Allen Bradley DH485

HMI Factory Setting:
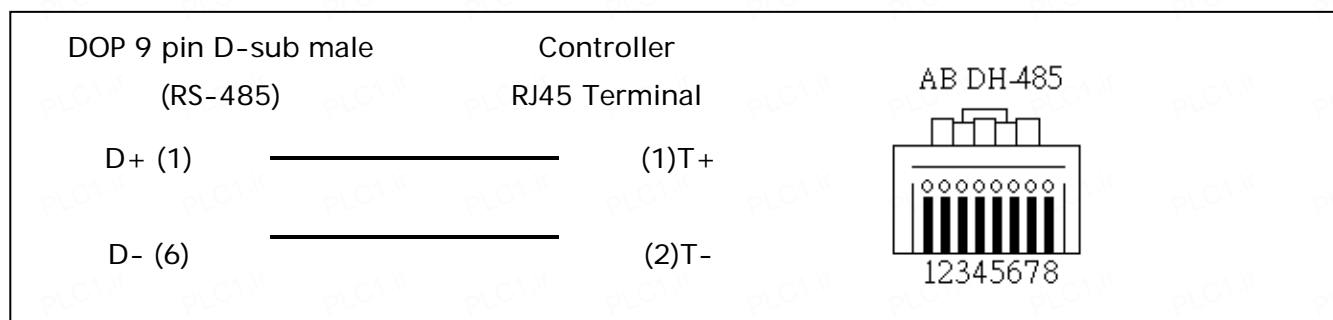
Baud rate: 19200. 8. None. 1

Controller Station Number: 1

Control Area / Status Area: B3:0/B3:10

Connection

a. RS-485 (DOP-B Series)

DOP 9 pin D-sub male (RS-485)		Controller RJ45 Terminal
D+ (1)	————	(1)T+
D- (6)	————	(2)T-

AB DH-485

12345678

Definition of PLC Read/Write Address

b. Registers

Type	Format Word No. (n) Slot No. (s) File No. (f)	Read/Write Range	Data Length	Note
Output file	**O**:n	**O**:0 – **O**:255 (s = 0, f = 0)	Word	
	O:s.n	**O**:0.0 – **O**:255.255 (f = 0)		
Input file	**I**:n	**I**:0 – **I**:255 (s = 0, f = 1)	Word	
	I:s.n	**I**:0.0 – **I**:255.255 (f = 1)		
Status file	**S2**:n	**S2**:0 – **S2**:255 (f = 2)	Word	
Bit file	**B**:n	**B**:0 – **B**:255 (f = 3)	Word	
	Bf:n	**B**3:0 – **B**3:255, **B**9:0 – **B**255:255		
Timer flag	**T**:n	**T**:0 – **T**:255 (f = 4)	Word	
	Tf:n	**T**4:0 – **T**4:255, **T**9:0 – **T**255:255		
Timer Preset Value	**T**:n.PRE	**T**:0.PRE – **T**:255.PRE (f = 4)	Word	
	Tf:n.PRE	**T**4:0.PRE – **T**4:255.PRE, **T**9:0.PRE – **T**255:255.PRE		
Timer Accumulator Value	**T**:n.ACC	**T**:0.ACC – **T**:255.ACC, (f = 4)	Word	
	Tf:n.ACC	**T**4:0.ACC – **T**4:255.ACC, **T**9:0.ACC – **T**255:255.ACC		

Type	Format Word No. (n) Slot No. (s) File No. (f)	Read/Write Range	Data Length	Note
Counter flag	C:n	C:0 – C:255, (f = 5)	Word	
	Cf:n	C5:0 – C5:255, C9:0 – C255:255		
Counter Preset Value	C:n.PRE	C:0.PRE – C:255.PRE, (f = 5)	Word	
	Cf:n.PRE	C5:0.PRE – C5:255.PRE, C9:0.PRE – C255:255.PRE		
Counter Accumulator Value	C:n.ACC	C:0.ACC – C:255.ACC, (f = 5)	Word	
	Cf:n.ACC	C5:0.ACC – C5:255.ACC, C9:0.ACC – C255:255.ACC		
Control file	R:n	R:0 – R:255, (f = 6)	Word	
	Rf:n	R6:0 – R6:255, R9:0 – R255:255		
Control Size of Bit Array	R:n.LEN	R:0.LEN – R:255.LEN, (f = 6)	Word	
	Rf:n.LEN	R6:0.LEN – R6:255.LEN, R9:0.LEN – R255:255.LEN		
Control Reserved file	R:n.POS	R:0.POS – R:255.POS, (f = 6)	Word	
	Rf:n.POS	R6:0.POS – R6:255.POS, R9:0.POS – R255:255.POS		
Integer file	N:n	N:0 – N:255, (f = 7)	Word	
	Nf:n	N7:0 – N7:255, N9:0 – N255:255		
Floating Point file	F:n	F:0 – F:255, (f = 8)	Double Word	
	Ff:n	F8:0 – F8:255, F9:0 – F255:255		
String File	STf:n	ST9:0 – ST255:255	41 Words	
Long Word File	Lf:n	L9:0 – L255:255	Double Word	

