

HV1305(G)C

Horizontal / Vertical Laser

Hands-on



CONTRACTORS-TOOLS.COM
SURVEY EQUIPMENT & SUPPLIES

1-877-866-5721



HV1305(G)C Controls



HV1305(G)C Peripherals



HV1305(G)C Peripherals

Indication of the
positive X slope

Indication of the
positive Y slope

5/8" X 11 for vertical

Serial label including the laser safety label



HV1305(G)C Installing the batteries



Open the battery door by pulling the latch here.



If using 4 x D-Cell alkaline batteries, note the plus (+) and minus (-) diagram within the battery pocket.



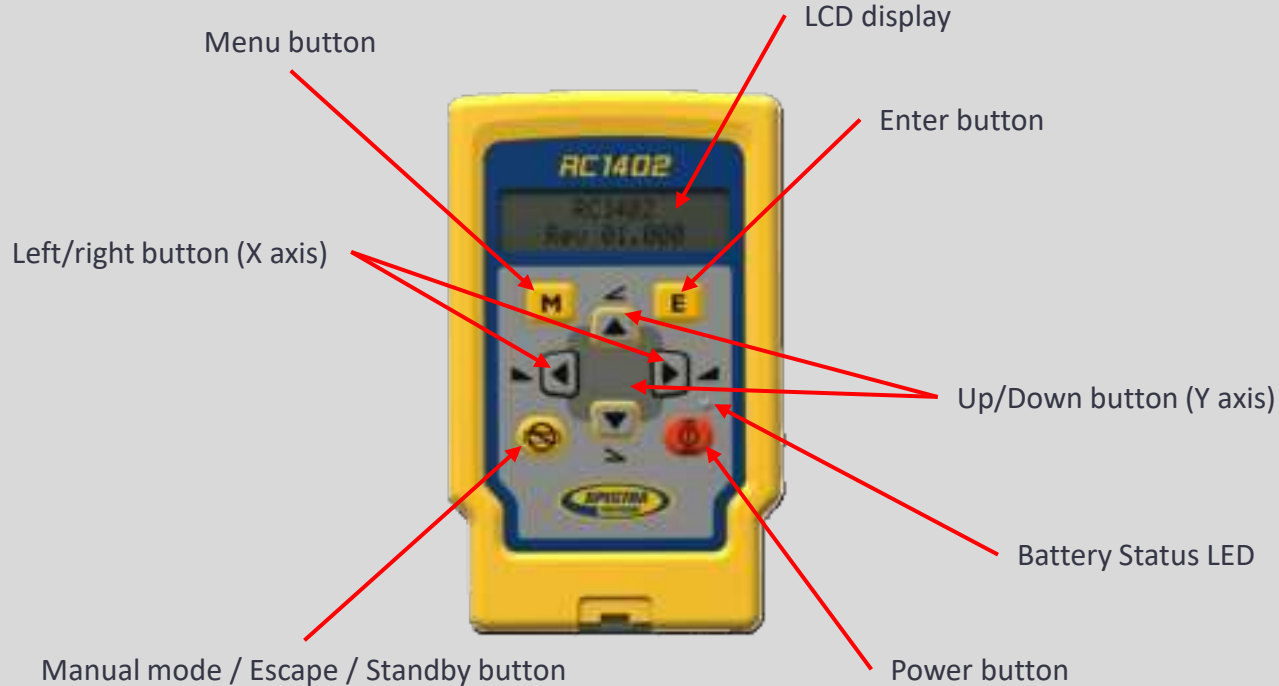
Battery Pack NiMH (B10)
Do not open the cage for exchanging the rechargeable batteries. Install/remove the battery pack. The design prevents miss-insertion.



Charger worldwide (CH10)



RC1402 Remote Control



RC1402 Remote Control



Powering the RC1402

1. Open the battery door using a coin or similar pry device to release the battery door tab on the RC1402N.
2. Insert two AA batteries noting the plus (+) and minus (-) diagrams inside the battery housing.
3. Close the battery door. Push down until it „clicks“ into the locked position.

Turning On the RC1402

Press the Power button to turn on the radio remote control.

Using the RC1402 the HV1305GC and HV1305C provide more features that are not available via the laser only.

