

# System 800xA PC Toolkit Library for Melody V5.1-4 Release Notes

System Version 5.1

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## 1. Release Notes

### 1.1 General



Any security measures described in this document, for example, for user access, password security, network security, firewalls, virus protection, and so on, represent possible steps that a user of an 800xA System may want to consider based on a risk assessment for a particular application and installation. This risk assessment, as well as the proper implementation, configuration, installation, operation, administration, and maintenance of all relevant security related equipment, software, and procedures, are the responsibility of the user of the 800xA System.

### 1.2 Introduction

PC Toolkit Library for Melody Version V5.1-4 has been released for System 800xA SV5.1 (all Rev and FP versions). It also enumerates known problems encountered in the final testing of this product release and identifies workarounds that help overcome the problem. The document contains additional notes that may be valuable to the customers and service personnel working with the product. This document replaces the existing release notes for the prior release and is included on the product media.

## 2. Functionality

The PC Toolkit Library for Melody is a system extension for System 800xA. It extends the standard 800xA software with display libraries and functional libraries for the process industries (Chemical, Oil and Gas). It consists of a Basic set and one or more additional optional packages. The basic set is mandatory. It includes a standardized ready-to-use workplace, engineering tools, faceplates for the operating of functions and graphic elements for setting up process graphics. The PC Toolkit Library for Melody/AC870P is harmonized with faceplates and graphic elements for Freelance/AC800F and AC800M to the greatest extend.

### The PC Toolkit Library for Melody comprises

| Package | Description   |
|---------|---|
| Basis   | <ul style="list-style-type: none"> <li>Preconfigured one- and two-screen Operator Workplace</li> <li>Graphic Elements and Faceplates for all Melody Function Blocks (used in the Process Industries Petrochem, Oil &amp; Gas)</li> <li>Free Graphic Elements that allow showing mass data like radar diagram and profiling indication.</li> <li>PC Tools supports configuration by automatically generating. It includes Aspect link, Link Generator and SFC Step Text Uploader.</li> <li>Change Password tool allows operators to change the password via the 800xA workplace</li> </ul> |

*Table 2-1 Contents of the Basis software package*

### Following optional software packages are available

| Packages | Description  |
|----------|--|
| HP HMI   | Leverages and expands the capabilities of traditional Graphic Elements and Faceplates. It provides technologies to make operator workplace safe and efficient. |

*Table 2-2 Optional software package*

### 3. Versioning

| Software Package   |
|--|
| ABB PC Graphic Object Types 5.1-4 (Build: 5.1.4.0)             |
| ABB PC Tools 5.1-2 (Build: 5.1.2.0)                            |
| ABB PC Workplace 5.1-4 (Build: 5.1.4.0)                        |
| ABB PC Setup for Melody 5.1-4 (Build: 5.1.4.0)                 |
| ABB PC Library for Melody HP-HMI Add On 5.1-4 (Build: 5.1.4.0) |

Table 3-1 Software package version

#### 3.1 Conditions, Restrictions and Remarks



- Graphic displays that were created under Visual Basic Graphic Editor are still supported but are recommended to be migrated. A migration tool is available and part of the 800xA base product.
- As of version 5.1-3 the classic faceplates cannot be customized anymore (e.g. button style, step size, etc.) as it was possible in earlier versions.
- Refer to section 3BDA033456R5108EN Installation and Configuration when updating PC Setup for Melody to PC Toolkit Library for Melody.
- When using a four-screen-workplace the following rules and restrictions should be considered:
- The response time of a workplace with 4-screens is getting lower, when viewing many tags in alarm state. A limitation of open displays should be therefore considered. Example: Set the limitation at 8 graphic displays (full screen or ¼ screen), 3 trend displays, 1 group displays, 6 faceplates and 2 alarm pages.
- Display Call-up Time System 800xA (refer to 3BSE041434-510 System 800xA 5.1 System Guide Technical Data and Configuration)

| Graphic Displays   | Display Call-up Time          |
|--|-------------------------------|
| Graphic Display with maximum 800 OPC items (100 objects)   | ≤1 secs. <sup>1</sup>         |
| Group Display with 10 faceplates                           | ≤5 secs.                      |
| Faceplate  | ≤1 secs.                      |
| Extended Faceplate   | ≤2 secs.                      |
| Trend Display, at first call-up of trend with 10 variables | ≤2 secs. typical <sup>2</sup> |

**NOTE:**

1. Graphic display references are cached after the first call up which makes subsequent display call ups faster. Each display in a system is cached after the first call up which means there is no limitation in the number of cached displays. The performance figure reflects a cached display.
2. When a trend display contains OPC string values (engineering units), the call-up time will depend on the OPC server string handling configuration. With the default configuration the call-up time will typically be higher.

