VR-6100 Vibration Level Meter

Automatic storing procedure of the 1/3 real time octave analysis

ONO SOKKI CO., LTD.

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■ Measurement condition

The measurement starts immediately after pressing the start button.

The measurement data is stored automatically in every ten seconds.

The storage data is instantaneous data of 1/3 real time octave analysis.

The measurement stops when the start button is pressed again.

■ Function to use

- VR-0654 1/3 oct real time octave (Option)
- Timer function
- Real time memory

■ Operation procedure

1. **Changing the screen to the 1/3 real time octave analysis screen (VR-0654 option is required.)**

2. **Setting the level range**

   Set the measurement range level with the panel switch [△] or [▽] (LEVEL).

3. **Setting the memory address**

   Press the panel switch [<] or [>] (ADDRESS) to select the memory address for data storage. The memory address that is chosen at this time is indicated on the LCD display screen next to the alphabet R (memory mode display). In addition, if the data has been already stored, * mark is indicated next to the memory address.

   <Caution>
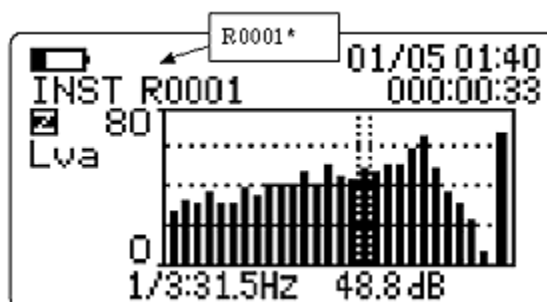
   When the real time analysis screen is selected, R memory starts automatically.

4. **Setting the timer measurement condition**

   In the timer measurement setting screen of menu mode [5.TIMER], set the measurement starting time [START], measurement interval [MEAS.T], measurement period [PERIOD], and total measurement time [TOTAL] as following values.

START	OFF
MEAS.T	000:00:01
PERIOD	000:00:10
TOTAL	000:00:00

① **Switching to the timer measurement setting screen [5.TIMER]**

Press the panel switch [MENU] to switch to the menu mode. Next, press the panel switch [△] or [▽] (ADDRESS) to flash [5.TIMER]. In the end, press the panel switch [ENTER] to switch the screen to timer measurement setting screen [5.TIMER].

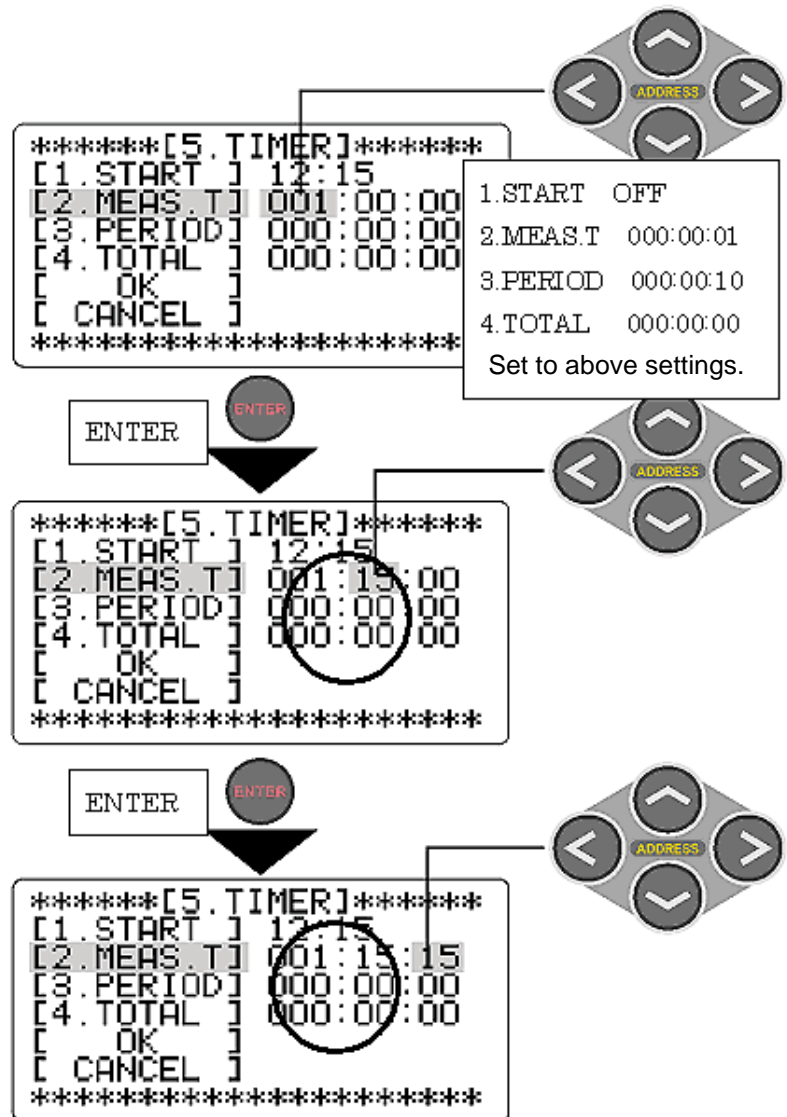② **Setting the measurement starting time [1.START] to OFF**

