

Operation Manual for Demo Programs

1. Startup and termination procedures

When either of the VI programs below is executed, the following screen will be displayed.

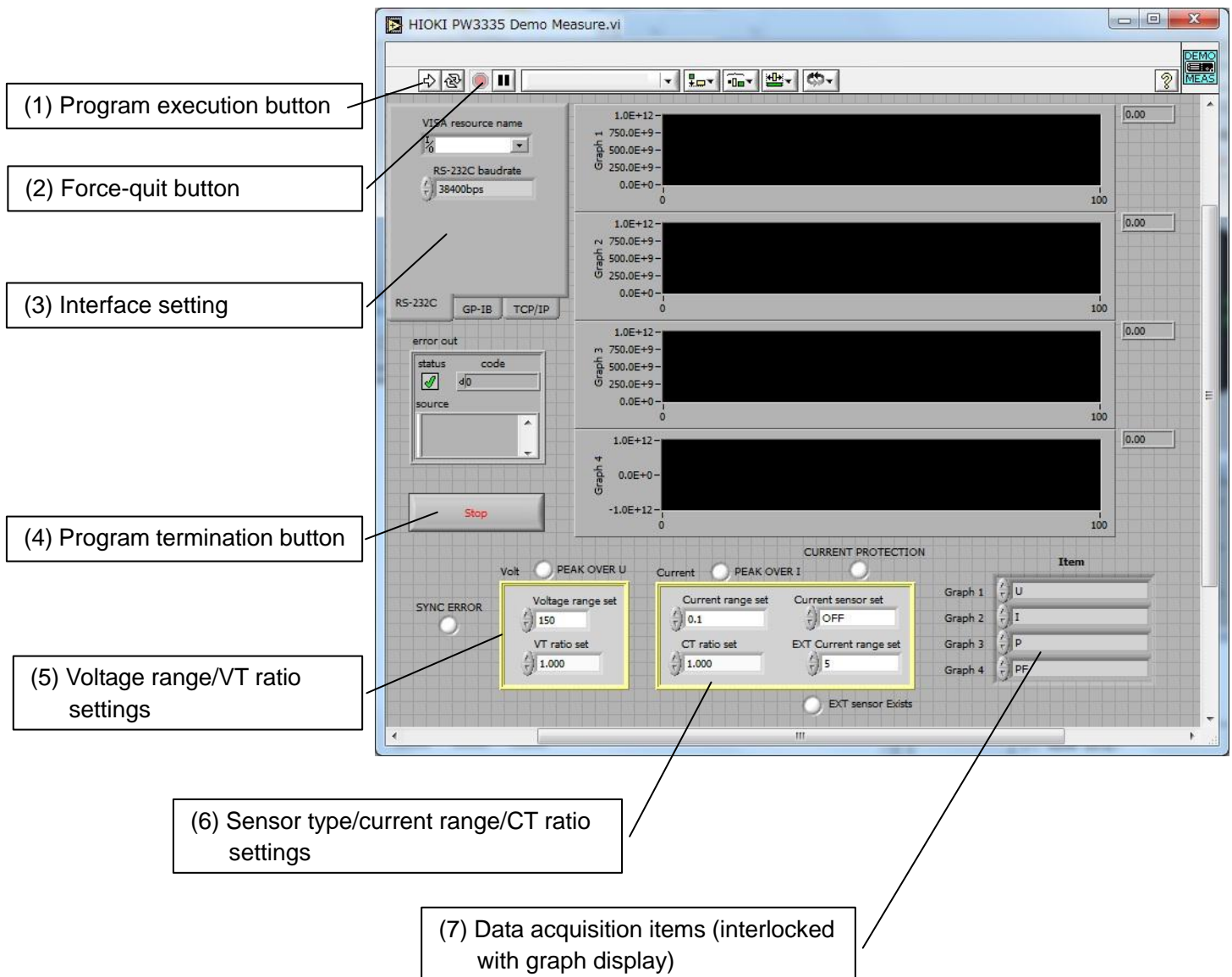
HIOKI PW3335 Demo Measure.vi

HIOKI PW3335 Demo Measure-H.vi (for harmonic)

When you set items (3) and (5) to (7), and then click the program execution button (1), the program will be executed. To terminate the program, click the program termination button (4). To force-quit the executed program, click the force-quit button (2).

This is only an example of a driver. We do not guarantee the operation.

