

## 6. MAINTENANCE

### Caution

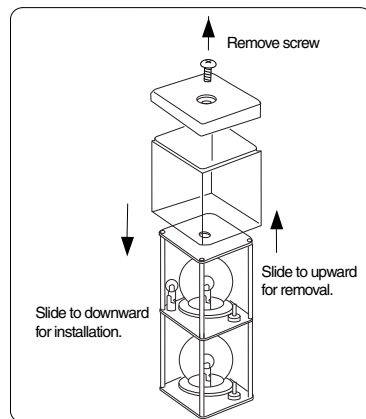
- Make sure power is turned off for electric shock prevention in case of bulb repair.
- Make sure power is turned off when checking or changing a fuse or bulb to prevent danger of electric shock.
- Make sure power is turned off and the temperature of electric bulb falls down for repair to avoid electric shock and burn.
- Make sure not to use any other bulbs except ones described in specifications.
- Do not use the hands to rotate reflector.
- Do not oil the motor and roter. (Neither will it rotate if oil enters the motor.)

### 1. Change lens

- Please follow the procedure mentioned below to change the lens

- ① Make sure power is turned off when changing lens.
- ② Loosen head cover screw, then put the lens off.
- ③ Put the new lens, then installing head cover.

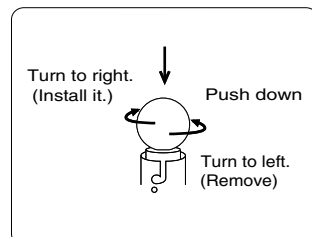
※ Be sure to reinstate the rubber packing to the body lens and head cover (one size for all applications) or the unit will no longer be splash proof.



### 2. Change bulb

- Please follow the procedure mentioned below to change the bulb.

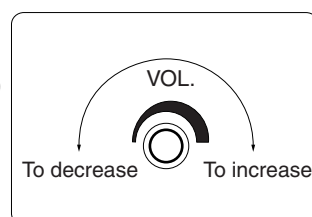
- ① Make sure power is turned off when changing lens.
- ② Remove lens. ( Refer to the "Change lens " )
- ③ The bulb can be easily removed by pressing it downward to turn to left.
- ④ The new bulb can be easily installed by pressing it downward to turn to right.
- ⑤ Install lens. ( Refer to the " Change lens " )



### 3. How to adjust the sound volume

- Please follow the procedure mentioned below to adjust the volume.

- ① Remove lens. ( Refer to the "Change lens " )
- ② It is adjustable when volume turned.
- ③ Install lens. ( Refer to the " Change lens " )



## 7. BEFORE REQUESTING SERVICE

- Please check the list shown below before requesting repairs. If the product still not work, please contact us for repairs. Please feel free to contact our sales office with any questions concerning the product. For inquiry, you are required to identify the number indicated at the name plate of the product.

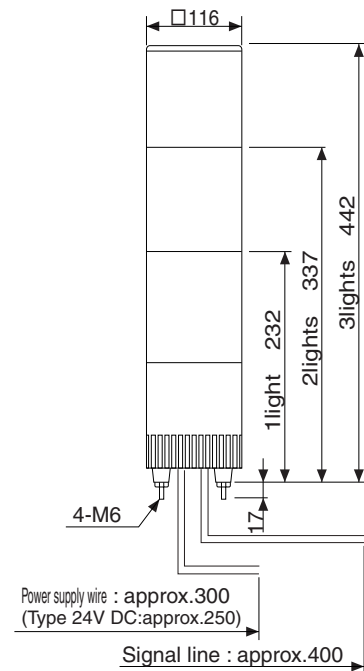
Problems	Where to check	What to do
• Bulb stays turned off • The reflector would not rotate	• Is the power on?	• Check the power wiring plug connection and fuse. • If a switch is installed check to see that It is turned on.
	• Is wiring mistake?	• Check and correct the power polarity. (24V version only)
• No sound from speaker	• Is the light bulb burned out?	• If it is, replace it with a new one.
• The reflector rotates but the lamp is off	• Is the motor stopped? Is the motor lubricated?	• The motor is broken or has reached the end of its life. Request a repair.
• The bulb is turned on but the reflector stays stopped	• Is the volume the smallest?	• Adjust the volume of the equipment for proper sound level.
• No sound from speaker	• Is wiring mistake? • Is the method of the message choice wrong? • Is type of sound wrong?	• Check for correct signal-line connections. • Check the input signal for correct format ( 1-bit input ) • Confirm the assignment of the message or sound required.