Press [△] or [▽] (ADDRESS), and press the panel switch [ENTER] while [1.START] on the timer measurement setting screen is flashing, flashing cursor is switched to the setting item of measurement time (initial setting is OFF). Press the panel switch [△] or [▽] (ADDRESS) to switch the measurement starting time into "OFF" setting. Press the panel switch [ENTER] to confirm the setting condition.

```
******[ MENU ]******
[1. DATE SET     ]
[2. RS232C       ]
[3. COND MEMORY  ]
[4. DATA MEMORY  ]
[5. TIMER        ]
[6. COMP OUT     ]
********************
```

ENTER

```
******[5.TIMER]******
[1.START ] OFF
[2.MEAS.T] 000:00:00
[3.PERIOD] 000:00:00
[4.TOTAL ] 000:00:00
[    OK   ]
[ CANCEL ]
*********************
```

ENTER

```
******[5.TIMER]******
[1.START ] 12:15
[2.MEAS.T] 000:00:00
[3.PERIOD] 000:00:00
[4.TOTAL ] 000:00:00
[    OK   ]
[ CANCEL ]
*********************
```

ADDRESS

Set to OFF

③ **Setting the measurement time [2.MEAS.T]**

Press the panel switch [△] or [▽] (ADDRESS), and press the panel switch [ENTER] while [2.MEAS.T] on the timer measurement setting screen is flashing, flashing cursor is switched to the setting item of measurement time (initial setting is 000:00:00).

Press the panel switch [<] or [>] (ADDRESS), move the flashing cursor to the (second) unit digit and set the 000:00:01 with panel switch [△] or [▽].

Press the panel switch [ENTER] to confirm the setting conditions.

```
******[5.TIMER]******
[1.START ]  12:15
[2.MEAS.T]  001:00:00
[3.PERIOD]  000:00:00
[4.TOTAL ]  000:00:00
[     OK     ]
[  CANCEL  ]
*********************
```

```
1.START   OFF
2.MEAS.T  000:00:01
3.PERIOD  000:00:10
4.TOTAL   000:00:00
Set to above settings.
```

ENTER

```
******[5.TIMER]******
[1.START ]  12:15
[2.MEAS.T]  001:15:00
[3.PERIOD]  000:00:00
[4.TOTAL ]  000:00:00
[     OK     ]
[  CANCEL  ]
*********************
```

ENTER

```
******[5.TIMER]******
[1.START ]  12:15
[2.MEAS.T]  001:15:15
[3.PERIOD]  000:00:00
[4.TOTAL ]  000:00:00
[     OK     ]
[  CANCEL  ]
*********************
```

④ **Setting the measurement period [3.PERIOD] and total measurement time [4.TOTAL]**

Set the values of the measurement period (3.PERIOD) to 0 hour 00 minute 10 second (000: 00: 10), and total measurement time (4.TOTAL) to 00 hour 00 minute 00 second (000: 00: 00) respectively.

