Miro PCM-P Points Condition Monitor User Manual

CHK POWER QUALITY
Experts in Power Quality
Get more Work from your Power

Technical Note: Miro Points Condition Monitor (PCM) Button Interface
This guide introduces the Miro PCM button interface and the different functionalities they offer.

Contents

1 Introduction
2 Buttons
3 LCD Pages
4 Maintenance Mode
5 Start Training
6 Documents / Resources
6.1 References
7 Related Posts

Introduction

The Miro Points Condition Monitor (PCM) has a button user interface to allow the instrument to be put into training and maintenance modes on-site, without needing to connect locally or remotely with a PC. Both the Pneumatic (Miro PCM-P) and Electric (Miro PCM-E) variants use this same interface.

Buttons

Two buttons are available, ‘F1’ and ‘F2’ as seen in Figure 1. ‘F1’ is used for ‘forward’ or ‘OK’, while ‘F2’ is used for ‘back’, ‘next option’ or ‘cancel’.

Figure 1 – Bottom view of the Miro PCM instrument

LCD Pages

The function of the buttons varies depending on which LCD page is currently being displayed. For a point monitoring application, disabling every LCD page except Points in the Configurations tab via Citrus can simplify the use of the buttons (Figure 2).

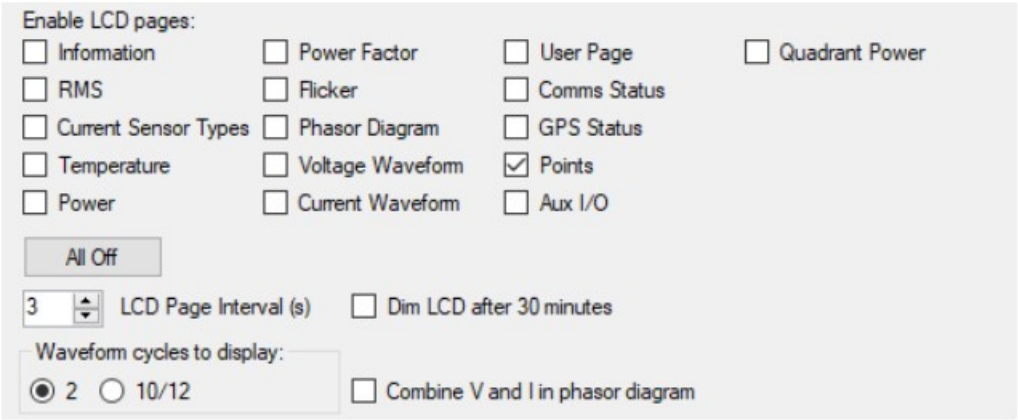


Figure 2 - Miro LCD Page Configuration tab

If not currently displayed, the user can quickly switch to the Points pages (or any other enabled pages) using the buttons as described in the next section.
If the Points pages need to be hidden, deselect Points in the configuration. This will prevent the LCD auto scrolling to the Points pages, though the Points sub-pages can still be accessed manually via the buttons as described in the ‘Points Menu’ section of this note.

Other Pages

When the LCD is displaying a page that is not part of the Points pages, the buttons work as follows:
Pressing the ‘F1’ button switches to the next page.
Pressing the ‘F2’ button switches to the previous page. If Points was selected in the LCD configuration page and if any of the Points pages is currently being shown on the LCD, pressing ‘F1’ or ‘F2’ will make the LCD only scroll through the 3 different Points pages. To leave the Points pages, wait for the LCD to auto-cycle back to the non-Point pages.
Pressing both ‘F1’ and ‘F2’ buttons simultaneously will always open the Points Menu.

Points Pages

The ‘F1’ and ‘F2’ buttons can be used to step through the 3 different Points pages:

- Status.

Voltage/current (for Miro PCM-E) or pressure/flow (for Miro PCM-P) for all channels

- Last A-Side operation (Normal or Reverse)
- Last B-Side operation (Normal or Reverse).

