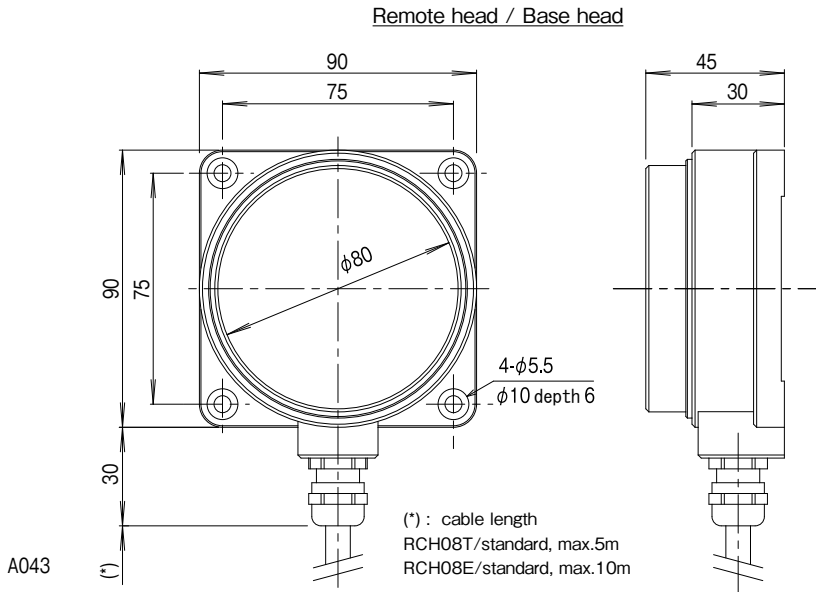


8+8 switch signal and 64+32 switch signal / Size : 90 x 90

Operating distance
4...9mm

Remote head and Base head shared dimension



Remote head:RCH08T-211 and Base head:RCH08E-211 are used for both 8+8 and 64+32 transmission system as a head.

Wiring 8+8	C020/P.122
Wiring 64+32	C023/P.123

(*) : cable length
 RCH08T/standard, max.5m
 RCH08E/standard, max.10m

Remote / Remote head	
Type code	RCH08T-211-PU-01
Applicable Remote amplifier	8+8 RC08T-011_-000 64+32 RL64T-344_-000, RL64T-345_-000
Drive voltage	24V ± 1.5V DC
Drive current	max.2A
Operating distance	4...9mm 6...8mm
Center offset	± 5mm ± 3mm
Drive current	≤ 1A ≤ 2A
Operating temperature	0...+50°C
Protection class	IP67
Cable	PUR / Ø7.8, 2x1.25mm ² +2x0.2mm ² with shield
Material	Housing Aluminum + alumite processing (metal part) Active face ABS + PBT (resin part)
Weight	Body 600 g + cable 120 g x 1 m
Remarks	

BaseBase head	
Type Code	RCH08E-211-PU-02
Applicable Base amplifier	8+8 RC08E-011_-000 64+32 RL64E-333_-000, RL64EA-355DN-000, RL64E-366CL-000, RL64E-366EI-000
Operational voltage	24V DC ± 5% (incl. ripple)
Current consumption	≤ 4A
Load current	---
Frequency of operation	---
LED	---
Operating temperature	0...+50°C
Protection class	IP67
Cable	PUR / Ø7.8, 2x1.25mm ² +2x0.2mm ² with shield
Material	Housing Aluminum + alumite processing (metal part) Active face ABS + PBT (resin part)
Weight	Body 620 g + cable 120 g x 2 m
Remarks	

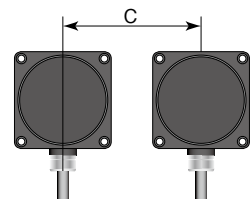
The Remote head in 8+8 signal transmission type can not work with the Base head in 64+32 signal transmission type, and vice versa, though these heads are shared in both transmission type.

Installation notes

In order to avoid influence of surrounding metal, or to avoid mutual influence between parallel-mounted Remote and Base, keep the minimum distances as described below.

