New Features in Designer 5.06/UniOP 4.22

The new UniOP Designer version 5.06, and its companion UniOP firmware version 4.22, come with several interesting new features. This Technical Note contains only the release highlights and will help you point out the differences and the improvements from the previous versions.

Contents

1. Support for 256 Colors 2
2. State-dependent Color Support for Selectors 2
3. Multi-state Indicator Lights 3
4. New Alarm Options 4
5. New Screensaver Options 4
6. Automatic Temperature Compensation of LCD Display Contrast 4
7. Firmware Upgrade 5
8. New Features: a Reference Table 6

1. Support for 256 Colors

Designer 5.06 introduces the possibility to import graphic images with up to 256 colors.
The new feature is available only in models with the VGA TFT displays.
In the Panel Ssetup dialog box one more display type has added: it is “VGA 256 Colors”. Figure 1 shows the new option.
To use this new feature you need firmware version 4.20 and above. No special hardware is needed and all the existing panels equipped with firmware 4.20 can be used with the 256 colors support, provided they have the TFT display.
This new option lets you import bitmap images with 256 colors for use in the Designer as static bitmaps, dynamic graphic and touch cells.
Important note: for all the VGA color panels you can choose from two different display types: the old one “30x80 Color LCD” should be selected if you are going to use your panel with the 16 colors palette; it must be selected if you are programming panels equipped with the STN display; “VGA 256 clors” should be selected if you want to enable the 256 colors support.

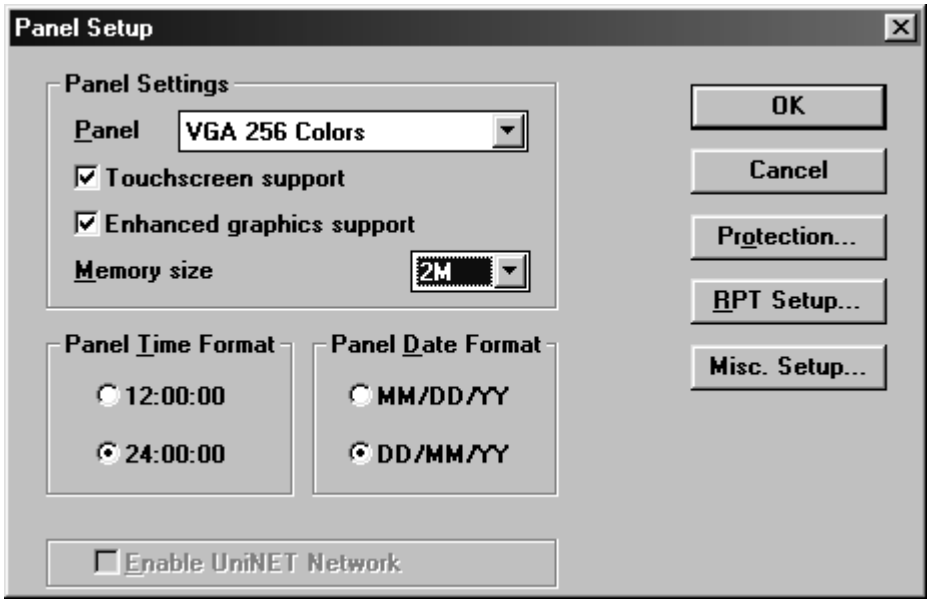

Figure 1

Designer and UniOP work with the standard Windows color palette.
To obtain the best results and to benefit from all the advantages of 256 colors support, all the graphic images should be converted to the Windows standard color palette before importing them into theDesigner project.

2. State-dependent Color Support for Selectors

Designer 5.06 introduces the possibility to create touch objects of type “Selector” with different colors for different states.
Figure 2 shows the list box added to select the color for each state of the selector.

