

## Hitachi H/EH/EHV Series

Supported Series: Hitachi H series, EH-150, Micro-EH, H20, H40, H64, H200, H250, H252, H300, H302, H700, H702, H1000, H1002, H2000, H4010.

Website: <http://www.hitachi-ies.co.jp/english/products/plc/index.htm>

### HMI Setting:

| Parameters          | Recommended             | Options            | Notes                            |
|---------------------|-------------------------|--------------------|----------------------------------|
| <b>PLC type</b>     | Hitachi H/EH/EHV Series |                    |                                  |
| <b>PLC I/F</b>      | RS232                   | RS232, RS485       |                                  |
| <b>Baud rate</b>    | 19200                   | 9600, 19200, 38400 |                                  |
| <b>Data bits</b>    | 7                       | 7                  |                                  |
| <b>Parity</b>       | Even                    | Even               |                                  |
| <b>Stop bits</b>    | 1                       | 1                  |                                  |
| <b>PLC sta. no.</b> | 0                       | 0-255              | Does not apply to this protocol. |

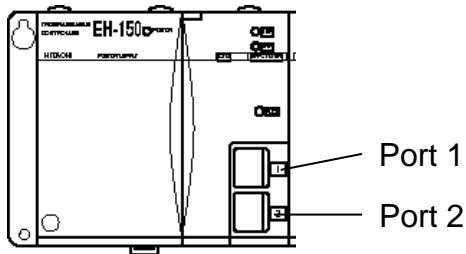
|                            |     |                          |    |
|----------------------------|-----|--------------------------|----|
| <b>Online simulator</b>    | YES | <b>Broadcast command</b> | NO |
| <b>Extend address mode</b> | NO  |                          |    |

### Device Address:

| Bit/Wor | Device type | Format | Range     | Memo                        |
|---------|-------------|--------|-----------|-----------------------------|
| B       | X_Dec       | HHHdd  | 0 ~ 4ff95 |                             |
| B       | Y_Dec       | HHHdd  | 0 ~ 4ff95 |                             |
| B       | X           | HHHHh  | 0 ~ ffff  | External input-bit (X)      |
| B       | Y           | HHHHh  | 0 ~ ffff  | External output-bit (Y)     |
| B       | M           | HHHHh  | 0 ~ ffff  | Data area-bit (M)           |
| B       | T           | HHHHh  | 0 ~ ffff  | Timer (T)                   |
| B       | R           | HHHHh  | 0 ~ ffff  | Internal output (R)         |
| B       | L           | HHHHh  | 0 ~ ffff  | Link area-bit (L)           |
| W       | TC          | HH     | 0 ~ ff    | Timer/Counter current value |
| W       | WM          | HHHH   | 0 ~ 270f  | Data area-word (M)          |
| W       | WX          | HHHH   | 0 ~ 270f  | External input-word (X)     |
| W       | WY          | HHHH   | 0 ~ 270f  | External output-word (Y)    |
| W       | WR          | HHHH   | 0 ~ c3ff  | Internal output-word (R)    |
| W       | WL          | HHHH   | 0 ~ 270f  | Link area-word (L)          |

## Wiring Diagram:

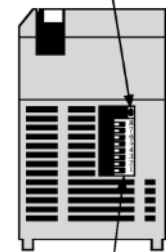
**WARNING:** If your communication cable is not wired exactly as shown in our cable assembly instructions, damage to the HMI or loss of communications can be caused.



| CPU TYPE        | Port 1        | Port 2 |
|-----------------|---------------|--------|
| EH-150/CPU 104A | RS-232        | RS-232 |
| EH-150/CPU 208A | RS-232        | RS-232 |
| EH-150/CPU 308A | RS-232/RS-485 | RS-232 |
| EH-150/CPU 316A | RS-232/RS-485 | RS-232 |
| EH-150/CPU 448A | RS-232/RS-485 | RS-232 |

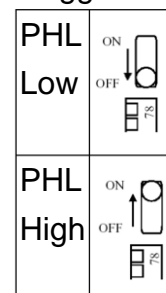
| Switch Number |     |                 |                          |                 |
|---------------|-----|-----------------|--------------------------|-----------------|
| 1             | OFF | Normal mode     |                          |                 |
| 2             | OFF | TRNS0 operation |                          |                 |
| 3, 4          | 3   | 4               | Port1 transmission speed |                 |
|               | ON  | ON              | 4,800 bps                | Doesn't support |
|               | OFF | ON              | 9,600 bps                |                 |
|               | ON  | OFF             | 19,200 bps               | Default         |
|               | OFF | OFF             | 38,400 bps               |                 |
| 5             | ON  | Dedicated port  |                          |                 |
| 6             | 6   | PHL             | Port2 transmission speed |                 |
|               | ON  | Low             | 9,600 bps                |                 |
|               | ON  | High            | 38,400 bps               |                 |
|               | OFF | Low             | 4,800 bps                | Doesn't support |
|               | OFF | High            | 19,200 bps               | Default         |
| 7             | OFF | (System mode)   |                          | Do not turn on. |
| 8             | OFF | (System mode)   |                          | Do not turn on. |

