

CONFIDENTIAL

SPECIFICATIONS

I/R Remote Control

Plasmavision Home Theater models

Jan 18th 2006

FUJITSU GENERAL LIMITED

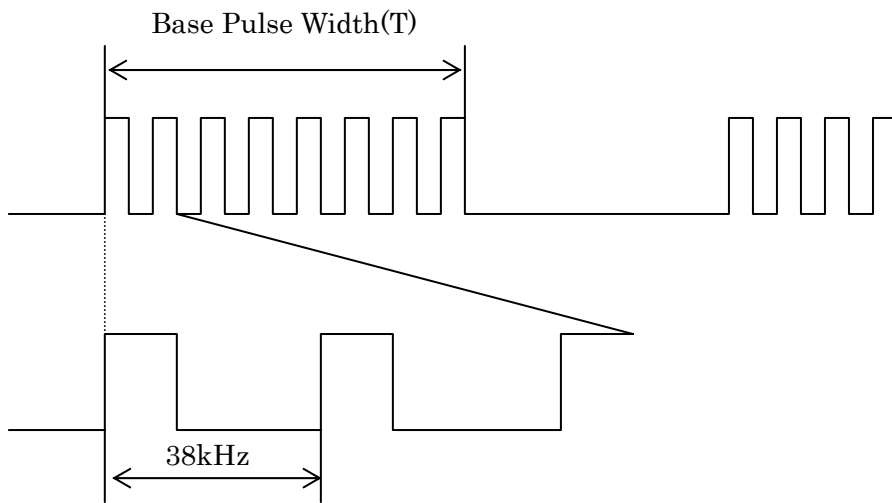
1. Output Signal

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%

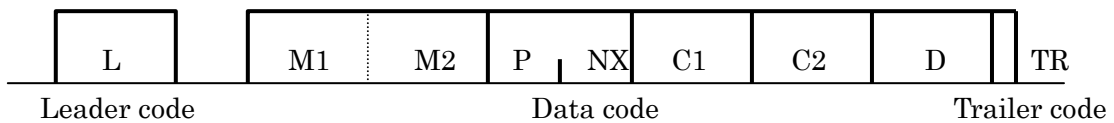
Pulse position Modulation



1-2. Signal Format

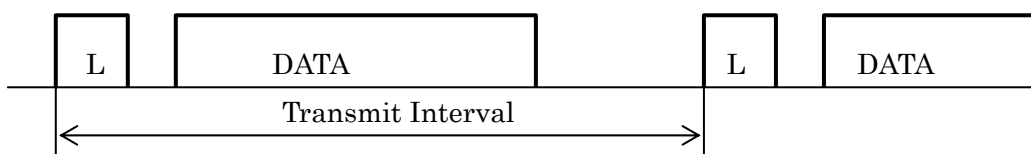
Transmission data conforms to the format standardized by KADEN SEIHIN KYOUKAI (Home Electronics Association).

