### User's Manual

# DC100 Communication Interface User's Manual

The following commands and parameters are valid from style number S10.

## ASSIGNS the measurement/computation/communication input channel to the retransmission channel.

Mode Operation mode
Setting AOp1, p2<terminator>

p1 Retransmission terminal number (stand-alone model: 001 to 060, expandable model:

001 to 560)

p2 Measurement/computation/communication input channel number

OFF: 0.05 V or less or 0.15 mA or less

001 to 560: Measurement channel (stand-alone model: 001 to 060)
A01 to A60: Computation channel (stand-alone model: A01 to A30)

C01 to C60: Communication input channel (stand-alone model: C01 to C30)

Example Retransmit the measured data of measurement channel 245 from the retransmission terminal 05 of subunit 1.

AO105, 245

Comments • If a retransmission terminal that is not recognized by the system is specified, an error occurs.

- If a measurement channel that is not recognized by the system is specified, an error occurs.
- If the optional computation function is not available and a computation channel is specified, an error occurs.
- If the communication module is not recognized by the system and a communication input channel is specified, an error occurs.

#### YO Sets the time constant of the retransmission.

Mode Setup mode
Setting YOp1<terminator>

p1 Time constant (0 to 9)

Example Set the time constant to 6.

YO6

Comments • The relationship between the specified value and the time constant is as follows.

Value	Time Constant (ms)	Value	Time Constant (ms)	
0	4	5	250	
1	12	6	500	
2	28	7	950	
3	60	8	1750	
4	125	9	3000	

However, the time constant is the value that is applicable when the voltage or current changes from 1 V to 5 V or from 4 mA to 20 mA, respectively. If the amount of change is small, the time constant may be smaller than the value specified.

#### XS command (page 6-12)

Add "OUTPUT" (assignment of the measurement/computation/communication input channel to the retransmission channel) to parameter p1 of the XS command

#### CM command (Page 6-11)

This command is valid when the optional computation function is available and when the retransmission module is connected.



#### XZcommand (Page 6-14)

Add the following calibration of the retransmission module.

#### Calibrating while checking the output value of the retransmission module

- XZp1, p2, p3, p4, p5, p6<terminator>
  - p1 Subunit number (0 to 5)
  - p2 Slot number (0 to 5)
  - p3 CAL/EXEC
  - p4 Output terminal number (01 to 10 for DT500-11 and 01 or 02 for DT500-2)
  - p5 Output selection (ZERO or FULL)
  - p6 Calibration value

#### Calibrating using a predetermined calibrated value

- XZ p1, p2, p3,····, p23<terminator>
  - p1 Subunit number (0 to 5)
  - p2 Slot number (0 to 5)
  - p3 DISPLAY
  - p4 Zero calibration value for output terminal number 1
  - p5 Full calibration value for output terminal number 1
  - p6 Zero calibration value for output terminal number 2
  - p7 Full calibration value for output terminal number 2
  - p8 Zero calibration value for output terminal number 3
  - p9 Full calibration value for output terminal number 3
  - p10 Zero calibration value for output terminal number 4
  - p11 Full calibration value for output terminal number 4
  - p12 Zero calibration value for output terminal number 5
  - p13 Full calibration value for output terminal number 5
  - p14 Zero calibration value for output terminal number 6
  - p15 Full calibration value for output terminal number 6
  - p16 Zero calibration value for output terminal number 7
  - p17 Full calibration value for output terminal number 7
  - p18 Zero calibration value for output terminal number 8
  - p19 Full calibration value for output terminal number 8
  - p20 Zero calibration value for output terminal number 9
  - p21 Full calibration value for output terminal number 9
  - p22 Zero calibration value for output terminal number 10
     p23 Full calibration value for output terminal number 10
- Comments For DT500-21, parameters p8 and beyond are invalid.