DX200C DAQSTATION Circular Recorder

IM 04L03A01-01E 2nd Edition

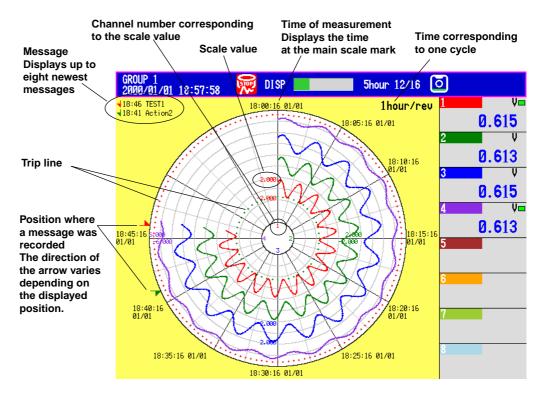
2nd Edition : March 2001 (YK)

All Rights Reserved, Copyright © 2000, Yokogawa Electric Corporation

Thank you for purchasing the DX200C with the circular display function. This User's Manual describes the circular display function of the DX200C. Please use this manual along with the DX200 User's Manual (IM04L02A01-01E).

Overview

This recorder is a DX200C DAQSTATION circular recorder.

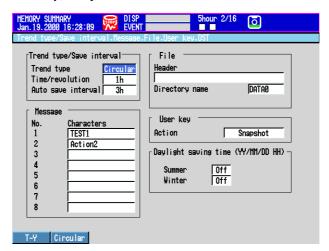


You can select circular display or normal trend display in the setting mode. If you select trend display through screen switching in the operation mode, circular display or trend is shown based on the setting mode setting.

Procedure

Switching to circular display and setting the time corresponding to one cycle

- 1. Press the MENU key to enter the setting mode.
- 2. Press the soft key corresponding to [#3 Trend type/Save interval, Message, File, User key, DST].



- 3. Set [Trend type] to [Circular]. To display the normal trend, select [T-Y].
- 4. Set the time corresponding to one cycle on the circular display to [Time/ revolution]. Select from 1h, 2h, 6h, 8h, 12h, 16h, 1day, 2day, 1week, 2week, and 4week.
- 5. Press the DISP/ENTER key.

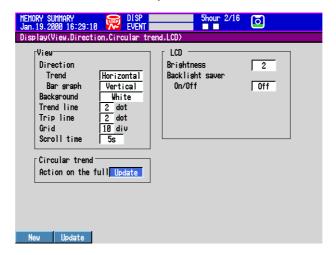
Note

On the DX200C, 15s/div and 30s/div cannot be selected as the display update rate even when T-Y is set as the trend type. Please see page 7-3 of the User's Manual (IM04L02A01-01E).

Setting the update method of the screen

Select the method by which the screen is updated: (1) one scale mark of the old waveform is cleared when the remaining amount of waveform reaches one scale mark or (2) clear the entire waveform when one cycle of the waveform has been recorded.

- 1. Press the MENU key to enter the setting mode.
- 2. Press the soft key corresponding to [#4 Display] to display the display menu.
- 3. Press the soft key corresponding to [#4 View, Direction, Circular trend, LCD].
- 4. Select [New] or [Update] for [Action on the full].
- 5. Press the DISP/ENTER key.



Scale marks

The number of scale marks varies depending on the time corresponding to one cycle. Scale marks consists of main scale marks and subscale marks. Main scale marks are used to divide the cycle into sections; subscale marks are used to divide between the main scale marks. The number of divisions created by main scale marks and subscale marks are as follows:

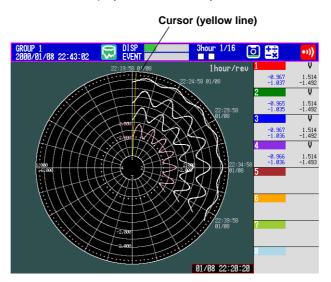
2 IM 04L03A01-01E

| Time/rev | Number of Divisions Created by Main Scale Marks | Number of Divisions Created by Subscale Marks | Time per Scale Mark | Display Update Rate |
|----------|---|---|------------------------|------------------------|
| 1h | 12 | 2 | 2 min 30 s | 2 s |
| 2h | 12 | 2 | 5 min | 4 s |
| 6h | 12 | 2 | 15 min | 10 s |
| 8h | 8 | 2 | 30 min | 20 s |
| 12h | 12 | 2 | 30 min | 20 s |
| 16h | 8 | 2 | 1 h | 40 s |
| 1day | 12 | 2 | 1 h | 1 min |
| 2day | 12 | 2 | 2 h | 2 min |
| 1week | 7 | 4 | 6 h | 4 min |
| 2week | 7 | 4 | 12 h | 8 min |
| 4week | 4 | 7 | 24 h | 20 min |

Historical trend

The procedure for displaying the historical trend is the same as the procedure for displaying the historical trend for the normal trend. See section 4.6, "Using the Historical Trend" in the User's Manual IM04L02A01-01E.

When the circular display is shown, the historical trend and data being measured cannot be displayed simultaneously.



To display data before or after the current displayed data, carry out the following procedure:

- 1. To display data before the current waveform (older waveform), hold down the left arrow key until the cursor moves to the beginning of the waveform. To display data after the current waveform (newer waveform), hold down the right arrow key until the cursor moves to the end of the waveform. When the cursor moves to the beginning or the end of the waveform, the cursor no longer moves even if you continue to press the arrow key.
- 2. Press the same arrow key again to change the displayed waveform.

Selecting another file

To display data from another file, select the file from the memory summary. **Message**

On the historical trend, up to eight newest messages that exist before the cursor position can be displayed.

IM 04L03A01-01E 3

Event data

When displaying event data using the historical trend, the time corresponding to one cycle is automatically determined from the sampling interval of the event data to be displayed as follows:

| Scan interval | Time/rev | Number of Divisions Created by Main Scale Marks | Number of Divisions Created by Subscale Marks |
|---------------|------------|---|---|
| 125 ms | 5 min/rev | 5 | 4 |
| 250 ms | 10 min/rev | 5 | 4 |
| 500 ms | 20 min/rev | 5 | 4 |
| 1 s | 30 min/rev | 6 | 4 |
| 2 s | 1 h/rev | 12 | 2 |
| 5 s | 2 h/rev | 12 | 2 |
| 10 s | 6 h/rev | 12 | 2 |
| 30 s | 12 h/rev | 12 | 2 |
| 60 s | 1 day/rev | 12 | 2 |
| 120 s | 2 day/rev | 12 | 2 |
| 300 s | 1 week/rev | 7 | 4 |
| 600 s | 2 week/rev | 7 | 4 |

Addition of Communication Commands

C1 Sets the trend type.

Syntax C1 p1<terminator>

p1 Trend type

T-Y Normal trend display

CIRCULAR Circular display

Query C1?

Example Set to circular display.

C1 CIRCULAR

C2 Selects the update method of the circular display.

Syntax C2 p1<terminator>

p1 Update method

NEW Clear the entire screen.

UPDATE Clear the data corresponding to one scale mark.

Query C2?

Example Set the update method to the method in which the entire screen is

cleared.

C2 NEW

SW Sets the waveform update rate (for circular display)

Syntax SWp1, p2<terminator>

p1 Time corresponding to one cycle (1H, 2H, 6H, 8H, 12H, 16H, 1DAY, 2DAY, 1WEEK, 2WEEK, 4WEEK)

p2 Auto-save interval (10MIN, 20MIN, 30MIN, 1H, 2H, 3H, 4H, 6H, 8H, 12H, 1DAY, 2DAY, 3DAY, 5DAY, 7DAY, 10DAY,

Query SW?

Example Set the time corresponding to one cycle to one day and the auto-

save interval to two days.

SW 1DAY, 2DAY

14DAY, 31DAY)

Description • For the equivalent command for the normal trend display, see

User's Manual IM04L02A01-17E.

4 IM 04L03A01-01E