Port setting toggle-switch

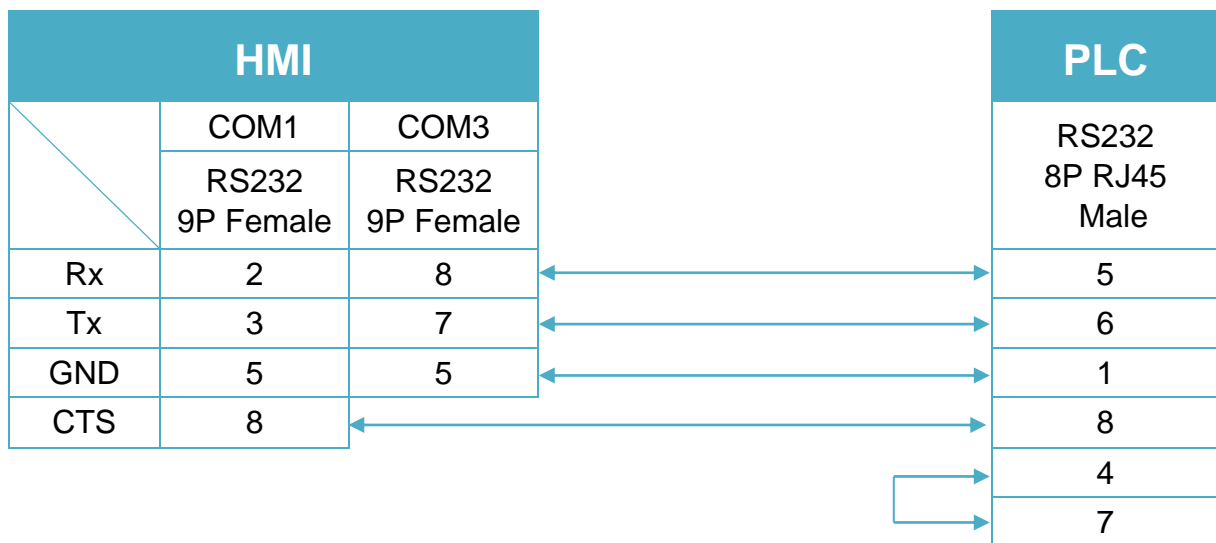


Mode setting DIP-switch

### Toggle-Switch

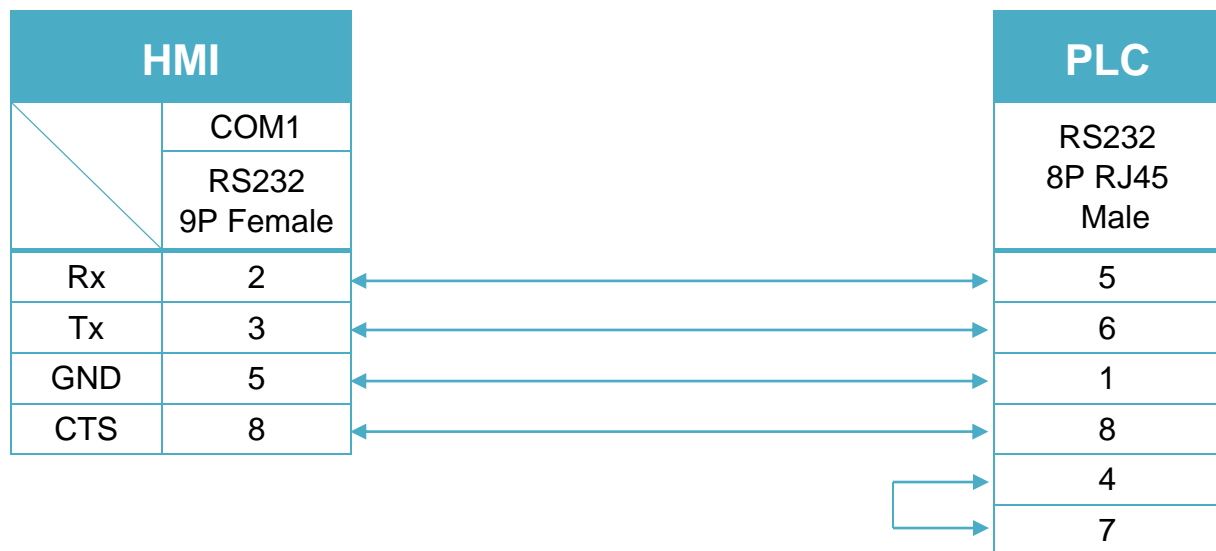


EH-150 port1/port 2 RS232 / MICRO-EH port1 RS232 (Diagram 1 ~ Diagram3)

**Diagram 1**
**cMT Series**                      *cMT3071 / cMT3072 / cMT3090 / cMT3103 / cMT3151*
**eMT Series**                      *eMT3070 / eMT3105 / eMT3120 / eMT3150*
**MT-iE**                              *MT8073iE / MT8102iE*
**MT-XE**                              *MT8092XE*
**MT-iP**                                *MT6103iP / MT8102iP*


