



# Device/PLC Connection Manuals



**About the Device/PLC Connection Manuals** 

Prior to reading these manuals and setting up your device, be sure to read the "Important: Prior to reading the Device/PLC Connection manual" information. Also, be sure to download the "Preface for Trademark Rights, List of Units Supported, How to Read Manuals and Documentation Conventions" PDF file. Furthermore, be sure to keep all manual-related data in a safe, easy-to-find location.

# 2.12 Koyo Electronics Industries

# 2.12.1 System Structure

The following describes the system structure for connecting the GP to Koyo Electronics Industries PLCs.

**The Cable Diagrams mentioned in the following tables are listed in the section titled "2.12.2 Cable Diagrams"**.

#### ■ **KOSTAC SG Series** (using Link I/F)

| CPU  | Link I/F                                 | Cable Diagram   | GP        |
|------|--|---|-----------|
|      | Upper Link<br>Module                     |   |           |
| SG-8 | G01-DM                                   | RS-232C<br>(Cable Diagram 1)<br>RS-422<br>(Cable Diagram 2) | GP series |
|      | CPU Unit Upper Link<br>I/F <sup>*1</sup> | RS-232C<br>(Cable Diagram 1)<br>RS-422<br>(Cable Diagram 3) | GP Series |

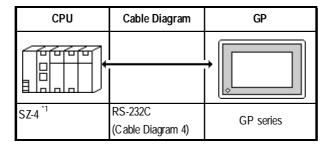
<sup>\*1</sup> Connect to the CPU module's generic communication port.

# ■ KOSTAC SU Series (using Link I/F)

| CPU   | Link I/F                | Cable Diagram     | GP        |
|-------|-------------------------|-------------------|-----------|
|       | Upper Link<br>Module    |                   |           |
| SU-5  | U01-DM                  | RS-232C           |           |
| SU-6  | U01-DM                  | (Cable Diagram 1) |           |
|       | CPU Unit Upper Link I/F |                   |           |
| SU-6B | CPU Unit Upper Link I/F | RS-232C           | GP series |
|       | *1                      | (Cable Diagram 1) |           |
|       |                         | RS-422            |           |
|       |                         | (Cable Diagram 3) |           |

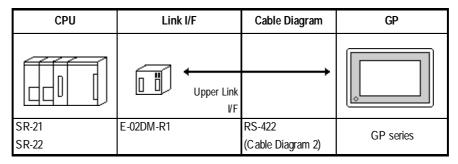
<sup>\*1</sup> Connect to the CPU module's generic communication port.

#### ■ KOSTAC SZ Series (using CPU unit Link I/F)

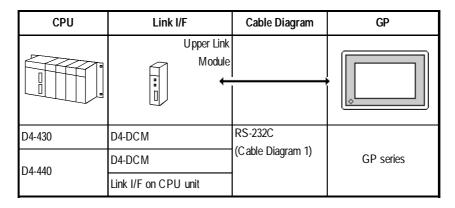


\* 1 Connect to the CPU module's generic communication port.

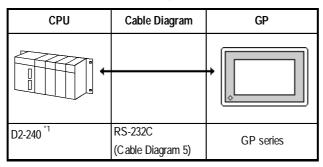
## ■ KOSTAC SR Series (using Upper Link I/F)



#### ■ DL-405 Series (using Link I/F)

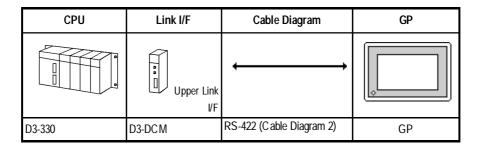


# ■ DL-205 Series (using Link I/F on CPU unit)

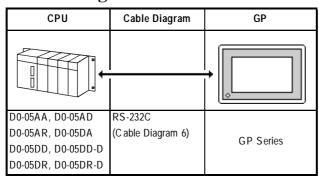


<sup>\* 1</sup> Connect to the CPU module's generic communication port.