  Applies only to the Miro PCM-E.

  The 3 different pages can be seen below in Figures 3 to 6.

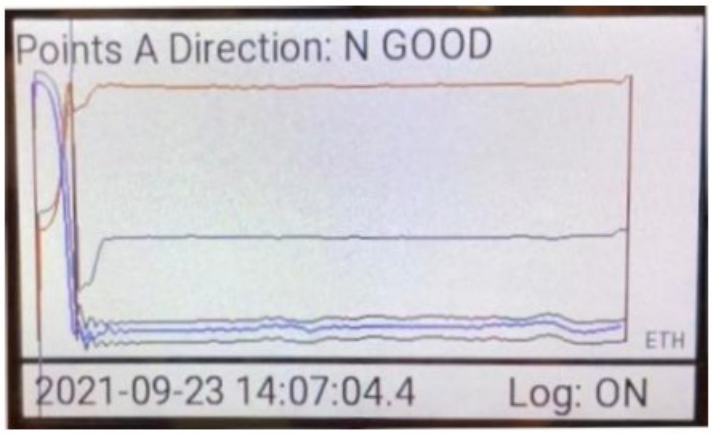


Figure 3 - Last points operation screen for A-side

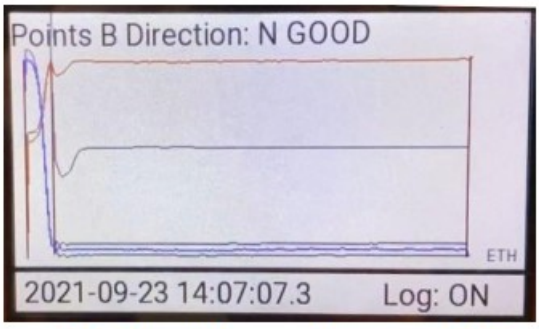


Figure 4 - Last points operation screen for B-side

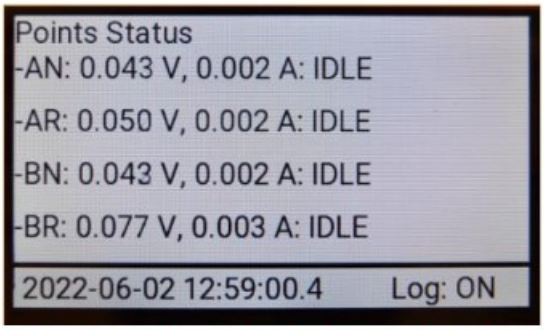


Figure 6 - Status page for Miro PCM-E showing real time voltage and current

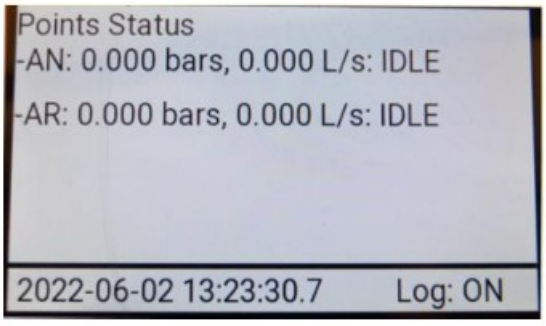


Figure 7 - Status page for Miro PCM-P showing real time pressure and flow

Points Menu

Figure 7 shows the Points Menu page. ‘F2’ is used to scroll through the menu items via the cursor. ‘F1’ activates a menu item. The user will be asked to confirm the item by pressing ‘F1’ again or cancel by pressing ‘F2’. The Points menu can always be accessed by pressing both ‘F1’ and ‘F2’ simultaneously. Exiting the Points menu will take you to the Points pages regardless of whether Points has been selected in the LCD configuration or not. To leave the Points pages, wait for the LCD to auto-scroll back to the non-Point pages as previously mentioned.