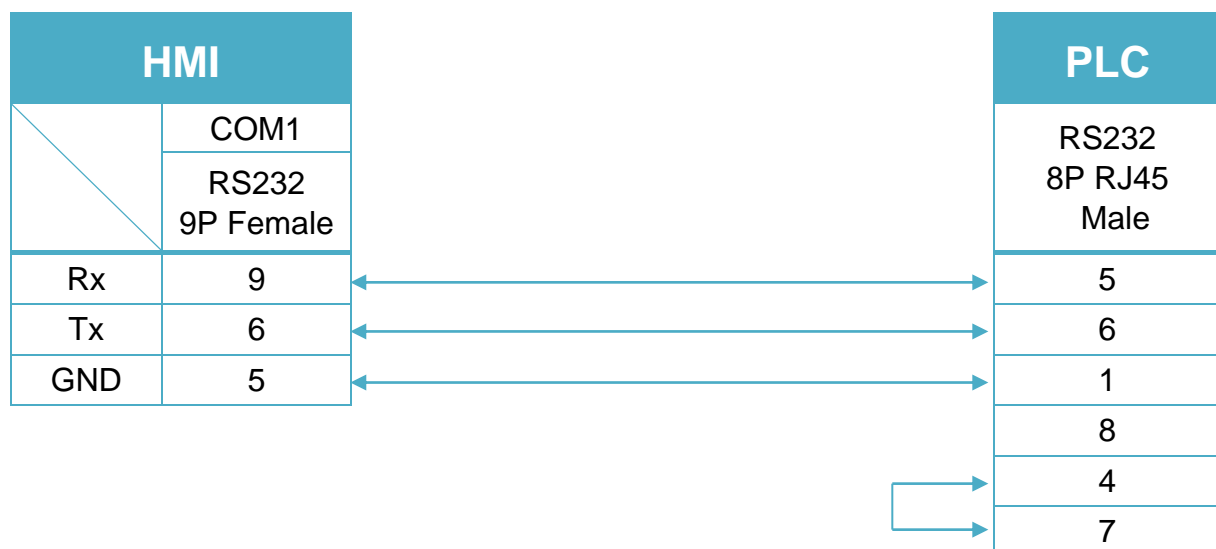
## Diagram 2

|                   |   |
|-------------------|---|
| <b>cMT Series</b> | <i>cMT-SVR / cMT-G01 / cMT-G02 / cMT-HDM / cMT-FHD</i>  |
| <b>mTV</b>        | <i>mTV</i>  |
| <b>MT-iE</b>      | <i>MT8070iE / MT6070iE / MT8100iE / MT8121iE / MT8150iE /<br/>MT8071iE / MT6071iE / MT8072iE / MT6072iE / MT8073iE /<br/>MT8101iE / MT8102iE / MT8103iE</i> |
| <b>MT-XE</b>      | <i>MT8121XE / MT8150XE / MT8090XE</i>   |



## Diagram 3

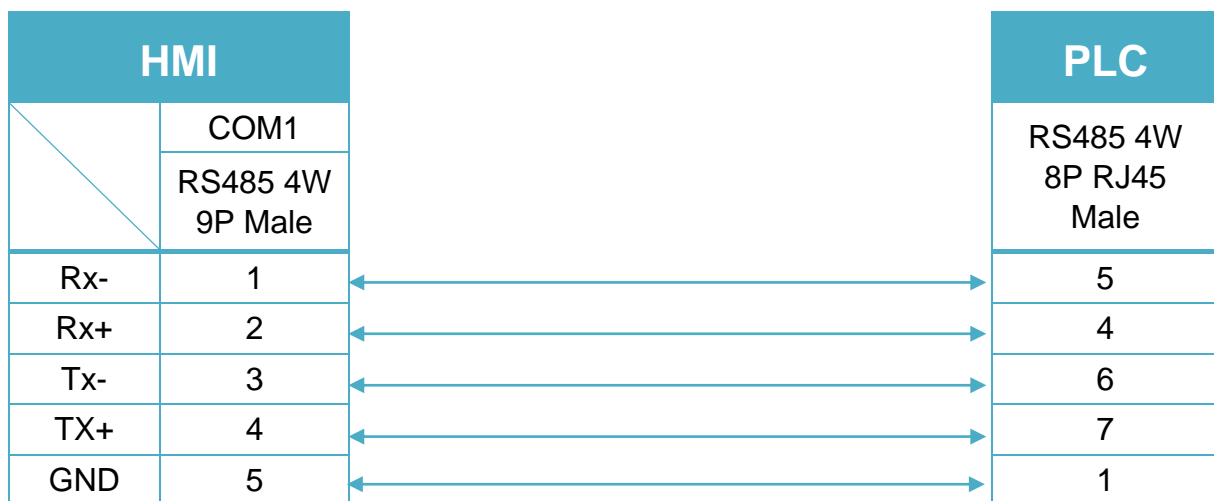
|              |  |
|--------------|--|
| <b>MT-iE</b> | <i>MT8050iE / MT8053iE</i>                       |
| <b>MT-iP</b> | <i>MT6051iP / MT8051iP / MT6071iP / MT8071iP</i> |



EH-150 port1 RS485 4W (Diagram 4 ~ Diagram7)