#### ■ DL-305 Series (using Link I/F on CPU unit)



#### **■** Direct Logic 05 Series



# 2.12.2 Cable Diagrams

The cable diagrams illustrated below and the cable diagrams recommended by Koyo Electronic Industries may differ, however, using these cables for your PLC operations will not cause any problems.

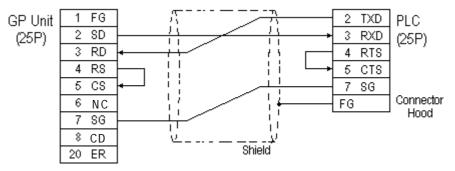


Ground your PLC's FG terminal according to your country's applicable standard. For details, refer to the corresponding PLC manual.



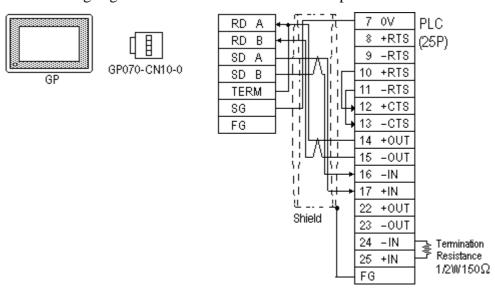
- Connect the FG line of the Shield cable to either the GP or PLC, depending on your environment. When using a connector hood and grounding the FG line, be sure to use an electrical conductor.
- For the RS-232C connection, use a cable length less than 15m.
- If a communications cable is used, it must be connected to the SG (signal ground).
- For the RS-422 connection, use a cable length less than 600m.

#### Cable Diagram 1 (RS-232C)

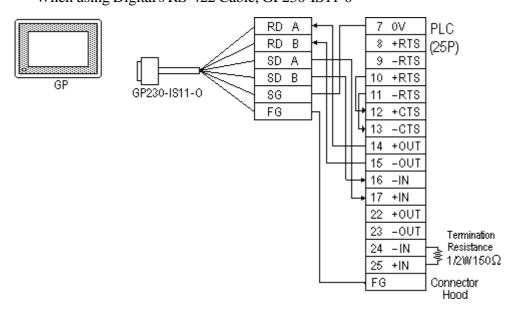


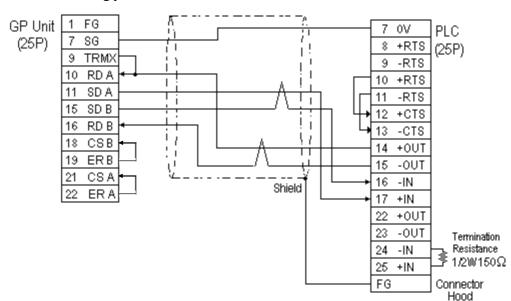
#### Cable Diagram 2 (RS-422)

• When using Digital's RS-422 connector terminal adapter GP070-CN10-0



• When using Digital's RS-422 Cable, GP230-IS11-0





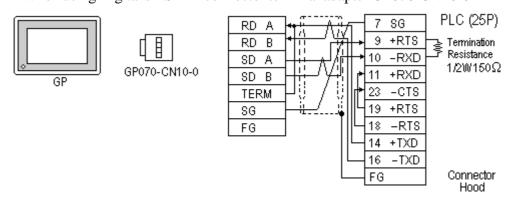
• When making your own cable connections



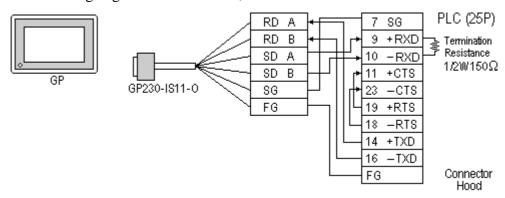
- When making your own connections, we recommend using Hitachi Densen's CO-SPEV-SB(A)3P\*0.3SQ cable.
- When connecting the #9 and #10 pins in the GP Serial I/F, a termination resistance of  $100\Omega$  is added between RDA and RDB.
- When using RS-422 connection, the cable length must not be any longer than 600 meters.

