



Handy Calibrator CA150 Application Notes



Yokogawa Meters & Instruments

Temperature Transmitters

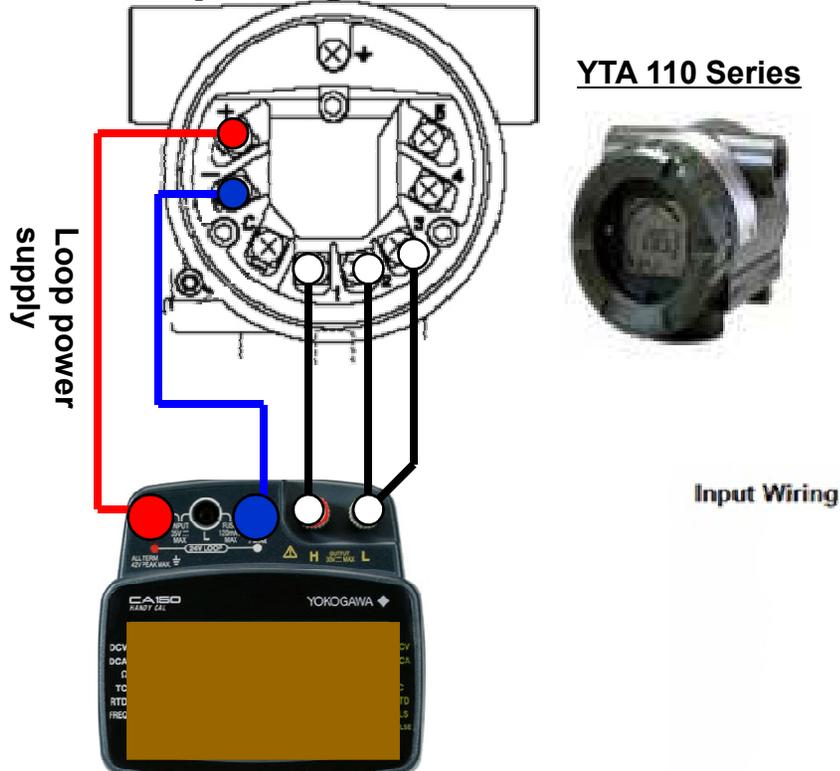


- Operation check of Temperature Transmitter made by Yokogawa.

Calibration of YTA110 series Pt100

connection

Temp. Transmitter



Example: With YTA110 series

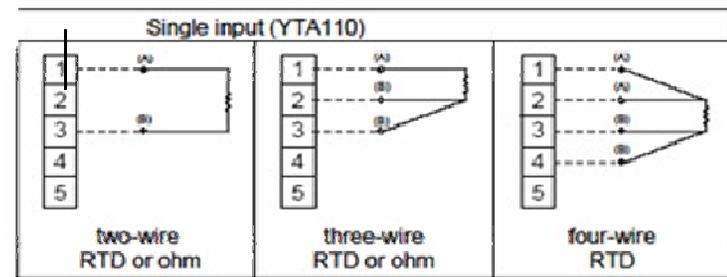
Connection: Connect loop power to YTA.

Connect CA150 source to input of YTA sensor (Please refer connection diagrams)

Characteristics: Source response time is 5ms at *specific ranges. *1V / 10V / 500 Ohm (excitation current 1mA) and RTD (excitation current 1mA)