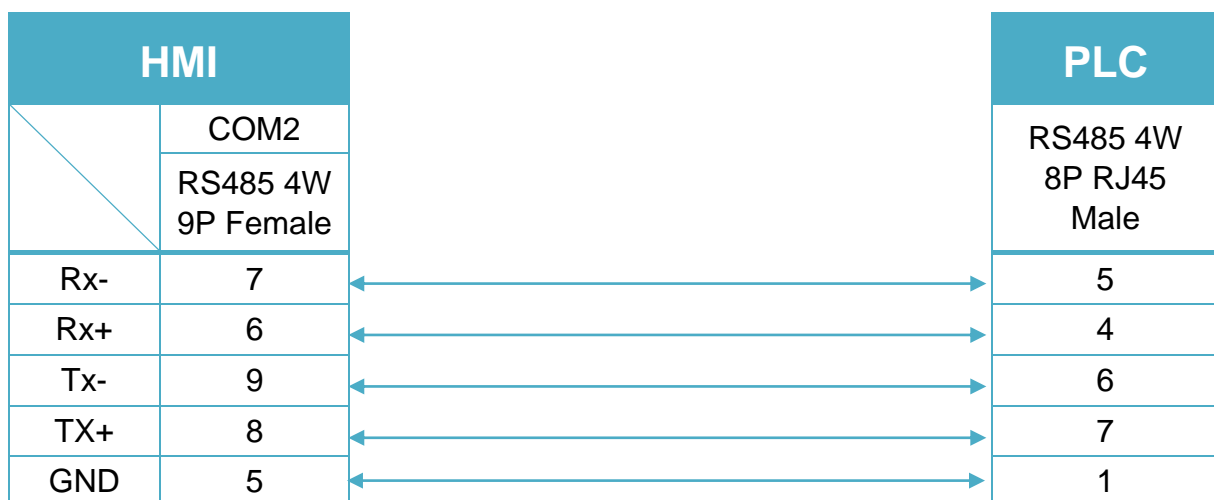
### Diagram 4

|                   |  |
|-------------------|--|
| <b>cMT Series</b> | <b><i>cMT3151</i></b>  |
| <b>eMT Series</b> | <b><i>eMT3070 / eMT3105 / eMT3120 / eMT3150</i></b>                |
| <b>MT-iE</b>      | <b><i>MT8070iE / MT6070iE / MT8100iE / MT8121iE / MT8150iE</i></b> |
| <b>MT-XE</b>      | <b><i>MT8121XE / MT8150XE</i></b>                                  |



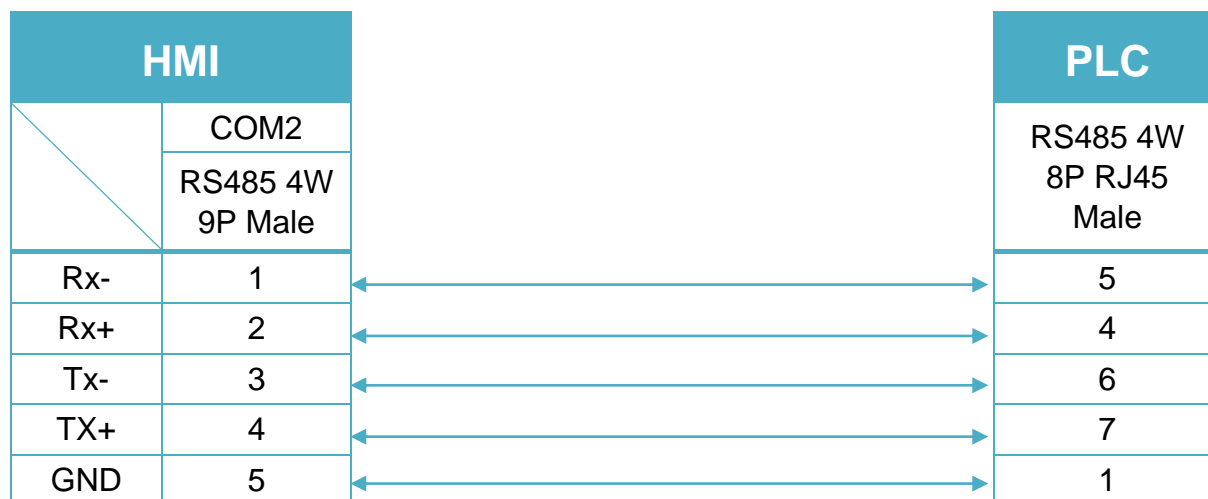
### Diagram 5

|                   |   |
|-------------------|---|
| <b>cMT Series</b> | <b><i>cMT-SVR / cMT-G01 / cMT-G02 / cMT-HDM / cMT-FHD</i></b> |
| <b>mTV</b>        | <b><i>mTV</i></b>   |

