Colors

The G7 contains a bitmap display, which only allows for solid black or solid white pixels (no transparency). This document is designed in vector format, but screens are converted to a bitmap format (PNG) before being loaded into firmware.

#FFFFFF	
#000000	

G7 USER INTERFACE

blacklinesafety

Screen Specifications

SHARP Memory LCD 1.3" LCD screen

LS013B7DH05



G7 USER INTERFACE

0.0

0 20.9

Device Imagery

blacklinesafety

Sharepoint file (UX Projects library): https://top-secret-sharepoint-link.com

Has renderings of G7C and G7x with quad, single, and no gas cartridges



Sharepoint file (UX Projects library): https://top-secret-sharepoint-link.com

Includes pulled latch, alarm patterns, drawing of back of the G7

Typography

The G7 only allows certain font sizes, all in Verdana. Fonts smaller than 18pt are hard to read on the device, so they are only used as captions or subscript.

On average, each line of text at 18pt can fit 16 characters per line. The G7 is translated into different languages after it's designed, which may use more characters to say the same thing when translated. Try not too add more text than needed to any one screen - break it out into 2 screens (with a timed transition) if you need to.

The G7 UI uses sentence case throughout - the first word of any title or content is capitalized, and further words are lowercase. For example, the menu displays "Main menu" (correct) vs "Main Menu" (incorrect).

G7 Logo	Michroma/Regular/36pt
X-Large Numbers	Verdana/Regular/72pt
Large Numbers	Verdana/Regular/38pt
Titles & Body	Verdana/Regular/18pt
Captions	Verdana/Regular/14 pt

Subscript

Verdana/Regular/10 pt



G7 USER INTERFACE

Translations

blacklinesafety

Fransla	ations
---------	--------

Text in the G7 UI is currently translated into the core languages above. This may impact your design as translations may use more characters to say the same thing, and we're restricted to very specific character limits per text row in G7.

English	Spanish
French	Dutch
German	Italian

Portugese

Kazakh

Translation Documentation

Main Menu← Back to statusModesPTT channelsGas optionsMessages	Menu principal ← Retour au statut Modes Saisir no chaînes Options de gaz Messages	Menú principal ← Volver al estad Modos Canales PTT Opciones de gas Mensajes
English	French	Spanish
Hauptmenü zurück zum Status 	Menu principale ← Indietro	Hoofdmenu ← Terug

G7 Translation User Guide:

https://top-secret-sharepoint-link.com

G7 Translation Master Document (Contains all text translations for various languages):

https://top-secret-sharepoint-link.com



Portugese

Kazakh

lcons

Device icons are created in vector format for use in G7 designs and prototypes. We translate these to bitmap format in Bitfonter for use on the device. If you create new icons for the device, please add them to this design kit as components for reference and re-use.

Creating new icons

We use Material Design icons where possible, and create our own if the icon we need doesn't exist. You can search the icon set and download SVGs here: https://fonts.google.com/icons



Adding icons to the bitmap icon fonts

When your prototype is ready to go to Firmware for production, the designer recreates these icons as bitmapped glyphs using Bitfonter (a PC-only program). You can copy/paste a PNG into a Bitfonter glyph, then adjust using the in-program drawing tools.

Small icons (16px) are placed in the Verdana 18 font. Larger icons (32 px+) are placed in the Verdana 72 font. We have the font in Sharepoint, or you can request the most recent version of the font from Firmware.



Once you've added your icons to the font, you can send the updated font to Firmware. They rearrange the icons in the font as needed and adds it to their firmware build.

Verdana 18

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Verdana 72

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MAIN COMPONENTS

Icons - Verdana 18



MAIN COMPONENTS

blacklinesafety

lcons - Verdana 72







Screen Layout

24 рх	Row 1
24 px	Row 2
24 px	Row 3
24 px	Row 4
24 px	Row 5
24 px	Row 6

Overview

The G7 screen is laid out in 6 rows, each of which is 24 px high. The default text size for a row is 18px, with a max of around16 characters per line. Text does not wrap from one line to the next - each line is its own entity.

Banners

The top row of any screen can alternately have a banner instead of a text row. Banner rows are 25px high instead of 24. Banner components should be aligned to the top of the screen, and placed as the top layer. This allows for a 1px overlap on row 2, so that row components are universally the same height. See "Banners" artboard for more information.

