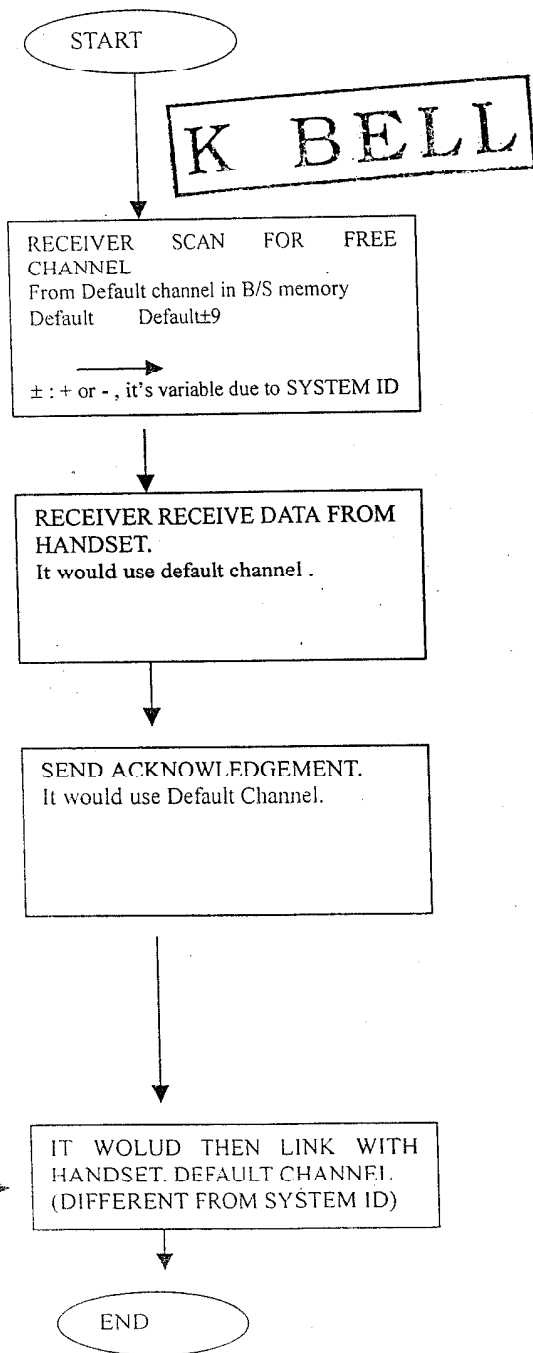
\* channel is used for TEST MODE only.