Can be mach with YTA's input response time

Connection diagram with YTA



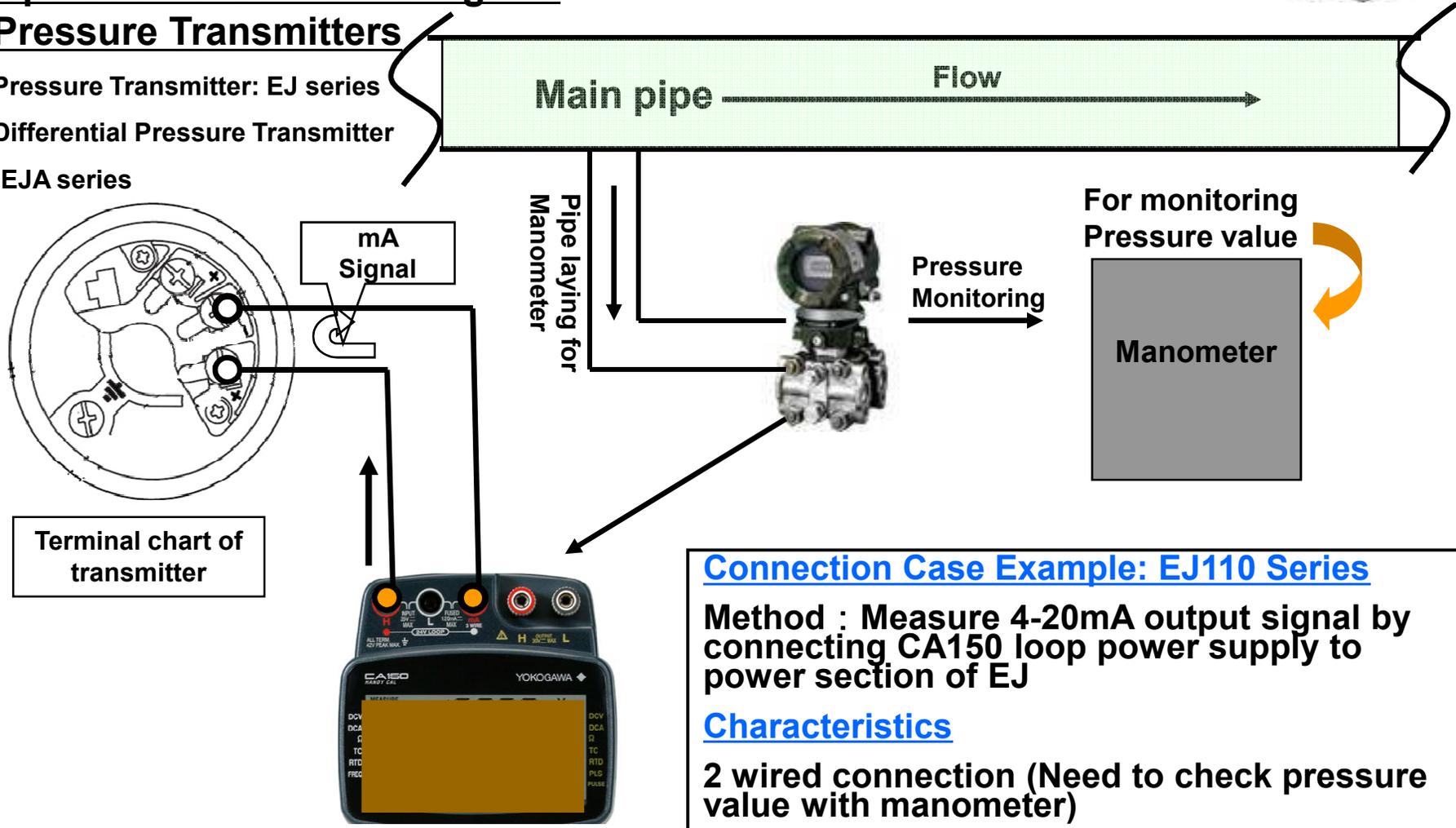
FGS6-EP3

Connection Pressure Transmitter



Operation check for Yokogawa Pressure Transmitters

Pressure Transmitter: EJ series
Differential Pressure Transmitter :EJA series

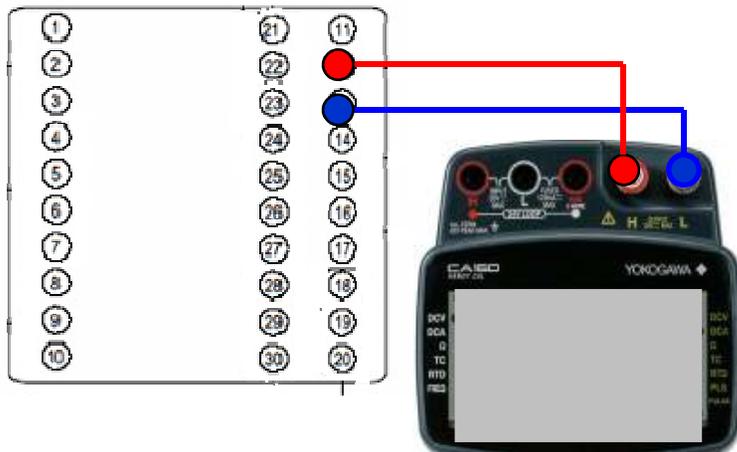


Connection Case Example: EJ110 Series
Method : Measure 4-20mA output signal by connecting CA150 loop power supply to power section of EJ
Characteristics
2 wired connection (Need to check pressure value with manometer)

Temp. Controller/Indicating Controller Connecting Samples



- Calibration, function check in Yokogawa Electric made UT series Ind. Controller and UP series Programmable Ind. Controller.



UT351 terminal connection

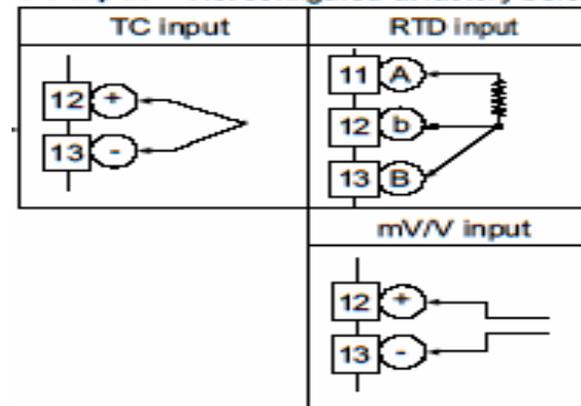
Connecting Sample of UT351 series Temp. Controller

Connect CA150 cable to UT sensor input (see figures below). Check the indication.