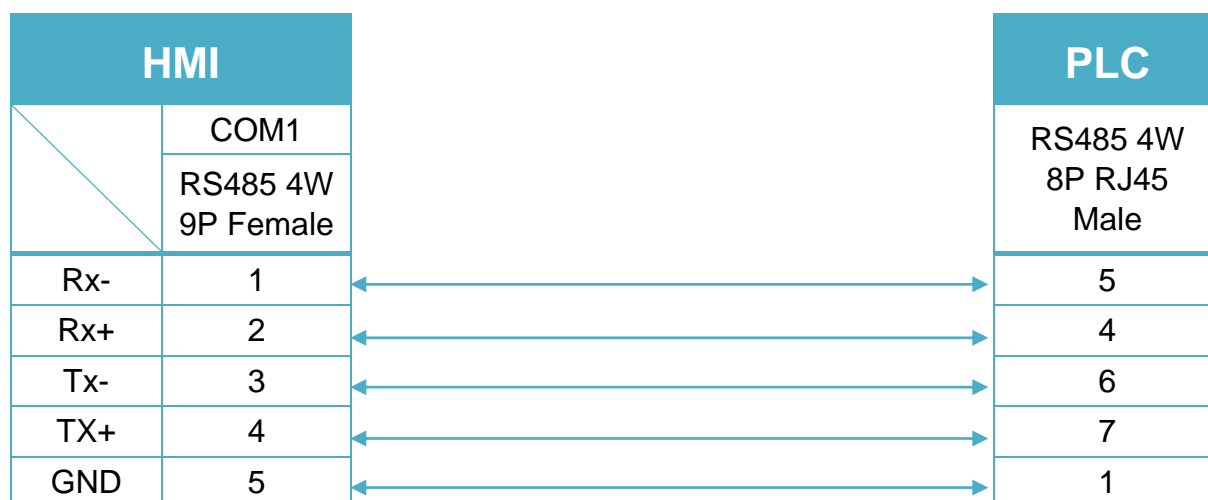


**Diagram 6**

|                   |   |
|-------------------|---|
| <b>cMT Series</b> | <b><i>cMT3071 / cMT3072 / cMT3090 / cMT3103</i></b>   |
| <b>MT-iE</b>      | <b><i>MT8071iE / MT6071iE / MT8072iE / MT6072iE / MT8073iE / MT8101iE / MT8102iE / MT8103iE</i></b> |
| <b>MT-XE</b>      | <b><i>MT8090XE / MT8092XE</i></b>   |
| <b>MT-iP</b>      | <b><i>MT6071iP / MT8071iP / MT6103iP / MT8102iP</i></b>   |

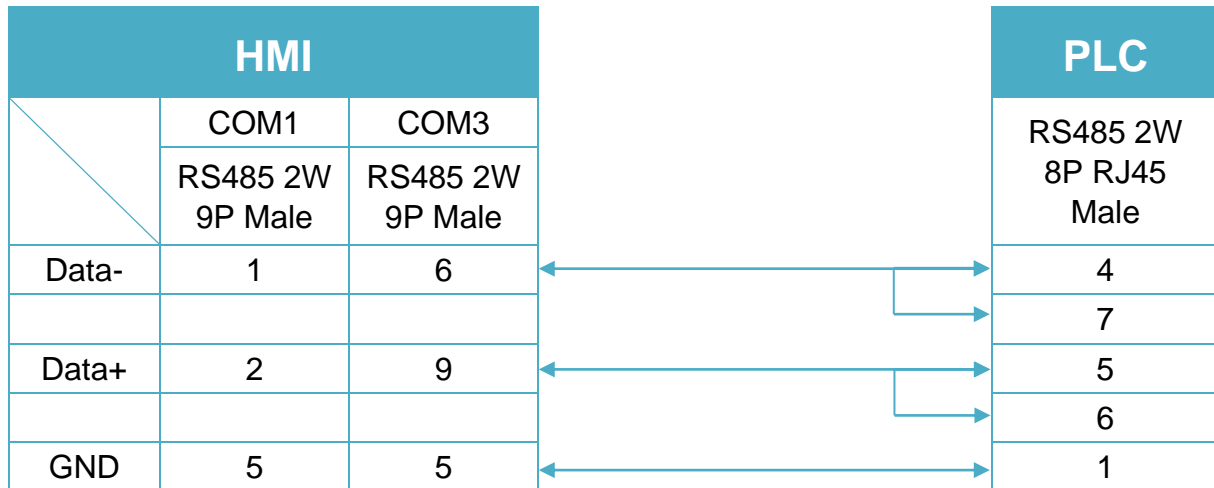

**Diagram 7**

|              |                                   |
|--------------|-----------------------------------|
| <b>MT-iE</b> | <b><i>MT8050iE / MT8053iE</i></b> |
| <b>MT-iP</b> | <b><i>MT6051iP / MT8051iP</i></b> |

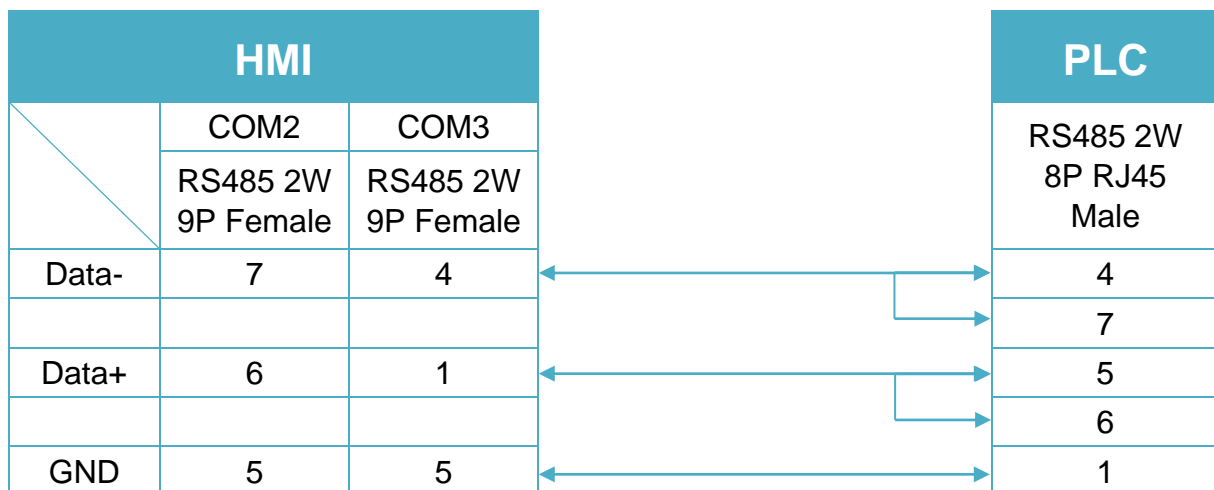


EH-150 port1 RS485 2W (Diagram 8 ~ Diagram 13)