HIOKI PW3335 Demo Measure.vi



HIOKI PW3335 Demo Measure-H.vi

(1) Program execution button

(2) Force-quit button

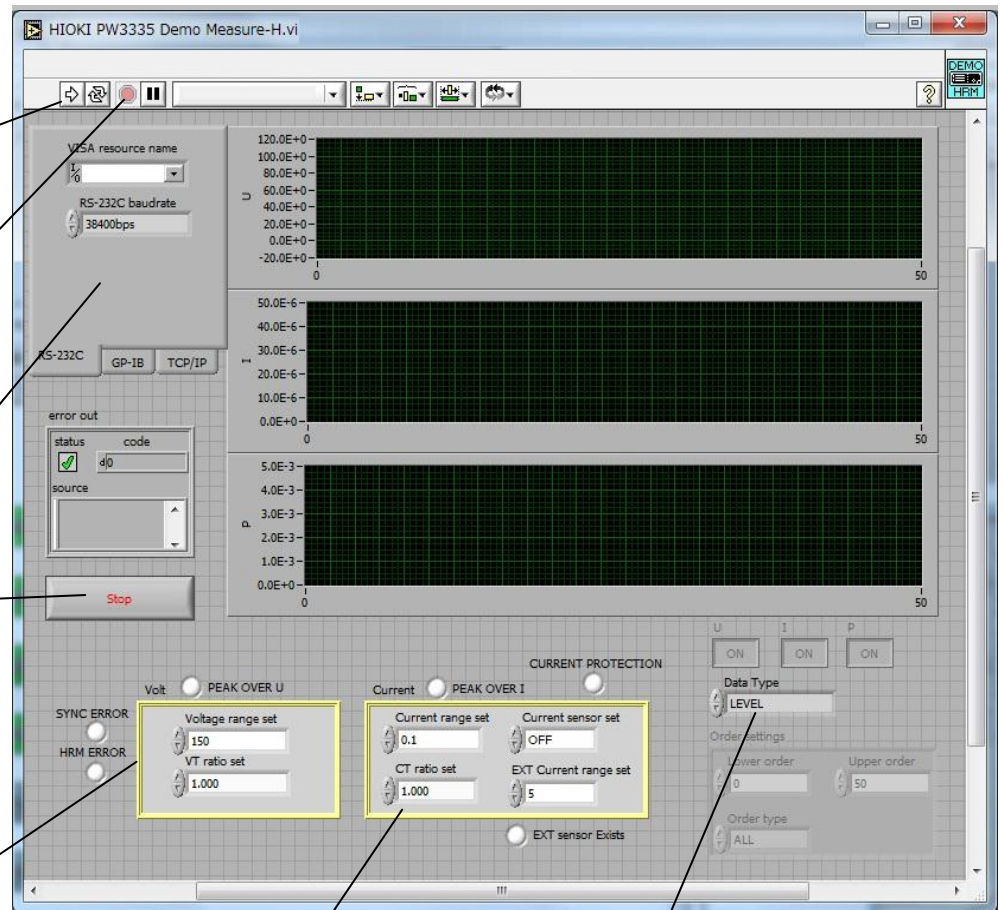
(3) Interface setting

(4) Program termination button

(5) Voltage range/VT ratio settings

(6) Sensor type/current range/CT ratio settings

(7) Data type
(Level/Content/Phase)



2. Description of HIOKI PW3335 Demo Measure.vi

2.1 Main screen

The values of the specified measurement items are displayed in a time-series graph at intervals of 200 ms.

The screenshot shows the HIOKI PW3335 Demo Measure.vi interface. It includes a top toolbar with icons for file operations and execution. The main area is divided into several sections:

- Communication Settings:** Includes fields for VISA resource name, RS-232C baudrate (set to 38400bps), and tabs for RS-232C, GP-IB, and TCP/IP.
- Error Information:** A section with status (checked), code (40), and source fields, along with a Stop button.
- Measurement Settings:** Includes Voltage range set (150), VT ratio set (1.000), Current range set (0.1), CT ratio set (1.000), Current sensor set (OFF), and EXT Current range set (5). There are also checkboxes for PEAK OVER U, PEAK OVER I, and CURRENT PROTECTION.
- Item Selection:** A list of items (U, I, P, PF) for Graph 1 through Graph 4.
- Graphs:** Four time-series graphs showing measurement data over 100 samples. The y-axis ranges from 0.0E+0 to 1.0E+12.