#### Cable Diagram 3 (RS-422)

• When using Digital's RS-422 connector terminal adapter GP070-CN10-0



• When using Digital's RS-422 Cable, GP230-IS11-0



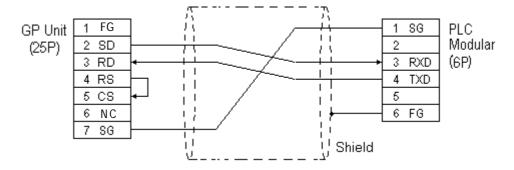
PLC (25P) SG GP Unit FG SG 9 +RTS Termination (25P) Resistance TRMX 10 -RTS  $1/2W/150\Omega$ 10 RD A 11 +CTS 23 -CTS 11 SDA 15 SD B 19 +RTS 16 RDB -RTS 18 CSB +TXD 18 14 1.1 19 ER B -TXD16 Connector 21 CSA FG Shield Hood ER A

When making your own cable connections



- When making your own connections, we recommend using Hitachi Densen's CO-SPEV-SB(A)3P\*0.3SQ cable.
- When connecting the #9 and #10 pins in the GP Serial I/F, a termination resistance of  $100\Omega$  is added between RDA and RDB.
- When using RS-422 connection, the cable length must not be any longer than 600 meters.

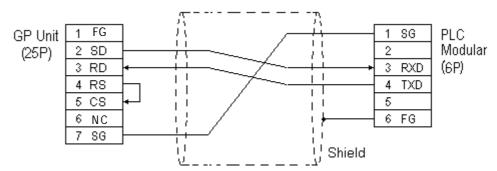
#### Cable Diagram 4 (RS-232C)





The GP connection uses SZ-4's Port 2 (generic SIO port). Port 1 is the program communication port (Programming Console S-20P).

#### Cable Diagram 5 (RS-232C)

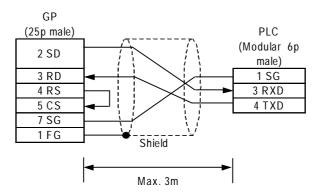




The GP connection uses D2-240's Port 2 (generic SIO port). Port 1 is the program communication port.

Setup System Area here.

#### Cable Diagram 6 (RS-232C)



#### 2.12.3 **Supported Devices**

The following describes the range of devices supported by the GP.

## ■ KOSTAC SG Series

**Word Address Particulars Device Bit Address** <u>ост</u>81 Input Relay 10000 ~ 11777 R40400 ~ R40477

| Output Relay                      | Q0000 ~ Q1777   | R40500 ~ R40577 | <u>ост</u> 8)         |     |
|-----------------------------------|-----------------|-----------------|-----------------------|-----|
| Control Relay                     | M0000 ~ M3777   | R40600 ~ R40777 | <u>ост8</u> )         |     |
| Stage                             | S0000 ~ S1777   | R41000 ~ R41077 | <u>ост8</u> )         |     |
| Link Relay (input)                | GI0000 ~ GI3777 | R40000 ~ R40177 | <u>ост8</u> )         |     |
| Specified Transfer Relay (output) | GQ0000 ~ GQ3777 | R40200 ~ R40377 | <u>ост8</u> )         |     |
| Timer (contact)                   | T000 ~ T377     | R41100 ~ R41117 | <u>ост8</u> )         | L/H |
| Counter (contact)                 | C000 ~ C377     | R41140 ~ R41157 | <u>ост8</u> )         |     |
| Timer (elapsed time)              |                 | R0000 ~ R0377   | <u>ост8</u> )         |     |
| Counter (elapsed value)           |                 | R1000 ~ R1377   | <u>ост8</u> )         |     |
| Variable Memory 1                 |                 | R400 ~ R777     | <u>ост8) віі 1 5)</u> |     |
| Variable Memory 2                 |                 | R1400 ~ R7377   | <u>ост8) вн1 5)</u>   |     |
| Variable Memory 3                 |                 | R10000 ~ R37777 | <u>ост8) віт1 5)</u>  |     |

# **■ KOSTAC SU Series**

Setup System Area here.