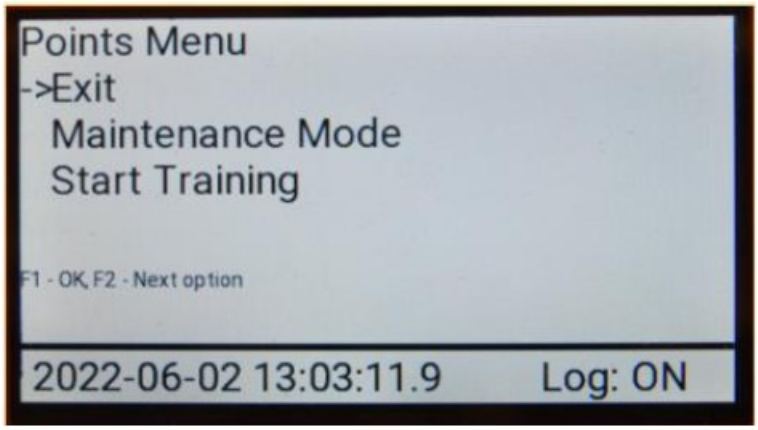


Figure 10 - Miro LCD page Points Menu screen

Maintenance Mode

This will start 2 hours of maintenance mode. To set the Miro PCM into maintenance mode, go to the Points menu and move the cursor to ‘Maintenance Mode’ using the ‘F2’ button and select it using the ‘F1’ button. Upon selection, the device will ask to confirm selection as seen in Figure 8. Press ‘F1’ to confirm selection or ‘F2’ to cancel.

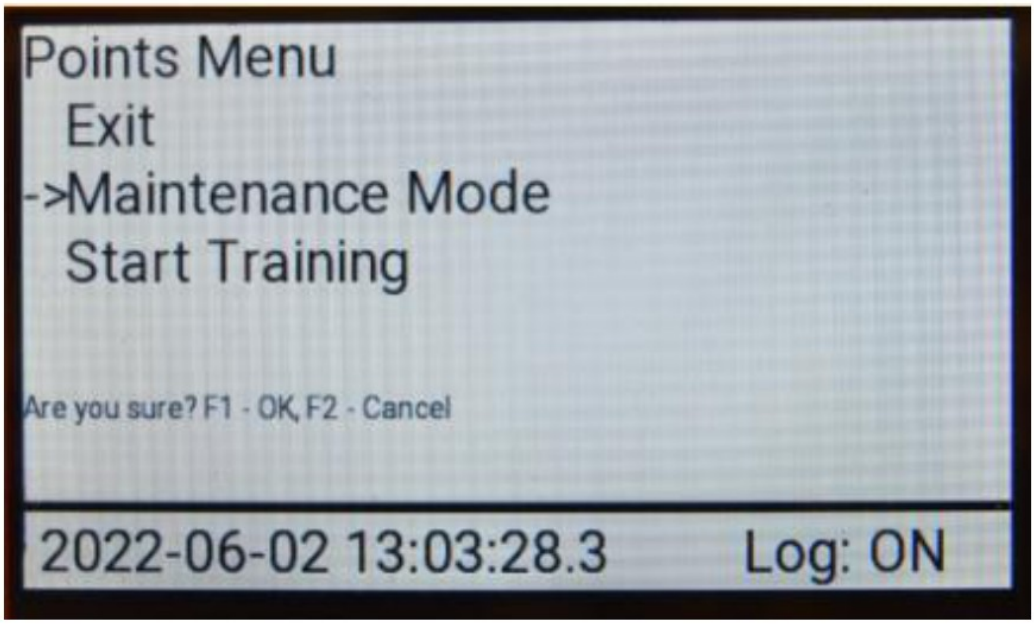


Figure 5

Upon confirmation, the instrument will be put into maintenance mode and the word ‘MAINTAINENCE MODE:’ along with a counter starting from 7200 (seconds) will appear on the LCD screen permanently until the counter counts down from 7200s to 0s as shown below in Figure 9.