Turning Off the RC1402

Press and hold the Power button for two seconds.

The RC1402 is backwards compatible with the products HV302 and HV302G



RC1402 pairing with the laser



Option 1:

1. Make sure both the laser and the remote control are turned off.
2. Start with the laser: Press and hold the manual button and turn on the laser pressing the power button. Result: the laser battery LED flashes fast.
3. Continue with the remote control: Within six seconds press and hold the manual button and turn on the remote control pressing the power button.
4. The RC1402 display show „Pairing OK“ for one second. Finally the RC1402 shows the laser information to indicate the laser has been machted with the remote control.

Option 2:

Bring the laser into pairing mode using the Menu

1. Press the M button.
2. Scroll to Settings, press the E button.
3. Scroll to Pairing, press the E button.
4. Scroll to Radio, press the E button. Result: the laser is in pairing mode.
5. Do step 3 from option 1.
6. The RC1402 display show „Pairing OK“ for one second. Finally the RC1402 shows the laser information to indicate the laser has been machted with the remote control.



HL760 pairing with the laser

Start with bringing the HL760 into pairing mode.

1. Turn on the HL760.
2. Press and hold the  (A) and  (B) buttons for two seconds simultaneously.
3. The display shows MENU first, then RDIO.
4. Press the  (C) button to display the radio mode:



5. Check if MODE LS is shown to connect the HL760 with a laser (LS).
6. If yes, proceed with step 10.
7. If no, press  (C) button. Result: the current mode (HL or OF) flashes.
8. Press  (A) or  (B) button until MODE LS is blinking.
9. Press  (C) button to enter MODE LS. Result: MODE LS stops blinking.
10. Press  (B) button. Result: Shows „PAIR“.
11. Press  (C) button again. Result: Shows „PAIR“ and a rotating bar.

Switch to laser.

12. Make sure laser is turned off.
13. Press and hold  (manual button) and press  (power button). Result: Battery LED flashes fast.
14. „PAIR OK“ will be displayed. The laser turns back to the standard display.
15. Press  (HL760 power button) twice to show the receiver standard display.
16. Result: the receiver display shows the laser and antenna symbol to confirm the radio connection:



CR700 pairing with the laser

Start with bringing the CR700 into pairing mode

1. Press  (power button) to turn on the CR700
2. Press  (menu button).
3. Scroll down  to „RDIO“ to display the radio mode:



4. Check if RDIO LS is shown to connect the CR700 with a laser (LS).
5. If yes, proceed with step 10
6. If no, press  (enter button). Result: the current RDIO (HL or OF) flashes.
7. Press  or  button until RDIO LS is blinking.
8. Press  (enter button) to enter RDIO LS. Result: RDIO LS stops blinking.
9. Scroll down  to „PAIR“.
10. Press  (enter button) again. Result: Shows „PAIR“ and a rotating bar.

Switch to laser

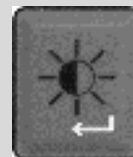
11. Make sure laser is turned off.
12. Press and hold  (manual button) and press  (power button). Result: Battery LED flashes fast.
13. „PAIR OK“ will be displayed. The laser turns back to the standard display.
14. Press  (CR700 menu button) once to show the receiver standard display.
15. Result: the receiver display shows the laser and antenna symbol to confirm the radio connection:



power / menu



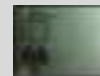
scroll up



enter



scroll down



Turn on the laser



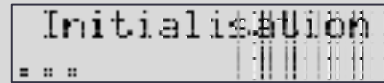
To turn the laser on, press the power button for two seconds.

The laser always powers on in automatic self leveling mode.

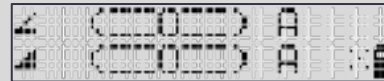
All LEDs are turned on for two seconds.

On the RC1402 remote control:

The LCD shows „Initialisation“ and for one second the software revision.



The LCD shows the mask mode and for a few seconds the battery status.



Power button



Turn on the laser



Status LED

Status LED flashes during self-leveling once a second.

When leveled, the status LED lights solid for the first five minutes or 30 seconds (depends on shock warning settings), then flashes every four seconds indicating the laser remains leveled and Shock warning (HI-alert) has been activated.