⑤ **Confirming the setting values**

After setting all conditions, move the flashing cursor to [OK] on the measurement time setting screen [5.TIMER]. When the panel switch [ENTER] is pressed, all the setting conditions on the measurement time setting screen [5.TIMER] are confirmed, and screen is returned to the main menu. And when the panel switch [MENU] is pressed, the screen is returned to the measurement screen.

<Caution>
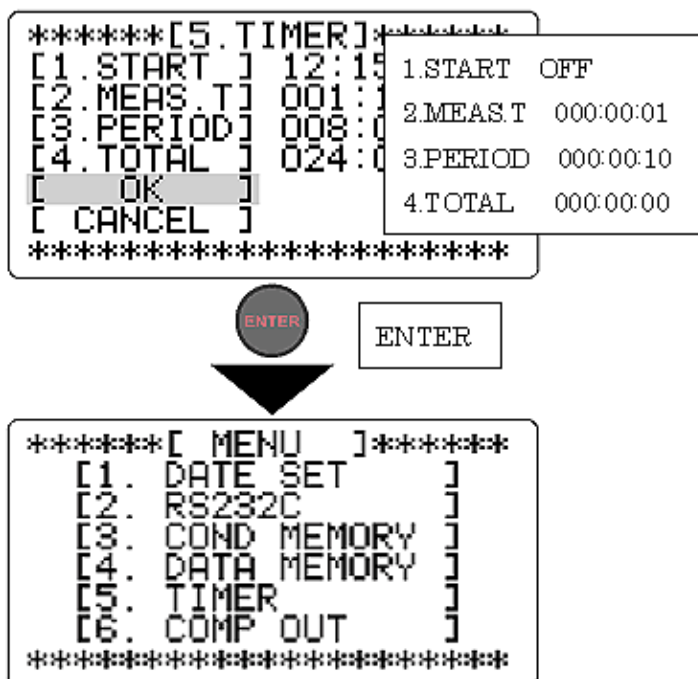
If the panel switch [ENTER] is pressed while [OK] is flashing, all conditions that are set on timer measurement setting screen [5.TIMER] are confirmed, and switched directly to the measurement screen.

```
******[5.TIMER]********
[1.START ] 12:15
[2.MEAS.T] 001:1
[3.PERIOD] 008:0
[4.TOTAL ] 024:0
[    OK    ]
[ CANCEL ]
**********************
```

```
1.START   OFF
2.MEAS.T  000:00:01
3.PERIOD  000:00:10
4.TOTAL   000:00:00
```

ENTER

```
******[ MENU ]******
[1. DATE SET     ]
[2. RS232C       ]
[3. COND MEMORY  ]
[4. DATA MEMORY  ]
[5. TIMER        ]
[6. COMP OUT     ]
********************
```

5. Executing the timer measurement

① **Switching the timer measurement to ON**

Press the panel switch [TIMER] to switch the timer measurement ON. At that time, the "TIMER" mark is indicated on the screen.

Timer measurement ON

```
            TIMER  01/05 01:40
INST R0001         000:00:33
Z 80
Lva

0
1/3:31.5Hz    48.8dB
```
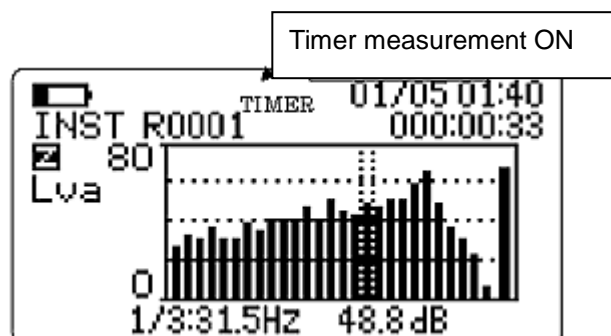
② **Starting the time measurement**

When the panel switch [START] is pressed, the timer measurement is started. When first actual measurement is finished, the data is stored to the specified address. The second measurement starts after 10 seconds, and from second measurement, measurement result is automatically and sequentially stored to the next address with the interval of 10 seconds.