| Device                  | Bit Address                    | Word Address                       | Particulars            |     |
|-------------------------|--------------------------------|------------------------------------|------------------------|-----|
| Input Relay             | 1000 ~ 1477                    | R40400 ~ R40423                    | <u>ост8</u> )          |     |
| Output Relay            | Q000 ~ Q477                    | R40500 ~ R40523                    | <u>ост8</u> )          |     |
| Control Relay           | M0000 ~ M1777                  | R40600 ~ R40677                    | <u>ост8</u> )          |     |
| Stage                   | S0000 ~ S1777                  | R41000 ~ R41077                    | <u>ост8</u> )          |     |
| Link Relay/Link Input   | GI0000 ~ GI1777                | R40000 ~ R40077                    | <u>ост8</u> ]          |     |
| Special Relay           | SP000 ~ SP137<br>SP320 ~ SP717 | R41200 ~ R41205<br>R41215 ~ R41234 | ост8)                  |     |
| Timer (contact)         | T000 ~ T377                    | R41100 ~ R41117                    | <u>ост8</u> )          | L/H |
| Counter (contact)       | C000 ~ C177                    | R41140 ~ R41157                    | <u>ост8</u> )          | _,  |
| Timer (elapsed time)    |                                | R0000 ~ R0377                      | <u>ост8</u> )          |     |
| Counter (elapsed value) |                                | R1000 ~ R1177                      | <u>ост8</u> )          |     |
| Data Register           |                                | R1400 ~ R7377                      | <u>ост8) віі 15)</u>   |     |
| Special Register        |                                | R700 ~ R737<br>R7400 ~ R7777       | ост8)<br><u>вії</u> 5) |     |
| Expanded Register       |                                | R10000 ~ R17777                    | ост8] <u>Віт</u> 1 5]  |     |

<sup>\* 1</sup> Only the SU-6B will check connections (Only the SU-6B can use special registers R700 to R737), however it cannot write data.

## **■ KOSTAC SZ Series**

Setup System Area here.

| Device                  | Bit Address   | Word Address    | Particulars          |     |
|-------------------------|---------------|-----------------|----------------------|-----|
| Input Relay             | 1000 ~ 10477  | R40400 ~ R40423 | <u>ост8</u> )        |     |
| Output Relay            | Q0000 ~ Q0477 | R40500 ~ R40523 | <u>ост8</u> )        |     |
| Control Relay           | M0000 ~ Q0377 | R40600 ~ R40617 | <u>ост8</u> ]        |     |
| Stage                   |               | R41000 ~ R41037 | <u>ост8</u> )        |     |
| Timer (contact)         | T000 ~ T177   | R41100 ~ R41107 | <u>ост8</u> )        | L/H |
| Counter (contact)       | C000 ~ C177   | R41140 ~ R41147 | <u>ост8</u> )        |     |
| Timer (elapsed time)    |               | R0000 ~ R0177   | <u>ост8</u> )        |     |
| Counter (elapsed value) |               | R1000 ~ R1177   | <u>ост8</u> )        |     |
| Variable Memory 2       |               | R2000 ~ R3777   | <u>ост8) віт 5</u> 1 |     |

<sup>\*2</sup> Only the SU-6B can be used.

## **■ KOSTAC SR Series**

Setup System Area here.

| Device                        | Bit Address            | Word Address        | Particulars               |     |
|-------------------------------|------------------------|---------------------|---------------------------|-----|
| Input/Output                  | 000 ~ 157<br>700 ~ 767 | R000 ~ R014<br>R070 | <u>ост8</u> ]             |     |
| Control Relay                 | 160 ~ 377<br>770 ~ 777 | R016 ~ R036<br>R076 | <u>ост8</u> )             |     |
| Shift Register                | 400 ~ 577              | R040 ~ R056         | <u>ост8</u> )             |     |
| Timer/Counter (contact)       | 600 ~ 677              | R060 ~ R066         | <u>ост</u> 8)             | L/H |
| Timer/Counter (elapsed value) |                        | R600 ~ R677         | <u>ост8</u> 1             |     |
| Data Register                 |                        | R400 ~ R577         | <u>ост8)віі 5)</u><br>÷2⊃ |     |



Cannot perform only bit write operations. Use byte units to perform bit write operations, where all other bits besides the selected bit, are cleared to 0.