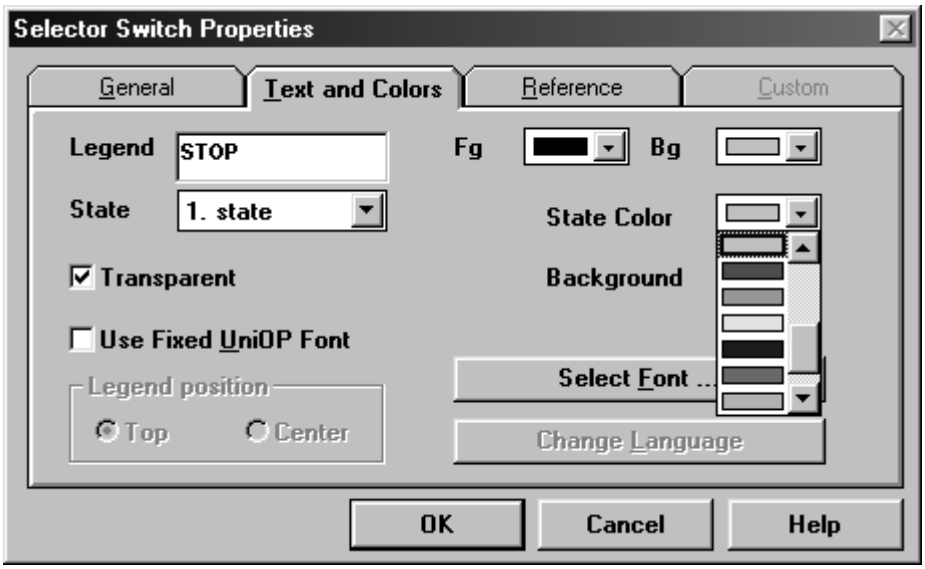

Figure 2

3. Multi-state Indicator Lights

The “Indicator Light” touch object can be configured to handle up to 4 different states. For each state a different color can be programmed and will be shown according to the contents of the referenced memory location.
Different colors are associated to the values 0, 1, 2 and 3 of the reference memory.
The new list box is shown in Figure 3.

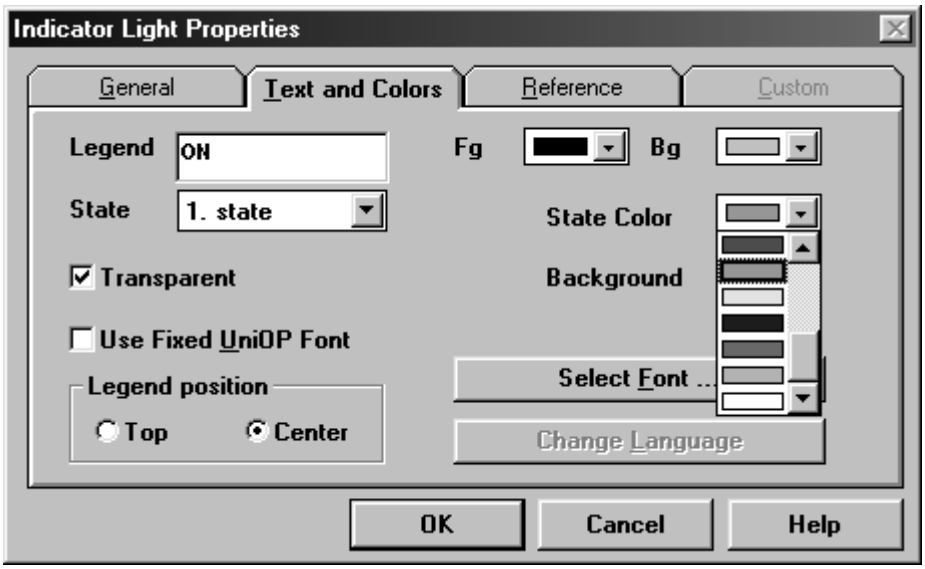

Figure 3

4. New Alarm Options

Designer 5.06 and the companion firmware version 4.22 introduce a new interesting option for long alarms strings in small displays.
Starting from firmware version 4.22 and Designer 5.06 you will be able to use up to 40 characters in the alarm messages also for UniOP panels with a 20 columns display.
In this case the complete message associated to an alarm will take 3 display rows: the first for time and date, the second and the third for the alarm message string.

5. New Screensaver Options

Firmware version 4.22 introduces new mailbox commands to allow more control on the operation of the screensaver. A common demand is to disable automatically the screensaver (that is, turn the display light back on) whenever there is an alarm condition or some other event that must be notified to the operator.
Please refer to the Technical Note TN130 for the complete description of these new features.

6. Automatic Temperature Compensation of LCD Display Contrast

Firmware version 4.22 extends the automatic compensation of the LCD display contrast to more UniOP models, including the ERT-16.
Please refer to the Technical Note TN131 for the complete description.

7. Firmware Upgrade

UniOP units with firmware version older than 4.22 can be upgraded to the version 4.22 by means of the simple firmware download process only under certain restrictions; the reason of the restriction is in the compatibility of the bootstrap loader module which has been changed to take into account some of the new features.

Note: *If the upgrade process is applied to a panel with firmware V4.20 or older by means of the simple firmware download, the panel will no longer support operation with the external keyboard (ET-F, AT-F). The problem can be solved with the complete firmware upgrade using bootstrap V4.22.*

Firmware download is possible only for UniOP panels originally equipped with version 4.13. Note that both in the case of firmware and in the case of replacement of the Flash chip, the features related to hardware improvements will not be available.
The table below lists for each UniOP model the code of the corresponding firmware and the oldest version that can be upgraded to 4.22 by means of replacing the firmware Flash chips.