Surrounding metal

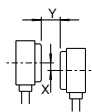
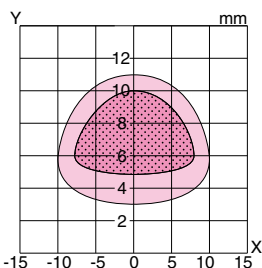
Parallel installation



Type Code	A(mm)	B(mm)	C(mm)
RCH08T-211-PU-__	50	45	300
RCH08E-211-PU-__			

Typical Transmitting Diagram (Supply voltage at 24V/non-flush mount)

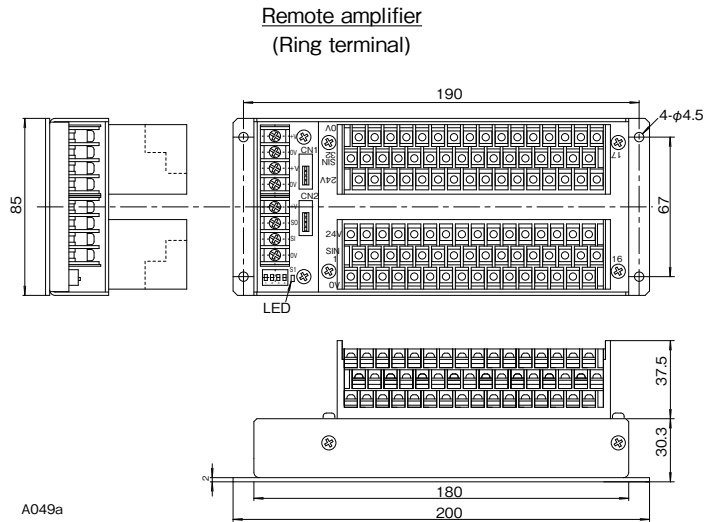
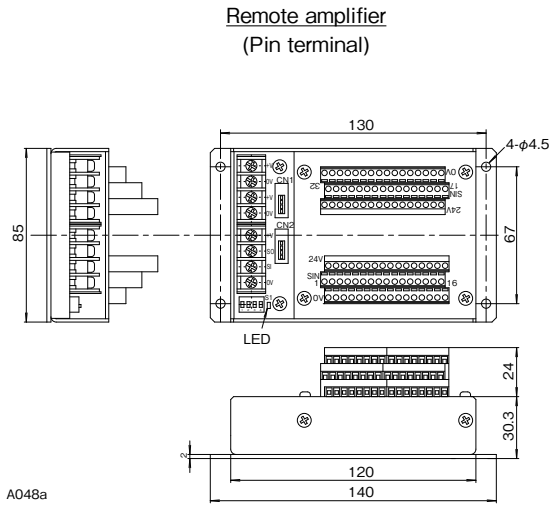
RCH08T-211-PU-__ / RCH08E-211-PU-__



X : Offset (mm)
 Y : Operating distance (mm)

Drive current ≤ 2A
 Drive current ≤ 1A

64+32 switch signal



Wiring Please refer to the User's Guide.

		Remote amplifier (Pin terminal)	Remote amplifier (Ring terminal)
Type Code	NPN	RL64T-344N-000	RL64T-345N-000
	PNP	RL64T-344P-000	RL64T-345P-000
Applicable Remote head		RCH08T-211-PU	RCH08T-211-PU
Applicable Base amplifier		RL64E-333_000, RL64EA-355DN-000, RL64E-366CL-000, RL64E-366EI-000	RL64E-333_000, RL64EA-355DN-000, RL64E-366CL-000, RL64E-366EI-000
Input logic		NPN or PNP	NPN or PNP
No. of input signal		32	32
Load current		7mA per input	7mA per input
Frequency of operation		20Hz	20Hz
Current consumption		≤ 70mA	≤ 70mA
LED		Ready	Ready
Material	Housing	SPCC-SD, Glass-epoxy	SPCC-SD, Glass-epoxy
	Cover plate	---	---
Connection	Sensor	Terminal block : 3 pole x 32	Terminal block : 3 pole x 32
	Remote head	Terminal block : 4 pole x 1	Terminal block : 4 pole x 1
	Input/Output unit	Connector: e-con , 4-pin x 2	Connector: e-con , 4-pin x 2
Operating temperature		0...+50°C	0...+50°C
Weight		620 g	1,040 g
Remarks			

