

# RouteMagic

## RMC-MP1200 Instruction Manual

Thank you very much for choosing our RouteMagic Controller (RMC). Before using RMC, be sure to read this document and understand how to operate and the relevant instructions completely.

### Before Use

- Our guarantee does not apply to any trouble nor accident arisen from failure to comply with the instructions described in this document. Be sure to read this manual and keep it for future reference.
- Any copy, disassembling, decompiling, or reverse engineering of this device or our proprietary software incorporated into this device is strictly prohibited.
- Newest software and related manuals can be downloaded from the following our support site.

<http://www.routrek.co.jp/en>

## 1 Checking Contents of Package

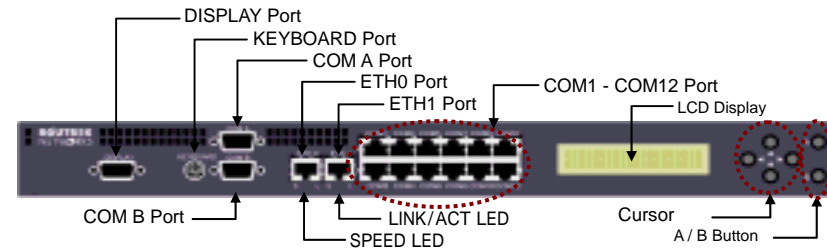
RouteMagic Controller (RMC) is delivered to you together with accessories.

- |  |          |
|--|----------|
| • RouteMagic Controller (RMC-MP1200) main unit | 1 unit   |
| • Power cable                                  | 1 piece  |
| • RJ-45-ROLLED serial cable (2m)               | 2 pieces |
| • RJ-45-DB9 socket conversion connector        | 2 pieces |
| • RJ-45-DB9 plug conversion connector          | 2 pieces |
| • Rack mount bracket                           | 2 pieces |
| • Screw for rack mount bracket                 | 6 pieces |
| • Instruction manual (this document)           |          |

## 2 Specification and Name of Component

### RMC-MP1200 Specifications for Main Unit

Interface	Serial port EIA-RS232D (DB9) x2 Serial port EIA-RS232D (RJ-45) x12
Network port	IEEE802.3 10BASE-T/100BASE-TX (RJ-45) x2
Display function	LCD Display panel LINK/ACT LED , Speed LED
Power supply	110V AC 60Hz
Power consumption	1A (110V AC)
Operating conditions	Temperature 0 to 40°C humidity 15 to 85%, no condensation
EMI	VCCI Class A
Outside dimension	441x310x43.5 (mm)(WxDxH)
Weight	4.8Kg



Name	Function
DISPLAY Port	Port to connect a display.
KEYBOARD Port	Port to connect a keyboard.
COM A Port	Port to connect a serial console terminal.
COM B Port	Port to connect a modem.
ETH0 Port	Ethernet port (to connect to an external network).
ETH1 Port	Ethernet port (for maintenance)
LINK/ACT LED	Shows Ethernet LINK/ACT (Blinks when sending/receiving data)
SPEED LED	Shows Ethernet speed (Turns on at 100Mbps).
COM1 - COM12 Port	Serial ports (to connect a target device).
LCD	LCD to display various status and operation messages.
Cursor Button	Operation button for LCD panel.
A Button	Execution button (Confirmation of operation execution).
B Button	Cancel button (Cancel of operation).

## 3 Specifications for Cable/Connector

Pin Layout of Ports COM1 to COM12



Pin Number	Signal	In/Out
1	RTS	OUT
2	DTR	OUT
3	TXD	OUT
4	GND	-
5	GND	-
6	RXD	IN
7	DSR	IN
8	CTS	IN

Pin Layout of Port COMA/COMB



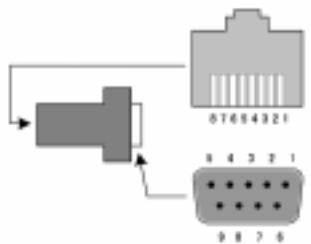
Pin Number	Signal	In/Out
1	DCD	IN
2	RXD	IN
3	TXD	OUT
4	DTR	OUT
5	GND	-
6	DSR	IN
7	RTS	OUT
8	CTS	IN
9	RI	IN

RJ-45 ROLLED Serial Cable (Cross Cable)



RJ-45	RJ-45
1-----	8
2-----	7
3-----	6
4-----	5
5-----	4
6-----	3
7-----	2
8-----	1

RJ-45-DB-9 Socket Conversion Connector  
(for straight/server connection)

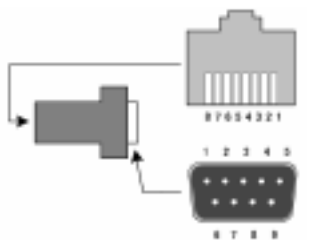


Pin Layout of RJ-45 connector (Front view)

Pin Layout of D-sub9 connector (Front view)

RJ-45 (Female)	D-sub9 (Female)	Signal
1	7	CTS
2	4	DSR
3	1	DSR
4	3	RXD
5	5	GND
6	5	GND
7	2	TXD
8	6	DTR
	8	RTS

RJ-45-DB-9 Plug Conversion Connector  
(for cross/modem connection)



Pin Layout of RJ-45 connector (Front view)

Pin Layout of D-sub9 connector (Front view)

RJ-45 (Female)	D-sub9 (Male)	Signal
1	8	CTS
2	6	DSR
3	2	RXD
4	5	GND
5	5	GND
6	3	TXD
7	4	DTR
8	7	RTS

## 4 Installation of RMC-MP1200

RMC-MP1200 can be used under the following condition.

