

● Control Description ○ : Controllable × : Incontrollable

DC Power Supply Series	PAS	PWR	PAM	PMR
Output voltage setting	○	○	○	○
Output current setting	○	○	○	○
Query for output voltage setting value	○	○	×	×
Query for output current setting value	○	○	×	×
Output voltage value read-back	○	○	○	○
Output current value read-back	○	○	○	○
Designation/Query of output channel number	×	×	×	○
Designation of output channel number to display	×	×	×	○
Overvoltage protection activation point setting	○	○	×	×
Query for overvoltage protection activation point	○	○	×	×
Overcurrent protection activation point setting	○	○	×	×
Query for overcurrent protection activation point	○	○	×	×
Output ON/OFF	○	○	○	○
Power switch shutoff	○	○	×	×
Panel lock ON/OFF	○	○	○	○

Note: For power supply with analog control function, refer to the PIA4800 Series catalog or contact Kikusui.

● PIA4850 Specifications

Item	Details
TP-BUS	Connections The connections given below are possible using the provided TP-BUS connector Expansion unit PIA4820: 4 units can be connected (Extension length: Maximum 200 m, Twist count: 1 time/cm or more)
	Number of controlled units* PAS Series : Maximum 32 units PWR Series : Maximum 32 units PAM Series : Maximum 31 units PMR Series : Maximum 31 units
	Polarity None
	Conforming power wiring Twisted wire: 0.32 mm ² (AWG22) Extended length: Maximum 200 m 0.20 mm ² (AWG24) Extended length: Maximum 20 m
USB	Conforms to USB 2.0 specifications, and to USBTMC-USB488 device class specifications. Communications speed: 12 Mbps (full speed) (High power device (power consumption: 200 m))
OS	Windows2000 Professional (SP4 or later) Windows XP Professional (SP2 or later, 32-bit versions) Vista Home Premium, Business, Ultimate (32-bit versions)
VISA specifications	Ver. 3.0 or higher
Operating ambient temperature/Humidity range	0°C to 40°C, 10% rh – 90% rh (No condensation.)
Storage ambient temperature/Humidity range	-20°C to 70°C, 10% rh – 90% rh (No condensation.)
Installation location	Indoors, maximum height 2000 m
Safety	Conforms to Low-Voltage Directive 73/23/EEC, EN61010-1 Class III, Pollution Degree 2.
Dimensions/Weight	95W x 58D x 18H mm / Approximately 100 g
Accessories	USB cable (1 m) TP-BUS connector, TP-BUS cable (1 m) Magnet sheet for fastening the base CD (instruction manual, driver files, sample programs, etc.)

*The maximum controllable units are 31 when the connections include PAM series or PMR series unit.

● PIA4850 Q&A

Question	Answer
Are there restrictions on the power supplies that can be connected?	If the power supplies equip the Kikusui digital interface (TP-BUS), then up to 32 units may be connected. (The maximum is 31 for PMR and PAM units.)
Is it possible to control power supplies that do not equip TP-BUS?	For power supplies that do not equip TP-BUS, control from the control board (OP01-PIA or OP02-PIA) is possible by connecting the expansion unit (PIA4820).
Are there restrictions on the PC that is connected?	A PC with a USB interface and running one of the following OS is required. • Win2k Professional (SP4 or later) • WinXP Professional (SP2 or later, 32-bit versions) • Vista Home Premium, Business, or Ultimate (32-bit versions)
What else is required besides the power supply (with TP-BUS) and PIA4850?	None. Everything is supplied.
Are there restrictions on the locations where the PIA4850 can be installed?	The unit must be installed within the range of the USB cable. The TP-BUS cable that is connected to the power supply(ies) can be extended to a maximum length of 200 m.
For digital control, is it necessary to perform calibration for the combination with the connected power supply(ies), or to make environment settings?	If the power supply equips TP-BUS, only the node address (identifying number) must be specified. No calibration for the combination is required.
What kinds of commands are used to perform power control?	The commands vary depending on the power supply that is being controlled. The commands are listed in the instruction manual that was provided with the power supply unit. The instruction manuals can also be viewed at the Kikusui website.
What is the communications speed? (How much time is required for one command?)	The control time varies depending on the power supply that is being controlled, and also on the number of controlled power supplies and the PC performance. As an example, when controlling one PWR series unit, approximately 100 ms are required in order to send the command and start operation of the device.
Is it possible to operate devices other than Kikusui VISA?	The PIA4850 conforms to USBTMC specifications. VISA from other companies that include compatible drivers can also be operated. * USBTMC stands for USB Test & Measurement Class.

● Required Drivers and Components

		WAVY application software	VB, VBA, VC++ LabVIEW
VISA (including USB-TMC driver)		Required	Required
PIA4800 instrument driver	IVI-COM/C	Not required	Required in some cases
	IVI Shared Components		

● The latest drivers available at the Kikusui website.



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