Outstanding features: Multi output is available with CA150 so that one unit of universal input type indicator functions as required.

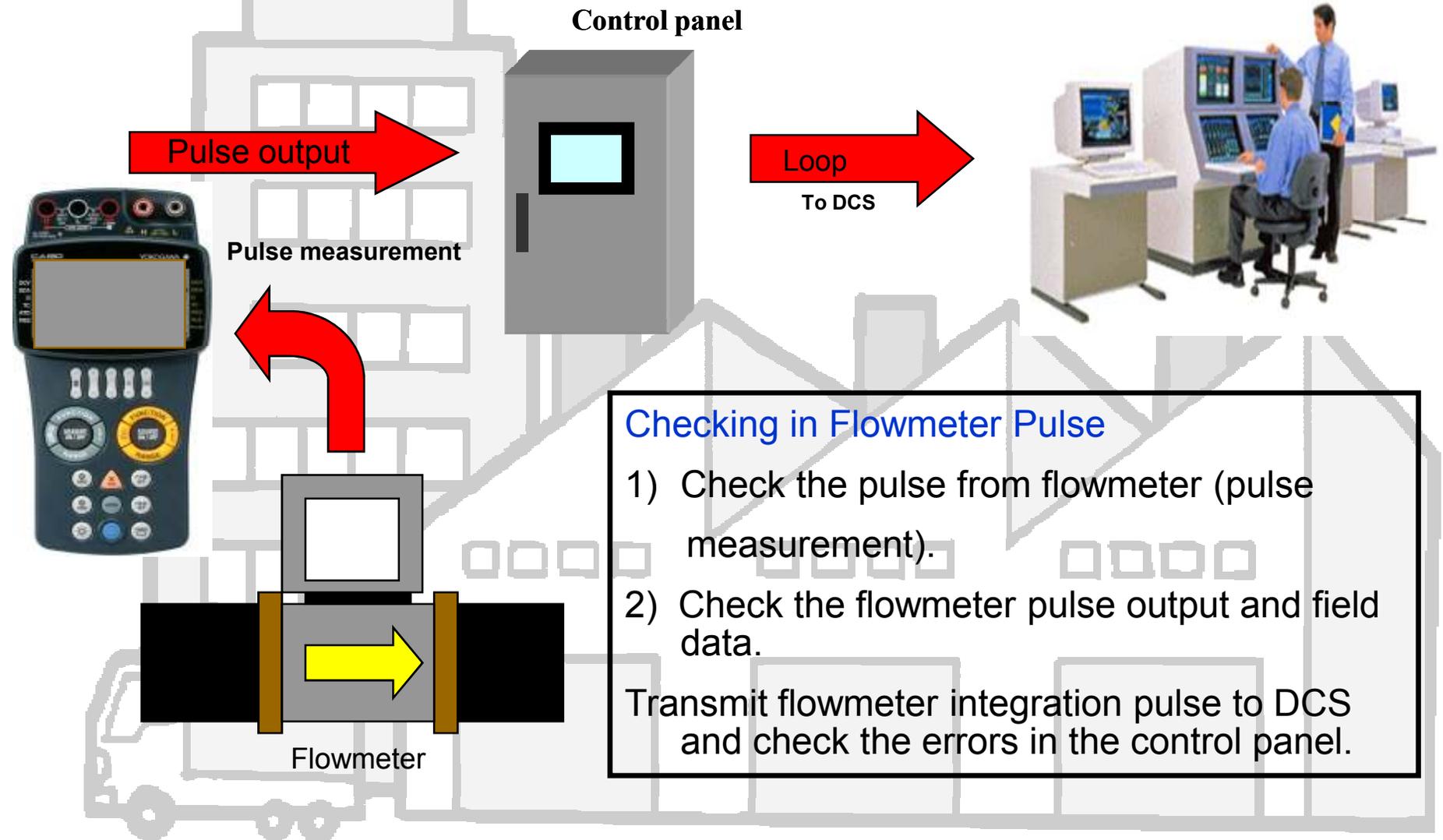
UT/UP connection samples

PV input * Not configured at factory before shipment



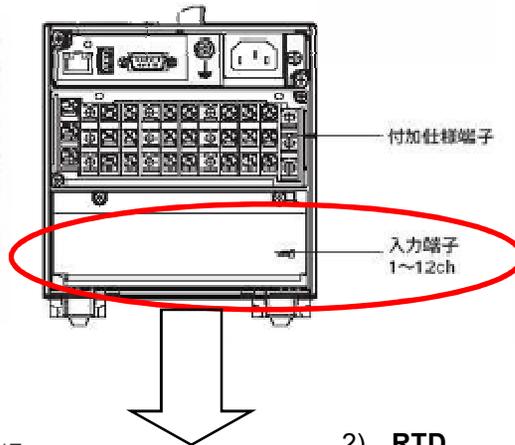
Checking in Flowmeter Pulse

•Check the flowmeter pulse output and field data

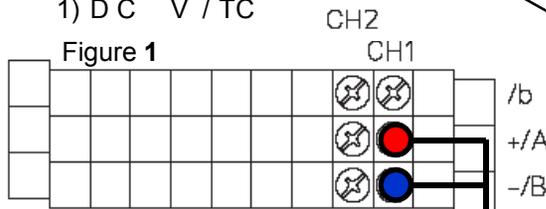


Conn. Samples of DAQSTATION DX1000

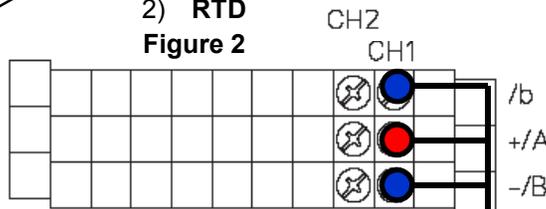
•DAQSTATION DX1000/2000 – Manufactured by Yokogawa Electric Corp.



1) DC V / TC
Figure 1



2) RTD
Figure 2



DX1000 Connecting samples

① **DC V/TC input**
Connect to DX1000 (see figure 1)
Check if the specified value is generated and indicated.

② **RTD input**
Connect to DX1000 (see figure 2).
Check if the specified value is generated and indicated.

Outstanding features: Multi output is available with CA150 so that one unit of universal input type functions as required.
It is recommended to use this equipment for an experiment in a product development situation or checking use prior to recording process.