### Diagram 8

**cMT Series**
***cMT3151***
**eMT Series**
***eMT3070 / eMT3105 / eMT3120 / eMT3150***


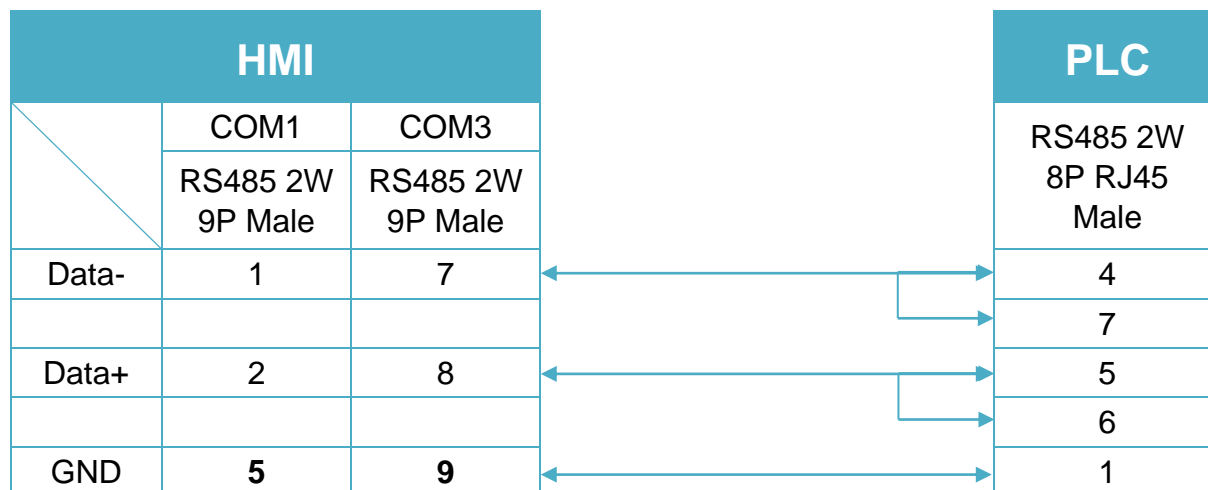
### Diagram 9

**cMT Series**
***cMT-SVR / cMT-G01 / cMT-G02 / cMT-HDM / cMT-FHD***
**mTV**
***mTV***


### Diagram 10

**MT-iE** *MT8070iE / MT6070iE / MT8100iE / MT8121iE / MT8150iE*

**MT-XE** *MT8121XE / MT8150XE*



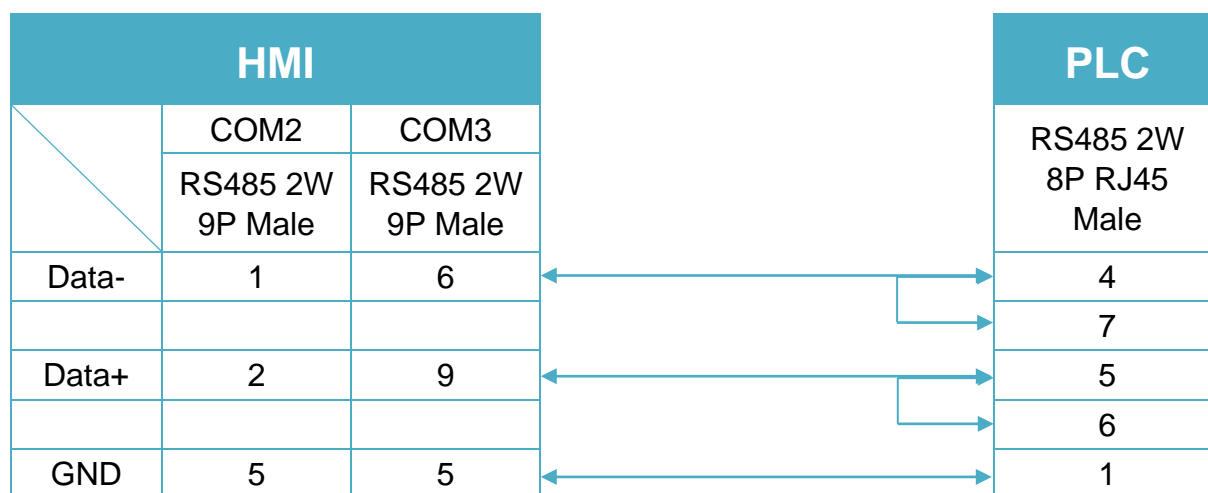
### Diagram 11

**cMT Series** *cMT3071 / cMT3072 / cMT3090 / cMT3103*

**MT-iE** *MT8071iE / MT6071iE / MT8072iE / MT6072iE / MT8073iE /  
MT8101iE / MT8102iE / MT8103iE*