Table 3-2 Display Call-up Time

## 3.2 Related Documents

The following documents describe installation, configuration and operation with PC Toolkit Library for Melody.

| Category      | Document          | Title                          |
|---------------|-------------------|--------------------------------|
| Operation     | 3BDA033439R5106DE | Bedienen                       |
|               | 3BDA033439R5106EN | Operation                      |
| Configuration | 3BDA033456R5108EN | Installation and Configuration |
|               | 3BDA033440R5104EN | HMI_Analog                     |
|               | 3BDA033441R5104EN | HMI_Dosing Function            |
|               | 3BDA033442R5104EN | HMI_PID Controller             |
|               | 3BDA033443R5104EN | HMI_Block Flags                |
|               | 3BDA033444R5104EN | HMI_Binary                     |
|               | 3BDA033446R5104EN | HMI_IDF                        |
|               | 3BDA033447R5104EN | HMI_SFC                        |
|               | 3BDA033448R5104EN | HMI_Single Flags               |
|               | 3BDA033449R5104EN | HMI_Timer & Pulse Counter      |
|               | 3BDA033450R5104EN | HMI_Counter & Totalizer        |
|               | 3BDA033478R5103EN | HMI_Graphic Properties         |
|               | 3BDA035329R5103EN | HMI_FreeGraphicElement         |

*Table 3-3 Related Documents*



## 4. Product Support

### 4.1 Modifications against previous version

- Change Password Tool implemented. For more info refer to 3BDA033456R5108EN Installation and Configuration and 3BDA033439R5106EN\_Operation
- Temporary Corrections TC1, TC2, TC3 and some other improvements implemented
- Graphic Element mapping implemented. This allows to VB graphics to PG2 graphics by means of the 800xA migration tool.

### 4.2 Fixed Problems and improvements

The table below lists the problems corrected in this Temporary Correction and briefly explains the fix or workaround for each problem.

| Issue  | Correction or Fix |
|--|-------------------|
| IDF HPHMI faceplate: On/Off buttons may not operable in certain cases (Classic PG2 faceplate is working)<br><i>ID: MEL-FP-055</i>  | Fixed with TC1    |
| ANMON/ANOUT/APID HPHMI Faceplate: The MAN/AUT respectively the alternative value switchover buttons are visible even if the ATV/SET is not set (Operation of ATV is not possible)<br><i>ID: MEL-FP-056</i> | Fixed with TC1    |
| APID Graphic elements: Icons for auto and cascade do not correspond to the defined GE position.<br><i>ID: MEL-GE-058</i>   | Fixed with TC1    |
| IDF: The output state indication does not change in the faceplates<br><i>ID: MEL-FP-057, MEL-FP-065</i>  | Fixed with TC2    |
| SFC and IDF: Off, On, and Stop Button not working<br><i>ID: MEL-FP-061</i>   | Fixed with TC2    |
| IDF: On and Off buttons are disabled if both feedbacks are active<br><i>ID: MEL-FP-064 and MEL-FP-064 HPHMI</i>  | Fixed with TC2    |
| SFC and SFC-Phase Faceplate: SFC-Viewer callup button doesn't work in German environment (PG2 Classic and HPHMI)<br><i>ID: MEL-FP-066 and MEL-FP-66 HPHMI</i>  | Fixed with TC2    |
| GE (all pump symbols): Symbol selection "ExcentricScrew" does not work<br><i>ID: MEL-GE-70 and MEL-GE-70 HPHMI</i>   | Fixed with TC3    |
| HPHMI Dosing faceplate: PV and SP value in the trend display seems to be swapped<br><i>ID: HF MEL-FP-71HPHMI</i>   | Fixed with TC3    |
| SFC: Tipp-Buttons are disabled if INHI is set<br><i>ID: MEL-FP-73 and MEL-FP-73 HPHMI</i>  | Fixed with TC3    |


