

Connection to the PVD-T Series

1. Control Parameters

Connections to the PVD-T series are made in two different ways: PVD-T-1 and PVD-T-2.

The following parameters can be controlled.

Table 1 Control Parameters

✓ : Can be controlled No mark : Uncontrollable

Connection	PVD-T-1	PAD-T-2
Control board	OP01-PIA ^{*1}	OP02-PIA
Output voltage setting	✓	✓
Output current setting	✓	✓
Output voltage readback	✓	
Output current readback	✓	

*1. OP01-PIA cannot control models with a rated output voltage exceeding 500 V.

2. PVD-T-1

The PVD-T series is controlled on the OP01-PIA using the remote-control connector PROGRAM LINES on the rear panel.

To connect the PVD-T series to the OP01-PIA, use a cable fabricated using the connector accompanying the OP01-PIA.

Fabricate a cable in accordance with Table 2 and 8.7, "Connection to J1/J2 Connectors" of PIA4800 series operation manual.

For details of the remote-control connector PROGRAM LINES on the PVD-T series, see the operation manual for the PVD-T series.

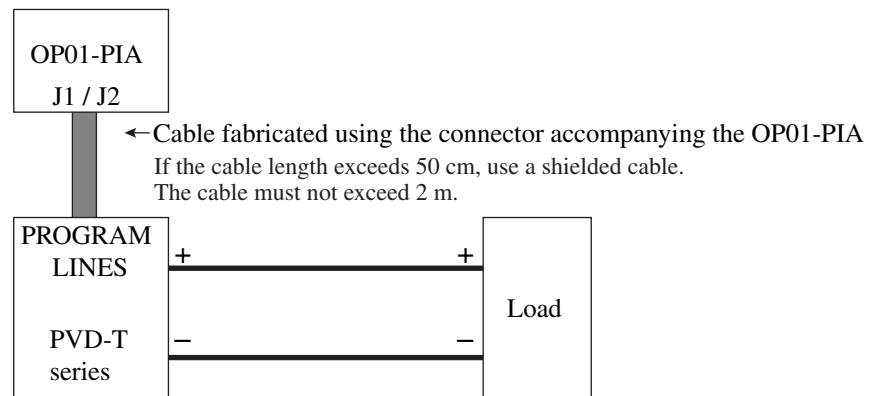


Fig.1 PVD-T-1 connections

Table 2 Pin layout for PVD-T-1

PVD-T series Control connector PROGRAM LINES	OP01-PIA J1/J2	Remarks
B3	4	Output voltage control
B1	2	Common for output voltage control
B4	6	Output current control
B1	3	Common for output current control
B5	8	Output-voltage read-back signal
B6	9	Output-current read-back signal

3. PVD-T-2

The PVD-T series is controlled on the OP02-PIA using the remote-control connector PROGRAM LINES on the rear panel.

To connect the PVD-T series to the OP02-PIA, see the operation manual for the PVD-T series and 9.6, “Connection to CH1/CH2 Connectors” of PIA4800 series operation manual.

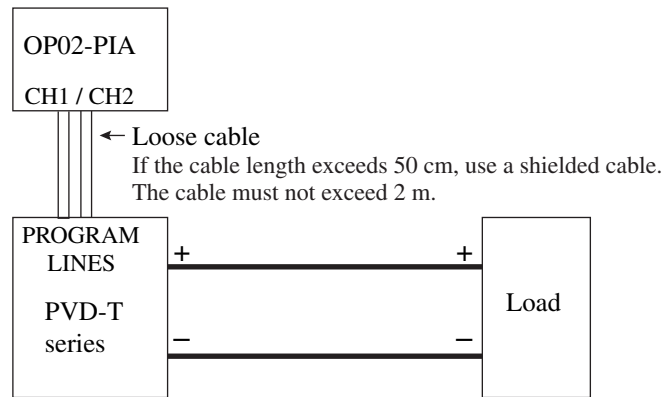


Fig.2 PVD-T-2 connections

Table 3 Pin layout for PVD-T-2

PVD-T series Control connector PROGRAM LINES	OP02-PIA CH1/CH2	Remarks
B3	A	Output voltage control
B1	B	Common for output voltage control
B4	C	Output current control
B1	D	Common for output current control

4. Preparation for Starting Control

Settings on the PVD-T Series

Before starting control operation, make the following settings on the PVD-T series:

- 1 Set the control voltage to 0 V to 10 V.
- 2 Enable analog control mode.

For details, see the operation manual for the PVD-T series.

Setting and checking the PVD-T series Model ID

The newest version of ID list can be downloaded from download service of Kikusui website (<http://www.kikusui.co.jp/en/download/>).

Table 4 ID list

ID No.	Model	Output-current setting range [V]	Output-current setting range [A]	Switch setting position on ^{*1} the control board	
				100/200 ^{*2}	101/201 ^{*2,*3}
160	PVD10-600T	0-10.000	0-600.0	H	H/NO
169	PVD10-1200T	0-10.000	0-1200.0	H	H/NO
161	PVD20-300T	0-20.000	0-300.00	H	H/NO
170	PVD20-600T	0-20.000	0-600.0	H	H/NO
162	PVD40-150T	0-40.00	0-150.00	H	H/NO
171	PVD40-300T	0-40.00	0-300.00	H	H/NO
163	PVD60-100T	0-60.00	0-100.00	H	H/NO
172	PVD60-200T	0-60.00	0-200.00	H	H/NO
164	PVD80-75T	0-80.00	0-75.00	H	H/NO
173	PVD80-150T	0-80.00	0-150.00	H	H/NO
165	PVD100-60T	0-100.00	0-60.00	H	H/NO
174	PVD100-120T	0-100.00	0-120.00	H	H/NO
166	PVD150-40T	0-150.00	0-40.00	H	H/NO
175	PVD150-80T	0-150.00	0-80.00	H	H/NO
167	PVD300-20T	0-300.00	0-20.000	H	H/NO
176	PVD300-40T	0-300.00	0-40.00	H	H/NO
168	PVD600-10T	0-600.0	0-10.000	H	NO
177	PVD600-20T	0-600.0	0-20.000	H	NO

*1. The setting positions for the switch of OP01-PIA or OP02-PIA

*2. The number "100" and "101" are applied for the switch of Channel 1, "200" and "201" are for the switch of Channel 2.

*3. The setting positions of "H" is used for OP01-PIA, "NO" is used for OP02-PIA.

For the ID settings, see 3.4, "Configuration Software" of PIA4800 series operation manual.

Calibrating the PVD-T series

When a new Model ID has been set, be sure to conduct calibration.

Calibration can be performed for two parameters: output voltage and output current.

For the calibration procedure, see Chapter 3, “Calibration by Device Configuration” of PIA4800 series operation manual.

Checking PVD-T performance

Following calibration, set a voltage via GPIB or RS232C to check the performance of the PVD-T.

Checking procedure (example)

By sending the message “NODE 1;CH 1;VSET 12.0” to the PIA4800 series, make sure the preset voltage on the PVD-T series is set at 12.0 V.

5. Commands

For the commands, see “Device Messages” of Connecting & Programming Guide.