Test Unit
Type GHTU8

Product Description
Test unit for Hi-Line modules and networks. Monitoring/control unit with LCD-display. Highly recommended for Hi-Line system start-up, troubleshooting and maintenance.

Type Selection
Supply
Supplied by Hi-Line

Ordering Key
GHTU 8
Type: Hi-Line
Type no.

Supply Specifications
Power supply
Supplied by Hi-Line
Reverse-polarity protection
Yes
Rated operational current
< 4.0 mA

General Specifications
Environment
Degree of protection
IP 40
Pollution degree
3 (IEC 60664)
Operating temperature
0° to +50°C (+32° to +122°F)
Storage temperature
-20° to +60°C (-4° to +140°F)
Humidity (non-condensing)
20 to 80%

Mechanical resistance
Shock
15 G (11 ms)
Vibration
2 G (6 to 55 Hz)

Dimensions (l x w x d)
145 x 90 x 28 mm

Material
ABS, grey
Weight
250 g

Wiring Diagram
Supplied by Hi-Line
BUS+: Signal wire

Additional Information
Scope of supply
1 x Test unit
1 x Cable 1 (mini grips)
1 x Cable 2

GHTU8
GTU8 - GRIP - CAB
GTU8 - ASIC - CAB

Specifications are subject to change without notice (07.06.2007)
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Mode of Operation

128-channel portable transmitter/receiver unit supplied by Hi-Line. The GHTU8 can be used anywhere along the two Hi-Line wires to monitor and control the status of the channels. This unit is highly recommended for start-up and maintenance work on systems.

The GHTU8 can operate in 6 different modes:
- Digital 1 group
- Digital 2 groups
- Split I/O
- Sensor Calibration

The start-up mode is "Digital 1 group".

To change mode:
1. Press « Mode »
2. Shift between mode options by pressing either « ↑ » or « ↓ »
3. Select mode by pressing « Enter ».

Digital 1 group
Once connected to the Hi-Line, the display shows the status of channel group A. Active channels are indicated by their numbers. Pressing «1», «2», ..., «8» will activate the corresponding Dupline channel in the selected channel group.

Pressing « ↑ » or « ↓ » changes the channel group shown in the display.

Digital 2 groups
When the mode "Digital 2 groups" is selected, the user may select an additional channel group for permanent monitoring on the bottom line of the display. The channel status of the two selected groups can now be monitored, but changing the channel status through the keys «1» ... «8» only affects the channels displayed in the upper row of the display. Even so, pressing the « ↑ » or « ↓ » key only changes the channel group in the upper row of the display.

Edit Tx-latch
In this mode it is possible to "latch" the activation of one or more channels. This means that the GHTU8 will continue transmitting on the channel(s) even though the corresponding transmission button is released.

To cancel the transmission on a channel, press the corresponding transmission button again.

The latched transmission will continue even if the channel group or mode is changed. In order to change the status of a latched transmission, it is necessary to re-enter the "Edit Tx-latch" mode.

All the latched channels are reset to normal Dupline® operation whenever the GHTU8 becomes disconnected from the Dupline®.

Analog BCD
In this mode it is possible to monitor values from analog transmitters that use the multiplexed 3 1/2-digit BCD format. The analog values are shown as BCD numbers within the range of -1999 to 1999.

By pressing « ↑ » or « ↓ » the group addresses can be changed. By keeping « Enter » pressed while activating « ↑ » or « ↓ », the multiplex address will change instead.

The display will show "Wait" until the selected multiplex address has been present on channels A1-A4.

If no analog value is transmitted on the selected address, the display will show: "None".

If the analog value on the selected address is not valid, the display will show: "Error".

To change mode:
1. Enter this function and select the decided Dupline® group.

Sensor Calibration
The Sensor Calibration function is carried out as a sequence of steps. The function controls one channel on the Dupline® bus to tell the attached sensors to calibrate.

1. Enter this function and select the decided Dupline® group:
   "SELECT SENSOR CALI GROUP: X" (X is the group number)
   Press enter when the wanted group is selected.

2. When Group is selected the channel within the group must be selected:
   "SELECT SENSOR CALI CHANNEL: XY" (X = Group number, Y = Channel in group X)
   Press enter when the wanted channel is selected.

3. When the channel has been selected, an intermediate state is entered: "PRESS ENTER TO CALIBRATE!"
   Press enter to start Calibrating.

4. When enter is pressed the calibration is started and a progress bar is shown in the display: "0%:**********
   Don’t press anything the GHTU8 will change state automatically.

5. When calibration is finished the following will be shown in the display: "FINISHED! PRESS MODE TO EXIT"
   Pressing the mode button is the only way to restart calibration or entering a new mode of operation!

Warnings:
- Do not plug or unplug the Jack connector when the GHTU8 is connected to Hi-Line. This will cause a short-circuit of the two wires.
- Do not connect a standard GTU8 test unit to Hi-Line. It will cause immediate damage to the unit.

Note: The GHTU8 will not work on a normal Dupline net.