Applicable sensor and actuator

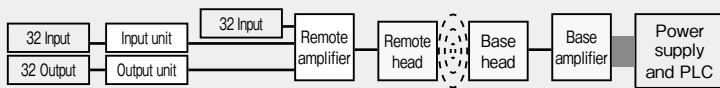
- Remote amplifier RL64T-344/345 can connect up to 32 detectors directly without Input unit.
- Please use a sensor which works definitely in the condition described below.

Supply voltage	24 V DC
Total current consumption	≤ 2 A
Residual voltage	≤ 6 V
Residual current	≤ 1 mA

- The total of the current consumption of all units being connected to Remote head - Remote amplifier, an input and output unit, sensors and actuators - must not exceed 2A the drive current which is supplied by the Remote head.

Notes

- Prepare the cable, 4 conductors and outer diameter phi 1.35 ... 1.6 mm to connect an input unit and an output unit.
An insulation displacement connector is attached to each unit.

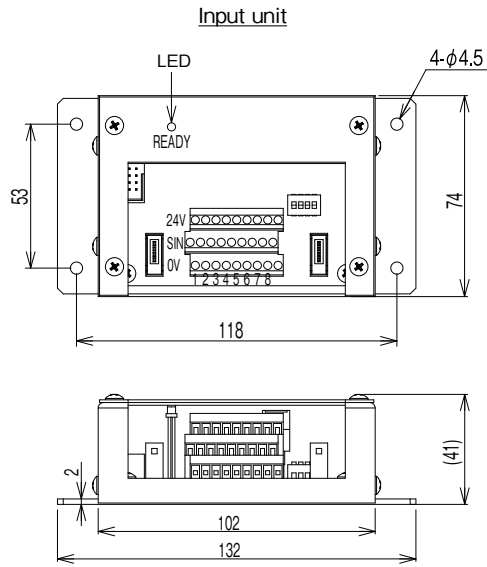


RL64T

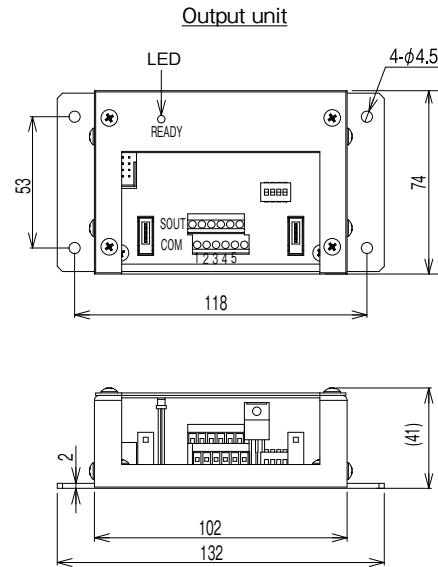
RLX08
RLY04

64+32
signal

64+32 switch signal



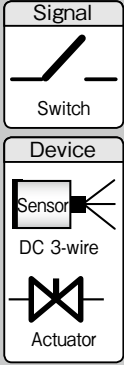
A052 Wiring Please refer to the User's Guide.



A053 Wiring Please refer to the User's Guide.