| Issue  | Correction or Fix   |
|--|---|
| IDF (maybe also SFC, APID): PC faceplate setting not working correctly on classic PG2 faceplates, on HPMI faceplates it is missing<br><i>ID: MEL-FP-77 and MEL-FP-77 HPHMI</i> | Fixed with TC3  |
| IDF + APID + SFC: PC faceplate setting aspects are missing<br><i>ID: MEL-FP-78</i>   | Fixed with TC3  |
| AnalogOut: Uncertain indication is visible if alternative value is set<br><i>ID: MEL-FP-79</i>   | Fixed with TC3  |
| APID: Reset of substitute value is not working<br><i>ID: MEL-FP-80</i>   | Fixed with TC3  |
| SFC Faceplate: The field where the time values and step texts are displayed is too small to be indicated.<br><i>ID: MEL-FP-81 and MEL-FP-81 HPHMI</i>                          | Fixed with TC3<br>Only the most significant digits are displayed - mo:hh:mm.ss will be shorten to mo:hh:mm<br>Longer step text is cut and marked with dots. The complete text can be looked up on tooltips. |
| HPHMI: Graphic element idf_HPHMI_flap and binmon_HPHMI_i5_valve was not provided<br><i>ID: MEL-GE-054</i>  | Missing GEs implemented   |
| The property "CMD1/SIG" in the faceplate element "idf_FE_HPHMI_Status" wrongly mapped<br><i>ID: MEL-FP-065</i>   | fixed   |
| Graphic Element idf_HPHMI_text: StatusIndication is behind the numeric value. Must be changed to be in front.<br><i>ID: MEL-GE-067</i>   | fixed   |
| GE anmon_valve_PG2: ValvePalette is not working<br><i>ID: MEL-GE-069</i>   | fixed   |
| Operator actions are also executed when the mouse pointer clicks an empty space inside the button area instead of the Apply button.<br><i>ID: MEL-FP-075</i>                   | fixed, also with PCFaceplateElementsLib 1-0-1 TC1.afw   |
| APID: Calculation of VD value is not correct (faceplate parameters)<br><i>ID: MEL-FP-083, MEL-FP-083 HPHMI</i>   | fixed   |
| All classic GE: After update to 5.1 FP4 RevD (or 5.1 RevD) graphics became inoperable if in one or more GE's the property StatusIndWidth is set to 0<br><i>ID: MEL-GE-084</i>  | fixed   |
| Improvement to ID: MEL-FP-81 and MEL-FP-81 HPHMI<br><i>ID: MEL-FP-85</i>   | fixed   |
| IDF: Element idf_cmd1_op_PG2 doesn't work<br><i>ID: MEL-GE-087</i>   | fixed   |



| Issue   | Correction or Fix                                |
|---|--|
| HPHMI FP Bar: Several issues regarding changing values directly at the bar graph: Step size not calculated by range, no proper indication movement range is limited<br><i>ID: MEL-FP-088</i>  | fixed  |
| BINMON Faceplate element binmon_FE_Main3 PG2: input signal I13 was wrongly mapped<br><i>ID: MEL-FP-089</i>  | fixed  |
| Indication for end position OFF and release OFF (R0) in a 1-branch-SFC does not make sense but was shown.<br><i>ID: MEL-FP-090</i>  | fixed  |
| The color indication on limits of the HPHMI faceplates was differently between ANMON and APID.<br><i>ID: MEL-FP-097</i>   | For all object types limit indication harmonized |
| APID Para Tab – P –Treatment.<br>It is not possible to set a KP value greater than 1.00<br>In SV4.0 and SV4.1 only the KP range from 0 to 1 was downloaded into the controller. This is the reason that you had to configure the KPY in this range. | fixed  |
| HPHMI Alarm Indication might slow down the graphic callup times<br><i>ID: MEL-GE-098</i>  | fixed  |

Table 4-1 Fixed Problems

### 4.3 Known Issues

| Category  | Description   | Remarks   |
|-----------|---|---|
| General:  | <p>The PC Toolkit Library provides a number of preconfigured templates for alarm and event lists.</p> <p>In the actual version for 5.1 the templates for all alarm and event lists do not have the required columns anymore. The columns have to be configured manually for each project.</p> <p>PC Toolkit Library in mixed Systems with AC800F and Melody</p> <p>The column mapping in the alarm page is not harmonized in mixed systems with Melody and Freelance 800F. This is however possible by means of a manual workplace customization.</p> <p><i>ID: MEL-ALM-048</i></p> | Contact your ABB representative or DEATG/CE       |
| Faceplate | If Measuring Range Start > Measuring Range End, the bar graphs for analog faceplates are not displaying the values.   | Negative values cannot be displayed in faceplates |
|           | <p>The main view does only show this icon for “operator note” on the extended view and not on the main view</p>   | No space to show up this icon in the main view.   |

