

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

The screenshot shows the HIOKI PW3335 Demo Measure.vi software interface. The interface includes a toolbar at the top with buttons for execution, force-quit, and termination. The main area is divided into several sections: interface settings (VISA resource name, RS-232C baudrate, interface type), error handling (status, code, source), and measurement settings (voltage range, VT ratio, current range, CT ratio, current sensor, EXT current range, EXT sensor Exists). There are four graphs (Graph 1 to Graph 4) displaying waveforms. A table on the right lists acquisition items (U, I, P, PF) for each graph. Callouts (1) through (7) point to specific elements: (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, and (7) Data acquisition items (interlocked with graph display).

(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 acquisition items (interlocked with graph display)

HIOKI PW3335 Demo Measure-H.vi

(1) Program execution button

(2) Force-quit button

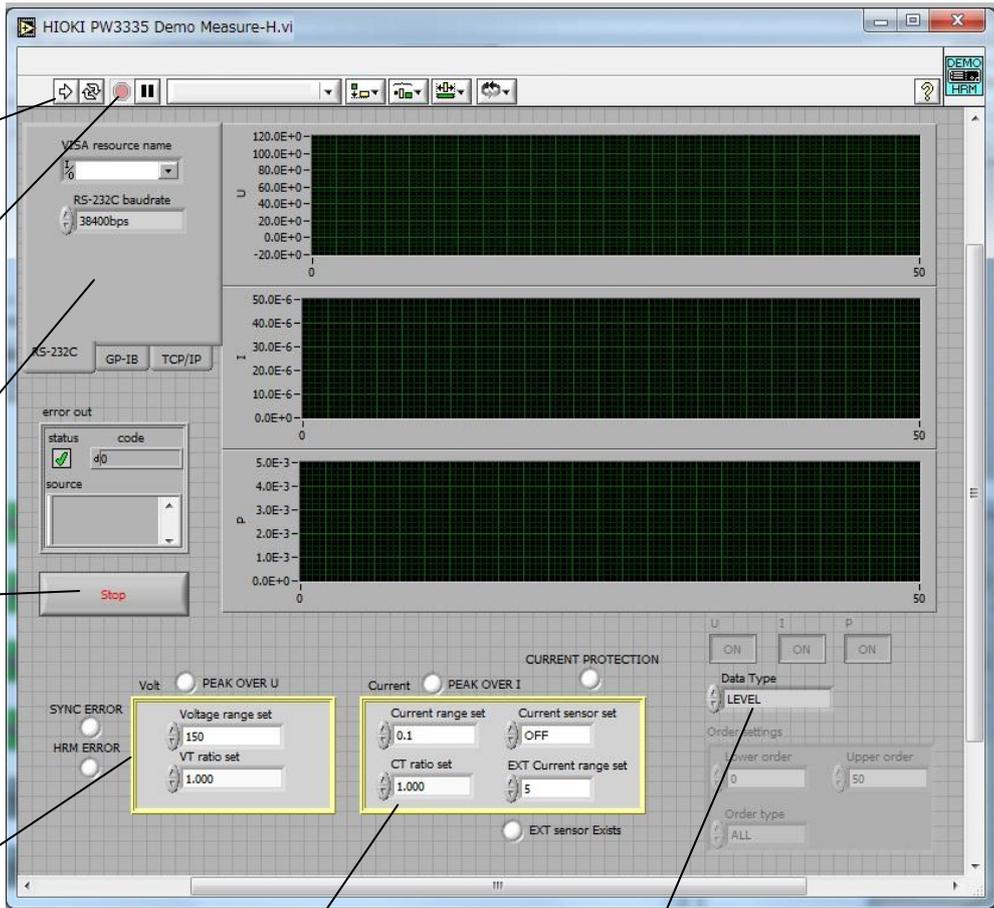
(3) Interface setting

(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 VISA resource name field, RS-232C baudrate (38400bps), and communication interface options (RS-232C, GP-IB, TCP/IP). There are four time-series graphs showing measurement data. The interface also features a status section with error out, status, code, and source fields, and a 'Stop' button. At the bottom, there are settings for Voltage range set (150), VT ratio set (1.000), Current range set (0.1), Current sensor set (OFF), CT ratio set (1.000), and EXT Current range set (5). There are also indicators for SYNC ERROR, PEAK OVER U, PEAK OVER I, CURRENT PROTECTION, and EXT sensor Exists. An 'Item' list on the right allows selecting measurement items for Graph 1 (U), Graph 2 (I), Graph 3 (P), and Graph 4 (PF).

