Verbatim™

Common Questions

The eleven issues RACO support hears most often — what to check, what to press, and how to bring a Verbatim back to a working state in the field.

DOCUMENT
Verbatim Common Questions

AUDIENCE
Installers & Support

SUPPORT
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00 The eleven most common questions

Start with the question that matches your symptom. Every answer is written for a technician on site with the Verbatim open. Codes are shown exactly as they should be keyed on the front panel, with **Enter** at the end of each sequence unless noted.

BEFORE YOU BEGIN

All programming operations assume the unit is powered and in Program mode. Press PROGRAM before keying any code; the **PROGRAM** LED confirms. If you make an error during code entry, press **CANCEL** and start again.

CONVENTION

ZZ is the two-digit channel number — always use a leading zero for channels 1 through 9 (e.g. 01, 02). **The "*" key is the POINT key on the Verbatim.**

01

QUESTION 01

Programming & changing phone numbers

The Verbatim can hold up to sixteen dial-out phone numbers. Add a leading **1** for any cell or long-distance number. Use the **MINUS** key inside the number to insert a one-second dial delay.

DIAL DELAY

`–` one second · `– –` two seconds · and so on. The default delay at the end of dialing is one second.

Add a phone number

`7 01 1–555–5555`	Saves to the **1st** phone number slot
`7 02 1–555–5555`	Saves to the **2nd** phone number slot
`7 DN N`	Continue the pattern up to destination **16**

Overwrite a phone number

Overwriting uses the same code — the new number replaces whatever was in that slot.

`7 01 1–555–5555`	Overwrites the **1st** phone number slot
`7 02 1–555–5555`	Overwrites the **2nd** phone number slot

Delete a phone number

Enter the slot code followed by the **POINT** key.

`7 01 *`	Deletes the **1st** phone number
`7 02 *`	Deletes the **2nd** phone number
`7 DN *`	Continue the pattern for each slot

The "" key is the POINT key on the Verbatim front panel.*

Check an existing number

The Verbatim recites whatever is currently programmed.

`7 01`	Announces the **1st** phone number
`7 02`	Announces the **2nd** phone number

REMINDER

Each number can be up to **60 digits**. Always press `ENTER` at the end of every sequence on the front panel.

02

QUESTION 02

Message recording & reviewing

After keying the code the unit prompts you. Press and hold the **RECORD** key for the duration of your message; release when done and the unit plays it back. Re-entering the same code overwrites the previous recording.

Alarm messages

1 00	Records the **Station ID**
1 01	Records **Alarm Message 1**
1 02	Records **Alarm Message 2**
1 ZZ	Continue for each channel

Normal messages

2 01	Records **Normal Message 1**
2 02	Records **Normal Message 2**
2 ZZ	Continue for each channel

Review existing messages

Useful to confirm what the unit will say for a given channel.

3 01	Plays back both Alarm & Normal for **Ch. 1**
3 02	Plays back both Alarm & Normal for **Ch. 2**
3 ZZ	Continue for each channel

TIP

Stop the recording promptly to avoid wasting speech memory. The Verbatim plays each message back immediately so you can decide whether to re-record louder, softer, or more clearly.

03

QUESTION 03

Alarm trip delay

Trip Delay is the time a channel must remain in its alarm state before the Verbatim acts on it. Values are always in **seconds**.

`902 1`	Sets a **one-second** trip delay
`902 5`	Sets a **five-second** trip delay
`902 X`	Sets an **X-second** trip delay (any value)

04

QUESTION 04

Auto-Call function & daily check-in

Auto-Call has the Verbatim ring you on a schedule, so you know the line and the unit are healthy even when nothing has alarmed.

Enable, disable, and check

`908`	Checks the current **Auto-Call** state
`908 0`	Sets Auto-Call **OFF**
`908 1`	Sets Auto-Call **ON**
`909 24`	Call every **24 hours**

How the schedule anchors

Auto-Call repeats at the same time it was enabled. Enable at **08:00** and the Verbatim calls at 08:00 the next day, and every day after that. You can also set shorter intervals such as 12 hours.

RECOVERY

Because memory corruption can occur, it is good practice to re-enable Auto-Call if it seems to have stopped calling — even when the setting already reads ON — to ensure it continues on schedule.

05

QUESTION 05

Locked up & unresponsive

Work through the checks in order. In most field cases the issue is a seating problem on an option card or a failing lithium battery; a JB-3 hard reset is the last resort.

Check configuration

Verify the Verbatim's configuration against its serial number before touching any hardware.

Lithium battery

Measure the lithium battery on the main board. It must read **above 3 volts**. Replace if lower. When reseating the battery, lift gently so the clip is not bent, then verify contact.

Option cards

Option cards installed incorrectly can lock the unit up.

- Remove each expansion card and inspect the pins for bending.
- Align the pins carefully with the socket on the main board; ensure all pins are fully seated with none exposed.
- Repeat for every option card.

Daughter card

The **bottom slot** on the daughter card is not buffered — use only the **top three slots**.

Factory reset — locating JB-3 and JB-5

Open the Verbatim door and locate the main board label — **VMP7** or **VMP-5** depending on unit age. From the bottom-left corner of the main board, at the very edge, go straight up approximately **5 inches**. You will see two sets of jumper pins: **JB-5** and **JB-3**.

JB-3	**Hard reset.** Short the two pins and hold for **at least 5 seconds**. Erases all programming — re-program the unit afterward.
JB-5	**Soft reset.** Short the two pins and hold for **at least 5 seconds**. Use this before attempting a hard reset.