| Category    | Description   | Remarks  |
|-------------|---|--|
|             | <p>APID:<br/>A problem with APID's was observed that when ARN = 1 in Composer.</p> <p>This is not visible when ARN=0 but when we set it to 1 the symbol is shown, is this correct behavior.</p> | <p>The symbol indicates that the binary signal TFNO is true. Refer to Melody Documentation Technical Information 30/72-2890: Functional Module : APID – Advanced controller function, Chapter 4 – Detailed function description, Control deviation, time function</p>  |
|             | <p>APID:<br/>The buttons for setting KP, TI+/TI -, VD+/VD- and TD +/TD – are not visible for APID-tags loaded</p>   | <p>Work around:<br/>Enabling buttons for set gain- and time parameters in APID faceplate for already loaded tags</p> <ol style="list-style-type: none"> <li>1. Change the update rule field for the following two records in the Converter database (table MapAtom) from “insert” to “always” (Insert means only the first time a tag will create, the signal is set). The view below is filtered!</li> <li>2. Be sure that “Additional Signals (Batch, APID)” is checked in the Operations Code Generation or Commissioning dialog</li> </ol> |
|             | <p>APID:<br/>Symbols for Output limitation “&gt;&lt;” are visible on some main faceplates even if Limiting is not enabled on YPAR.</p>  | <p>It is mandatory that YHY or YLY is within the measuring range of YAY (mostly 0-100%) and the signal designator is not zero.</p>   |
|             | <p>APID: If WHY/WLY signal is not configured or not connected, the setpoint adjustment in the faceplate does not work.</p> <p style="text-align: right;"><i>ID: MEL-FP-086</i></p>              | <p>To be noticed:<br/>Incorrect or not connected values in the Composer may lead to wrong indication and even to invalid operation.</p>  |
|             | <p>SFC Faceplate: Long step texts exceed the available field</p> <p style="text-align: right;"><i>ID: MEL-FP-082</i></p>  | <p>The complete long text is shown by the Tool Tip</p>   |
| Help Aspect | <p>The aspect „PC Help – Melody Object Status.pdf“ is only available in English and marked as Draft.</p> <p style="text-align: right;"><i>ID: MEL-COM-047</i></p>                               | <p>For a Workaround refer to chapter 5.20 in 3BDA033456R5108_Installation and Configuration</p>  |
| Backup      | <p>When starting a system backup warnings may appear pointing to the ATPC.ocx control</p>   | <p>Register ATPC.ocx control. Refer to 3BDA033456R5108EN_Installation and Configuration</p>  |

Table 4-2 Known Issues

## 4.4 Technical Support

Contact ABB technical support at [tech-support-system-solution@de.abb.com](mailto:tech-support-system-solution@de.abb.com) or you local ABB representative for assistance in problem reporting.

## 4.5 How to obtain

Product Marketing/ TechSalesSupport and Order placement: DEATG/CE; <mailto:tech-support-system-solution@de.abb.com>.

License cost is outlined in the Price List 3BDA033517K\_PriceBook\_SystemSolutions

## 4.6 Deliverables

CD-Rom or DVD Medium with PC Toolkit Library for Melody and product documentation in English and German. (German language for Operation manual only).

## 5. Revisions

| Rev. ind. | Chapter              | Description                      | Date/Init.    |
|-----------|----------------------|----------------------------------|---------------|
| -d1       | All                  | Created                          | 17.02.2011/MO |
| -         |                      | Reviewed and approved for V5.0   | 09.03.2011/FB |
| A         |                      | Adapted and approved for V5.1    | 22.03.2011/FB |
| A         | Ch 6.2.8<br>Ch 6.2.9 | Known problems extended          | 12.05.2011/DW |
| A         | Ch 6.2.9             | Path corrected                   | 30.05.2011/FB |
| Ad1       |                      | New version 5.1-1 with HP HMI    | 21.06.2011/FB |
| B         |                      | Release                          | 22.05.2011/FB |
| Bd1       |                      | Adapted to release V5.1-2        | 23.11.2011/FB |
| C         | No change            | Released                         | 28.11.2011/FB |
| Dd1       |                      | Adapted to release V5.1-3        | 01.11.2012/FB |
| D         |                      | Reviewed and Released for V5.1-3 | 22.11.2012/FB |
| E         | Table 2.3            | Build number adapted             | 23.10.2013/FB |
| F         |                      | Released for PC TKL V5.1-4       | 06.06.2016/FB |

*Table 5-1 – Revision*



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