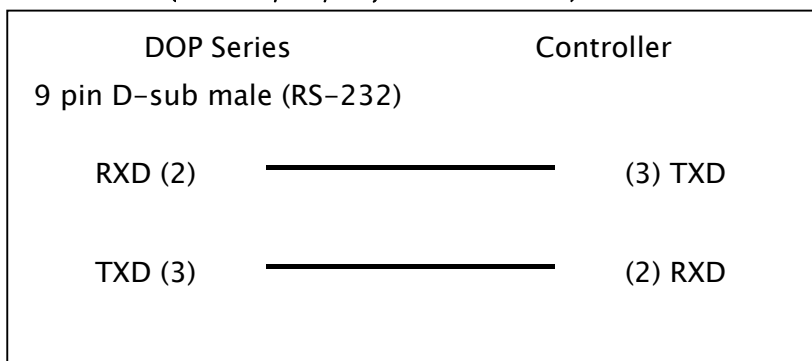# Parker Compax3 Servo

HMI Factory Setting:

Baud rate: 115200, 8, None, 1

Controller Station Number: 0 (Note1)
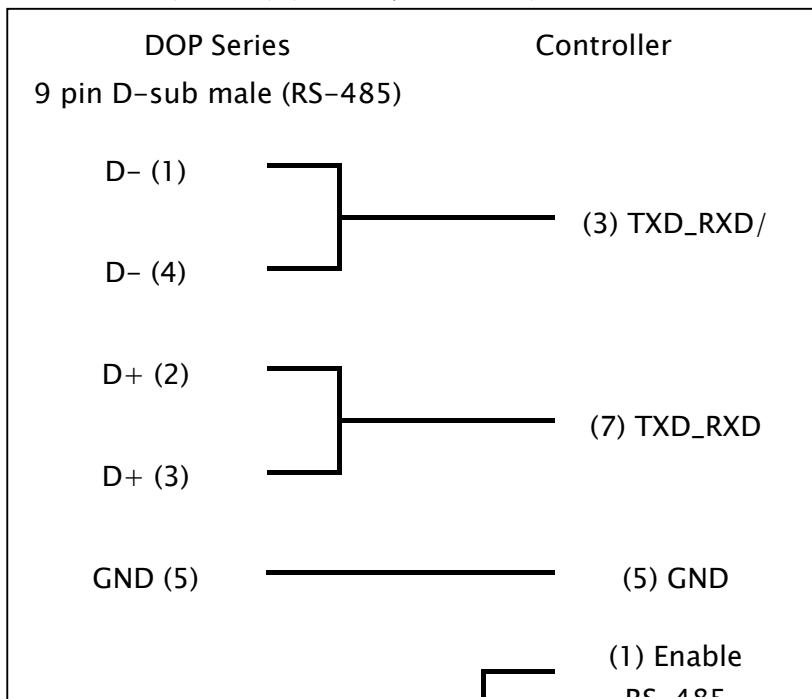
Control Area / Status Area: None/None
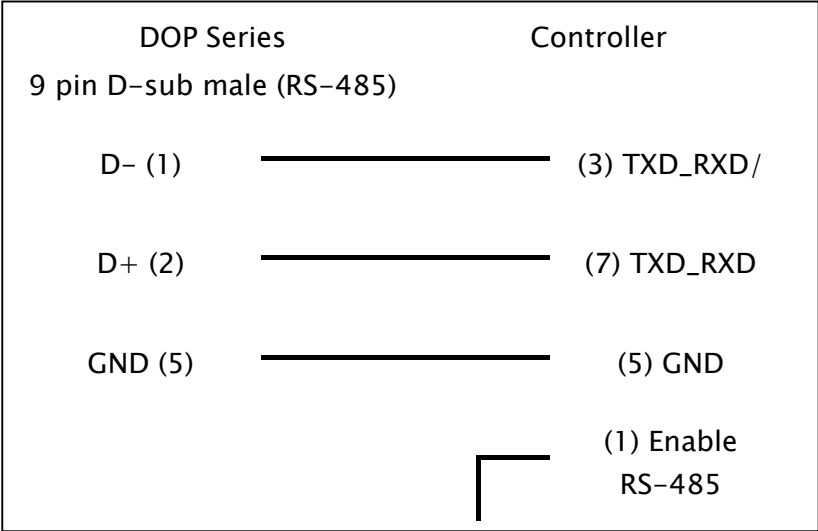
Connection

a. RS-232 (DOP-A/AE/AS, DOP-B Series)

```
        DOP Series              Controller
 9 pin D-sub male (RS-232)


    RXD (2) ————————————————— (3) TXD


    TXD (3) ————————————————— (2) RXD
```