# TALK MODE

CONDITION 1: All channels are unoccupied (Free channel)  
HANDSET

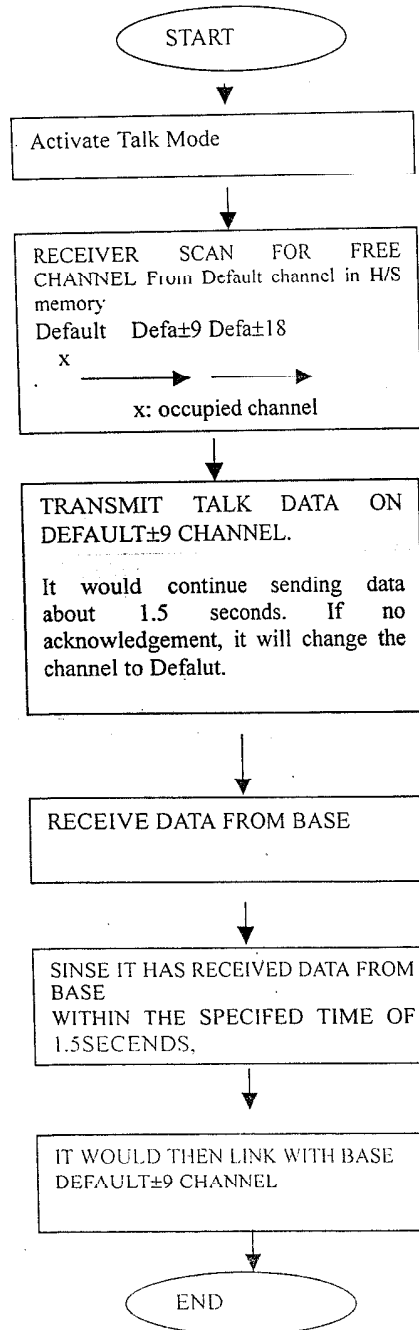


BASE

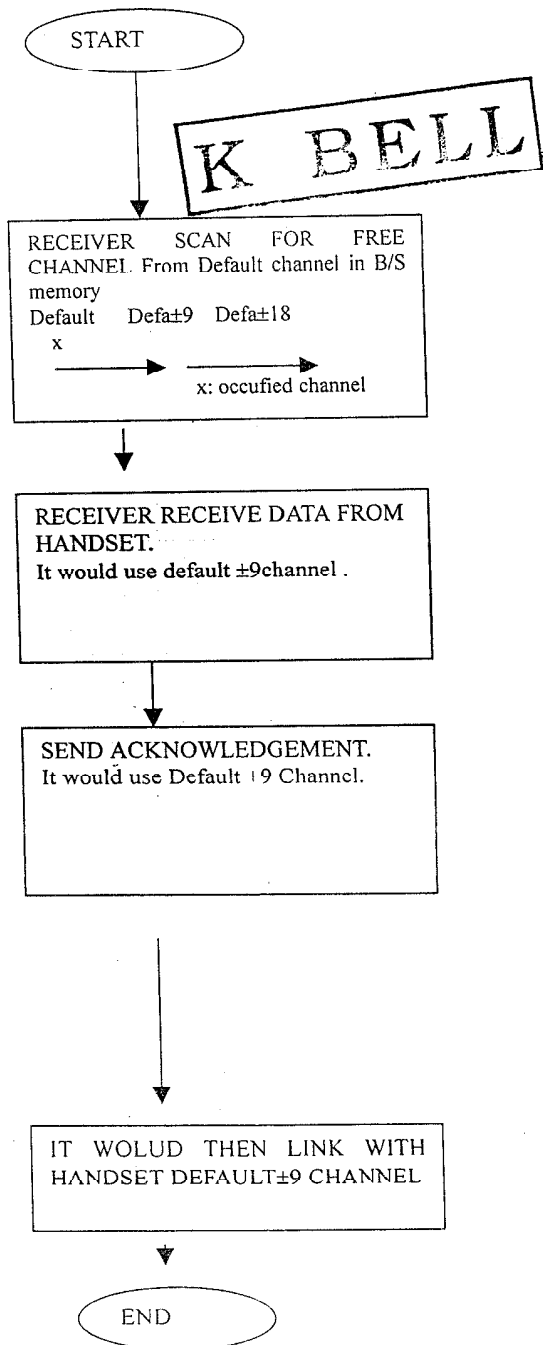


# TALK MODE

CONDITION 2: Some channels are occupied  
HANDSET

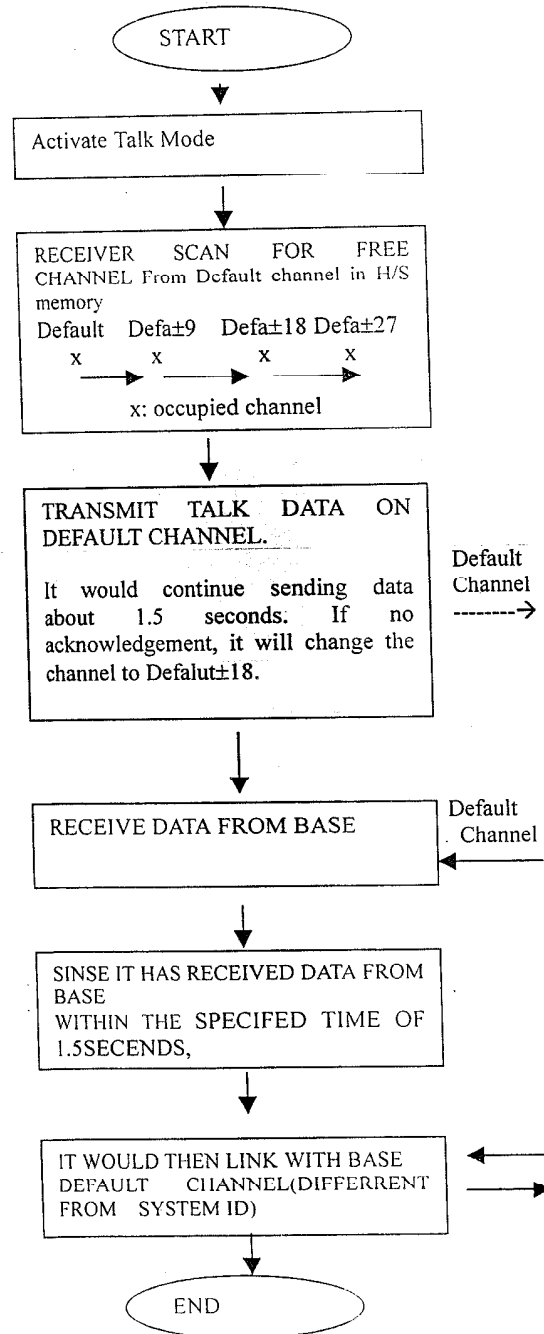