※ Please note that any malfunction or damage resulting from modification by the warranty.

## 8. SPECIFICATIONS

### 1. Dimensions

(mm)



## 2. Type of sound

MODEL	KJT-K (alarm)		KJT-L (chime · melody)	
	A	F	Q	S
1ch (Sky blue)	Beep (slow intermittent horn)	For Elise	Merry had a little Lamb	Amaryllis
2ch (Yellow)	Stutter (rapid intermittent horn)	Maiden's Prayer	The camptown Races	Symphony No.40
3ch (Pink)	Bell (clear high pitched bell)	Minuet	Cuckoo	Silent Lakeside
4ch (Light green)	Yelp (rapid siren)	Annie Laurie	Blacksmith in the village	Mountain musician
5ch (Purple)	Rapid Hi-Lo	London bridge is falling down	On the Avignon bridge	Romance De Amour
6ch (Gray)	Melody Chime	Holdiridia	Ob-La-Di, Ob-La-Da	Petrouchka
7ch (White)	Synthesized Piano	Chime (door chime)		
8ch (Blue)	Synthesized Bell	Call sign (PiPiPi...)		

### 3. Specifications

Type KJT						
Model	1-light	KJT-102KA, L	KJT-110KA, L	KJT-112KA, L	KJT-120KA, L	KJT-124KA, L
	2-lights	KJT-202KA, L	KJT-210KA, L	KJT-212KA, L	KJT-220KA, L	KJT-224KA, L
	3-lights	KJT-302KA, L	KJT-310KA, L	KJT-312KA, L	KJT-320KA, L	KJT-324KA, L
Rated voltage		24V AC/DC	100V AC	120V AC	220V AC	240V AC
Operative voltage range		21~27V AC/DC	90~110V AC	100~140V AC	180~240V AC	220~260V AC
Power consumption	1-light	25W(AC)/18W(DC)	20W			
	2-lights	36W(AC)/28W(DC)	26W			
	3-lights	47W(AC)/38W(DC)	32W			
Operative temp. range		-20°C ~ +50°C (Humidity 85% or less)				
Max volume level		90dB max.(at 1m)				
Anti-noise (Power supply)		500Vp-p				
Vibration proof		45m/s <sup>2</sup>	19.6m/s <sup>2</sup>			
Operative location		indoor, outdoor (upright) IP23				
Bulb		24V 10W	12V 5W			
		Grass:G18, Base:BA15S				
Mass	1-light	1.4kg	1.7kg			
	2-lights	2.0kg	2.4kg			
	3-lights	2.6kg	3.0kg			
Dispatch frequency		262.144kHz ± 20%				

Type KJPV						
Model	1-light	KJPV-102S	KJPV-110S	KJPV-112S	KJPV-120S	KJPV-124S
	2-lights	KJPV-202S	KJPV-210S	KJPV-212S	KJPV-220S	KJPV-224S
	3-lights	KJPV-302S	KJPV-310S	KJPV-312S	KJPV-320S	KJPV-324S
Rated voltage		24V DC	100V AC	120V AC	200V AC	240V AC
Operative voltage range		20~27V DC	90~110V AC	100~140V AC	180~240V AC	220~260V AC
Power consumption	1-light	20W	20W			
	2-lights	30W	26W			
	3-lights	40W	31W			
Operative temp. range		-10°C ~ +55°C (Humidity 85% or less)				
Max volume level		95dB max.(at 1m)				
Voice synthesis method		ADPCM				
Maximum-recording time		16sec. (1Mbit EPROM)				
Anti-noise (Power supply)		500Vp-p				
Vibration proof		45m/s <sup>2</sup>	19.6m/s <sup>2</sup>			
Operative location		indoor, outdoor (upright) IP23				
Bulb		24V 10W	12V 5W			
		Grass:G18, Base:BA15S				
Mass	1-light	1.4kg	1.7kg			
	2-lights	2.0kg	2.4kg			
	3-lights	2.6kg	3.0kg			

※ Specifications are subject to change without notice.

### Caution

- We are not in a position to be responsible for damage and trouble caused by handling against caution and warning described in this instruction manual.

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PATLITE

4048-L

C95100022

FC001

# Signal Phone, Signal Voice

## INSTRUCTION MANUAL

[TYPE : KJT, KJPV]

Thank you for purchasing a **Signal Phone, Signal Voice**. To ensure proper operation, please read this instruction manual thoroughly before attempting to use the system. Also, when undertaking maintenance, inspection or repair work, be sure to refer to this manual. If you have any questions regarding this product, please feel free to contact us.