b. RS-485 (2-wire) (DOP-A/AE Series)

```
        DOP Series              Controller
 9 pin D-sub male (RS-485)


    D- (1) ┐
           ├——————————— (3) TXD_RXD/
    D- (4) ┘


    D+ (2) ┐
           ├——————————— (7) TXD_RXD
    D+ (3) ┘


    GND (5) ——————————— (5) GND

                         (1) Enable
                      ┌─  RS-485
```

c. RS-485 (2-wire) (DOP-AS57 Series)

```
         DOP Series                    Controller
9 pin D-sub male (RS-485)

      D- (1)    ─────────────────   (3) TXD_RXD/

      D+ (2)    ─────────────────   (7) TXD_RXD

      GND (5)   ─────────────────   (5) GND

                                    (1) Enable
                         ┌───────      RS-485
```

d. RS-485 (2-wire) (DOP-AS35/AS38 Series)

```
         DOP Series                    Controller
9 pin D-sub male (RS-485)

      R-        ┐
                ├────────────   (3) TXD_RXD/
      T-        ┘

      R+        ┐
                ├────────────   (7) TXD_RXD
      T+        ┘

      GND (5)   ─────────────────   (5) GND

                                    (1) Enable
                         ┌───────      RS-485
```
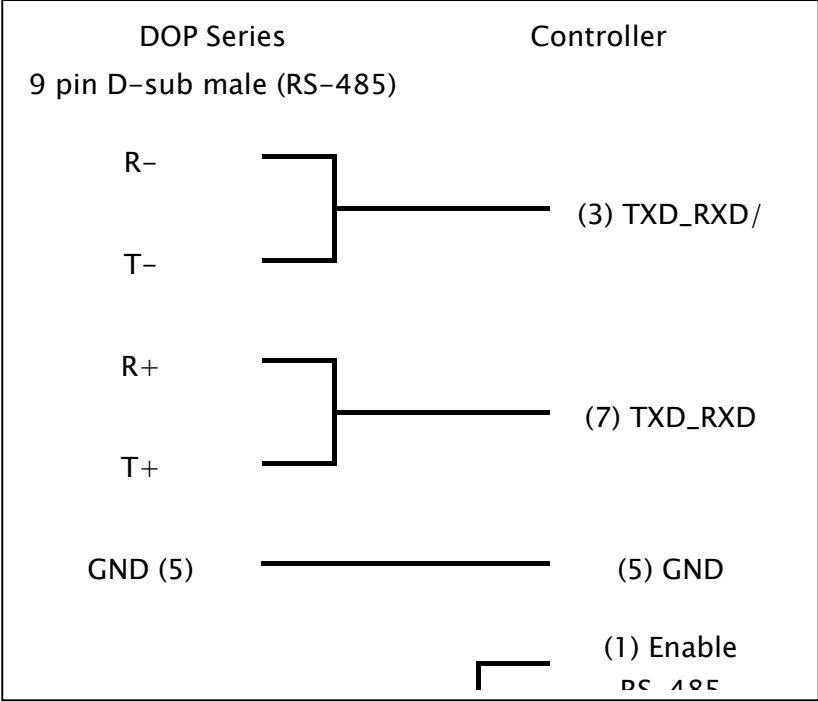
e. RS-485 (2-wire) (DOP-B Series)

```
          DOP Series                    Controller
     9 pin D-sub male (RS-485)


         D- (6)  ─────────────────  (3) TXD_RXD/


         D+ (1)  ─────────────────  (7) TXD_RXD


         GND (5) ─────────────────  (5) GND

                                     (1) Enable
                              ┌──         RS-485
                              │
                              └──      (9) +5V
```
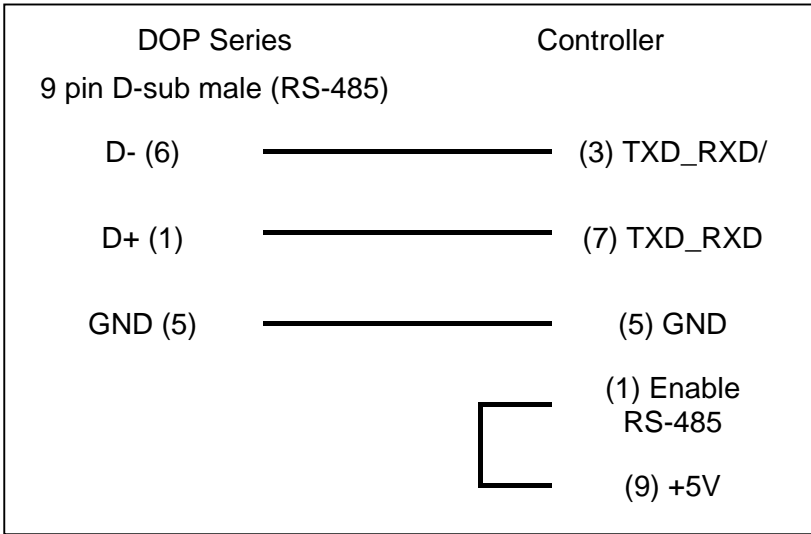
f. RS-422 (4-wire) (DOP-A/AE Series)

```
          DOP Series                    Controller
     9 pin D-sub male (RS-422)


         RXD- (1) ────────────────  (3) TxD/


         TXD- (4) ────────────────  (8) RxD/


         RXD+ (2) ────────────────  (7) TxD


         TXD+ (3) ────────────────  (2) RxD


         GND (5)  ────────────────  (5) GND

                                     (1) Enable
                              ┌──       RS-485
```
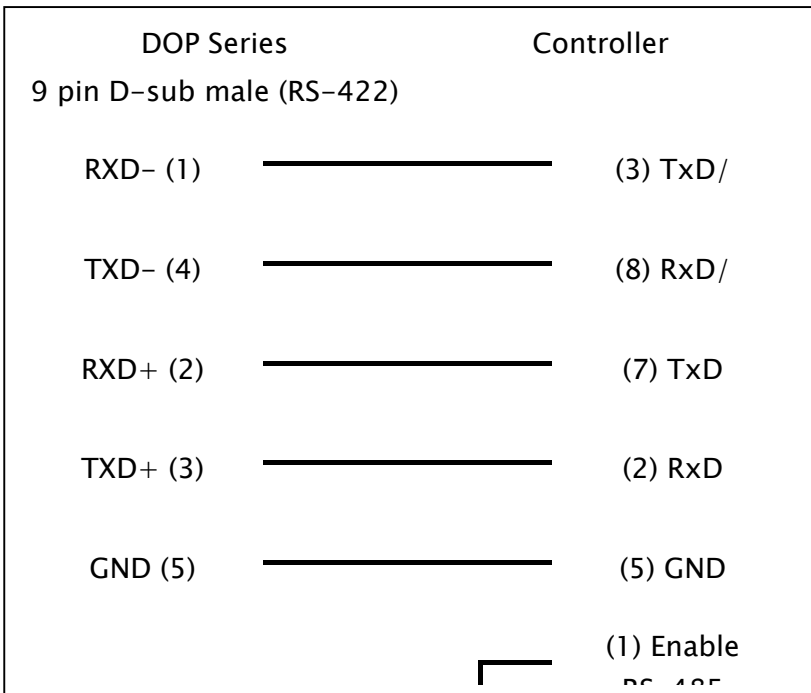
g. RS-422 (4-wire) (DOP-AS35/AS38/AS57 Series)