c. **Contacts**

Type	Format Word No. (n) Slot No. (s) File No. (f) Bit No. (b)	Read/Write Range	Note
Output	O:n/b	O:0/0 – O:255/15 (s = 0, f = 0)	
	O:s.n/b	O:0.0/0 – O:255.255/15 (f = 0)	
Input	I:n/b	I:0/0 – I:255/15 (s = 0, f = 1)	
	I:s.n/b	I:0.0/0 – I:255.255/15 (f = 1)	
Status	S2:n/b	S2:0/0 – S2:255/15 (f = 2)	
Bit	B:n/b	B:0/0 – B:255/15, (f = 3)	
	Bf:n/b	B3:0/0 – B3:255/15, B9:0/0 – B255:255/15	
Timer	T:n/b	T:0/0 – T:255/15, (f = 4)	

Type	Format Word No. (n) Slot No. (s) File No. (f) Bit No. (b)	Read/Write Range	Note
	T*f*:n/b	**T**4:0/0 – **T**4:255/15, **T**9:0/0 – **T**255:255/15	
	T:n/EN	**T**:0/EN – **T**:255/EN, (b = 15) (f = 4)	
	T*f*:n/EN	**T**4:0/EN – **T**4:255/EN, (b = 15), **T**9:0/EN – **T**255:255/EN (b = 15)	
	T:n/TT	**T**:0/TT – **T**:255/TT, (b = 14) (f = 4)	
	T*f*:n/TT	**T**4:0/TT – **T**4:255/TT, (b = 14) **T**9:0/TT – **T**255:255/TT (b = 14)	
	T:n/DN	**T**:0/TT – **T**:255/TT, (b = 13), (f = 4)	
	T*f*:n/DN	**T**4:0/TT – **T**4:255/TT, (b = 13) **T**9:0/TT – **T**255:255/TT (b = 13)	
Timer Preset Value	**T**:n.PRE/b	**T**:0.PRE/0 – **T**:255.PRE/15, (f = 4)	
	T*f*:n.PRE/b	**T**4:0.PRE/0 – **T**4:255.PRE/15, **T**9:0.PRE/0 – **T**255:255.PRE/15	
Timer Accumulator Value	**T**:n.ACC/b	**T**:0.ACC/0 – **T**:255.ACC/15, (f = 4)	
	T*f*:n.ACC/b	**T**4:0.ACC/0 – **T**4:255.ACC/15, **T**9:0.ACC/0 – **T**255:255.ACC/15	
Counter flag	**C**:n/b	**C**:0/0 – **C**:255/15, (f = 5)	
	C*f*:n/b	**C**5:0/0 – **C**5:255/15, **C**9:0/0 – **C**255:255/15	
	C:n/CU	**C**:0/CU – **C**:255/CU, (b = 15) (f = 5)	
	C*f*:n/CU	**C**5:0/CU – **C**5:255/CU, (b = 15) **C**9:0/CU – **C**255:255/CU (b = 15)	
	C:n/CD	**C**:0/CD – **C**:255/CD, (b = 14) (f = 5)	
	C*f*:n/CD	**C**5:0/CD – **C**5:255/CD, (b = 14) **C**9:0/CD – **C**255:255/CD (b = 14)	
	C:n/DN	**C**:0/DN – **C**:255/DN, (b = 13) (f = 5)	
	C*f*:n/DN	**C**5:0/DN – **C**5:255/DN, (b = 13) **C**9:0/DN – **C**255:255/DN (b = 13)	
	C:n/OV	**C**:0/OV – **C**:255/OV, (b = 12) (f = 5)	
	C*f*:n/OV	**C**5:0/OV – **C**5:255/OV, (b = 12) **C**9:0/OV – **C**255:255/OV (b = 12)	
	C:n/UN	**C**:0/UN – **C**:255/UN, (b = 11) (f = 5)	
	C*f*:n/UN	**C**5:0/UN – **C**5:255/UN, (b = 11) **C**9:0/UN – **C**255:255/UN (b = 11)	
	C:n/UA	**C**:0/UA – **C**:255/UA, (b = 10) (f = 5)	
	C*f*:n/UA	**C**5:0/UA – **C**5:255/UA, (b = 10) **C**9:0/UA – **C**255:255/UA (b = 10)	
Counter	**C**:n.PRE/b	**C**:0.PRE/0 – **C**:255.PRE/15, (f = 5)	
	C*f*:n.PRE/b	**C**5:0.PRE/0 – **C**5:255.PRE/15, **C**9:0.PRE/0 – **C**255:255.PRE/15	