Callout boxes provide additional information:

- Set the RS-232C (communication speed), GP-IB address, and TCP/IP address for the LAN on the instrument side. Communication is performed via the interface displayed to the front.**
- Displays the error information when an error occurs.**
- Graphically displays the measurement values of the items specified in "Item".**
- Set the voltage range and VT ratio.**
- Set the sensor type, current range, and CT ratio.**
- Specify the measurement items to be graphically displayed. For details on the item names, refer to "MEASure? query direct setting item list" on page 69 in the manual.**

Be sure to set the above items before executing the program. If you make any changes in the settings while the program is being executed, those changes are not updated.

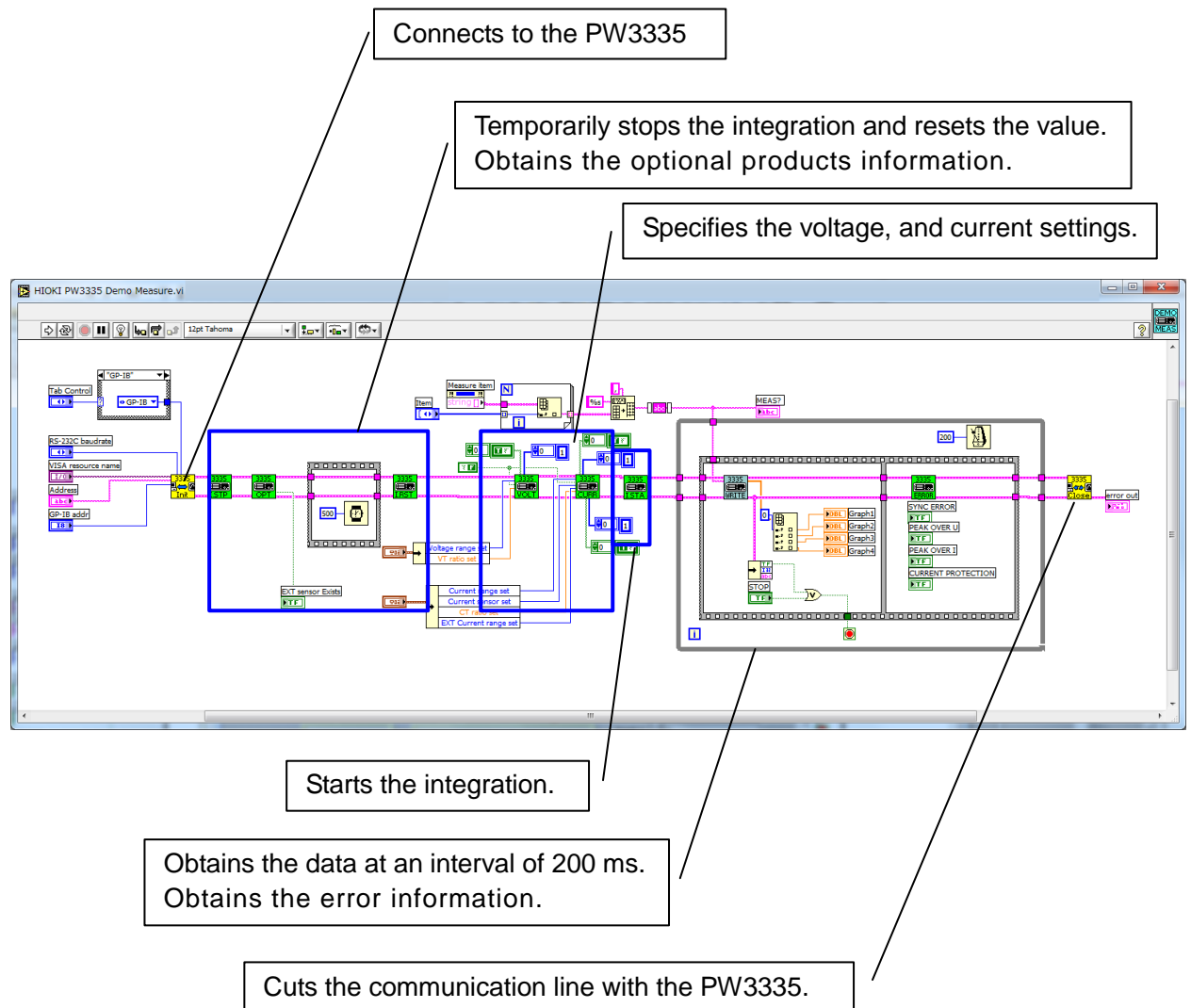
During the program execution, the lighted lamps indicate the instrument status.