DOP Series	Controller
9 pin D-sub male (RS-422)	
R-	(3) TxD/
T-	(8) RxD/
R+	(7) TxD
T+	(2) RxD
GND (5)	(5) GND
	(1) Enable RS-485

h. RS-422 (4-wire) (DOP-B Series)

DOP Series	Controller
9 pin D-sub male (RS-422)	
RXD- (9)	(3) TxD/
TXD- (6)	(8) RxD/
RXD+ (4)	(7) TxD
TXD+ (1)	(2) RxD
GND (5)	(5) GND
	(1) Enable RS-485

Definition of PLC Read/Write Address

a. Registers

Type	Format Index No.(n) Sub-Index No.(m)	Read/Write Range	Data Length	Note
Object	**OBJW**n.m	**OBJW**0.1 – **OBJW**65535.32	Word	
Object	**OBJD**n.m	**OBJD**0.1 – **OBJD**65535.32	Double word	3
Object	**OBJR**n.m	**OBJR**0.1 – **OBJR**65535.32	Floating point	3

b. Contacts

Type	Format Index No.(n) Sub-Index No.(m) Bit No.(b)	Read/Write Range	Note
Object	**OBJWB**n.m/b	**OBJWB**0.1/0 – **OBJWB**65535.32/15	
Object	**OBJDB**n.m/b	**OBJDB**0.1/0 – **OBJDB**65535.32/31	

NOTE

1) The connection established by RS–232 does not require station number setting. But, if the connection is established by RS–485, station number must be set in a range of 0 ~99.