Input unit	
Type Code	NPN RLX08-322N
	PNP RLX08-322P
Input logic	NPN or PNP
No. of input signal	8
Load current	7mA per input
Current consumption	≤ 40mA
Frequency of operation	20Hz
LED	Ready
Material Housing	SPCC-SD
Cover plate	Acrylic resin
Connect Sensor	Terminal block : 3 x 8 pole
Actuator	- - -
Input/Output unit	Connector : e-con, 4-pin x 2
Operating temperature	0...+50°C
Weight	350 g
Remarks	

Output unit	
Type Code	NPN RLY04-322N
	PNP RLY04-322P
Output logic	NPN or PNP
No. of output signal	5 (data : 4, Data valid : 1)
Load current	max.200mA per output
Current consumption	≤ 40mA
Frequency of operation	20Hz
LED	Ready
Material Housing	SPCC-SD
Cover plate	Acrylic resin
Connection Sensor	- - -
Actuator	Terminal block : 3 x 4 pole
Input/Output unit	Connector : e-con, 4-pin x 2
Operating temperature	0...+50°C
Weight	350 g
Remarks	



Remote Coupler

4+4
Switch Signal

8+8
Switch Signal

64+32
Switch Signal

RS-232C

CC-Link

DeviceNet

Exclusive Sensor

Applicable sensor and actuator

- Please use a sensor which works definitely in the condition described below.

Supply voltage	24V DC
Total current consumption	≤ 2 A
Residual voltage	≤ 6 V
Residual current	≤ 1 mA

-The total of the current consumption of all units being connected to Remote head - Remote amplifier, an input and output unit, sensors and actuators - must not exceed 2A the drive current which is supplied by the Remote head.

- The input unit connects up to 8 sensors. It can connect up to 4. (Max 64 sensors can be connected to the amplifier and input units.)

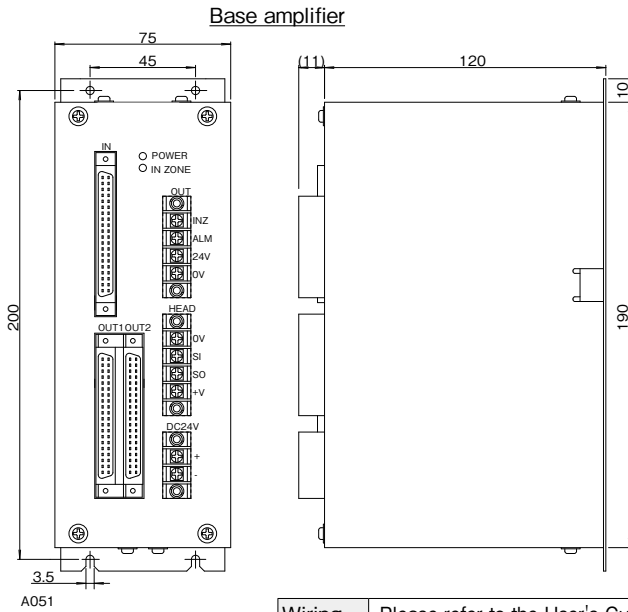
- The output unit connects up to 4 actuators. It can connect up to 8

Notes

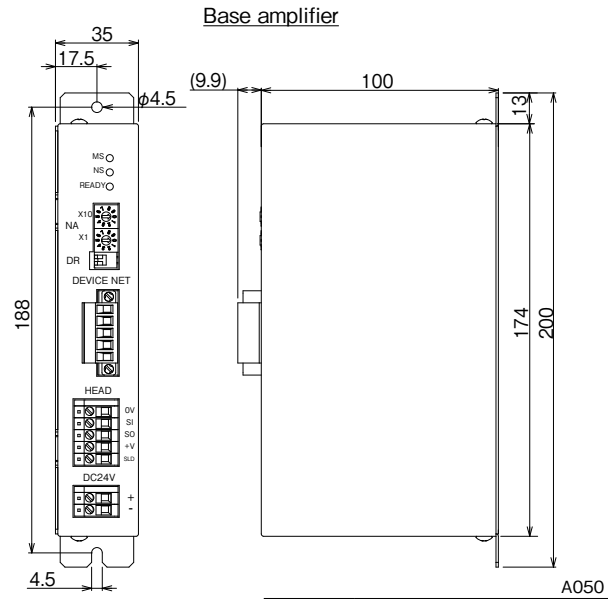
- Prepare the cable, 4 conductors and outer diameter phi 1.35 ... 1.6 mm to connect an input unit and an output unit. An insulation displacement connector is attached to each unit.

