

CONFIDENTIAL

SPECIFICATIONS

I/R Remote Control

Model

P37F * 05A * B

P65F * 00A * B

07 June 2007

FUJITSU GENERAL LIMITED

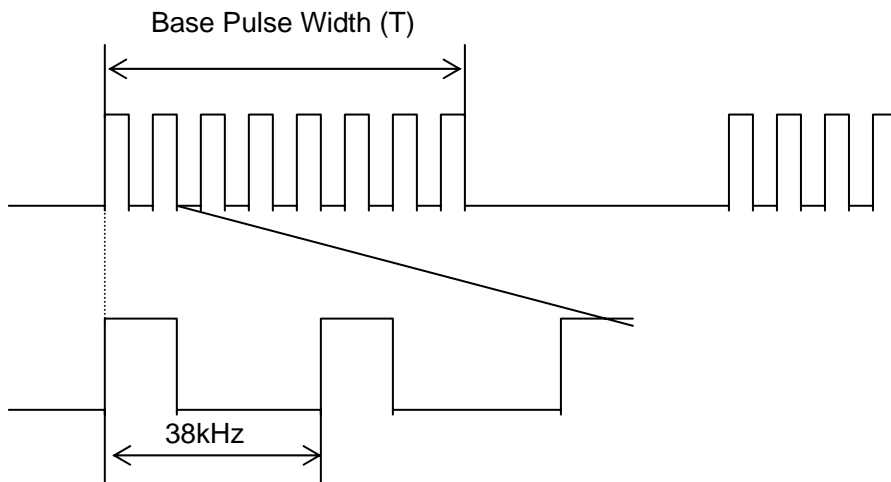
1. Output Signal

1-1. Signal Waveform

Out put signal is composed by the carrier signal and the sub-carrier signal.

- (1) Carrier signal Wave length : 900 ~ 950nm (peak)
- (2) Sub-Carrier Signal Frequency : 38kHz \pm 1%
- Duty: 30 to 50%

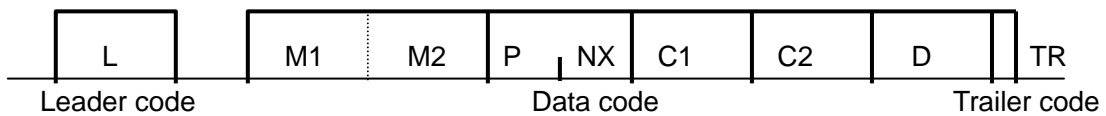
Pulse position Modulation



1-2. Signal Format

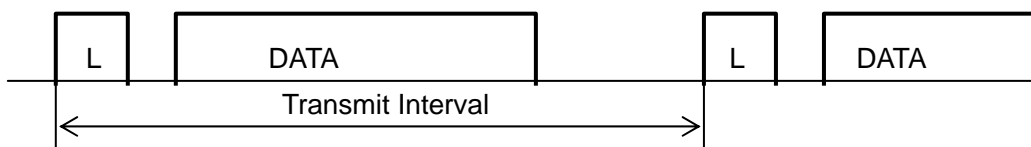
Transmission data conforms to the format standardized by KADEN SEIHIN KYOUKAI (Home Electronics Association).

Transmission data of remote control are composed by the following 9 types code (total 6 bytes) and is sent from the subordinate position bit in one byte.



Interval of the transmission data

- 1) Transmit same command continuously : 100ms+1%
- 2) Transmit deference command : more than 110ms

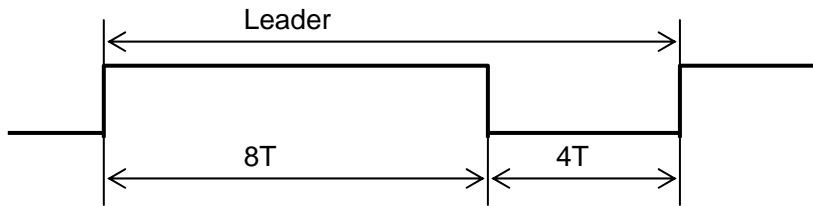


1-3 Base pulse width

The pulse width of the minimum unit which composes the data is assumed to be a basic pulse width (T).