2) This program supports both ASCII/BINARY RECORD mode, but the default setting is ASCII mode. Change can be made in "Screen Editor" → "Special Parameters" → "Extra".
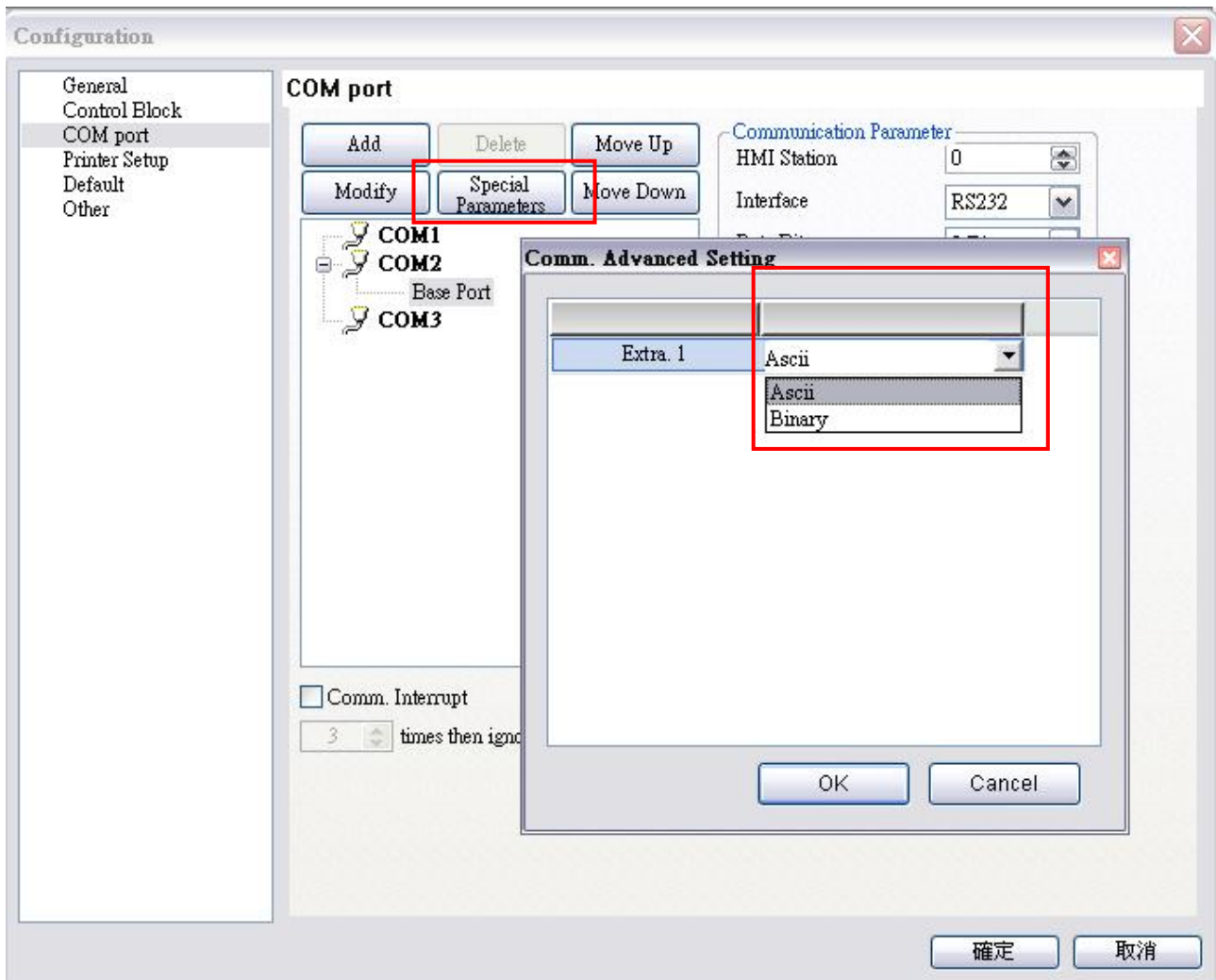
3) This protocol support access to the parameter of Compax3 and above only and is defined as OBJ. The data in different address are not the same type, therefore the character follows "OBJ" is to represent each type of data. OBJW is for 16bits date; OBJD is for 32 bits data, the data length must be Double Word format and numeric unit can not be Floating point; OBJR is for 32 bits data, data length must be Double Word type and numeric unit must be Floating point.

4) Pay special attention to the parameter characteristics, "read only" or "read/write". Please refer to Parker Compax 3 user manual for more detail.