Wiring

64+32 switch signal



Wiring Please refer to the User's Guide.



Wiring Please refer to the User's Guide.

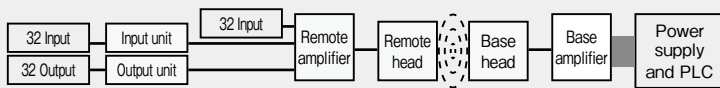
Base amplifier (Parallel I/O)	
Type	NPN RL64E-333N-000
Code	PNP RL64E-333P-000
Applicable Base head	RCH08E-211-PU
Applicable Remote amplifier	RL64T-344_-000 RL64T-345_-000
Input logic	NPN (current sink), PNP (current source)
No. of input signal ²⁾	32
Load current	7mA per input
Output logic	NPN (current sink), PNP (current source)
No. of output signal ¹⁾	67 (sensor: 64, InZone: 2, Short detection:1)
Load current	max.20mA per output
Operational voltage	24VDC ± 5%
Current consumption	≤ 150mA
Frequency of operation	20Hz
LED	Power(Green), Ready(Yellow)
Material	Housing: SPCC-SD (steel plate)
Connection	Power supply Terminal block : 2 pole x 1
	Head Terminal block : 4 pole x 1
	Input Square connector : 40-pin x 1
	Output Square connector : 40-pin x 2
Operating temperature	0...+50°C
Weight	1,300 g
Remarks	Connectors are supplied with Base amplifier

Base amplifier (DeviceNet)	
Type	DeviceNet RL64EA-355DN-000
Code	
Applicable Base head	RCH08E-211-PU
Applicable Remote amplifier	RL64T-344_-000 RL64T-345_-000
Communication function	Remotel/O (Poll)
Baudrate	500k/250k/125k Baud Set up by DIP switch
Node address	0 ~ 63 Set up by rotary switch
No. of input signal ¹⁾	64+1 Ready (9 byte)
No. of output signal ²⁾	32 (4 byte)
Operational voltage	24VDC ± 5%
Current consumption	≤ 150mA
LED	MS:Red/Green,NS:Red/Green,Ready : Yellow
Material	Housing : SPCC-SD (steel plate)
Connection	Power supply Terminal block : 2 pole x 1
	Head Terminal block : 5 pole x 1
	DeviceNet OpenConnector
Operating temperature	0...+50°C
Weight	550 g
Remarks	

1) No. of output signal from Remote system

2) No. of input signal to Remote system

Please refer to the manual for more information.

