VoltEdge

Technical Product Guide ASCII Safe

PulseBand 300

Description:

Wearable fitness band for wellness tracking and notifications.

Serial Numbers:

- VE-PB300-43125
- VE-PB300-52717
- VE-PB300-35862

Specifications:

- Battery: 220mAh Li-Ion (7 day typical)
- Sensors: HR PPG, SpO2, 3-axis accel
- BT 5.2 BLE
- 1.1 in AMOLED, 450 nits
- IP68 water rating
- Charging: magnetic pogo 5V 0.5A

Diagnostics:

- Battery load test 150mA 60s
- PPG SNR measurement at rest
- Accel vector self test
- Firmware CRC and bootloader

Troubleshooting Steps:

Reboot device by holding the side button for 10 seconds, then place it on a clean charger for 30 minutes. If the UI still does not appear, remove the band, dry contacts, and attempt a second 30 minute charge to rule out intermittent dock alignment.

Open the mobile app and install the latest firmware, then run the sensor calibration wizard end to end. If symptoms persist, disable always-on display and third party watch faces for one day to isolate excessive draw from software features.

Decision Tree:

No power -> charge 30m -> still off -> hard reset -> measure voltage under 150mA load. If voltage drops below 3.6V in 60s, classify as battery module failure and proceed to RMA. Otherwise, repeat charge cycle and recheck boot sequence.

Heart-rate inaccurate -> run calibration -> confirm SNR on PPG is >= 20 dB during rest. If SNR stays < 20 dB after two clean attempts, treat as sensor array failure and RMA; if SNR recovers, advise user hygiene and strap fit guidance.

Expanded RMA Conditions:

- Battery fails load test < 3.6V in 60s

- PPG SNR < 15 dB after calibration
- Liquid ingress indicator tripped
- Display pixel defects >= 5 or line failure

HyperSound Pro

Description:

Wireless ANC headphones with studio-grade codecs.

Serial Numbers:

- VE-HSPRO-41521
- VE-HSPRO-35313
- VE-HSPRO-25081

Specifications:

- Drivers: 40mm neodymium
- Battery: 1200mAh, up to 30h ANC
- Codecs: SBC, AAC, aptX HD, LDAC
- 6 mic hybrid ANC
- BT 5.3 multipoint
- USB C 5V 1A

Diagnostics:

- Driver sweep 20Hz-20kHz
- Channel balance check
- ANC mic self test and phase
- Near-field RSSI check
- Battery IR quick test

Troubleshooting Steps:

Reset the sound profile and clear EQ in the companion app, then perform a controlled driver sweep at 1kHz reference level. If distortion is heard, test with a wired cable and a second source to separate RF from driver issues.

Delete all Bluetooth pairings on both the headset and the phone, then re-pair and update firmware. If the link remains unstable within 1 meter line-of-sight, try an alternate phone to exclude host stack problems before escalating.

Decision Tree:

Distortion -> run sweep -> compute THD at 1kHz 94dB. If THD exceeds 5 percent or a channel imbalance > 3 dB is measured after resets, classify as driver failure and RMA; if within spec, advise cleaning ear pads and re-test.

No BT connect -> clear cache and re-pair -> measure near-field RSSI. If RSSI is persistently < -85 dBm at 1 m after firmware update, treat as RF module or antenna issue and RMA; otherwise, inspect host device and environmental interference.

Expanded RMA Conditions:

- Driver THD > 5 percent or open/short

- RF module fails RSSI spec at 1 m
- ANC mic failure (>=2 mics) or self test error
- Battery swelling observed