TO OPERATE THIS PRODUCT SAFELY, PLEASE OBSERVE THE FOLLOWINGS

### NOTES TO BE OBSERVED FOR SAFE OPERATION

Note to be followed to prevent any damage to the user and other personnel or to assets are as follows

- The indications for warning are divided into the following classes according to the degree of danger or damage incurred when the warning is not taken into consideration and the product is not correctly used.

### Warning

This symbol marks important instructions that, if ignored or incorrectly followed, could conceivably lead to death or serious injury.

### Caution

This symbol marks important instructions that, if ignored or incorrectly followed, could conceivably lead to injury or property damage.

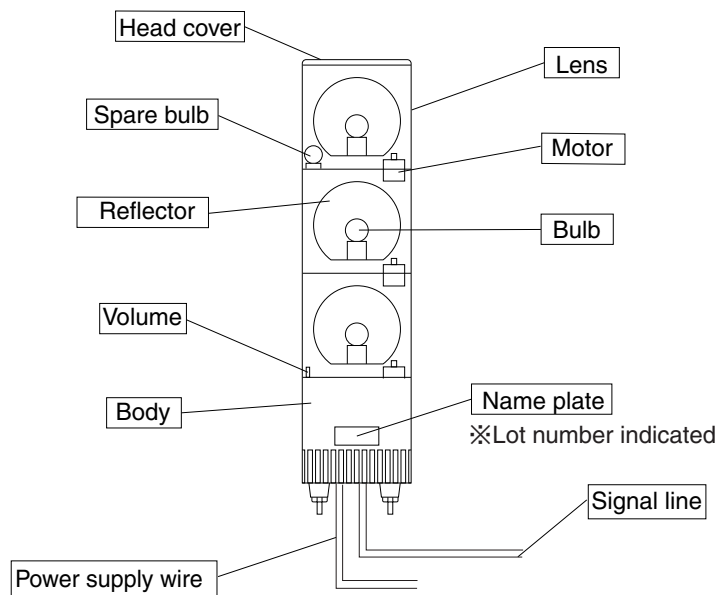
### Warning

- Wiring should be careful enough there to be for no mistake. If wiring is mistaken, an internal circuit will be damaged and it will become the cause of a fire.
- When the installation of this product requires the construction, please ask to specialist. Electric shock, fire and fall may occur.
- When you use this product for security purpose, routine inspection must be done. Just in case of emergency we recommend you to use this product together with other security product.
- Do not use this product without lens or head cover with cracked lens. It may cause electric shock.
- Make sure power is turned off to avoid electric shock, when you repair this product as color reformation.
- Make sure power is turned off and the temperature of electric bulb falls down for repair to avoid electric shock and burn.
- Make sure power is turned off when checking or changing a fuse to prevent danger of electric shock
- Turn off the power supply before making wiring connections. Neglecting to so may cause an electric shock.
- All loose ends of wires left unconnected upon the completion of wiring must be insulated individually, or they may cause equipment problems, short circuits or electric shock.
- When mounting the unit outdoors or in a place where water may splash on it, avoid inverted or sideways mount. If water seeps into the unit through the drain hole on the bottom of the case, then collects inside, it may cause an electric shock or short circuit.
- Be careful when handle a bulb, reflector or lens (or other plastic parts) since these parts are fragile.
- Be sure to waterproof an uncoated part of power supply line and signal line in case this product is used in the rain or water exposing environment. Water immersion into the product may result in malfunction or electric shock.

### Caution

- Use only specified operating voltage range. Excess voltage hastens degradation.
- Make sure to set fuse in a power supply side, please connect a fuse.
- To clean lens, head cover, and body, wipe with water or glass cleaner soaked soft cloth. Do not use thinner or benzine, gasoline, oil as these cause color change or deform the surface.
- Absolutely do not connect direct power in a signal wire and common wire, damage the internal circuit.
- Make sure not to use any other bulbs except ones described in specifications.