## BASE

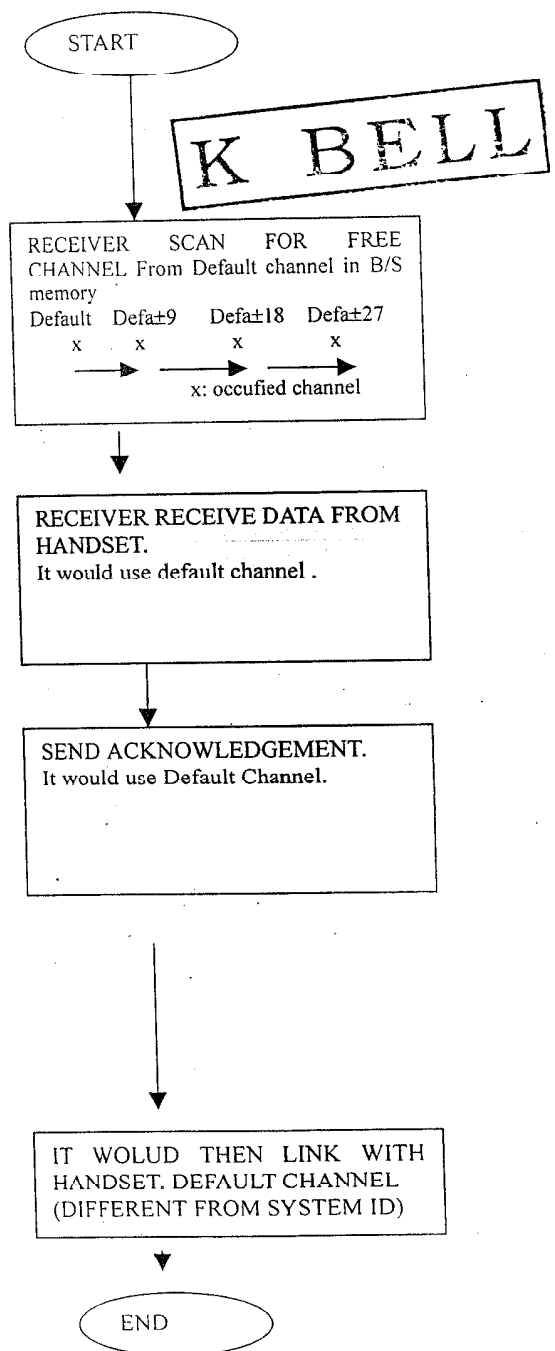


# TALK MODE

CONDITION 3: ALL channels are occupied  
HANDSET



# BASE



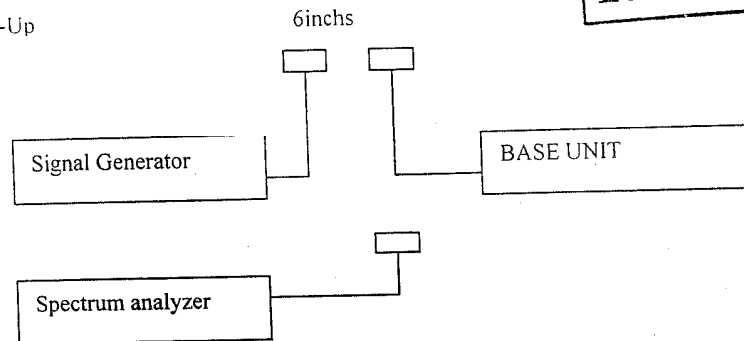
## AUTOMATIC CHANNEL SELECTION

The following tests were performed to show the incorporation of automatic channel selection.

