LEVELNIC　　Transmitter・Display　Set　　DL-D5　　Instruction Manual

Thank you for purchasing the DL-5 LEVELNIC Transmitter/Display Set.（Transmitter：DL-D5-TX、Display：DL-D5-DISP）
Please read this instruction manual thoroughly before use to insure proper operation and long service.

■ OVERVIEW

Transmitter and Display units for LEVELNIC DL-S3.
One transmitter can be connected to two LEVELNIC DL-S3, showing measurements from both on the Display.
Display includes independent 0-Cal, and 1/2-Cal controls for each connected DL-S3.
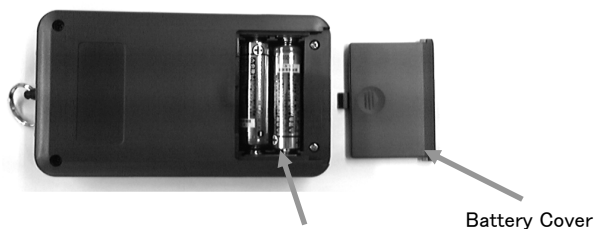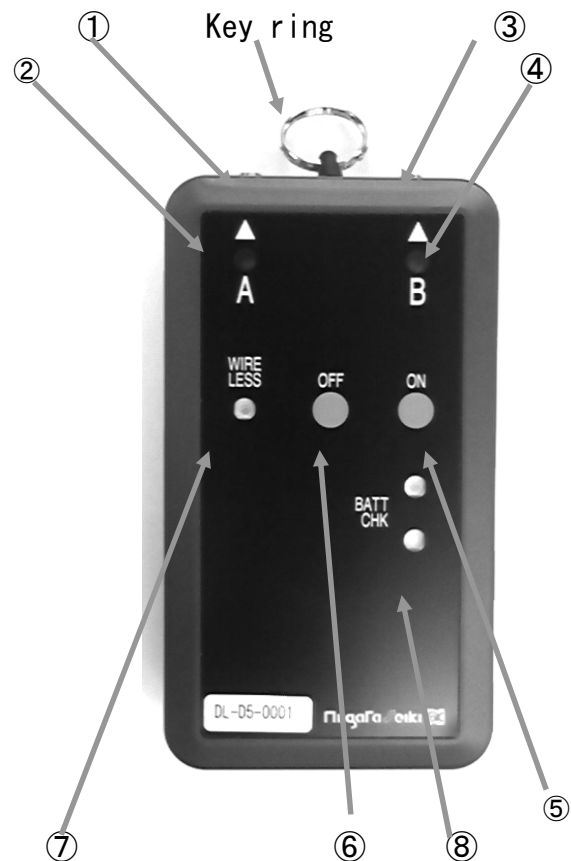Can also be used with a single DL-S3 connected to the transmitter.

■ FEATURES

・Single compact display can be used to control two DL-S3 for X, Y measurements. Ideal for equipment installation and setup.
・Use it with a single DL-S3 to make work quicker and for measurements in situations where it is difficult to read the DL-S3 display.
・No set-up required. The transmitter and Display are shipped as a pre-configured pair and ready for immediate use.
・Key ring provided for attaching a lanyard.
・Silicone protective cover included.

■ COMPONENT NAMES

Transmitter（DL-D5-TX）

① Signal input jack (A channel)
　　Connect with the signal output jack of DL − S3 using the supplied cable.

② Signal LED (A channel)
　　Blinks when signal is received from DL-S3.

③ Signal input jack (B channel)

④ Signal LED (B channel)

⑤ Power ON button
　　Press and hold (approx. 2 seconds) to turn power ON.

⑥ Power OFF button
　　Press and hold (approx. 2 seconds) to turn power OFF.
　　When no signal is received from either A or B channels after about
　　　　5 minutes, power will automatically aromatically turn OFF.

⑦ WIRELESS LED
　　Shows the status of communication link to the Display Unit.
　　Blinks when communicating with the Display.

⑧ Battery level indicator.
　　Shows status of battery.
　　　　Both LED ON：Battery level is good.
　　　　One LED ON：Battery level is low.
　　　　　　　Please replace battery as soon as possible.
　　　　Both LEDs OFF：Please replace battery before any further use.

Key ring

【Battery compartment】　2x AA-type Cells

Battery Cover

Display（DL-D5-DISP）

① Display Panel

Two line display shows angle measurements, battery status, and communication connection status.

Angle

DL-S3 measured value is displayed in mm/m.
Top row shows data for DL-S3 connected to A channel;
bottom row shows data for DL-S3 connected to B channel.

If DL-S3 units are set to "DEG", the display will indicate "Mismatch".
Please make sure the DL-S3 is set to mm/m.

If the DL-S3 measurement is out of range, it will output an error, and
an error will be displayed. For positive out of ranger error, "+Error"
is displayed, for negative, "-Error" is displayed.
（Refer to the DL-S3 Manual for measurement range and errors.）
The DL-S3 may send out a valid measurement which appears outside the
specified range due to the function of the 0-Cal and 1/2-Cal operations.