Banner text Row text Row text Row text Row text Row text

Banner text

Row text

Row text

Row text

Row text

Row text

Default (centered)

Content Rows

Rows of content are set at 24px high. Most rows are either centered text, or spacers (blank rows). Similar style rows are used in body content (full width) and menus, but menus rows are shorter to leave room for a scrollbar. There are 8 types of row components for G7: use whichever fits your purpose best.

Ro	W	tex	

Center-aligned

Spacer

creating stacks.

Used when sharing instructions or context with the user.

Useful for placing rows below it or

Row text	
✓ Row text	
Baseline	20.
	0.0



Hold arrow buttons

Used to indicate that the user should hold both buttons to mute alarms or acknowledge messages

↑ Low warning23.5

Left-aligned

Used for columns of data, especially on gas readings screens or in checklists.

$\square H_2 S \square O_2$

Checkboxes

Used when bumping or calibrating devices so you can select which gases to test.

Banner text	
Row text	
Yes	No

Content Rows: Call-To-Actions (CTAs)

The top row of any screen can alternately have a banner instead of a text row. Banner rows are 25px high instead of 24.

Banner components should be aligned to the top of the screen, and placed as the top layer. This allows for a 1px overlap on row 2, so that row components are universally the same height. See "Banners" artboard for more information.

Default: 2 options

Edit	Yes	No
------	-----	----

3 options

Used saving your selected option or editing. See it in action in PTT.

Reset	Back

Stopwatch See it in action in the Stopwatch.



2-row CTA

The height of two rows. See this in action by pushing the up or down arrow from the Status screen.



Inverted Screens

The status screen is the only screen that can be inverted (white background instead of black). When the status screen is inverted, it indicates that a pump mode is currently running. Once the pump mode is turned off, the screen will return to having a black background.

New message (1) The longest mes

Messages

When messages come in, they are similar to a full-screen modal.

They automatically take over the entire screen when sent via Blackline Live, unless the user is in red alert.

Row 1

16 chars

To acknowledge and dismiss the message, a user presses the "OK" button.

The banner text on this view contains "New message (1)", with the number in brackets being the number of unread messages.

The G7 can receive a maximum of 32 characters from Blackline Live at a time:

- This is sent in two separate 16-character lines.
- If the characters don't fit on the screen, they will wrap to the next line. The image to the left shows two lines of set sent from the portal, which both wrap. The last word is cut off due to character limitations.
- Users can see this character limit in Blackline Live when composing messages, and can adjust accordingly.

This device supp	oorts messaging
The longest mess age is 16 charad	
0 characters remaining	
Send	view available responses ~

Select Boxes

There are a few screens where users can select from a range of units, numbers, or symbols.

Each of these selection areas has alternate states for inverted (selected) and varying units.

Time offset increments for hours are 0-12 in 1 unit increments. For minutes, a user can select by 15 minute increments: 00, 15, 30, 45.







Time > Timer

Time > Time Settings > Custom Offset

Settings > Pump Options > Hose Length

Banners

25 рх	Banner text
23 рх	Row text
24 рх	Row text

Banners

The top row of any screen can alternately have a banner instead of a text row. Banner rows are 25px high instead of 24. Banner components should be aligned to the top of the screen, and placed as the top layer. This allows for a 1px overlap on row 2, so that row components are universally the same height.

Status / Home Banner

Default Banner (Status)

This banner is only used on the Status/Home Screen. We don't have room to add more icons to this, so if you need to display new information in a banner on the Home Screen, try the Multiple Banners method, above.

- The top right is reserved for time or check-in timer.
- The battery icon is always displayed, top left.
- The pump icon is displayed if the pump is on. When pump modes are on, the status screen is inverted as well.
- The PTT icon is a placeholder for a 2nd icon and is not currently in use.







Countdown to check-in (hh:mm:ss) If feature enabled. Counts down by 1s.

24h clock (hh:mm) Enable in Main Menu > Settings > Banner Pump mode + PTT icon

Multiple Banners

If multiple banners need to be displayed in the status screen, they flash from one to the next on a 2 second interval.

Bump test due





Banner text

Banner Variations

Default Banner

Starting pump 59

Text L, text R

Used as countdown when setting Up modes.

