

# Data Output Format Brief

How our hardware puts caller-ID on the wire — for POS / CRM integrators

## Why this format matters

Every CallerID.com unit I have ever shipped — the original Whozz Calling Ethernet boxes, the Vertex line, and the new Vertex Solace board — speaks the **exact same wire format, byte for byte**. That is a deliberate promise, not an accident.

- **Write your listener once.** The format never changes between models or firmware generations, so the code you write today works with every unit in the field and every one I build next.
- **Real time, no polling.** The record hits your software the instant the call is detected — pop the customer's screen before your staff says hello.
- **Plain text, easy to parse.** Fixed-width ASCII — no proprietary binary, no SDK, no handshake. If you can read a UDP packet, you can read our data.
- **One stream, the whole network.** We broadcast, so any number of POS lanes, back-office PCs, or CRM services on the LAN can listen to the same unit at once.

## How we output the data

Each call event is sent as a single **UDP datagram**, source and destination **port 3520**, broadcast to **255.255.255.255** so every device on the local network receives it. The payload is one fixed-width ASCII record — nothing else is added.

**The fields, left to right:**

| Field         | Example        | Meaning                                                                                                          |
|---------------|----------------|------------------------------------------------------------------------------------------------------------------|
| Line number   | 01             | Which phone line the call is on (01-99).                                                                         |
| Direction     | I              | I = inbound (a call coming in), O = outbound.                                                                    |
| Status        | S              | S = start of call, E = end of call, B = blocked.                                                                 |
| Duration      | 0000           | Call length in seconds (4 digits); 0000 while ringing, filled in at end of call.                                 |
| Activity      | R              | Single status character (e.g. R ring, G general); omitted in Call Accounting.                                    |
| Line (repeat) | 1              | The line number again, right-justified in a 2-char field. Standard & Detailed only — omitted in Call Accounting. |
| Date & time   | 03/02 10:45 AM | Standard: MM/DD + HH:MM AM/PM. Detailed / Call Accounting: MM/DD/YYYY (Call Accounting adds seconds).            |
| Phone number  | 770-555-1234   | Caller's number, left-justified in a 15-char field.                                                              |
| Caller name   | JOHN SMITH     | Caller's name, 15-char field (blank if unknown).                                                                 |

**Three interchangeable formats — same fields, minor differences:**

| Format                                                                       | Sample record                                                      |
|------------------------------------------------------------------------------|--------------------------------------------------------------------|
| <b>Standard</b><br>no prefix, MM/DD                                          | 01 I S 0000 R 1 03/02 10:45 AM 770-555-1234 JOHN SMITH             |
| <b>Detailed</b><br>leading \$, 4-digit year,<br>optional checksum            | \$01 I S 0000 G 1 03/02/2026 10:45 AM 770-555-1234 JOHN SMITH 0D6D |
| <b>Call Accounting</b><br>HH:MM:SS time; no<br>activity or line-repeat field | 01 I E 0095 03/02/2026 10:45:30 AM 770-555-1234 JOHN SMITH         |

**Want to see it on the wire?** Ask me for the sample packet capture (callerid\_udp\_3520\_sample.pcap) — open it in Wireshark to see real UDP/3520 broadcast packets in all three formats, enough to build and test your listener before you plug in a device.

## Can't get a popup? Capture it at the business

When a customer can't get a CallerID popup, don't try to guess from your desk. The fastest way I have found to settle it is to **capture the packets right at the business**, on their own network, with our free **Vertex Config Tool**. That tells me in minutes whether the unit is putting the record on the wire (a unit/wiring problem) or whether the record is fine and the POS/CRM software just isn't reading it (a software problem). Here is how I want it done:

1. **Run the tool on a PC on the same network as the unit.** Install and open the Vertex Config Tool on any Windows PC plugged into the customer's LAN (the same switch/router as the CallerID device). It listens on UDP 3520 automatically. Only one program can hold that port — close any other CallerID software first.
2. **Confirm the unit is alive.** Open Call Processing to watch live call records, then place a test call into the business. If a record appears, the unit is broadcasting; if nothing shows, the problem is the unit, its wiring, or the network — not the customer's software.
3. **Open the Network Packet Capture panel** and enter the capture password to unlock it.
4. **Choose what to capture.** Select All to grab everything on the wire (tick Monitor SIP w/ All if it's a SIP install), or SIP/RTP Export for a SIP-line problem.
5. **Capture a real call.** Start the capture (status flips from Off to Running), place one or two test calls, and watch the Packets Captured: counter climb so you know it's recording.
6. **Save and send it to me.** Stop the capture and save — the tool writes a Wireshark-readable .cap file (same as a .pcap). Use View Captures to find it or Copy Recent Capture to grab the latest, then email that file to me at [info@callerid.com](mailto:info@callerid.com) and I'll tell you exactly where the popup is breaking down.