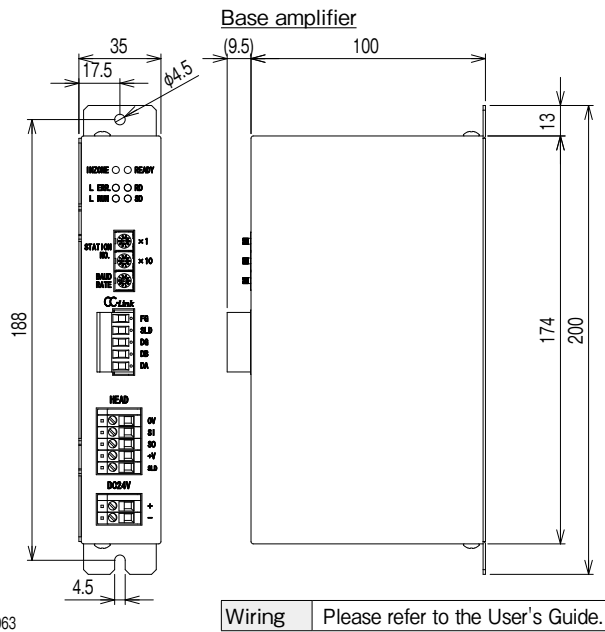


RL64E-333
RL64EA-355

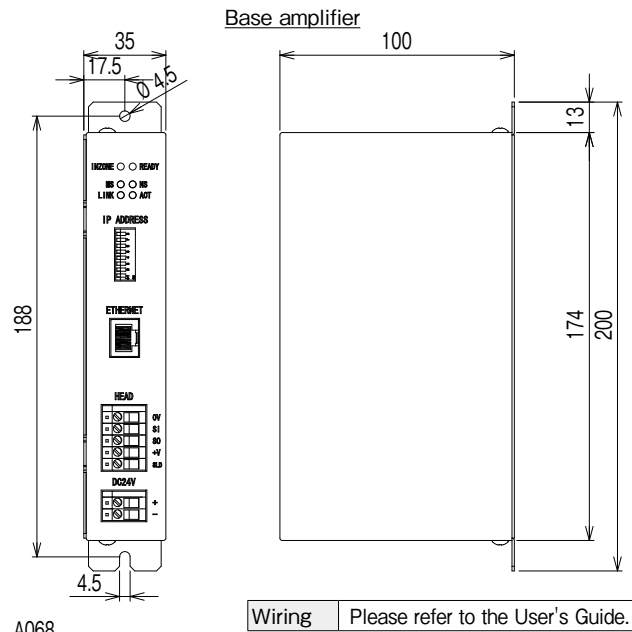
RL64E-366

64+32
signal

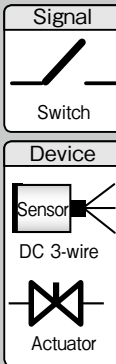
64+32 switch signal



Wiring Please refer to the User's Guide.



Wiring Please refer to the User's Guide.



Remote Coupler

Base amplifier (CC-Link)	
Type	CC-Link
Code	RL64E-366CL-000
Applicable Base head	RCH08E-211-PU
Applicable Remote amplifier	RL64T-344_-000 RL64T-345_-000
Protocol	CC-Link (Ver. 1.10)
Station type	Remote device
No. of stations occupied	3 stations (RX/RX 96 each bits, RWr/RWw each 12 words)
Baudrate	156k/625k/2.5M/5M/10M bps (Set up by rotary switch)
Station Number	1 ... 62 (Set up by rotary switch)
No. of input signal ¹⁾	64 (RXn0 ... RX(n+3)F) + 1 INZONE
No. of output signal ²⁾	32 (RYn0 ... RX(n+1)F) *1
Operational voltage	24VDC ± 5% (Ripple less than 1V)
Current consumption	≤ 150 mA
Material	Housing : SPCC-SD (steel plate)
Connection	Power supply
	Terminal block : 2 pole x 1
	Head
	Terminal block : 5 pole x 1
	CC-Link
	2 piece terminal block : 5 pole x 1
Operating temperature	0...+50°C
Weight	570 g
Remarks	

Base amplifier (EtherNet/IP)	
Type	EtherNet/IP
Code	RL64E-366EI-000
Applicable Base head	RCH08E-211-PU
Applicable Remote amplifier	RL64T-344_-000 RL64T-345_-000
Protocol	EtherNet/IP
Communication Function	Remote I/O function (Cyclic)
Communication method	Full duplex / half duplex (Automatic negotiation)
Baudrate	100Mbps/10Mbps (Automatic negotiation)
IP address	Set by DIP switch, DHCP and other
No. of input signal ¹⁾	64 + 1 INZONE (9 byte)
No. of output signal ²⁾	32 (4 byte)
Operational voltage	24V DC ± 5% (Ripple less than 1V)
Current consumption	≤ 150 mA
Material	Housing : SPCC-SD (steel plate)
Connection	Power supply
	Terminal block : 2 pole x 1
	Head
	Terminal block : 5 pole x 1
	Ethernet
	RJ 45 female Connector x 1
Operating temperature	0...+50°C
Weight	560 g
Remarks	

*1 n : The address which is allocated for the master station by setting of station number.

4+4
Switch Signal

8+8
Switch Signal

64+32
Switch Signal

RS-232C

CC-Link

DeviceNet

Exclusive Sensor

Wiring