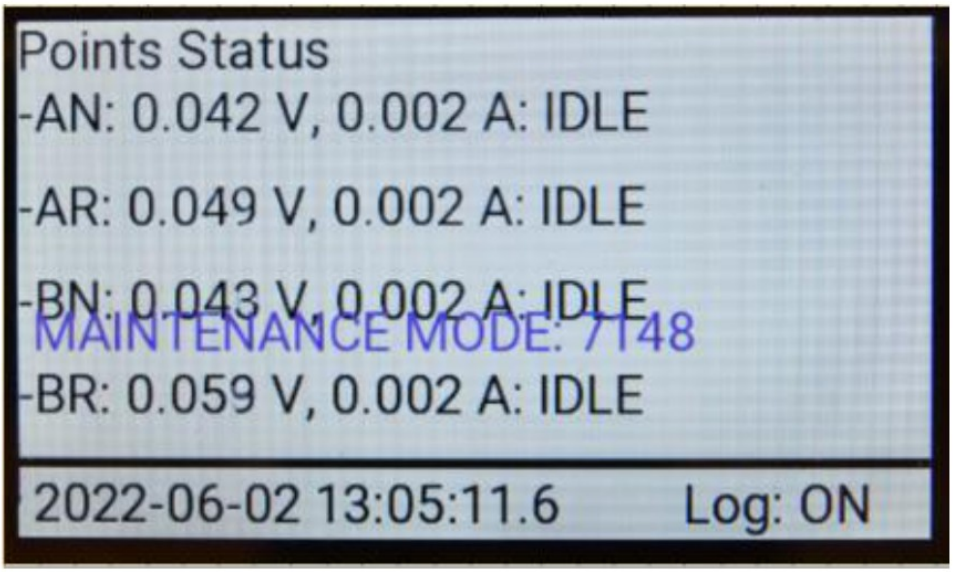


Figure 8 - The LCD screen showing the instrument in maintenance mode

While the instrument is in maintenance mode, all points operations will be listed as 'Maintenance' in the AsMoSys database, and no alarms or alerts will be generated even when an operation is determined as 'Possible Issue' or 'Critical'. Figure 10 shows the operations when in Maintenance mode.

Points Operation at: 2022-05-27 14:35:07 Channel: A-Normal-I (IA) Maintenance
Points Operation at: 2022-05-27 14:35:17 Channel: A-Normal-I (IA) Maintenance
Points Operation at: 2022-05-27 14:35:27 Channel: A-Normal-I (IA) Maintenance
Points Operation at: 2022-05-27 14:35:37 Channel: A-Normal-I (IA) Maintenance
Points Operation at: 2022-05-27 14:35:47 Channel: A-Normal-I (IA) Maintenance
Points Operation at: 2022-05-27 14:35:57 Channel: A-Normal-I (IA) Maintenance
Points Operation at: 2022-05-27 14:36:07 Channel: A-Normal-I (IA) Maintenance
Points Operation at: 2022-05-27 14:36:17 Channel: A-Normal-I (IA) Maintenance
Points Operation at: 2022-05-27 14:36:27 Channel: A-Normal-I (IA) Maintenance
Points Operation at: 2022-05-27 14:36:37 Channel: A-Normal-I (IA) Maintenance

Figure 9

If the Miro PCM instrument is powered down while in Maintenance mode and then powered up again, the Miro PCM resets and will default to normal operations mode. This can be seen on the LCD where the text, MAINTAINENCE MODE:' is not displayed. The Miro PCM will have to be set into Maintenance mode again, as required.

Start Training

This will start the training process. During training mode, the instrument will log 30 point operations and create reference traces. Upon approval of the reference traces by authorised personnel, the reference traces will be used to determine whether point operations are 'Good', 'Possible Issue' or 'Critical'.
To set the Miro PCM to training mode, navigate to the Points menu, move the cursor to 'Start Training' using the 'F2' button and select it using the 'F1' button. Upon selection, the device will ask to confirm selection as seen in Figure 11. Press 'F1' to confirm selection or 'F2' to cancel.