（Ex：If 0-Cal operation is performed when the DL-S3 is at angle of
−4mm/m, it will set the display to 0. Then when the DL-S3 is tilted
to +4mm/m, the display will read +8mm/m.）

Battery Low

When battery voltage begins to drop, the display will alternate between
measurement and "Low Power Battery" indication.
Replace battery immediately.

Establishing Communication

When communication with the Transmitter is not established, (due to
Transmitter power OFF or out of range) the display will show
" - - - - "（16 char, 2 lines.）After about 5 min., display will turn off.

② Power ON button

When first pressed, "ON-SW keeping" will display;　continue to hold button.
When power is ON, display will change to "ON keep OK"

③ Power OFF button

When pressed, 　"OFF-SW keeping" will display.
Press and hold (approx. 2 seconds) to turn power OFF.
If there is no communication with the Transmitter, after about 5 min. the
Display power will automatically turn OFF.

④ Backlight button

When the LIGHT button is pressed, the display backlight will go on for about 1 min.
If the LIGHT button is pressed while the light is on, the backlight will turn off.

⑤ 0-Cal button（A channel）

Press the 0-Cal button to set the displayed reading to 0.
Press and hold for about 2 sec. to insure activation.
（Button does not work during error display.）

⑥ 1/2-Cal button（A channel）

Press the 1/2-Cal button to divide the displayed reading by 2.
Value is changed when the 1/2-Cal button is released.
Press and hold for about 2 sec. to insure activation.
（Button does not work during error display.）

⑦ 0-Cal button （B channel）

⑧ 1/2-Cal button （B channel）

Key ring

【Silicone Covers attached】

■ HOW TO USE

【Preparation】
1）Insert the Batteries.

2）Attach the Silicone Covers（Can be used without the covers, but please use care to prevent
    damage from falling or impact）

【Operation】
1）Check to make sure the pairing numbers match for the Transmitter and Display Units.
    If Pairing numbers do not match, they will not communicate.

2）Using the supplied cables, connect the DL−S3 output to the Transmitter input jack.
    （When connecting to two DL−S3, connect to A, B inputs. If only using one DL−S3, either channel is OK.）

3）Turn ON the Display Unit.

4）Turn ON the Transmitter.

5）Set the DL−S3 Function Selector Switch （1/2、OUT）to the 1/2 Setting. This configures the LEVELNIC
to output a data signal continuously.
    Turn ON the DL−S3.

【※】 Please turn on the Display unit before turning on the Transmitter.
    When Transmitter is trying to establish communication it uses more power.
    If turned on in reverse order, system will operate without problem, but
    battery life will be reduced.

【When done】
1）Turn OFF power in revers order (DL−S3, Transmitter, then Display unit).

【Pairing Number】
（Set will have matching numbers）

■ SPECIFICATIONS

【Transmitter】	
Model	:DL−D5−TX
Input	:2x LEVELNIC DL−S3 external signal
	（A、B channel)
	Connects to DL−S3 w/ included cables(~ 80cm)
Wireless Protocol	:Bluetooth Class1
Comm. Range	:50～100m
	(Line of sight; some variance due to conditions.)
Operating Temp.	:0～40℃
Power	:2x AA Batteries
	(Standard rechargeable batteries can also be used.)
Continuous On Time	:Alkaline batteries：~17 hours
	(when communicating with Display Unit)
	(If communication can not be established, ~3 hours.)
Dimensions	:144(L) ×76(W) ×27(D) mm (incl. Key ring mount)
	(With Silicone Cover, 147×81×35mm)
Weight	:~290g (Including Batteries, Silicone Cover)
Accessories	:Connection Cable ×2
	AA Battery ×2
	Silicone Cover ×1

【Display】	
Model	:DL−D5−DISP
Display	:16char.× 2 lines
	（Top line for channel A, 2nd line for channel B)
	Character size： 4.9×2.5mm
	With backlight
Wireless Protocol	:Bluetooth Class1
Comm. Range	:50～100m
	(Line of sight; some variance due to conditions.)
Operating Temp.	:0～40℃
Power	:2x AA Batteries
	(Standard rechargeable batteries can also be used.)
Continuous On Time	:Alkaline batteries：~8 hours
Dimensions	:144(L) ×76(W) ×27(D) (incl. Key ring mount)
	(With Silicone Cover, 147×81×35mm)
Weight	:~290g (Including Batteries, Silicone Cover)
Accessories	:AA Battery ×2
	Silicone Cover ×1

■ PRECAUTIONS

For best performance, and to insure a long service life, please read and follow the notes listed below.

● Protect from dropping or impacts. Even when Silicone Covers are attached, the units can be damaged so please handle with care.
● Avoid using in the following environments:
   ・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.
   ・Locations 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.
● Remove the batteries if units will not be used for a long time.