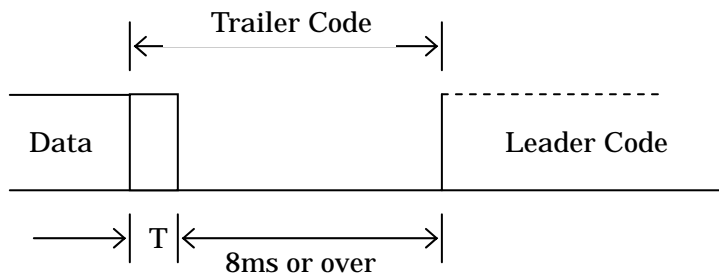
$$T=410\mu\text{s} \pm 3\%$$

1-4 Leader code

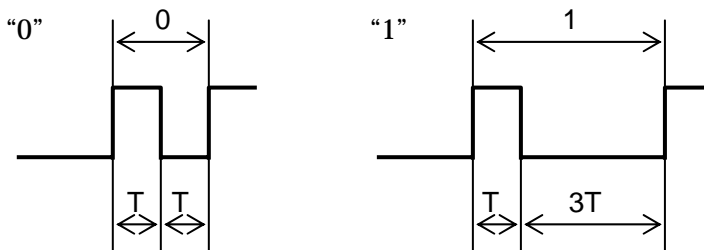


1-5 Trailer code

The state of a no signal of 8ms or more following the pulse of pulse width T after the final bit of the data is sent and it is assumed the trailer code.

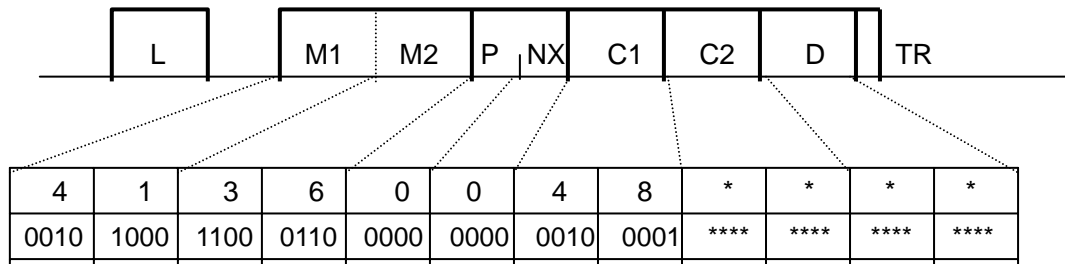


1-6 Data bit



1-7 Transmission Data

(a) Data Format



Hex LSB MSB

- (1) Maker code (M1) : 14 hex (00101000)
- (2) Maker code (M2) : 63 hex (11000110)
- (3) Maker code Parity (P): 00 hex (00000000)
- (4) Custom code (C1) : 84 hex (00100001)
- (5) Sub Custom code (C2): Refer to (b)
- (6) Command code (D) : Refer to (b)

(b) Command Code List

*All commands are described on Hex code.

| Function | Sub Custom Code | Command Code | AWB | AUB | AEB |
|-------------------------|-----------------|--------------|-----|-----|-----|
| Power-On/off (Toggle) | 8B | 00 | ✓ | ✓ | ✓ |
| Power-On | 8A | 01 | ✓ | ✓ | ✓ |
| Power-Off | 8A | 02 | ✓ | ✓ | ✓ |
| FINE | 8A | 44 | ✓ | ✓ | ✓ |
| WIDE | 8A | 10 | ✓ | ✓ | ✓ |
| Screen Size Normal | 8A | 12 | ✓ | ✓ | ✓ |
| Screen Size Wide 1 | 8A | 13 | ✓ | ✓ | ✓ |
| Screen Size Wide 2 | 8A | 14 | ✓ | ✓ | ✓ |
| Screen Size Zoom 1/Zoom | 8A | 15 | ✓ | ✓ | ✓ |
| Screen Size Zoom 2 | 8A | 16 | ✓ | ✓ | ✓ |
| DISPLAY | 8A | 08 | ✓ | ✓ | ✓ |
| Picture MEMORY | 8A | 48 | ✓ | ✓ | ✓ |
| Picture Memory 1 | 8A | 50 | ✓ | ✓ | ✓ |
| Picture Memory 2 | 8A | 51 | ✓ | ✓ | ✓ |
| Picture Memory 3 | 8A | 52 | ✓ | ✓ | ✓ |
| Picture Memory 4 | 8A | 53 | ✓ | ✓ | ✓ |
| Picture Memory 5 | 8A | 54 | ✓ | ✓ | ✓ |
| Picture Memory 6 | 8A | 55 | ✓ | ✓ | ✓ |
| Picture Memory 7 | 8A | 56 | ✓ | ✓ | ✓ |
| Picture Memory 8 | 8A | 57 | ✓ | ✓ | ✓ |
| OFF-TIMER | 8A | 41 | | ✓ | ✓ |
| i INFO | 8D | 5B | | ✓ | ✓ |
| TV/DTV | 8B | 0E | | ✓ | ✓ |
| VIDEO | 8B | 16 | ✓ | ✓ | ✓ |
| VIDEO 1 | 8B | 40 | ✓ | ✓ | ✓ |
| VIDEO 2 | 8B | 41 | ✓ | ✓ | ✓ |
| VIDEO 3 | 8B | 42 | ✓ | ✓ | ✓ |
| VIDEO 4 | 8B | 43 | ✓ | ✓ | ✓ |
| VIDEO 5 | 8B | 44 | ✓ | ✓ | ✓ |
| VIDEO 6 | 8B | 45 | ✓ | ✓ | ✓ |
| RGB | 8B | 17 | ✓ | ✓ | ✓ |
| RGB 1 | 8B | 68 | ✓ | ✓ | ✓ |
| MODE | 8B | 0B | ✓ | ✓ | ✓ |
| 1 | 8D | 40 | ✓ | ✓ | ✓ |
| 2 | 8D | 41 | ✓ | ✓ | ✓ |
| 3 | 8D | 42 | ✓ | ✓ | ✓ |
| 4 | 8D | 43 | ✓ | ✓ | ✓ |
| 5 | 8D | 44 | ✓ | ✓ | ✓ |
| 6 | 8D | 45 | ✓ | ✓ | ✓ |
| 7 | 8D | 46 | ✓ | ✓ | ✓ |