Calibration due

Icon 16 L, text R

Used when bump and/or calibration Lock is enabled in portal

No network

Icon 32 L, text R

Used when there's no Network signal

Alert Banner Flow





2s





Body (Content rows) Menus Banners 🚥 🕸 **ຢ** 2:09:52 + Back Banner text >Normal Row text Centered Starting pump 59 Hold \blacktriangle and \blacktriangledown Banner Time ■ Calibration due Row text Timer 00:00:00 🔊 No network 20.9 Flow% 43/48 Baseline ✓ Row text Left aligned ✦ Low warning23.5 $earrow H_2S$ **⊡**0₂ Press OK to change Reset Back CTAs (call-to-action) Edit Yes No



MAIN COMPONENTS

blacklinesafety

Elements



Menus & Scrolling

25 px	Main Menu
23 рх	
24 рх	Modes
24 рх	PTT channels
24 рх	Gas options
24 рх	Messages

Overview

Users get to the main menu by pressing "OK" from the G7 from the Status screen. They navigate the menu options using the up and down arrows, and press "OK" on a highlighted menu item to drill down. Pushing the down arrow on the last menu item will scroll you back up to the top, and vice versa. Menus use 24px high rows, like other screens, but are less wide due to the scroll bar on the right.



Main Menu
← Back to status
Modes
PTT channels
Gas options
Messages

Main Menu

Dock info Model G7 Dock Dock ID 5065 Device Ver

Dock menu > Advanced info > Dock info

Quick Select Menu



Overview

Users get to the Quick Select menu by pressing either the Up or Down arrow buttons from the G7 from the Status screen. They navigate the menu options using the up and down arrows. They press "OK" on a highlighted menu item to perform the action indicated in the white CTA bar. Pushing the down arrow on the last menu item will scroll you back up to the top, and vice versa.



Icon Menu

Users get to the Quick Select menu by pressing either the Up or Down arrow buttons from the G7 from the Status screen. They navigate the menu options using the up and down arrows.

They press "OK" on a highlighted menu item to perform the action indicated in the white CTA bar (bottom row). Pushing the down arrow on the last menu item will scroll you back up to the top, and vice versa.

MAIN COMPONENTS

Standard Menus

Main Menu + Back to status Modes PTT channels Gas options Messages

Modes
>Normal
Pre-entry
Pump run
SCBA
Leak check

PTT channels
← Back
Enter channel #
Receive only
All call
Change volume

Gas options	Gas info
← Back	← Back
Zero sensors	Gas set points
Bump test	Last completed
Calibration	Next due dates
View gas info	Peak readings
Messages	Send a messa

Send a message	
+ Back	Π
Send help	
No	
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Dock menu	Advanced Info
Bump test	← Back
Calibration	Inlet Settings
Advanced Info	Dock update
	Dock info



MAIN COMPONENTS

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Quick Select Menu



Status Screen Layout



Overview

The Status screen is the "Home" screen for the G7, and is what users see 90% of the time. There are 6 different versions of this screen, depending on how many gases their G7 detects.



Status - Standard (no gas) Used for lone worker or contact tracing applications



Status - 1 Gas (Single) Used for detecting 2 gases at once



Status - 2 Gas Used for detecting 2 gases at once



Status - 3 Gas Used for detecting 3 gases at once



Status - 4 Gas (Quad) Used for detecting 4 gases at once

CO	0.0 ppm
H_2S	0.0 ppm
O 2	20.0 %vol
NH ₃	0.0 ppm
LEL	0.0 ppm

Status - 5 Gas

Used for detecting 5 gases at once. One of the sensors detects 2 gases, so it still contains 4 sensors total.

States

The gas readings components each contain 4 states:

- Default: used when gas levels are safe
- Inverted: used when gas levels are above or below a safe range
- Check: Used when running initial tests on gas levels. Not used during gas detection.
- Dash (minus): Used when running initial tests on gas levels. Not used during gas detection.
- X (close): Used to indicate a failed bump test or calibration.





Quad-Gas Layout

G7s that detect 2-4 gases use the same layout, with a varying number of components on the screen. Each is 1/2 of the screen width, and 1/2 of the screen height, with padding.

59 px



MAIN COMPONENTS

Gas Readings



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