<Caution>

When displays L_{eq} on the screen during the timer measurement, stored data is not L_{va} (instantaneous data) but becomes L_{eq} (average value) with the interval of 1 second. Please note that the displayed data will be stored. When new data is stored to the address which indicates * mark, the original data is overwritten. Also, at this time, address of real time memory is moved to the next address automatically after the storing operation.

When the data storing is completed to the final address of R2880, the data cannot be stored until the timer measurement is turned OFF, or the new timer measurement is started.

When the address is switched to R2880 beforehand, only timer measurement is executed and the memory is not stored.

6.　The real time memory data recall procedure

① **Selecting the real time octave display**

Press [THRU/ FILTER] [1/1,1/3, REALTIME] to switch to the real time octave screen.

② **Selecting the memory address**

Press panel switch [<] or [>] (ADDRESS) to select the memory address which is stored the data to be recalled. The memory address that is chosen at this time is indicated in the LCD display screen next to the alphabet R (memory mode display). In addition, if the stored data is already existed, * mark is indicated next to the memory address. (Examples R0001*)

③ **Executing the data recall**

When the panel switch [RECALL] is pressed to switch to the recall screen, the measurement condition of calculation and calculation result are recalled, and stored data is indicated on the LCD screen together with the RCL mark.

Reading out the stored data
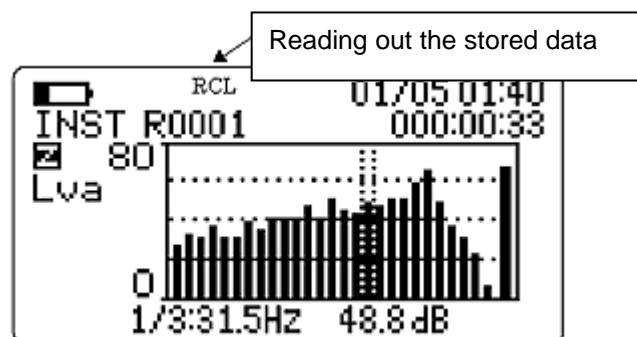
④ **Returning to the measurement screen**

To return to the measurement screen, press the panel switch [RECAL], and turn the RCL mark OFF.

<Caution>

The memory data cannot be recalled during the calculation or displaying menu screen.

When you select the address without * mark, trace back and search the address which is already stored the data and recall the first data.

When you switch the memory address in the memory data recall screen, it will find the address which is stored the data. The numerical value of the address will be changed automatically. During the recall operation, the display of [AXIS]/[L Leq LE] cannot be changed with the panel switch.

7. Changing the display screen

When the panel switch [LIST] is pressed, the screen is changed to the list from the bar graph. The switching screen examples are as follows.

●Bar graph

```
■□            01/05 01:40
INST R0001    000:00:33
☒  80
Lva




 0
1/3:31.5Hz    48.8dB
```

LIST

LIST

●Real time list (0.8 Hz to 6.3 Hz)

```
■□            01/05 01:41
INST R0001    000:00:55
Lva   ☒
0.8Hz  37.0dB 2.5Hz  41.5dB
1.0    38.8  3.15    36.1
1.25   39.7  4.0     37.6
1.6    40.2  5.0     36.2
2.0    34.7  6.3     37.0
```

LIST

LIST

●Real time list (80 Hz to ALLPASS)

```
■□            01/05 01:41
INST R0001    000:01:07
Lva   ☒
8.0Hz  42.0dB 25Hz   46.1dB
10     41.8  31.5    47.4
12.5   43.6  40      49.6
16     43.7  50      51.9
20     46.6  63      49.2
```

LIST

LIST

●Real time list (8 Hz to 63 Hz)

```
■□            01/05 01:42
INST R0001    000:01:07
Lva   ☒
80Hz   53.7dB 250Hz  20.5dB
100    64.3  315      5.9
125    47.9  AP      65.3
160    37.0
200    29.3
```

- END -