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

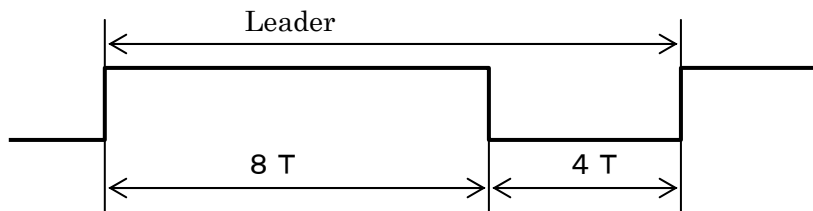


1-3 Base pulse width

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

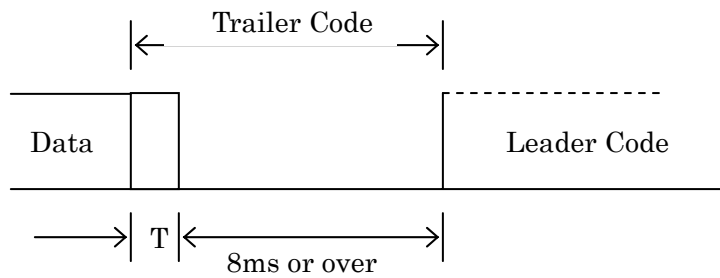
$$T = 410 \mu s \pm 3\%$$

1-4 Leader code

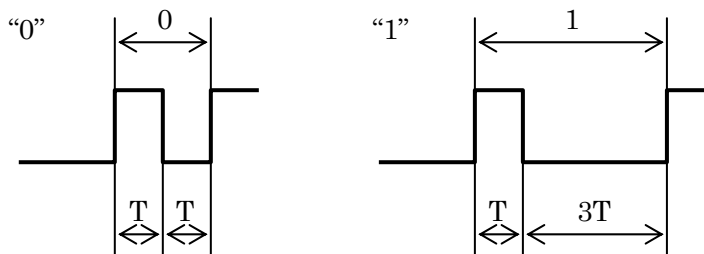


1-5 Trailer code

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.

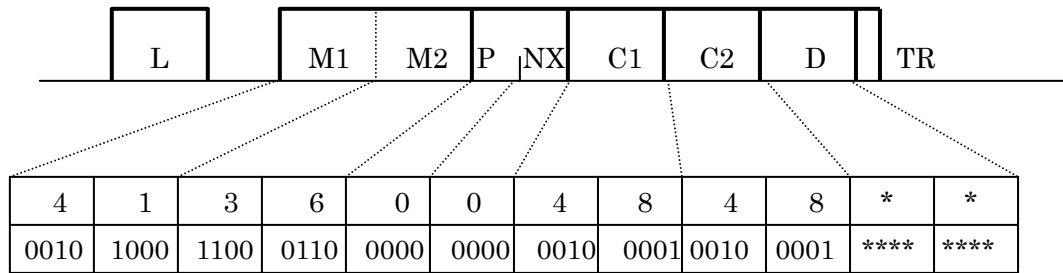


1-6 Data bit



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) | : 84 hex | (00100001) | |
| (6) Command code (D) | : Refer to (b) | | |

1-8 Command Code List

	Sub custom code		Command Code (16 hex)
	Separate	All in one	
ON/OFF (toggle)	8B		00
Power ON	8A		01
Power OFF	8A		02
DISPLAY	8A		08
WIDE (toggle key)	8A		10
Aspect Normal *	8A		12
Aspect Wide 1 *	8A		13
Aspect Wide 2 *	8A		14
Aspect Zoom 1 *	8A		15
Aspect Zoom 2 *	8A		16
MENU	8A		22
↑	8A		23
←	8A		20
ENTER	8A		26
→	8A		21
↓	8A		24
PICTURE MODE	8A		44
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
STILL	8A	-	4A
AUDIO IN (toggle)	8B	-	10
VIDEO (toggle key)	8B		16
RGB (toggle key)	8B		17
MODE (video in toggle)	8B		0B
VIDEO1	8B		40
VIDEO2	8B		41
VIDEO3	8B		42
VIDEO4	8B	-	43
VIDEO5	8B	-	44
VIDEO6	8B	-	45
VIDEO7	8B	-	46
R G B 1	8B		68
R G B 2	8B		69
R G B 3	8B		6A
MUTE	8C		12
VOL+	8C		10
VOL-	8C		11
DUAL/STEREO	8D		12
0	8D		4A
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

	Sub custom code		Command Code (16 hex)
	TV Tuner models		
TV	8B		0E
CH +	8D		0B
CH -	8D		0C
CH RETURN	8D		0E
TELETEXT	8E		03
RED	8E		0C
GREEN	8E		0D
YELLOW	8E		0E
BLUE	8E		0F
INDEX	8E		50
SUBPAGE	8E		51
STORE	8E		52
MODE	8E		53
SIZE	8E		54
REVEAL	8E		55
HOLD	8E		56
CANCEL	8E		57

Maker Code : 6314 (HEX)
 Maker Parity #1 Code : 0 (HEX)
 Maker Parity #2 Code : 0 (HEX)
 Custom Code : 84 (HEX)

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