Model	FW Type	Oldest version upgradable
MD00R-02	32	4.10
MD00R-04	32	4.10
MD03R-02	32	4.09Q
MD03R-04	32	4.09Q
MD02F-02	32	4.09Q
MD02R-04	32	4.09Q
CP01R-04	32	4.09Q
CP02R-04	32	4.09Q
CP01F-02	32	4.09Q
CP02F-02	32	4.09Q
CP04F-04	32	4.09Q
CP10G-04	32	4.20
CP11G-04	32	4.20
CP12G-04	32	4.20
CP13G-04	32	4.20
EF-02	32	4.09Q
EF-04	32	4.09Q
ER-04	32	4.09Q
MKDF-02	32	4.09Q
MKDF-04	32	4.09Q
MKDR-04	32	4.09Q
MKDR-05	32	4.20
MKDG-06	32	4.20
MKDG-07	32	4.20

Model	FW Type	Oldest version upgradable
ER-16	33	4.07Y
EL-16N	33	4.07Y
ER-25	33	4.07Y
ER-VGA	38	4.20
EL-25	33	4.07Y
EL-VGA	38	4.20
BKDR-16	33	4.07Y
BKDC-16	37	4.09
BKDL-16	33	4.07Y
BKDR-16T	33	4.20
BKDC-16T	33	4.20
BKDL-16T	33	4.20
MKDR-16	33	4.07Y
MKDL-16N	33	4.07Y
MKDR-25	33	4.07Y
MKDL-25	33	4.07Y
MKDR-VGA	38	4.20
MKDC-VGA	38	4.11
MKDL-VGA	38	4.20
MKDT-VGA	38	4.20
ERT-16	33	4.07Y
ECT-16	37	4.09
ELT-16	33	4.07Y
ER-25T	33	4.07Y
EL-25T	33	4.07Y
ERT-VGA	38	4.20
ECT-VGA	38	4.11
ELT-VGA	38	4.20
ETT-VGA	38	4.20

Table 1

8. New Features: a Reference Table

The table below describes the current status of the new features in all UniOP models.

Model	Message Only Alarm Option	256 Color Support	Color Support for Selectors	Color Support for Indicator Lights
MD00R-02	Yes	-	-	-
MD00R-04	Yes	-	-	-
MD00G-04	Yes	-	-	-
MD03R-02	Yes	-	-	-
MD03R-04	Yes	-	-	-
MD02F-02	Yes	-	-	-
MD02R-04	Yes	-	-	-
CP01R-04	Yes	-	-	-
CP02R-04	Yes	-	-	-
CP01F-02	Yes	-	-	-
CP02F-02	Yes	-	-	-
CP04F-04	Yes	-	-	-
CP10G-04	Yes	-	-	-
CP11G-04	Yes	-	-	-
CP12G-04	Yes	-	-	-
CP13G-04	Yes	-	-	-
EF-02	Yes	-	-	-
EF-04	Yes	-	-	-
ER-04	Yes	-	-	-
MKDF-02	Yes	-	-	-
MKDF-04	Yes	-	-	-
MKDR-04	Yes	-	-	-
MKDR-05	Yes	-	-	-
MKDG-06	Yes	-	-	-
MKDG-07	Yes	-	-	-
ER-16	Yes	-	-	-
EL-16N	Yes	-	-	-
ER-25	Yes	-	-	-
ER-VGA	Yes	-	-	-
EL-25	Yes	-	-	-
EL-VGA	Yes	-	-	-
BKDR-16	Yes	-	-	-
BKDC-16	Yes	No	-	-
BKDL-16	Yes	-	-	-
BKDR-16T	Yes	-	-	-
BKDC-16T	Yes	No	Yes	Yes
BKDL-16T	Yes	-	-	-
MKDL-16N	Yes	-	-	-
MKDR-25	Yes	-	-	-
MKDL-25	Yes	-	-	-
MKDR-VGA	Yes	-	-	-
MKDC-VGA	Yes	No	-	-
MKDL-VGA	Yes	-	-	-
MKDT-VGA	Yes	Yes	-	-
ERT-16	Yes	-	-	-
ECT-16	Yes	No	Yes	Yes
ELT-16	Yes	-	-	-
ER-25T	Yes	-	-	-
EL-25T	Yes	-	-	-
ERT-VGA	Yes	-	-	-
ECT-VGA	Yes	No	Yes	Yes
ELT-VGA	Yes	-	-	-
ETT-VGA	Yes	Yes	Yes	Yes

Table 2