

若您不需要使用新功能，則不需更新韌體。

If you are not going to use the new function, please do not update your firmware.

Major update:

Ver.	Description
4.30	4.26 to 4.29 was skipped. <a href="https://zh.wikipedia.org/wiki/交通部中央氣象局地震震度分級">https://zh.wikipedia.org/wiki/交通部中央氣象局地震震度分級</a> The new intensity scale was released by CWB.
4.34	Debug Please update your firmware to 4.34 if you are using 4.31 to 4.33. NEW Modbus address updates Options of AUTO_OFFSET: YES / NO / TRTC TRTC: Disable the AUTO_OFFSET during triggered.
4.35	Debug Fix EEWS intensity will be overwritten by on-site intensity.
4.37	Debug SPS1000 did not support 10 Hz Low-pass filter before 4.37.
4.40	Update Update the library of MQTT. <b>You must update the firmware via our update program.</b> <b>DO NOT update the firmware manually.</b> Please press 7 seconds on the button and wait. The device would download the library and firmware. After downloading, the firmware would reload automatically. NEW PX-01 and PX-01 Cube could connect to SIAP weather station now. Debug The record threshold is useless when the system enabled the voting system of trigger (N out of M) and [GLOBAL_EVENT_ENABLE]. It would record once the event was triggered and the intensity or PGA of message Palert reached the threshold now.
4.41	NEW Press 10 seconds, backup the firmware (paIntSave.exe or vAlert8Save.exe). Press 6 seconds to reload the firmware without restart the network.

	<p>Debug</p> <p>The PGA in file name and file is not matched.</p> <p>It might cause the event file issue such as no pre-event.</p> <p>Please update the firmware if the version is between 4.30 to 4.40.</p>
4.57	<p>Debug</p> <p>Change the frequency of the heartbeat signal.</p>
4.58	<p><b>Major update</b> (2021/05/24)</p> <p>Debug</p> <p>If [PRE_EVENT_SECOND] is zero, the start time of the event file will be wrong. This issue is fixed in this version.</p> <p>Fix the issue of the IIR low-pass filter of 20 Hz.</p>
4.59	<p>2021/06/11</p> <p>Palert series</p> <ol style="list-style-type: none"> <li>1. Adding displacement in Modbus.</li> <li>2. Adding [REMOTE_CONTROL] for enabling/disable DO control via Modbus.</li> <li>3. Adding DATA_FIXED_POINT option for event file.</li> <li>4. Adding recovery.sh call in factoryReset().</li> <li>5. Fixing bug of reset to factory setting by pressing the button which could not press 6 seconds.</li> <li>6. Changing selfTest() call by threaded.</li> </ol> <p>Cube &amp; PX-01</p> <ol style="list-style-type: none"> <li>1. Adding [REMOTE_CONTROL] for enabling/disable DO control via Modbus.</li> <li>2. Adding [DATA_FIXED_POINT] option for event file.</li> <li>3. Adding recovery.sh call in factoryReset().</li> <li>4. Adding of sending reload command to Palert if continuing trig.</li> <li>5. Fixing data contamination which causes max. intensity, PGA, PGV odd in [AC200GW] sensor, mode 16 packet.</li> <li>6. Fixing [AC200GW] sensor reset filter bug which will cause trig issue every hour at 3 minutes.</li> <li>7. Fixing bug of [AC200GW] sensor samplingRate incorrect in the event file.</li> <li>8. Fixing [AC200GW] sensor event does not stop issue if the offset is drifted during a big earthquake.</li> <li>9. Fixing bug of reset to factory setting by pressing the button which could not press 6 seconds.</li> </ol>