| | | | | | |
|------------------|----|----|---|---|---|
| 8 | 8D | 47 | ✓ | ✓ | ✓ |
| 9 | 8D | 48 | ✓ | ✓ | ✓ |
| CH RETURN | 8D | 0E | | ✓ | ✓ |
| 0 | 8D | 4A | ✓ | ✓ | ✓ |
| . | 8D | 58 | | ✓ | |
| CH/PAGE ^ | 8D | 0B | | ✓ | ✓ |
| CH/PAGE v | 8D | 0C | | ✓ | ✓ |
| SOURCE ^ | 8A | 2A | ✓ | | |
| SOURCE v | 8A | 2B | ✓ | | |
| MULTI/MTS/STEREO | 8D | 12 | | ✓ | ✓ |
| NIGHT | 8C | 19 | ✓ | ✓ | ✓ |
| VOL + | 8C | 10 | ✓ | ✓ | ✓ |
| VOL - | 8C | 11 | ✓ | ✓ | ✓ |
| MENU | 8A | 22 | ✓ | ✓ | ✓ |
| GUIDE | 8D | 5C | | ✓ | ✓ |
| MUTE | 8C | 12 | ✓ | ✓ | ✓ |
| ↑ | 8A | 23 | ✓ | ✓ | ✓ |
| ← | 8A | 20 | ✓ | ✓ | ✓ |
| ENTER | 8A | 26 | ✓ | ✓ | ✓ |
| → | 8A | 21 | ✓ | ✓ | ✓ |
| ↓ | 8A | 24 | ✓ | ✓ | ✓ |
| TEXT | 8E | 03 | | | ✓ |
| FAV/LIST | 8D | 62 | | | ✓ |
| EXIT | 8E | 59 | | | ✓ |
| SUBTITLE | 8E | 51 | | | ✓ |
| RED | 8E | 0C | | | ✓ |
| INDEX | 8E | 50 | | | ✓ |
| MODE | 8E | 53 | | | ✓ |
| GREEN | 8E | 0D | | | ✓ |
| REVEAL | 8E | 55 | | | ✓ |
| STORE | 8E | 52 | | | ✓ |
| YELLOW | 8E | 0E | | | ✓ |
| SIZE | 8E | 54 | | | ✓ |
| HOLD | 8E | 56 | | | ✓ |
| BLUE | 8E | 0F | | | ✓ |
| CANCEL | 8E | 57 | | | ✓ |
| FAVORITE | 8D | 5A | | ✓ | |
| LINK1394 | 8D | 61 | | ✓ | |
| EXIT | 8D | 59 | ✓ | ✓ | |
| ANTENNA | 8D | 30 | | ✓ | |
| CABLE | 8D | 31 | | ✓ | |
| CC | 8D | 5D | | ✓ | |

*1 Depending on the type of signal, some aspects may not be selected