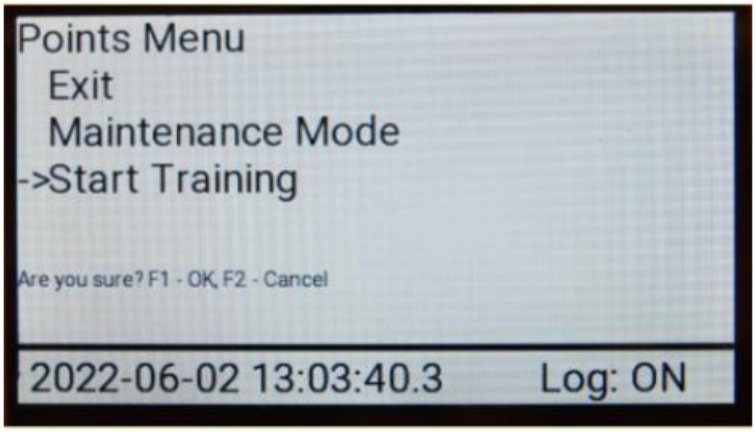


Figure 12

Upon confirmation, the instrument will be put into training mode. There will be no visual indicator to say that the Miro PCM instrument has been put into training mode on the LCD, but on the AsMoSys database event log, there will be events that state when training started and when training finished. Please refer to Figure 12.

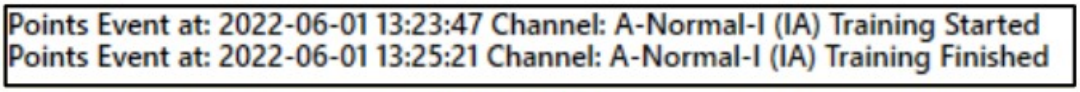


Figure 11

During training mode and before approval of the training data, no point operation will be classified as either 'Good', 'Possible Issue' or 'Critical' on the AsMoSys database. Instead, operations will be listed as 'Training Not Complete' during the training period or as 'Awaiting Limit Approval', when the training limits have yet to be approved. Point events that occur during this time will also be listed as 'Unapproved'. Please see Figure 13.

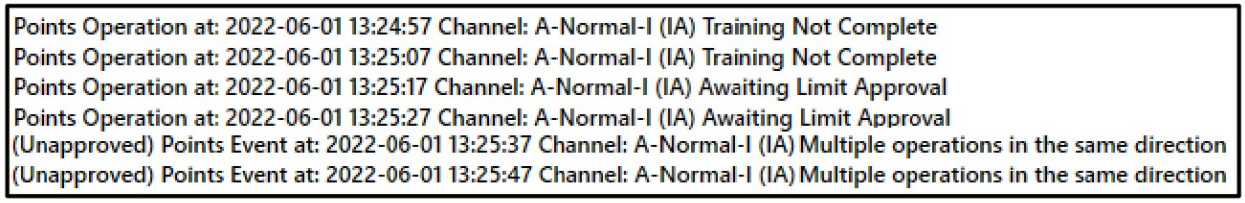
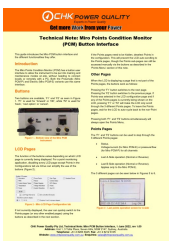


Figure 13

CHK Power Quality Pty Ltd, Technical Note: Miro PCM Button Interface, 1 June 2022, rev 1.00
Address: Unit 1, 3 Tollis Place, Seven Hills, NSW 2147, Sydney, Australia
Telephone: +61 2 8283 6945;
Fax: +61 2 8212 8105
Website: www.chkpowerquality.com.au;
Enquiries: sales@chkpowerquality.com.au

Documents / Resources

	Miro PCM-P Points Condition Monitor [pdf] User Manual PCM-P, PCM-E, PCM-P Points Condition Monitor, Points Condition Monitor, Condition Monitor, Monitor

References

- Power Quality Experts & Asset Condition Monitoring | CHK Power Quality
- Power Quality Experts & Asset Condition Monitoring | CHK Power Quality

Manuals+.