PG-xH12JS Pistol Grip Remotes

Features

✓ PG-9H12JS 900 MHz@10 mW / PG-2H12JS 2.4 GHz@100 mW / RF Power License-Free Operation
✓ Direct Sequence Spread Spectrum Technology
✓ Three 3-Position Toggles ✓ Two Dual Axis Joysticks
✓ Dedicated M-Stop Button ✓ Four Status/Diagnostic LEDs
✓ Glove-Accessible Switches ✓ Four Handle-Embedded Magnets
✓ Umbilical Connection Option ✓ J1939 CAN Capable
✓ Powered by 4-“AA” Cell Batteries
✓ Comfortable Weatherproof Pistol Grip Design

The SmaRT™ PG-xH12JS pistol grip remotes are designed for traditional and non-traditional mobile applications. Capable of activating digital and joystick trigger-control-pulse-width-modulated proportional outputs of SmaRT base units, the PG-xH12JS provides single-handed operation in a comfortable layout. Using direct sequence spread spectrum (DSSS) wireless technology at 900 MHz or 2.4 GHz, the SmaRT pistol grip remote provides a robust link with SmaRT base units in congested radio environments. The SmaRT PG-xH12JS features seamless association to a SmaRT base unit without the need to open the case of either unit. The umbilical option allows a PG-xH12JS remote to directly connect to base units.

The rugged weatherproof Pistol Grip enclosure allows the unit to operate worry free in harsh weather conditions. Four handle-embedded magnets allow the remote to be securely attached to ferrous surfaces to help prevent misplacing the unit while not in use.

Specifications

Power

\[ V_{\text{in}} \] +3.0 VDC nominal
Batteries Four AA Alkaline
Battery Life ≥175 to 200 hours
Low V Power Down 1.6 VDC
Auto-Power Down 10 minutes of inactivity (default)

Radio

Frequency 906–924 MHz; 2405–2480 MHz
RF Power 10 mW @ 900 MHz; 100 mW @ 2.4 GHz
License License-Free
Modulation DSSS
Antenna Internal

Environment

Operating Temp –20°C to 55°C (–4°F to 131°F)
Storage Temp –40°C to 55°C (–40°F to 131°F)
Humidity 0 to 100%

Controls

Switches

Three 3-position toggles, two dual axis joysticks
One trigger (proportional controller)
One oversized stop

Indicators (4 LEDs)

TX (Green)
Blinking Transmitting messages
Steady Switch active
RX (Amber)
Blinking Receiving messages
Steady Output of interest active
Error (Red)
Steady Error detected; switch conflict
Flashing Switch conflict, switch held by user when turned on

Battery (Amber)
Flashing Low battery indication

Enclosure

Dimensions mm: 230.59 x 133.93 x 146.92
inch: 9.08 x 5.27 x 5.78
Weight 1.22 kg (2.7 lbs)
Durability High Impact Polymer
**Associate Mode**

All Cervis systems are associated (communications are pre-set) at the factory. However, a SmaRT PG-xH12JS can be associated to a SmaRT base unit in the field when desired.

To associate there must be a clear line-of-sight between the handheld and the base unit, and both units must be OFF (powered down). Do not operate the trigger while associating.

1. Stand near to the base unit in a clear direct line-of-sight with the handheld while both handheld and base unit are OFF.
2. Release the MACHINE STOP, move any switch to its maximum position and then allow it to return to its neutral position. This activates the handheld making it ready for use.
3. Hold SW1 in the UP (Associate) position.
4. Hold SW3 in the UP position.

All four LEDs will flash once, TX (transmit) lights steady, and RX, ER, and Battery go out.

5. Continue to hold SW1 and SW3.
6. Power Up the base unit.
7. Release SW1 and SW3.

Handheld and base unit association is complete when TX and RX continue to blink (flicker) while the handheld and base unit are active (on) indicating the communication link is established.

**PG-xH12JS Family**

All PG-xH12JS handheld remotes use four “AA” cell batteries for power and have four handle-embedded magnets. The following table defines various features applicable to the models listed.

<table>
<thead>
<tr>
<th>Model Name</th>
<th>Freq.</th>
<th>RF Power</th>
<th>Umbilical</th>
<th>CAN Capable</th>
<th>Dedicated Stop</th>
<th>Joysticks (X and Y Axis)</th>
<th>Proportional Trigger Control</th>
<th>Toggle Switches</th>
</tr>
</thead>
<tbody>
<tr>
<td>PG-9H12JS</td>
<td>900 MHz</td>
<td>10 mW</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Three 3-position</td>
</tr>
<tr>
<td>PG-9H12JS-UMB</td>
<td>900 MHz</td>
<td>10 mW</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Three 3-position</td>
</tr>
<tr>
<td>PG-2H12JS</td>
<td>2.4 GHz</td>
<td>100 mW</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Three 3-position</td>
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<tr>
<td>PG-2H12JS-UMB</td>
<td>2.4 GHz</td>
<td>100 mW</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Three 3-position</td>
</tr>
</tbody>
</table>

*Custom Configurations by Request*