## ■ DL-405 Series

Setup System Area here.

| Device                  | Bit Address                    | Word Address                       | Particulars            |     |
|-------------------------|--------------------------------|------------------------------------|------------------------|-----|
| Input Relay             | X000 ~ X477                    | V40400 ~ V40423                    | <u>ост8</u> ]          |     |
| Output Relay            | Y000 ~ Y477                    | V40500 ~ V40523                    | <u>ост8</u> ]          |     |
| Internal Relay          | C0000 ~ C1777                  | V40600 ~ V40677                    | <u>ост8</u> ]          |     |
| Stage                   | S0000 ~ S1777                  | V41000 ~ V41077                    | <u>ост8</u> ]          |     |
| Link Relay/Link Input   | GX0000 ~ GX1777                | V40000 ~ V40077                    | <u>ост8</u> ]          |     |
| Special Relay           | SP000 ~ SP137<br>SP320 ~ SP717 | V41200 ~ V41205<br>V41215 ~ V41234 | <u>ост8</u> 1          | L/H |
| Timer (contact)         | T000 ~ T377                    | V41100 ~ V41117                    | <u>ост8</u> ]          |     |
| Counter (contact)       | CT000 ~ CT177                  | V41140 ~ V41147                    | <u>ост8</u> ]          |     |
| Timer (elapsed time)    |                                | V0000 ~ V0377                      | <u>ост8</u> ]          |     |
| Counter (elapsed value) |                                | V1000 ~ V1177                      | <u>ост8</u> ]          |     |
| Data Register           |                                | V1400 ~ V7377                      | <u>ост8) віі 1 5</u> 1 |     |
| Special Register        |                                | V7400 ~ V7777                      | <u>ост8) вн 1 5 ј</u>  |     |

# **Chapter 2 - PLC-GP Connection**

# ■ DL-205 Series

Setup System Area here.

| Device                  | Bit Address   | Word Address    | Particulars         |     |
|-------------------------|---------------|-----------------|---------------------|-----|
| Input Relay             | X0000 ~ X0477 | V40400 ~ V40423 | <u>ост8</u> )       |     |
| Output Relay            | Y0000 ~ Y0477 | V40500 ~ V40523 | <u>ост8</u> )       |     |
| Control Relay           | C0000 ~ C0377 | V40600 ~ V40617 | <u>ост8</u> )       |     |
| Stage                   |               | V41000 ~ V41037 | <u>ост8</u> )       |     |
| Timer (contact)         | T000 ~ 177    | V41100 ~ V41107 | <u>ост8</u> )       | L/H |
| Counter (contact)       | CT000 ~ CT177 | V41140 ~ V41147 | <u>ост8</u> )       |     |
| Timer (elapsed time)    |               | V0000 ~ V0177   | <u>ост8</u> ]       |     |
| Counter (elapsed value) |               | V1000 ~ V1177   | <u>ост8</u> )       |     |
| Variable Memory 2       |               | V2000 ~ V3777   | <u>ост8) вн1 51</u> |     |

#### ■ DL-305 Series

Setup System Area here.

| Device                  | Bit Address | Word Address | Particulars        |     |
|-------------------------|-------------|--------------|--------------------|-----|
| Input/Output            | 000 ~ 157   | V000 ~ V014  | ост8)              |     |
|                         | 700 ~ 767   | V070         |                    |     |
| Control Relay           | 160 ~ 377   | V016 ~ V036  | ост8)              |     |
|                         | 770 ~ 777   | V076         | 00101              |     |
| Shift Register          | 400 ~ 577   | V040 ~ V056  | <u>ост8</u> )      |     |
| Timer/Counter (contact) | 600 ~ 677   | V060 ~ V066  | <u>ост8</u> )      | L/H |
| Timer/Counter           |             | V600 ~ V677  | ост8)              |     |
| (elapsed value)         |             | V000 ~ V077  | 00101              |     |
| Data Register           |             | V400 ~ V577  | <u>ост8)віт15)</u> |     |
|                         |             |              | لكتا               |     |