## 1. PARTS NAME



## 2. REPLACEMENT PARTS

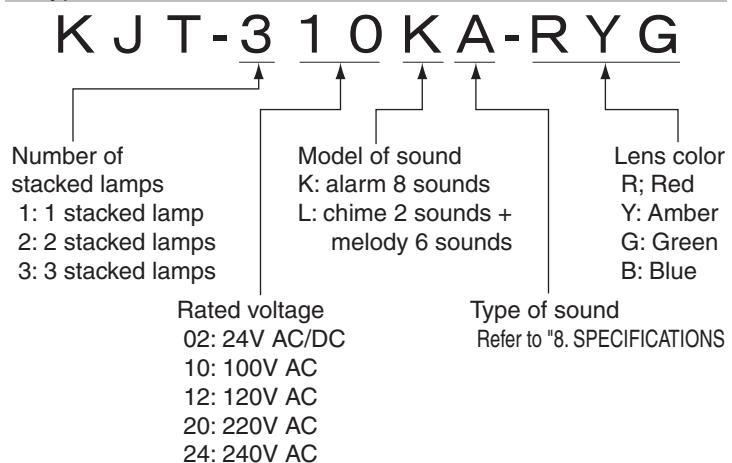
The replacement parts are prepared. Please ask your local distributor for availability.

- Head cover
- Lens (per color)
- Motor (per voltage)
- Bulb (per voltage)

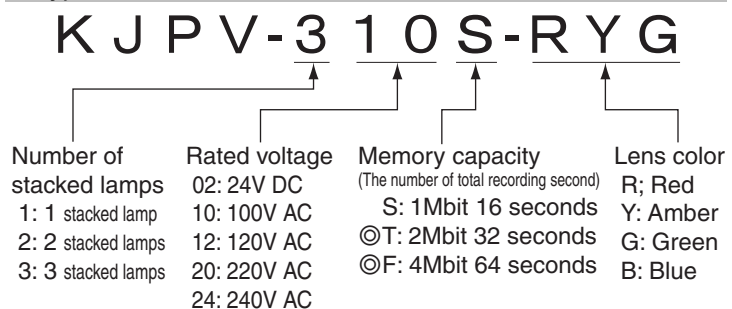
※If you have question please feel to contact us about other parts.

## 3. MODEL NO. CONFIGURATION

### 1. Type KJT



### 2. Type KJPV



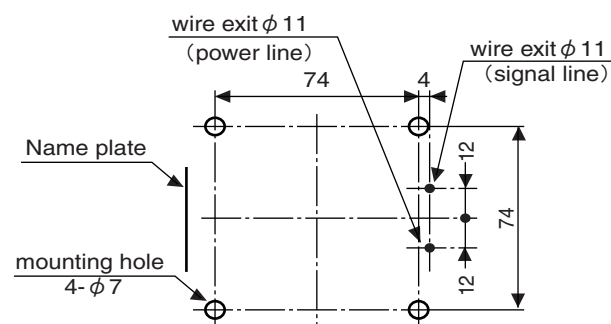
※The model indicated "©" is custom order item.

## 4. HOW TO MOUNTING

### ⚠ Caution

- Do not install with wrong direction, as it may be water leaked.
- Signal Tower must be installed in a vertical position where it has enough strength and less vibration. Do not install it horizontally or reversely.
- When the installation of this product requires the construction, please ask to specialist. Electric shock, fire and fall may occur.
- When installing the unit in a high place, choose the place where a foothold can be secured for case in repairs.

- Make mounting holes in wall.( Refer to the following installation drawing )
- Tighten with nuts and bolts.



When it is processed from the mounting surface side.