YS Series SLCD Connection Samples

YS80 Series – Manufactured by Yokogawa Electric Corp.



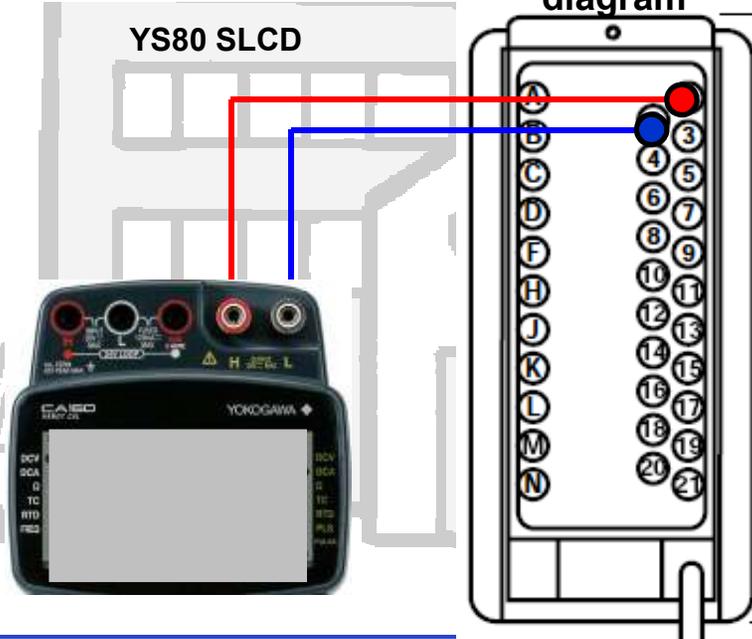
Connection Sample: YS80 SLCD

Connect CA150 cable to SLCD measuring input (see terminal diagrams below).

Check the indication.

Outstanding Features: It is recommended to use in checking of cascade arithmetic, programming supplementary or field use at the time of start-up service.

YS80 SLCD



Terminal diagram

■ TERMINAL CONNECTIONS

Terminal Designation	Description	Terminal Designation	Description
1	+ Process variable input (1 to 5 V DC)	17	+ Communications (Note1)
2	+ Cascade set point input (1 to 5 V DC)	18	+ Deviation alarm output
3	+ Tracking input (1 to 5 V DC)	19	- Fail output (neg. terminal)
4	+ Feedforward input (1 to 5 V DC)	20	+ Manipulated output Note 2(4 to 20 mA DC)
5	+ Instrument mode switching	21	+ Manipulated output (1 to 5 V DC)
6	+ C, A/M contact output	F	+ Set point signal (1 to 5 V DC)
7	+ C/A, M contact output	H	+ Input high limit alarm
8		J	+ Input low limit alarm
9		L	+ Fail output (pos. terminal)
10		M	
11		N	
12			
13			
14			
15			
16			