# **■** Direct Logic 05 Series

| Device                  | Bit Address     | Word Address    | Particulars |        |
|-------------------------|-----------------|-----------------|-------------|--------|
| Input Relay             | 10000 ~ 10377   | R40400 ~ R40417 | *1          |        |
| Output Relay            | Q0000 ~ Q0377   | R40500 ~ R40517 | *1          |        |
| Internal Relay          | M0000 ~ M0777   | R40600 ~ R40637 | *1          |        |
| Stage                   | S0000 ~ S0377   | R41000 ~ R41017 | *1          |        |
| Special Relay           | SP0000 ~ SP0777 | R41200 ~ R41237 | *1          |        |
| Timer (status bit)      | T000 ~ T177     | R41100 ~ R41147 | *1          | 1 /1 1 |
| Counter (status bit)    | C000 ~ C177     | R41140 ~ R41147 | *1          | L/H    |
| Timer (elapsed time)    |                 | R0000 ~ R0177   | *1          |        |
| Counter (calculate)     |                 | R1000 ~ R1177   | *1          |        |
| V-Memory                |                 | R1200 ~ R7377   | *1 *3       |        |
| V-Memory (non-volatile) |                 | R7400 ~ R7577   | *1 *2       |        |
| System Parameter        |                 | R7600 ~ R7777   | *1 *2       |        |

<sup>\*1</sup> Octal data address.

<sup>\*2</sup> Bit-type address.

<sup>\*3</sup> R1200 to R1377 cannot be designated using bits. (R1400 - R7377 can.)

# 2.12.4 Env

# **Environment Setup**

The following tables list Digital's recommended PLC and GP communication settings.

■ KOSTAC SG Series (using Upper Link I/F)

| GP Setup                          |             | Upper Link Module Setup |           |
|-----------------------------------|-------------|-------------------------|-----------|
| Baud Rate                         | 19200 bps   | Baud Rate               | 19200 bps |
| Data Length                       | 8 bits      |                         | -         |
| Stop Bit                          | 1 bit       |                         | -         |
| Parity Bit                        | Odd         | Parity Bit              | Odd       |
| Data Flow Control                 | ER Control  |                         |           |
| Communication Format<br>(RS-232C) | RS-232C     |                         |           |
| Communication Format<br>(RS-422)  | 4-wire type |                         |           |
|                                   |             | Master/Slave Setup      | Slave     |
|                                   |             | Transfer Mode Hex       |           |
| Unit No.                          | 1           | Station Number          | 1         |

## ■ KOSTAC SG Series (using General SIO Port)

| GP Se                | etup              | Generic SIG                    | O Port Setup         |
|----------------------|-------------------|--------------------------------|----------------------|
| Baud Rate            | 19200 bps (fixed) | Baud Rate                      | 19200 bps (fix ed)   |
| Data Length          | 8 bits (fixed)    | Data Length                    | 8 bits (fixed)       |
| Stop Bit             | 1 bit (fix ed)    | Stop Bit                       | 1 bit (fix ed)       |
| Parity Bit           | Odd (fix ed)      | Parity Bit                     | Odd (fix ed)         |
| Data Flow Control    | ER Control        |                                |                      |
| Communication Format | RS-232C           | Communication Format           | Dipswitch 1 (CCM SIO |
| (RS-232C)            |                   | (RS-232C)                      | Port) is ON          |
| Communication Format | 4-wire type       | Communication Format           | Dipswitch 4 (CCM SIO |
| (RS-422)             |                   | (RS-422)                       | Port) is Off         |
|                      |                   | Transfer Mode <sup>1</sup> Hex |                      |
| Unit No.             | 1                 | CCM Number*1                   | 1                    |

<sup>\*1</sup> Turn Dip Switch 2 (CCM Station No.) OFF, and run Transfer mode and CCM Station Number setup with the programmer. Communication will not occur when Dip Switch 2 is ON and the transfer Mode is not designated as Hex.

