

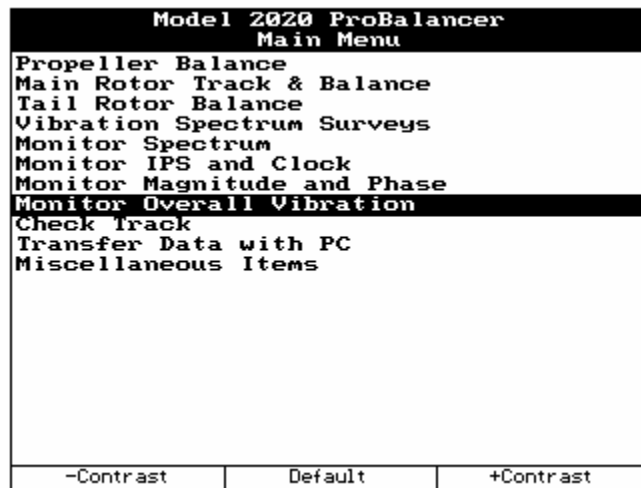
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# Chapter 11

## Monitor Overall Vibration

(Revision 3, July 2007)

“Monitor Overall Vibration” is an analyzer function that is accessed from the analyzer’s Main Menu banner screen. A description of this function follows, along with the information required to complete the menu screens within the function, and the steps necessary to perform the function.



“Monitor Overall Vibration” allows the user to monitor the overall vibration condition of a system or component in a digital numeric display only. This function also provides the means to monitor under one set of criteria, then quickly change those criteria and return to the monitor mode. As with all “monitor” functions of the analyzer, there are no provisions for storing, reviewing, or printing the monitored data.

To use the “Monitor Overall Vibration” function, do the following:

1. Select “Monitor Overall Vibration” from the Main Menu banner screen.

The “Overall Vibration Setup” banner screen appears as shown below. To complete the “Overall Vibration Setup” screen, define the fields according to your requirements.

Model 2020 ProBalancer Overall Vibration Setup	
Min Frequency:	0.0
Max Frequency:	60000.0
Freq Units:	RPM
Measure Inputs:	A+B
Channel A Desc:	Chan A
Channel B Desc:	Chan B
Vibration:	g's
Mod:	Peak
Full Scale Vibration:	1.00
Sensor:	991D-1

2. Enter the minimum frequency of interest in the “Min Frequency” field using the keypad. (Refer to Chapter 3, “Using the Model 2020 ProBalancer Analyzer” if you are unfamiliar with using the keypad.)
3. Use the [↓] key to move down to the next field. Using the keypad, enter the maximum frequency of interest in the “Max Frequency” field.
4. Use the [↓] key to move down to the “Freq Units” field. Use the [⇒] key to toggle between the selections in this field. The selections are RPM or Hz.

#### CAUTION

**Sensors connected to Channel A and Channel B must be of the same type. Using different sensors during the same job will cause erroneous readings and problems achieving good balance results.**

5. Use the [↓] key to move down to the “Measure Inputs” field. Use the [⇒] key to toggle between the selections in this field. Select A, B, or A+B according to your needs.

Choosing a single channel for measurement will allow you to select 1,200,000 RPM (20,000 Hz) as the “Max Frequency.” Selecting to sample two channels will allow for a “Max Frequency” of 720,000 RPM (12,000 Hz) on each individual channel.

6. Use the [↓] key to move down to the “Channel A Desc” and “Channel B Desc” fields. Using the keypad, enter a descriptive name (up to six alphanumeric characters) for each Channel input. Use the [↓] and [↑] keys to move between these fields.
7. Use the [↓] key to move down to the “Vibration” field. Select the engineering units you wish the vibration to be displayed in by using the [⇒] key to toggle between the available selections which are g's, IPS, mm/sec, cm/sec, mils, and microns.
8. Use the [↓] key to move down to the “Mod” field. Select the unit modifiers for your display by using the [⇒] key to toggle between the available selections which are Peak, Pk-Pk, Avg, and RMS.

9. Move to the “Full Scale Vibration” field by using the [↓] key. Use the [⇒] key to toggle between the available selections in this field. Select a level of vibration that will be higher than, but not less than, the highest level of vibration you expect to encounter.
10. Use the [↓] key to move down to the “Sensor” field. Select the vibration sensor you are using for this job by using the [⇒] key to toggle between the available selections. If the sensor you are using is not displayed refer to Paragraph 13.2.2. “Sensor Setup.”
11. When all fields are defined, press [ENTER] to begin monitoring.
12. The “Overall Vibration” monitoring banner screen will display the current and maximum vibration levels for Channel A and Channel B according to your specifications. The total number of samples taken and the Units of engineering will also be displayed. Press the [F1] key if you want to reset the screen and retake data.
13. If you want to exit back to the “Overall Vibration Setup” banner screen to change the parameters for the monitoring, press either [BACKUP] or [ENTER]. You will be returned to the “Overall Vibration Setup” banner screen where you can then change any of the defined fields. Press [ENTER] to begin monitoring under the new criteria.
14. To exit the “Monitor Overall Vibration” function, press [BACKUP] twice from the monitoring screen or once from the “Overall Vibration Setup” screen.