Equipment used to perform Tests

- MARCONI 2051 SIGNAL GENERATOR  
Interference Signal 1KHz 5KHz Deviation
- Spectrum analyzer HP 8593E

Test Set-Up



Test procedures

1. Set signal generator at a certain channel then turn the generator off.
2. Turn on the phone and charge.
3. Lift the handset and try to talk, and Read the frequency of BASE UNIT from the SPECTRUM ANALYZER. And off link.
4. Set SIGNAL GENERATOR to reading frequency of STEP3 and turn on.
5. Try to talk, and read the frequency.
6. Press the SCAN key to change the DEFAULT CHANNEL.
7. Repeat the STEP 3 -6 for 40 CHANNELS.



Test Result

1. SYSTEM ID LSB 5bits 0 ~ 15

Interference channel at	Phone preset channel at	Phone auto scan to channel at - 13dBm
1	1	10
2	2	11
3	3	12
4	4	13
5	5	14
6	6	15
7	7	16
8	8	17
9	9	18
10	10	19
11	11	20
12	12	21
13	13	22
14	14	23
15	15	24
16	16	25
17	17	26
18	18	27
19	19	28
20	20	29
21	21	30
22	22	31
23	23	32
24	24	33
25	25	34
26	26	35
27	27	36
28	28	37
29	29	38
30	30	39
31	31	40
32	32	1
33	33	2
34	34	3
35	35	4
36	36	5
37	37	6
38	38	7
39	39	8
40	40	9

2. SYSTEM ID LSB 5bits 16 ~ 31

Interference channel at	Phone preset channel at	Phone auto scan to channel at - 13dBm
1	1	32
2	2	33
3	3	34
4	4	35
5	5	36
6	6	37
7	7	38
8	8	39
9	9	40
10	10	1
11	11	2
12	12	3
13	13	4
14	14	5
15	15	6
16	16	7
17	17	8
18	18	9
19	19	10
20	20	11
21	21	12
22	22	13
23	23	14
24	24	15
25	25	16
26	26	17
27	27	18
28	28	19
29	29	20
30	30	21
31	31	22
32	32	23
33	33	24
34	34	25
35	35	26
36	36	27
37	37	28
38	38	29
39	39	30
40	40	31

TEST MODE ON 36248 / 36258 / MPH 7895

June 14, 2000

A. BASE UNIT.

1. TEST MODE SETTING

WHILE THE PAGE/PH AND PLAY/STOP KEY IS PRESSED TOGETHER, PUT THE ADAPTOR PLUG TO UNIT.  
AFTER THE KEYS ARE PRESSED ABOUT 2.0 sec, PLEASE RELEASE THE PAGE/PH AND PLAY/STOP KEY.  
THEN YOU CAN HEAR THE LONG BEEP.

- DEFAULT CHANNEL IS 20CH.

2. CHANNEL SETTING

2-1 CHANNEL-UP ( CH21 ~ CH40 )

TO INCREASE THE CHANNEL FROM 20CH, HIT THE TAD ON/OFF KEY (▶), THEN THE CHANNEL  
MOVE UP ONE CHANNEL PER ONE HIT.

2-2 CHANNEL DOWN ( CH19 ~ CH1 )

TO DECREASE THE CHANNEL FROM 20CH, HIT THE OGM KEY (◀), THEN THE CHANNEL MOVE DOWN ONE  
CHANNEL PER ONE HIT.

B. HANDSET.



1. TEST MODE SETTING

WHILE THE KEY 0 & KEY 5 IS PRESSED TOGETHER, PUT THE BATTERY PLUG TO BATTERY JACK OF HANDSET WHICH  
IS LOCATED ON BACK SIDE, AND THEN HIT THE BUTTON 9,8,7,6 SEQUENCELY.

- AFTER TEST MODE IS SETTED, YOU CAN HEAR THE LONG BEEP.
- AFTER TEST MODE IS SETTED, YOU CAN SEE THE "20 RTX " ON LCD WITHIN 2.0 sec.
- THE DEFAULT CHANNEL IS 20CH.

2. CHANNEL SETTING

- HIT THE TWO DIGITS DIAL BUTTON AS BELOW.

EX ) CHANNEL 02 - HIT THE DIAL BUTTON 0, AND THEN HIT THE DIAL BUTTON 2.

CHANNEL 39 - HIT THE DIAL BUTTON 3, AND THEN HIT THE DIAL BUTTON 9.

*Note : THE VOLUME SETTING IS AT THE MIDDLE POSITION BASED ON TEST MODE CONDITION.*