■ KOSTAC SU Series (using Upper Link I/F)

| GP Setup             |                | Generi         | Generic Link Module Setup |     |  |
|----------------------|----------------|----------------|---------------------------|-----|--|
| Baud Rate            | 19200 bps      | Baud Rate      | Baud Rate 19200 bps       |     |  |
| Data Length          | 8 bits (fixed) |                |                           |     |  |
| Stop Bit             | 1 bit (fixed)  |                |                           |     |  |
| Parity Bit           | Odd            | Parity Bit     |                           | Odd |  |
| Data Flow Control    | ER Control     |                |                           |     |  |
| Communication Format | RS-232C        |                |                           |     |  |
| Unit No.             | 1              | Station Number | Station Number 1          |     |  |

## ■ KOSTAC SU Series (using General SIO Port)

| GP Setup                         |                 | Generic SIO Port Setup |           |
|----------------------------------|-----------------|------------------------|-----------|
| Baud Rate                        | 19200 bps       | Baud Rate              | 19200 bps |
| Data Length                      | 8 bits (fix ed) | -                      |           |
| Stop Bit                         | 1 bit (fix ed)  | -                      |           |
| Parity Bit                       | Odd             | Parity Bit Odd         |           |
| Data Flow Control                | ER Control      |                        |           |
| Communication Format (RS-232C)   | RS-232C         |                        |           |
| Communication Format<br>(RS-422) | 4-wire type     |                        |           |
| Data Format <sup>1</sup> Hex     |                 | Hex                    |           |
| Unit No.                         | 1               | Station Number         | 1         |

<sup>\*1</sup> Turn Dip Switch 2 (CCM Station No.) OFF, and run Transfer mode and CCM Station Number setup with the programmer. Communication will not occur when Dip Switch 2 is ON and the transfer Mode is not designated as Hex.

#### **■ KOSTAC SZ Series**

| GP Setup             |            | Generic SIO Port Setup       |          |
|----------------------|------------|------------------------------|----------|
| Baud Rate            | 9600 bps   | Baud Rate                    | 9600 bps |
| Data Length          | 8 bits     | Data Length                  | 8 bits   |
| Stop Bit             | 1 bit      | Stop Bit                     | 1 bit    |
| Parity Bit           | Odd        | Parity Bit                   | Odd      |
| Data Flow Control    | ER Control |                              |          |
| Communication Format | RS-232C    |                              |          |
|                      |            | Data Format <sup>1</sup> Hex |          |
| Unit No.             | 1          | Station Number               | 1        |

<sup>\*1</sup> Turn Dip Switch 2 (CCM Station No.) OFF, and run Transfer mode and CCM Station Number setup with the programmer. Communication will not occur when Dip Switch 2 is ON and the transfer Mode is not designated as Hex.

#### **■ KOSTAC SR Series**

| GP Setup             |            | CPU Module Setup  |           |
|----------------------|------------|-------------------|-----------|
| Baud Rate            | 19200 bps  | Baud Rate         | 19200 bps |
| Data Length          | 8 bits     |                   |           |
| Stop Bit             | 1 bit      |                   |           |
| Parity Bit           | None       | Parity Bit        | None      |
| Data Flow Control    | ER Control |                   |           |
| Communication Format | 4-line     |                   |           |
|                      |            | Tum Around Relay  | No delay  |
| F                    |            | Power Up Mode     | RUN mode  |
|                      |            | Transmission Mode | Нех       |
| Unit No.             | 1          | Station Number    | 1         |

#### ■ **DL405 Series** (using Upper Link I/F)

| GP Setup             |                | Upper Link Module Setup |           |
|----------------------|----------------|-------------------------|-----------|
| Baud Rate            | 19200 bps      | Baud Rate               | 19200 bps |
| Data Length          | 8 bits (fixed) |                         |           |
| Stop Bit             | 1 bit (fixed)  |                         |           |
| Parity Bit           | Odd            | Parity Bit              | Odd       |
| Data Flow Control    | ER Control     |                         |           |
| Communication Format | RS-232C        |                         |           |
| Unit No.             | 1              | Station Number          | 1         |