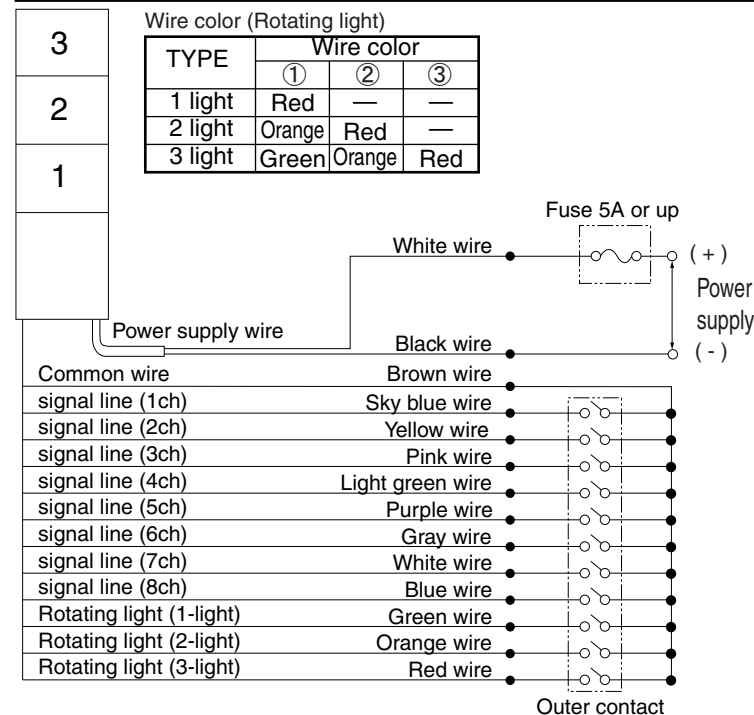
## 5. HOW TO WIRING CONNECTION

### ⚠ Caution

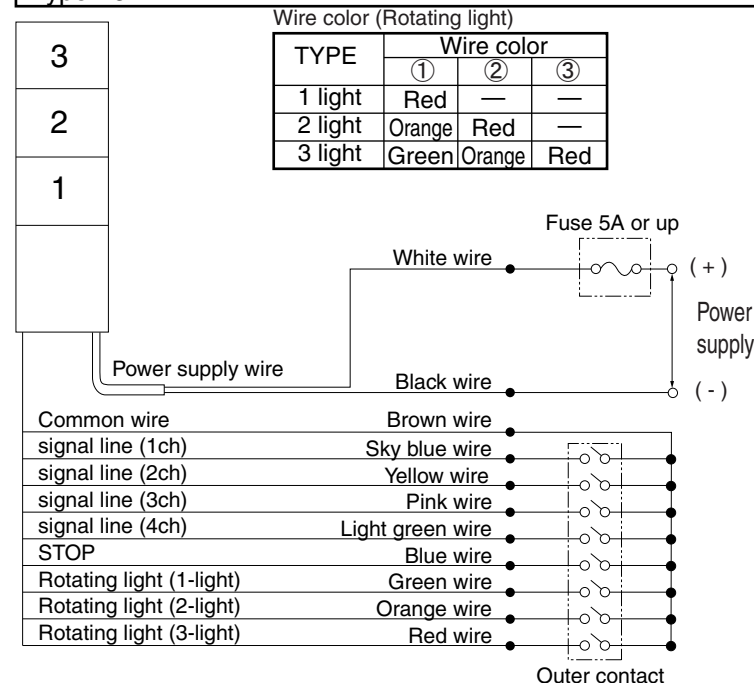
- Turn off the power supply before making wiring connections.
- Neglecting to so may cause an electric shock.
- When you have questions for the method of special operation or plural units operation, we recommend you to ask our sales office before wiring.
- Do not pull lead wire and push it in body when wiring.
- Wiring should be careful enough there to be for no mistake. If wiring is mistaken, an internal circuit will be damaged and it will become the cause of a fire.
- During connection, refer to the wiring example. Be sure to use crimp type terminal connectors.
- Make sure to set fuse in a power supply side, please connect a fuse.
- When wiring is completed, make sure ends of any unused wires are insulated (Taped).
- KJT series: alarm or chime sounds only when the signal lines are connected, there is no one shot input.
- After the connection (of the sound line to COM), it could take about 1 second to start the sound. Consider this delay time so that it will not cause any problems on the system.
- KJPV series a signal greater than 100ms is necessary to start/stop playback.
- KJPV series: When input of less than 100ms is received on the signal line, a noise output may turn on momentarily even though no message playback is taking place.
- Due to the individual difference in frequency of melody IC, there may be a difference in tone or pitch of melody or alarm.
- In case of using two or more products, deviation in playback sound of alarm or melody may occur even if operated simultaneously.
- Sound pressure level in specifications is the maximum level. Operating sound pressure level may be lower than the specified level due to the type of melody or surge voltage.

## 1. Wiring example

### Type KJT



### Type KJPV

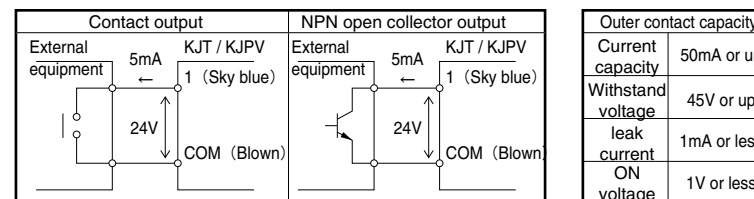


### 2. Power supply wiring

- Confirm specified voltage as indicated on "3. TYPE No. CONFIGURATION", and connect accordingly.
- When 24V DC is used, make a black line a (-).