### Requirements of Target Device

- A console port of the device meets the RS-232C/D specifications.
- A console port of the device functions as a dumb terminal (ASCII character output).
- The device outputs an error message and any other log to a console port.

### Requirements of RMC Network Connection

- TCP/IP network (IP version 4).
- IP reachable to a host on Internet with SMTP.

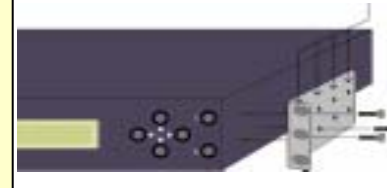
### Recommended RMC Network Connection

- IP reachable to a DNS server set properly.
- Communication can be made directly to MTA (Mail Transfer Agent) to/from which a mail is sent. (No mail is received through a relay host nor POP.)
- An NTP server is available.
- A TFTP server is available (for saving configuration and upgrading).
- To connect RMC and RMS through Internet, use the authentication/decoding function for the communication between RMC and RMS.

### Rack Mount

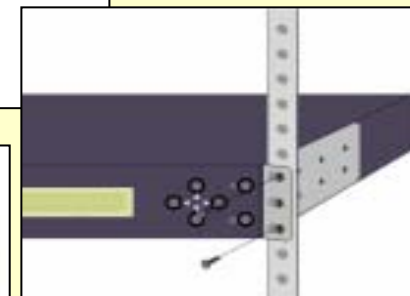
Attaching the bracket turning the front panel toward the front

The rack mount position can be adjusted according to the rack mount bracket position.



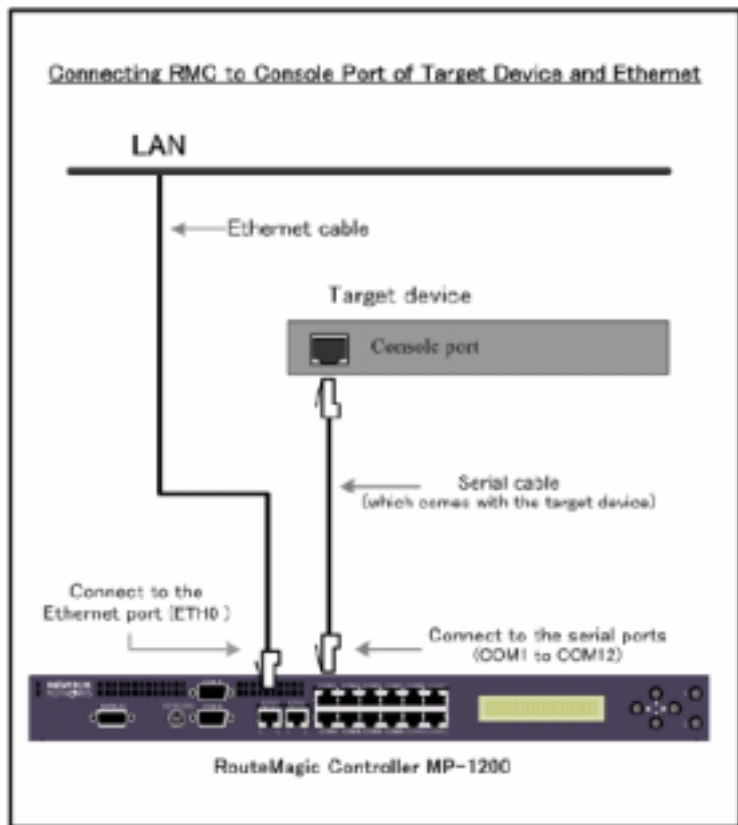
RMC-MP1200 can be mounted on 19-inch rack of EIA Standards.



Attaching the bracket turning the back panel toward the front



## Connection to Target Device and Network

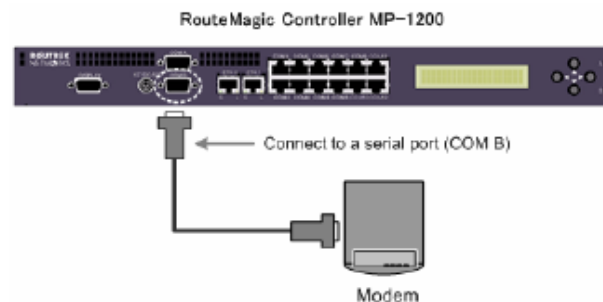
- ① Connect a console port of the target device to the serial ports COM1 to COM12.
- ② Connect the Ethernet port ETH0 to LAN.
  - To connect the target device, use the serial cable which comes with each device.
  - When using the serial cable and conversion connector which come with RMC, refer to the description about cable/connector specifications in this document.
  - The ETH1 port is an Ethernet port provided for maintenance and the communication can be made only to a node on the same segment in LAN.