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.

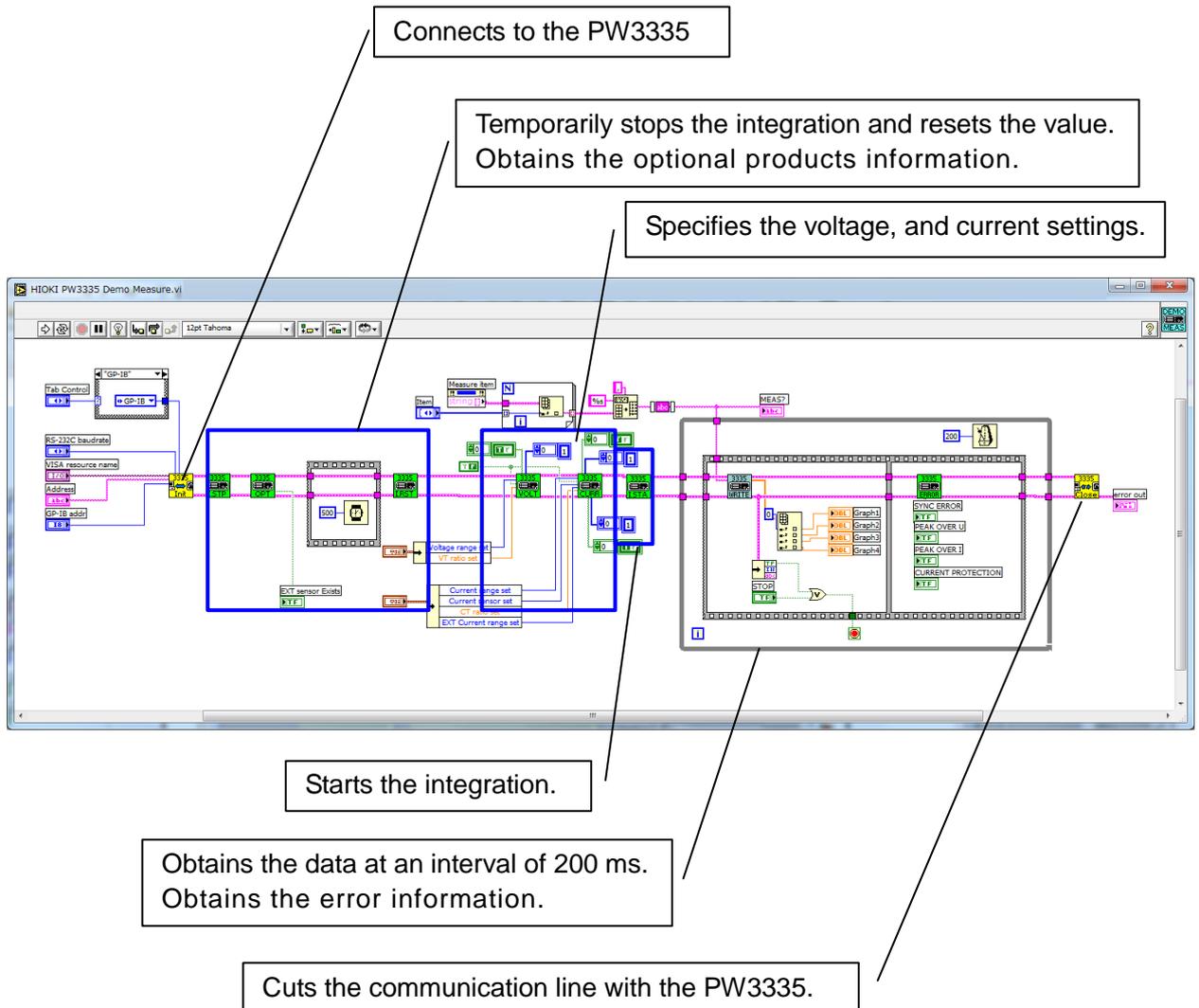
During the program execution, the lighted lamps indicate the instrument status.

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 window shows error codes and sources. Three bar graphs display harmonic data. Settings for voltage range (150), VT ratio (1.000), current range (0.1), CT ratio (1.000), and current sensor (OFF) are visible. A 'Data Type' dropdown is set to 'LEVEL'. Error indicators for SYNC ERROR, HRM ERROR, PEAK OVER U, PEAK OVER I, CURRENT PROTECTION, and EXT sensor Exists are present.

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