### 3. Signal line wiring

- In case of using relay contact, connect diode for preventing backward voltage to primary side of the diode.
- Wire signal line as short as possible for preventing noise. Use twisted pair shielding wire for extension and junction.
- Wiring signal line around high voltage wire or at a place influenced by induced noise may cause wrong works and damages of internal circuit.



## 4. How to use

### 1. Type KJT

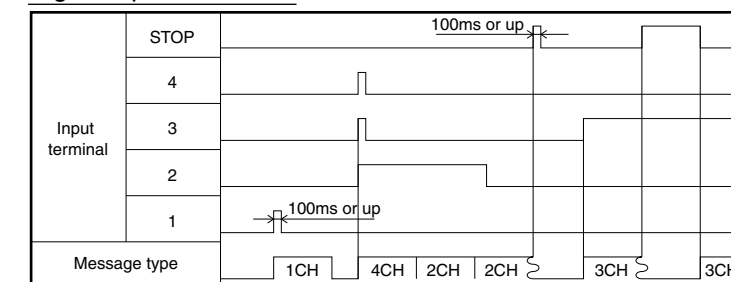
- A different type of alarm, chime or melody. Can be selected by connecting each line 1 (Sky blue) ~8 (blue) with COM (black).
- A rotating light rotates when a COM(Brown) is connected with the signal line(Red, Orange, Green) for the rotating lights.
- If there are more than 2 signals, higher number will be prioritized.

8ch > 7ch > . . . . . 2ch > 1ch  
(Blue) (White) (Yellow)(Sky Blue)

### 2. Type KJPV...1Bit signal input

- The message of the channel which had the input in each terminal of 1 (Sky blue) to 4(Light green) is reproduced ones busy output may turn on to the signal input 100ms or less instantaneously, without reproducing a message.
- While playing back a channel in which nothing is recorded, you can hear only noise
- While reproducing a message the input of those other than STOP terminal is not received.
- A STOP INPUT needs the input for 100ms or more.
- The greater number has priority when any of the channels are activated simultaneously.  
STOP > 4ch > 3ch > 2ch > 1ch  
(Blue) (Light green) (Pink) (Yellow) (Sky blue)
- Only rotating light works while short-circuiting signal wire for rotating light (Red) and common wire (Brown).

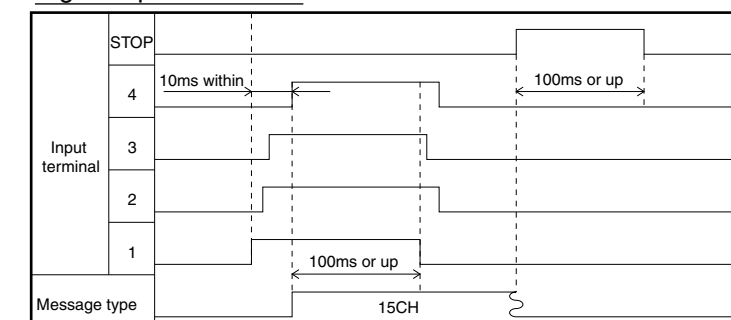
### Signal input time chart



### 3. KJPV...4 Bit binary input ( Custom order item )

- Input binary signal to 1(Sky blue)~4(Light green) can play back each message from on 1 to 15, rotating light at the same time during the regeneration too.
- The first binary signal should be less than 10ms. The second signal more than 100ms.
- If this is not performed in this sequence, there may malfunction such as a different channel will be played back or an incorrect action of BUSY signal.
- When the channel currently not recorded is reproduced, noise sound is outputted while a signal is being inputted.
- While reproducing a message the input of those other than stop terminal is not received.
- A STOP INPUT needs the input for 100ms or more.
- Only rotating light works while short-circuiting signal wire for rotating light (Red) and common wire (Brown).

### Signal input time chart



### Binary input code

Message NO.	Terminal Number				Message NO.	Terminal Number			
	1	2	3	4		1	2	3	4
1	1	0	0	0	9	1	0	0	1
2	0	1	0	0	10	0	1	0	1
3	1	1	0	0	11	1	1	0	1
4	0	0	1	0	12	0	0	1	1
5	1	0	1	0	13	1	0	1	1
6	0	1	1	0	14	0	1	1	1
7	1	1	1	0	15	1	1	1	1
8	0	0	0	1					