Using the RC1402 remote control, pressing and holding the E button shows the current rotation speed, the internal product temperature and battery status.



Turn off the laser



Press and hold the Power button for two seconds turns off the laser.

Power button



Standby mode

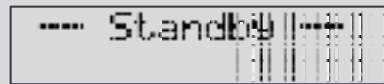


HI/MAN LED

Standby mode helps to increase the battery life but still controls the laser set up during breaks. The self-leveling and rotation will be stopped and the laser beam will be turned off while the shock warning (HI-alert) is still active.

Press and hold the manual button at the laser or remote control for three seconds to activate the standby mode.

The HI/MAN LED at the laser flashes red every five seconds while the display (on the RC1402 remote control) shows „Standby“.



Press and hold the manual button for three seconds to deactivate standby mode and restore full operations of the laser.

Manual button



Manual mode



MAN LED

Manual mode bypasses the laser's automatic leveling to use the laser in slope mode in horizontal as well as in vertical set up.

Press and release the manual button at the laser or the remote control.

Result: the MAN LED will flash red once a second.

Horizontal: slope the laser beam using the arrow buttons at the laser or the remote control.

Vertical: the up/down arrow buttons adjust the vertical slope. The left/right arrow buttons can be used for the line adjustment to the left and right.

To resume the automatic self-leveling mode, press the manual button three times.

Up/down and left/right arrow buttons

Manual button



Mask mode



Mask mode allows you to electronically turn off the laser beam in up to three lighthouse sections to prevent interference with other receivers or reflecting surfaces on the job site.

At the laser or remote control press up/down arrow button and within one second press the manual button to mask the + or – Y axis.

At the laser or remote control press left/right arrow button and within one second press the manual button to mask the + or – X axis.

The display on the RC1402 remote control indicates which section of the laser has been turned off.



Note: The laser always powers on with the mask mode deactivated.

Up/down and left/right arrow buttons

Manual button



Rotation speed



Repeatedly pressing the rotation button on the laser or the RC1402 remote control toggles through 0, 10, 100, 200, 300 and 600 rpm regardless if the unit is in automatic or manual mode.

Using the up/down arrow buttons, the rotation speed can be increased by increments of 10 starting with 100 rpm.

Rotation button

Up/down arrow buttons



Scan Mode



Press and release the scan button on the laser or the RC1402 remote control to toggle between the different scan sizes.

Right/left arrow buttons moves the scan line clockwise or counterclockwise.

When working in horizontal automatic mode, pressing and holding the up/down arrow buttons increase or decrease the line size in 5° increments.

Note: when in vertical setup, pressing and holding the up/down arrow buttons move the line scan clockwise or counterclockwise.

Scan mode button

Left/right arrow buttons



Single Axis Slope Mode



Starting at the automatic leveling status, press the manual button twice to activate the Y axis single axis slope mode or three times to activate the X axis slope mode.

The Y axis slope mode is indicated by the simultaneously flashing red and green LEDs once every second.

In the X axis single slope mode these LEDs flash every three seconds.

When the Y axis is in Single Axis Slope Mode, use the up and down arrow buttons to slope the Y axis while the X axis remains in self-leveling mode.

When the X axis is in Single Axis Slope Mode use the left and right arrow buttons to slope the X axis while the Y axis remains in self-leveling mode.

Red and green LED is flashing to indicate Single Axis Slope Mode

Manual button



PlaneMatch = Single Axis Slope



PlaneMatch requires RC1402 and HL760 or CR700 receiver that is paired with the laser. Press M button on the remote control. Using the up and down arrow buttons scroll to >>PlaneMatch<<. Press E button to enter the sub menu. Press E button to confirm the PlaneMatch for the Y axis. When PlaneMatch has been completed, the HL760/CR700 goes back to the standard elevation display. The laser shows it status by simultaneously flashing red and green LEDs once a second.

Note: The Y axis is in manual mode and the X axis is in automatic mode.

Exiting PlaneMatch can be done by pressing the Manual button twice where the unit always goes back to automatic mode.

Red and gree LED is flashing to indicate Single Axis Slope Mode

Manual button



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