Type	Format Word No. (n) Slot No. (s) File No. (f) Bit No. (b)	Read/Write Range	Note
Counter Accumulator Value	**C**:n.ACC/b	**C**:0.PRE/0 – **C**:255.PRE/15, (f = 5)	
	Cf:n.ACC/b	**C**5:0.PRE/0 – **C**5:255.PRE/15, **C**9:0.PRE/0 – **C**255:255.PRE/15	
Control Control	**R**:n/b	**R**:0/0 – **R**:255/15, (f = 6)	
	Rf:n/b	**R**6:0/0 – **R**6:255/15, **R**9:0/0 – **R**255:255/15	
	R:n/EN	**R**:0/EN – **R**:255/EN, (b = 15) (f = 6)	
	Rf:n/EN	**R**6:0/EN – **R**6:255/EN, (b = 15) **R**9:0/EN – **R**255:255/EN (b = 15)	
	R:n/EU	**R**:0/EU – **R**:255/EU, (b = 14) (f = 6)	
	Rf:n/EU	**R**6:0/EU – **R**6:255/EU, (b = 14) **R**9:0/EU – **R**255:255/EU (b = 14)	
	R:n/DN	**R**:0/DN – **R**:255/DN, (b = 13) (f = 6)	
	Rf:n/DN	**R**6:0/DN – **R**6:255/DN, (b = 13) **R**9:0/DN – **R**255:255/DN (b = 13)	
	R:n/EM	**R**:0/EM – **R**:255/EM, (b = 12) (f = 6)	
	Rf:n/EM	**R**6:0/EM – **R**6:255/EM, (b = 12) **R**9:0/EM – **R**255:255/EM (b = 12)	
	R:n/ER	**R**:0/ER – **R**:255/ER, (b = 11) (f = 6)	
	Rf:n/ER	**R**6:0/ER – **R**6:255/ER, (b = 11) **R**9:0/ER – **R**255:255/ER (b = 11)	
	R:n/UL	**R**:0/UL – **R**:255/UL, (b = 10) (f = 6)	
	Rf:n/UL	**R**6:0/UL – **R**6:255/UL, (b = 10) **R**9:0/UL – **R**255:255/UL (b = 10)	
	R:n/IN	**R**:0/IN – **R**:255/IN, (b = 9) (f = 6)	
	Rf:n/IN	**R**6:0/IN – **R**6:255/IN, (b = 9) **R**9:0/IN – **R**255:255/IN (b = 9)	
	R:n/FD	**R**:0/FD – **R**:255/FD, (b = 8) (f = 6)	
	Rf:n/FD	**R**6:0/FD – **R**6:255/FD, (b = 8) **R**9:0/FD – **R**255:255/FD (b = 8)	
Control size of bit array	**R**:n.LEN/b	**R**:0.LEN/0 – **R**:255.LEN/15, (f = 6)	
	Rf:n.LEN/b	**R**6:0.LEN/0 – **R**6:255.LEN/15, **R**9:0.LEN/0 – **R**255:255.LEN/15	
Control Reserved	**R**:n.POS/b	**R**:0.POS/0 – **R**:255.POS/15, (f = 6)	
	Rf:n.POS/b	**R**6:0.POS/0 – **R**6:255.POS/15, **R**9:0.POS/0 – **R**255:255.POS/15	
Integer	**N**:n/b	**N**:0/0 – **N**:255/15, (f = 7)	
	Nf:n/b	**N**7:0/0 – **N**7:255/15, **N**9:0/0 – **N**255:255/15	
Long Word File	**L**f:n/b	**L**9:0/0 – **L**255:255/31	

NOTE

1)   This protocol only supports CRC Error Check.