LEVELNIC Display DL-D4　　Instruction Manual

Thank you for purchasing the LEVELNIC DL-D4 Display. Please read this instruction manual
thoroughly before use to insure proper operation and long service.

■ OVERVIEW

Display unit for LEVELNIC DL-S2W (wireless digital gauge,) also providing remote 0-Cal, and 1/2-Cal buttons.
Can used as display for other LEVELNIC gauges with RS-232C output, (without remote 0-Cal or 1/2-Cal functionality.)

■ FEATURES

・Combined with LEVELNIC DL-S2W for level gauge with remote display.

・When used with the DL-S2W, provides remote 0-Cal and 1/2-Cal buttons. With this unit, the DL-S2W does not require a PC connection.

・Powers the DL-S2W wireless receiver through the input cable.

・Can be used as remote display with other RS-232C capable LEVELNIC for easy visibility when used on high surfaces or in tight
locations. (0-Cal or 1/2-Cal buttons can only be used with DL-S2W , optional connection cable required.)

■ COMPONENT NAMES

① Display Panel
Display shows angle measurements, battery status, and communication connection status.

Angle
When used as display for DL-S2W, angles are shown as mm/m.
An error message is displayed for measurement which are out of range
For positive out of ranger error, "+Error" is displayed, for negative, "-EEEE" is displayed.
(Refer to the DL-S2W Manual for measurement range and errors.)
When used with other LEVELNIC with RS-232C connection, the angle will be displayed
using the same units as those of the LEVELNIC it is connected to.
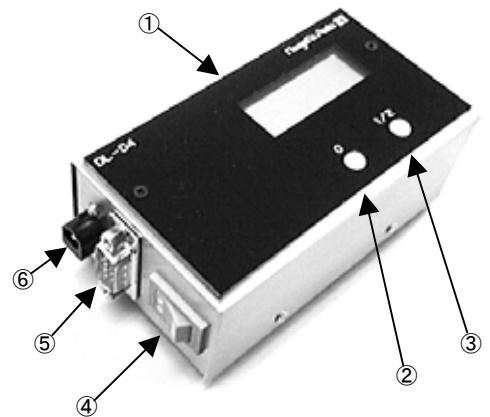
Battery Status
When battery voltage drops below acceptable level, the displayed value will blink.
If used as remote display for DL-S2W, when the DL-S2W battery voltage is low the
center two digits will blink.
If both the DL-D4 and a connected DL-S2W have low batteries, the blinking will
alternate between the center digits and all four digits.

Communication Status
If there is no communication to the Display (Cable connection problem, receiver not
turned on, DL-S3 battery low, etc.,) the Display will show "- - - - " (4 bars.)

② 0-Cal Button
0-Cal Button sets the displayed value to zero.
Button requires deliberate press of about 2 sec.
(Functional only when used as a remote display for a DL-S2W.
Button does not work during error display.)

③ 1／1/2-Cal Button
Press the 1/2-Cal button to divide the displayed reading by 2.
Value is changed when the 1/2-Cal Button is released.
Button requires deliberate press of about 2 sec.
(Functional only when used as a remote display for a DL-S2W.
Button does not work during error display.)

④ Power Switch
Display is ready for use about 3 sec. after being switched ON.
When used as a DL-S2W Display, it takes an additional few seconds to establish
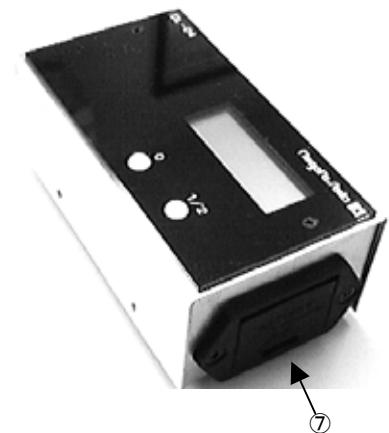communication with the DL-S2W (about 10 sec.)

⑤ Input Connector
Connects to LEVELNIC
When Used as remote Display for DL-S2W, the Receiver plugs in here.
Since the Receiver power is linked to the display unit power,
always keep the Receiver power switch ON.
When used with other LEVELNIC with RS-232C port, connect the PC connection
cable here (Cable model: DL-P5AD or DL-P6.)

⑥ AC Adapter Jack

Power Jack for external power; connect to the provided AC Adapter.

※ Jack contains diode to prevent current backflow from battery to adapter.
If Adapter is plugged in the Battery will not be discharged, but if AC adapter is
not powered (due to power failure or being unplugged) please disconnect the
Adapter from the Display to prevent the battery from draining.

⑦ Battery Case

Holds a standard 9v battery (JIS-006P).
To open, push up on bottom groove to lift, and pull out.

【Battery Case Open】

■ OPERATION

【When used as DL-S2W remote display】
1) Install the Receiver included with the DLS2W onto the Input Connector of the Display.
Switch the Receiver power switch to the ON position.
The Receiver is powered through the input connector, so the USB power cable is not needed.
2) Turn on the Display, then turn on the DL-S2W.
Power can be switched on in either order, but turning on the receiving side (the Display) first, and
then the transmitting side (DL-S2W) will reduce power consumption by the DL-S2W.

【With Receiver Attached】

【When used as display for other LEVELNIC with RS-232C output】
1) connect the display input connector to the LEVELNIC DATA Out jack using a pc connection cable
(sold separately, cable model: DL-P5AD or DL-P6).
(For DL-P5AD, move slide switch to "Computer" setting.)
2) Set the LEVELNIC Function Select Switch (1/2, OUT) to "1/2" so that the output data signal is sent
continuously.
3) Turn on LEVELNIC power, and display power. (They can be turned on in any order.)
Display power may be kept off and only turned on when needed.

【With PC Cable Attached】

■ SPECIFICATIONS

Model：	DL-D4
Display Range：	Determined by connected LEVELNIC
Resolution：	Determined by connected LEVELNIC
Operating Temp. Range：	0〜40℃
Input：	LEVELNIC RS-232C compatible signal (proprietary)
Power：	Standard 9V battery (1x) (or 8.4V rechargeable); AC adapter included
Continuous Use Time:	With wireless operation:　Alkaline battery: ~5 hr.
	With cable connection:　　Alkaline battery: ~60 hr.
	(some variation depending on usage conditions.)
Dimensions：	116(L)×62(W)×48(H)mm
Weight：	330g (including battery)
Package Contents：	Display Unit ×1
	AC Adapter ×1
	9V Battery ×1
	Instruction Manual ×1

■ PRECAUTIONS

Please read and follow the notes below to insure top performance and long service life from this instrument.

● Avoid using in the following conditions:
・Dirty, or dusty locations.
・Exposed to direct sunlight.
・Places where chemicals such as acids, alkali, solvents, etc. are present or on surfaces.
・Places contaminated with water or oils.
・Where there is high electrical noise, or sparks, such as near welding equipment.
・Locations with high electromagnetic fields, such as near power lines or broadcast radio waves.
● Clean with a dry cloth, and moistened with mild detergent or alcohol as needed. Do not use solvents such as thinners, etc.
● Do not disassemble or modify.
● Please remove battery when not in use for long period of time.