**MT-XE** *MT8090XE / MT8092XE*

**MT-iP** *MT6103iP / MT8102iP*

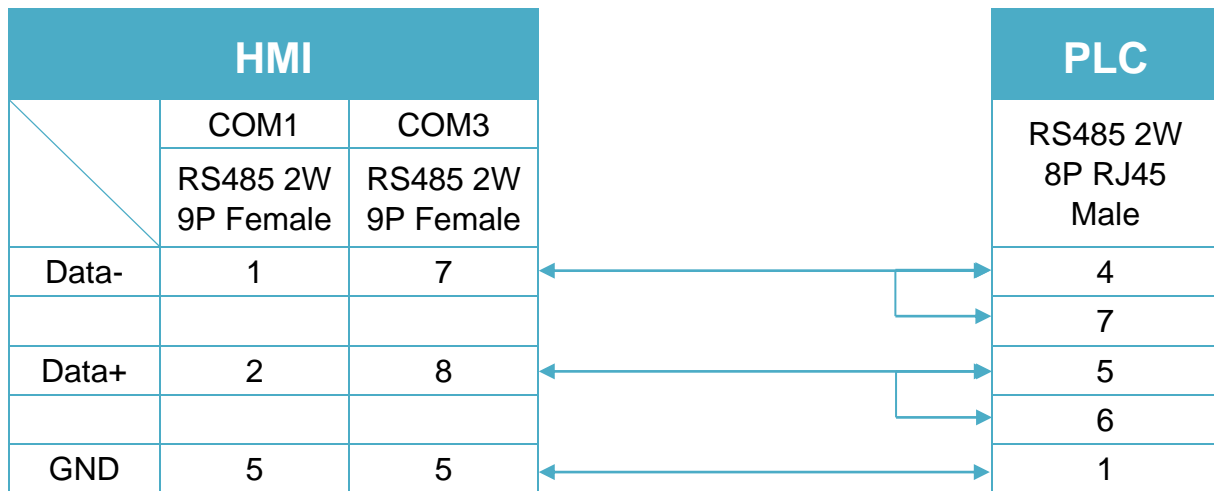




## Diagram 12

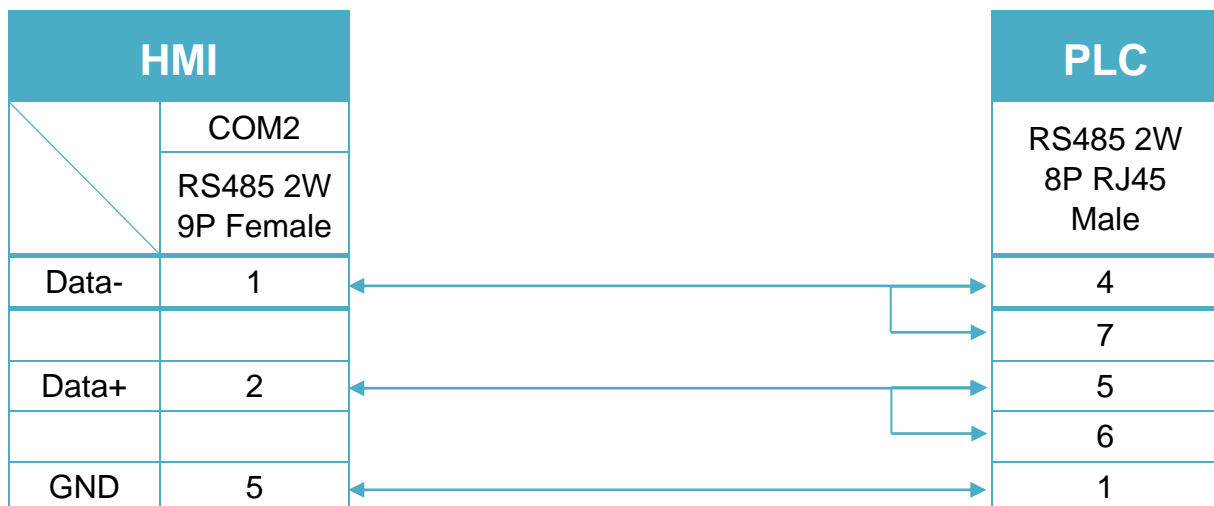
**MT-iE** *MT8050iE / MT8053iE*

**MT-iP** *MT6051iP / MT8051iP*

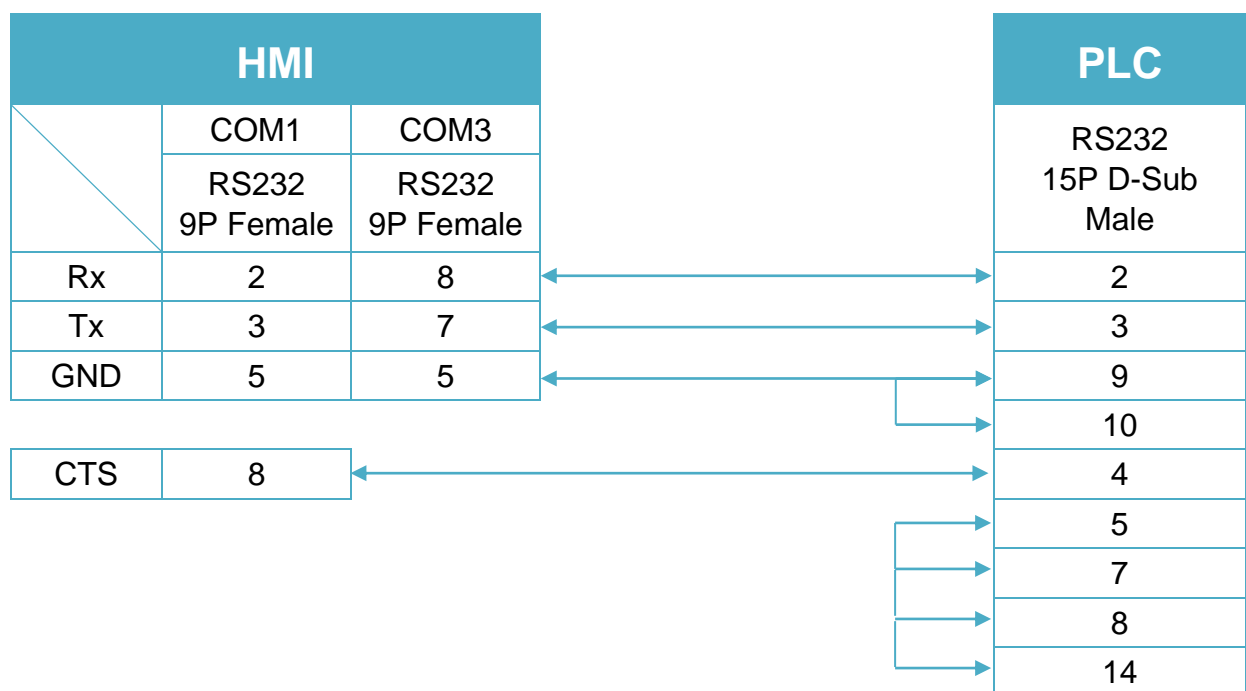


## Diagram 13

**MT-iP** *MT6071iP / MT8071iP*



## H Series CPU Port RS232 (Diagram 14~ Diagram 16)

**Diagram 14**
**cMT Series**                      *cMT3071 / cMT3072 / cMT3090 / cMT3103 / cMT3151*
**eMT Series**                      *eMT3070 / eMT3105 / eMT3120 / eMT3150*
**MT-iE**                              *MT8073iE / MT8102iE*
**MT-XE**                             *MT8092XE*
**MT-iP**                              *MT6103iP / MT8102iP*


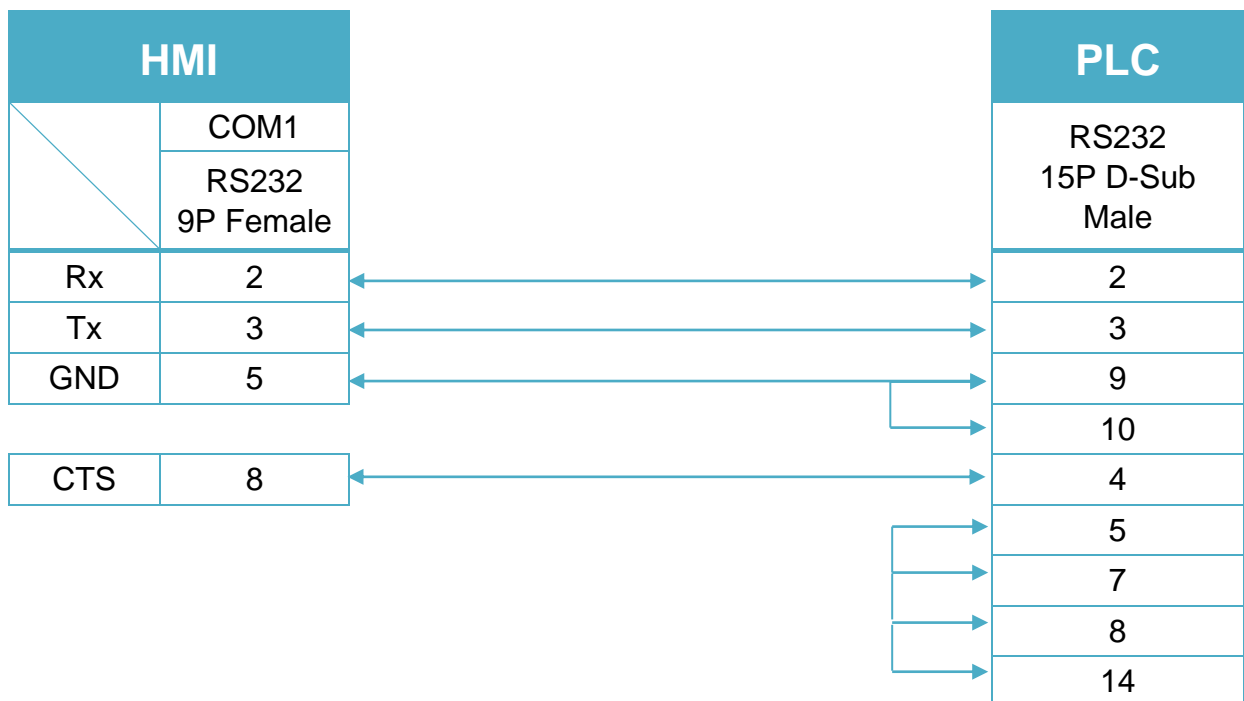
## Diagram 15

**cMT Series**                      *cMT-SVR / cMT-G01 / cMT-G02 / cMT-HDM / cMT-FHD*

**mTV**                                *mTV*

**MT-iE**                              *MT8070iE / MT6070iE / MT8100iE / MT8121iE / MT8150iE /  
MT8071iE / MT6071iE / MT8072iE / MT6072iE / MT8073iE /  
MT8101iE / MT8102iE / MT8103iE*

**MT-XE**                              *MT8121XE / MT8150XE / MT8090XE*



## Diagram 16

**MT-iE**                      *MT8050iE / MT8053iE*

**MT-iP**                      *MT6051iP / MT8051iP / MT6071iP / MT8071iP*