## ■ DL-405 Series (using General SIO Port)

| GP Setup                       |                | Generic SIO Port Setup        |                     |  |
|--------------------------------|----------------|-------------------------------|---------------------|--|
| Baud Rate                      | 19200 bps      | Baud Rate                     | Baud Rate 19200 bps |  |
| Data Length                    | 8 bits (fixed) |                               |                     |  |
| Stop Bit                       | 1 bit (fixed)  |                               |                     |  |
| Parity Bit                     | Odd            | Parity Bit                    | Odd                 |  |
| Data Flow Control              | ER Control     |                               |                     |  |
| Communication Format (RS-232C) | RS-232C        |                               |                     |  |
| Communication Format (RS-422)  | 4-wire type    |                               |                     |  |
|                                |                | Data Format <sup>*1</sup> Hex |                     |  |
| Unit No.                       | 1              | Station Number 1              |                     |  |

<sup>\*1</sup> Turn Dip Switch 2 (CCM Station No.) OFF, and run Transfer mode and CCM Station Number setup with the programmer. Communication will not occur when Dip Switch 2 is ON and the transfer Mode is not designated as Hex.

# ■ DL-205 Series

| GP Setup             |            | Generic SIO Port Setup |          |
|----------------------|------------|------------------------|----------|
| Baud Rate            | 9600 bps   | Baud Rate              | 9600 bps |
| Data Length          | 8 bits     | Data Length            | 8 bits   |
| Stop Bit             | 1 bit      | Stop Bit               | 1 bit    |
| Parity Bit           | Odd        | Parity Bit             | Odd      |
| Data Flow Control    | ER Control |                        |          |
| Communication Format | RS-232C    |                        |          |
|                      |            | Data Format *1 Hex     |          |
| Unit No.             | 1          | Station Number         | 1        |

<sup>\*1</sup> Turn Dip Switch 2 (CCM Station No.) OFF, and run Transfer mode and CCM Station Number setup with the programmer. Communication will not occur when Dip Switch 2 is ON and the transfer Mode is not designated as Hex.

#### ■ DL-305 Series

| GP Setup             |                        | CPU Module Setup           |           |
|----------------------|------------------------|----------------------------|-----------|
| Baud Rate            | 19200 bps              | Baud Rate                  | 19200 bps |
| Data Length          | 8 bits                 |                            |           |
| Stop Bit             | 1 bit                  |                            |           |
| Parity Bit           | None                   | Parity Bit                 | None      |
| Data Flow Control    | ER Control             |                            |           |
| Communication Format | 4-wire type            |                            |           |
|                      |                        | Turn Around Relay No delay |           |
|                      | Power Up Mode RUN mode |                            | RUN mode  |
| D.                   |                        | Data Format *1             | Нех       |
| Unit No.             | 1                      | Station Number             | 1         |

<sup>\*1</sup> Turn Dip Switch 2 (CCM Station No.) OFF, and run Transfer mode and CCM Station Number setup with the programmer. Communication will not occur when Dip Switch 2 is ON and the transfer Mode is not designated as Hex.

## **■** Direct Logic 05 Series

| GP Setup             |            | CPU Module Setup   |           |
|----------------------|------------|--------------------|-----------|
| Baud Rate            | 19200 bps  | Baud Rate          | 19200 bps |
| Data Length          | 8 bits     | Data Length        | 8 bits    |
| Stop Bit             | 1 bit      | Stop Bit           | 1 bit     |
| Parity Bit           | odd        | Parity Bit         | odd       |
| Data Flow Control    | ER Control |                    |           |
| Communication Format | RS-232C    |                    |           |
| Protocol CCM2 (CC    |            | CCM2 (CCM Net)     |           |
|                      |            | Data Transfer Mode | HEX       |
| Unit No.             | 1          | Station Number     | 1         |

<sup>\*1</sup> The Baud Rate setting is for PORT2 only. PORT1 is fixed at 9600bps.