	10. Changing selfTest() call by threaded.
V4.60	<p>Palert series</p> <ol style="list-style-type: none"> <li>1. Adding NTP restart if offset &gt; OFFSET_TH.</li> <li>2. Adding NTP sync. information for Modbus.</li> <li>3. Adding LCD BRIGHTNESS_ON_ERR while error is detected.</li> <li>4. Adding CPU_SLIP_TIMEOUT_TICK for new SLIP packet CPU_ADC_STREAM_100 which will be used in the new CPU board.</li> <li>5. Modifying GEO_CH_4 and GEOPHONE_STREAMING is the same function.</li> <li>6. Fixing bug of GEO_CH_4 without waveform.</li> <li>7. Adding CPU_DATA_ALIGNMENT for disable/enable of sampling data addendum or discard.</li> </ol> <p>Cube &amp; PX-01</p> <ol style="list-style-type: none"> <li>1. Adding NTP restart if offset &gt; OFFSET_TH.</li> <li>2. Adding NTP sync. information for Modbus.</li> <li>3. Integrating HAZUS and onsite earthquake information for GP.</li> <li>4. Disabling Modbus mapping for mode 1 packet header from Palert 0 ~ 4, Modbus addresses 3899, 4899, 5899, 6899, 7899.</li> </ol>
V4.61	<p>Palert series</p> <ol style="list-style-type: none"> <li>1. Fix system hang issue if fileByMinute and AUTO_START are enable in [AUTO_RECORD]</li> <li>2. Fix last config item not record in configRead.txt bug.</li> <li>3. Fix IP display on LCD not integrity in lcdPrintLogoForce().</li> <li>4. Fix bug of event file still record even if Palert is disconnect when fileByMinute.</li> <li>5. Change event file close at 00:00:00 to 00:00:00 ~ 00:00:05</li> <li>6. Add CEB protocol2</li> <li>7. Add LPF coefficients of 25 Hz and 250 Hz (LPF_HI_ORDER YES)</li> <li>8. Add conditions of calling restartNTP()</li> </ol> <p>Cube &amp; PX-01</p> <ol style="list-style-type: none"> <li>1. Fix last config item not record in configRead.txt bug.</li> <li>2. Fix IP display on LCD not integrity in lcdPrintLogoForce().</li> <li>3. Fix bug of event file still record even if Palert is disconnect when fileByMinute.</li> <li>4. Change event file close at 00:00:00 to 00:00:00 ~ 00:00:05</li> <li>5. Fix HAZUS_RSHD driven by not event</li> </ol>

	6. Add conditions of calling restartNTP()
V4.62	<p>Palert series</p> <ol style="list-style-type: none"> <li>1. Add NTP OFFSET_TH control and NTP information to mbusAi[].</li> <li>2. Add BRIGHTNESS_ON_ERR while error is detected.</li> <li>3. Modify noSlipCnt check by every 3 seconds.</li> <li>4. Modify GEO_CH_4 and GEOPHONE_STREAMING is the same function.</li> <li>5. Fix bug of GEO_CH_4 without waveform.</li> <li>6. Fix timing issue of miniSeed file</li> <li>7. Add log for NCREE trig</li> <li>8. Add [REPLAY] to simulate a historical event</li> <li>9. Add an option for record mode of NCREE trig. (RECORD_DRIVEN_BY_EVENT)</li> <li>10. Add an option to handle spike issues. (SPIKE_DATA FIRST_DATA/INTER_DATA)</li> <li>11. Add options for hardware settings. (COUNT_TO_GAL, CPU_SLIP_TIMEOUT_TICK, CPU_DATA_ALIGNMENT, DESPIKE)</li> <li>12. Fix the issue that vector PGA and Intensity are not matched if clients read value from Modbus.</li> </ol> <p>Cube &amp; PX-01</p> <ol style="list-style-type: none"> <li>1. Integrate HAZUS and onsite earthquake information for GP.</li> <li>2. Add NTP OFFSET_TH control and NTP information to mbusAi[].</li> <li>3. Disable palertAiMapping[] = {2900, 3900, 4900, 5900, 6900}.</li> <li>4. Modify double events logic.</li> </ol>
V4.63	<p>Palert series</p> <ol style="list-style-type: none"> <li>1. Fix start time issue. (1970)</li> <li>2. fileByMinute is available for miniseed file (AUTO_START must be "YES")</li> <li>3. Add a new option for PALERT_ADVANCE_INT. "INITIALIZING_OFFSET NO" means do not calculate offset after booting.</li> </ol> <p>Cube &amp; PX-01</p> <ol style="list-style-type: none"> <li>1. Add a function for PX-01 and Cube that will control relay by Pd value of message pALERT.</li> </ol>
V4.64	<p>Palert series</p> <ol style="list-style-type: none"> <li>1. Add ntpOffset for mode 1 and mode 16.</li> <li>2. Change mbusAi[NTP_OFFSET_INT] unit from ms to 0.01 ms</li> <li>3. Improve key-pressed seconds did not display during displaying IP and other</li> </ol>

info.

4. Add velocity mapping for MSK64 intensity standard.
5. Add MSK84 intensity standard.
6. Add an option "COUNT\_TO\_MODBUS" for the displacement meter
7. Replace streaming data with raw data while filter reset.

Cube & PX-01

1. Fix bug of eewsTest voice.
2. Improve key-pressed seconds did not display during displaying IP and other info.