Lamp	Description
SYNC ERROR	A synchronization error occurs.
PEAK OVER U	A PEAK OVER of voltage waveform occurs.
PEAK OVER I	A PEAK OVER of current waveform occurs.
CURRENT PROTECTION	Enters into Current Protection mode.
EXT sensor Exists	The optional external sensor is connected.

2.2 Diagram

This is an example of the demo program when using any of the following drivers.

HIOKI PW3335 Initialize.vi	Opens the communication interface Initial setting of RS-232C/LAN/GP-IB
HIOKI PW3335 Close.vi	Closes the communication interface
HIOKI PW3335 Integrate_Start.vi	Starts the integration
HIOKI PW3335 Integrate_Stop.vi	Stops the integration
HIOKI PW3335 Integrate_Reset.vi	Resets the integration value
HIOKI PW3335 Conf Voltage.vi	Sets/queries the voltage range, voltage auto range, and VT ratio
HIOKI PW3335 Conf Current.vi	Sets/queries the current input type, current range (direct, sensor), current auto range, and CT ratio
HIOKI PW3335 MeasureWrite.vi	Obtains the desired items for normal measurement
HIOKI PW3335 OPT.vi	Obtains the optional products information
HIOKI PW3335 ERROR.vi	Obtains the error information



3. Description of HIOKI PW3335 Demo Measure-H.vi

3.1 Main screen

The values of the harmonic output data (voltage, current, and power) are displayed in a bar graph.

The screenshot shows the HIOKI PW3335 Demo Measure-H.vi interface. It includes a VISA resource name field, RS-232C baudrate (38400bps), and communication interface selection (RS-232C, GP-IB, TCP/IP). A status area shows error codes and a Stop button. The main display area contains three bar graphs for voltage, current, and power. Below the graphs are settings for voltage range (150), VT ratio (1.000), current range (0.1), CT ratio (1.000), current sensor (OFF), and EXT current range (5). There are also checkboxes for SYNC ERROR, HRM ERROR, PEAK OVER U, PEAK OVER I, CURRENT PROTECTION, and EXT sensor Exists. A Data Type dropdown is set to LEVEL. Order settings for Lower order (0) and Upper order (50) are shown, along with an Order type dropdown set to ALL.

Set the RS-232C (communication speed), GP-IB address, and TCP/IP address for the LAN on the instrument side. Communication is performed via the interface displayed to the front.

Displays the error information when an error occurs.

Graphically displays the measurement values of the items specified in "Data Type".

Set the voltage range and VT ratio.

Set the sensor type, current range, and CT ratio.

Specify the measurement items to be graphically displayed.
Data type
LEVEL ...Level
CON ...Content percentage
PHASE ...Phase
U,I,P: Fixed to ON
Order settings: All of the orders consisting of zeroth to 50th are fixed

Be sure to set the above items before executing the program. If you make any changes in the settings while the program is being executed, those changes are not updated. (Excluding Data type)

During the program execution, the lighted lamps indicate the instrument status.

Lamp	Description
SYNC ERROR	A synchronization error occurs.
HRM ERROR	The harmonic measurement function is disabled.
PEAK OVER U	A PEAK OVER of voltage waveform occurs.
PEAK OVER I	A PEAK OVER of current waveform occurs.
CURRENT PROTECTION	Enters into Current Protection mode.
EXT sensor Exists	The optional external sensor is connected.

3.2 Diagram

This is an example of the demo program when using any of the following drivers.

HIOKI PW3335 Initialize.vi	Opens the communication interface Initial setting of RS-232C/LAN/GP-IB
HIOKI PW3335 Close.vi	Closes the communication interface
HIOKI PW3335 Conf Voltage.vi	Sets/queries the voltage range, voltage auto range, and VT ratio
HIOKI PW3335 Conf Current.vi	Sets/queries the current input type, current range (direct, sensor), current auto range, and CT ratio
HIOKI PW3335 MeasureHRM Level.vi	Obtains the voltage, current, and active power harmonic level data
HIOKI PW3335 MeasureHRM Con.vi	Obtains the voltage, current, and active power harmonic content percentage data
HIOKI PW3335 MeasureHRM Phase.vi	Obtains the voltage, current, and active power harmonic phase data
HIOKI PW3335 OPT.vi	Obtains the optional products information
HIOKI PW3335 ERROR.vi	Obtains the error information