-  When connecting the serial cable, be sure to turn off RMC and the connected device.
- To turn off the power supply of RMC, execute "shutdown" command.
-  To turn off the power supply without executing "shutdown" command, keep pressing power supply switch for 4 seconds.

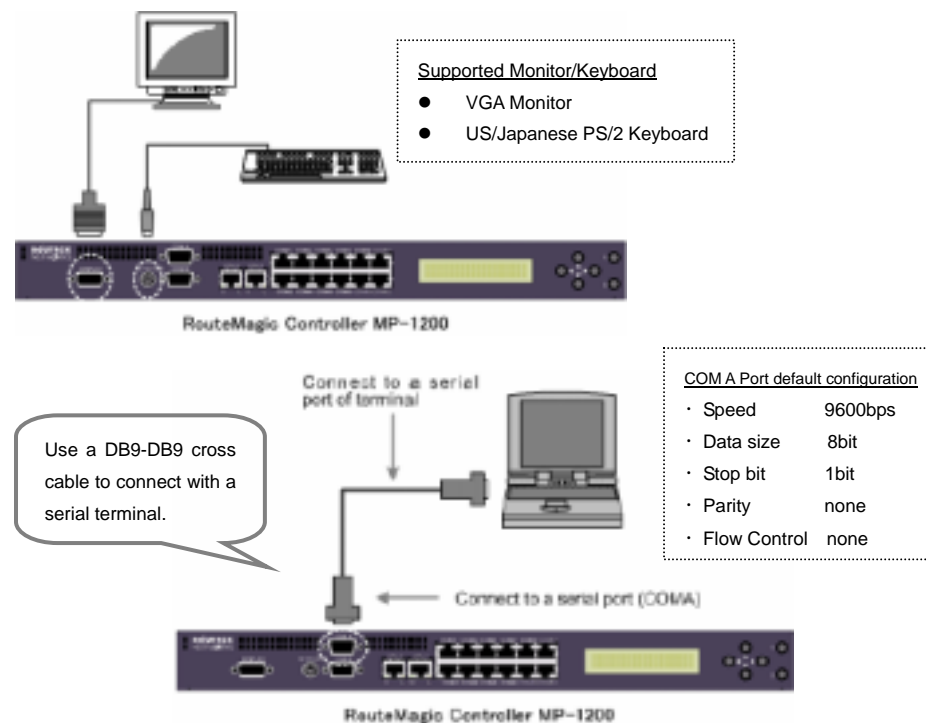
## Modem Connection

When a modem is connected to RMC COM B port, mail transmission and device operation is available via the modem even when a network failure occurs.



## Monitor/Keyboard and Serial Terminal Connection

A Keyboard/Monitor or serial terminal(ASCII terminal, PC terminal emulator) can be uses as a local console of RMC.



## 5 For Safety Operation

This device is a precision instrument. Before using it, read the instructions below carefully for correct operation.



### WARNING

This device is designed for general office automation equipment. Do not connect this device to any equipment of which maximum reliability and safety are required, such as medical instrument which directly involves human lives. Please note that we are not in a position to take responsibility for any losses produced by an improper operation of this device.

When this device gives off a strange smell, when it overheats, when it produces smoke or when water or chemical agent penetrates it, unplug the device immediately, otherwise a fire may break out or you may get a shock. Remove this device and consult your local retailer or us.

Never open this device, touch any internal component nor modify the device, otherwise you may get a shock, the device may get out of order or a fire may break out. Please note that our guarantee does not apply to any trouble in this case even during the guarantee period.

Never damage, pull nor bend by force the power cable of this device, otherwise you may get a shock, the device may get out of order or a fire may break out.

This device is for domestic power supply specifications (AC110V and 60Hz). Never use any other power supply for this device, otherwise you may get a shock, the device may get out of order or a fire may break out.



### CAUTION

The environmental conditions, including temperature and humidity, for this device are described in the device specification list of this instruction manual. Be sure to use this device in the rated range, otherwise a fire may break out or the device may get out of order.

Do not use this device in any improper place where the temperature fluctuates considerably or condensation occurs frequently, otherwise you may get a shock, a fire may break out, the device may get out of order or an error may occur in an operation. If condensation occurs, unplug the device and dry it completely, otherwise a fire may break out or the device may get out of order.

This device is designed for indoor use. Never this device in any dusty or exposed place, otherwise you may get a shock, the device may get out of order, a fire may break out or the device may be damaged.

Prevent foreign matter, including metallic material, dust and combustible material, from getting into the device or connectors, otherwise you may get a shock, a fire may break out or the device may get out of order.

If this device is used without human intervention for a long time, perform the maintenance and inspection periodically, otherwise a fire may break out, the device may get out of order or an error may occur in an operation.

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