CAUTION

A JB-3 hard reset clears every user setting, including recorded messages. Only perform it after JB-5 and the hardware checks above have failed to bring the unit back.

06

QUESTION 06

No power

Identify the voltage type

Use the serial number to determine what the unit expects.

12V DC	Serial numbers **above V26842** (dated 09/28/2016)
120V AC	Earlier units use **120V AC**

Verify input & fuse

- Confirm the correct input voltage (**12V DC** or **120V AC**) is actually present at the terminals.
- For **120V AC** models, measure live and neutral. It should read `≈ 100 Ω` — indicating power is reaching the transformer.

07

QUESTION 07

Not going into alarm

If a tripped sensor does not raise an alarm, walk through the wiring and the alarm-condition programming for the channel.

Verify wiring

- Check the serial number for the correct setup before changing anything.
- **8-channel Verbatim:** do *not* use contacts **1–4** on the bottom left of the main board.
- Use the common terminals (**C C C C**).
- All alarm contacts should land on the **expansion card** plugged into the center of the main board.

Check alarm conditions

Verify the alarm state programmed per channel, then measure voltage on the dry contacts. The Verbatim supplies 5V DC on the contact; ensure sensors are dry.

OPEN	`5V DC`
CLOSED	`0V DC`

08

QUESTION 08

Not calling out on alarms

Confirm the phone line first, then work inward to the Verbatim's own phone circuit.

1. **Phone-line type.** Confirm the line is an **analog copper POTS** line. The Verbatim will not work on VoIP or digital PBX extensions.
2. **Dial-out test.** Press the **DIAL OUT** button — you should hear a dial tone.
3. **Voltage check.** Verify `≈ 50V DC` on the tip and ring at the Verbatim.
4. **No voltage?** Disconnect the tip and ring wires from the Verbatim to rule out a short in its own phone circuit, then measure again at the wall.
5. **Line test.** Disconnect the Verbatim and test the line with a handheld phone; if that also fails, the issue is upstream.

09

QUESTION 09

Cannot call into the Verbatim

When you dial the Verbatim and it never answers, the K1 ring-detect relay is the usual suspect.

1. **Voltage check.** Verify `≈ 50V DC` on the tip and ring.
2. **K1 relay.** Confirm the **K1 relay** is present and properly installed — the indent must face **upward**.
3. **Line test.** Disconnect the Verbatim, plug in a regular phone to the same jack, and call the line to confirm it actually rings.

> **RELATED**
>
> If both **08** and **09** fail on the same site, treat it as a line problem first — the carrier or the on-premise wiring — before suspecting the Verbatim itself.

10

QUESTION 10

Power Failure alarm not working

A failed Power Failure alarm almost always traces back to the 6V backup battery or its leads.

6V battery under load

- Test the backup battery **under load**.
- Disconnect AC power and ensure voltage remains at least `6.3V`.

Battery leads

- Measure the **red** and **black** leads with the battery disconnected.
- Reading should be approximately `6.8V`.

11

QUESTION 11

Disarming itself & false alarm calls

Units that disarm themselves, trigger phantom alarms, or behave unpredictably are almost always suffering from memory corruption. Do these in order.

1. **Replace the lithium battery.** Measure first — anything below 3V must be replaced. When seating the new cell, lift it gently to avoid bending the clip so contact is maintained.
2. **Perform a JB-3 factory reset.** See **Question 05** for the JB-3 location. Short the two pins for at least 5 seconds, then re-program the unit.
3. **Verify with Auto-Call.** Re-enable Auto-Call (**Question 04**) to confirm the unit is dialing on schedule after the reset.

> **CAUTION**
>
> Perform the JB-3 reset only after the battery has been replaced and the unit still misbehaves — it erases all user programming and recorded messages.

BONUS REFERENCE

Wiring analog channels & scaling

How to bring a 4–20 mA analog loop into the Verbatim and give it units the unit can speak aloud.

Dry contact sensors

Two-wire setup:

- One wire to **Common (C)**.
- The other wire to the desired **channel input**.

Analog channels (4–20 mA)

- Set the signal range:
  - Low-end signal value: **4 mA**
  - High-end signal value: **20 mA**
- Assign spoken values representing those signals for alarm thresholds.

Analog programming codes

ZZ = channel number. Example: `01` = channel 1.

CODE	DESCRIPTION
SIGNAL TYPE	
`5 ZZ 7 N`	Default is **4–20 mA** — you shouldn't need to change this.
SCALING	
`5 ZZ 1 4`	**Low-end signal value** — equals 4 mA.
`5 ZZ 2 X`	**Low-end spoken value** — the value that 4 mA represents. Example: *0 ft*.
`5 ZZ 3 20`	**High-end signal value** — equals 20 mA.
`5 ZZ 4 X`	**High-end spoken value** — the value that 20 mA represents. Example: *100 ft*.
SET POINTS	
`5 ZZ 5 X`	**Low alarm** set point = spoken value. Example: *23 ft*.
`5 ZZ 5 X`	**High alarm** set point = spoken value. Example: *84 ft*.
`5 ZZ 5 X`	Disables the Low (or High) set point.
DISABLE CHANNEL	
`5 ZZ 0`	Turns off and **disables** channel ZZ.
RECORDING THE ANALOG MESSAGE	
`1 ZZ`	Message **before** the spoken value. Example: *Wet Well Level is*.
`2 ZZ`	Message **after** the spoken value. Example: *Feet*, *PSI*, etc.

Still stuck? Call us.

RACO Manufacturing & Engineering answers support calls directly. We'll help with installation, programming, and anything unusual you see in the field.

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