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KNX DateTime Sync

1. Intro

This driver is designed to broadcast the current time and date to the KNX bus using standard KNX Data Point Types:

- DPT_10 – Time (hours, minutes, seconds)
- DPT_11 – Date (day, month, year)
- DPT_19 – Combined DateTime + system flags (weekday, working day, DST, clock quality)

Note: You don't need to use all three DPTs. The driver will only send those with a Group Address assigned.

This driver is ideal for using Control4 as the master time source for KNX, ensuring all KNX devices stay synchronized — without requiring additional external hardware like KNX time servers.

The driver supports multiple ways to trigger a broadcast:

- Manual action buttons
- Programming commands (e.g. using the Scheduler agent triggering)
- KNX bus read requests from a KNX device
- KNX Gateway coming online (e.g. after Control4 reboots or reconnects to KNX gateway)
- Automatic periodic sending (enabled via a driver property)

Compatibility:

- KNX Tunneling Gateway (tested and developed with version 42)
- KNX Routing Gateway (tested and developed with version 58)

IMPORTANT NOTE:

During development, we identified a bug in both KNX gateway drivers (at the time of testing) that

causes the SECOND field in **DPT_19** to always transmit as 00, regardless of the actual value sent.

To mitigate this, the driver's periodic sending logic ensures that broadcasts occur exactly at the top of the minute (second 00). However, if **DPT_19** is triggered manually via programming, Action button, or by a read request from the KNX bus, we cannot guarantee it will be sent exactly at second 00. This problem is not present in **DPT_10**.

This issue was reported to Control4 support, who have worked diligently to address it. We have received a beta version where the bug has been resolved, although there is still no official ETA for the public release.

We sincerely thank the Control4 Europe support team for their prompt response and commitment.

Gateways Drivers with the bug fixed:

- KNX Tunneling Gateways: Ver 45
- KNX Routing Gateways: Ver 59

This is a free driver! The support is limited.

2. Properties

- *Cloud Status*: Displays the current status of the driver license.
- *Automatic Updates*: Enable driver automatics updates (Recommended!)
- *Driver*: Driver name.
- *Driver Version:* Current driver version.
- *Driver Information:* Shows the latest debug or diagnostic information.
- *Debug Mode:* If On, driver will print debug information on Lua output.
- *Driver KNX Status:* This property gives information about KNX gateway connection.
- *Time KNX GA [DPT_10]:* If needed, insert the KNX group address for broadcasting time using DPT_10.
- *Date KNX GA [DPT_11]:* If needed, insert the KNX group address for broadcasting date using DPT_11.
- *DateTime KNX GA [DPT_19]:* If needed, insert the KNX group address for broadcasting combined date and time using DPT_19.

- *Send Periodically Within The Day:* When set to **Yes**, the driver will manage a timer that sends date and/or time automatically throughout the day.
- *Send Periodically Every [Minutes]:* Sets the interval (in minutes) between each periodic broadcast. Valid range: **1 to 720 minutes** (up to 12 hours). The driver ensures that transmissions are aligned as precisely as possible to the start of each interval. For grater intervals, use Schedule Agent.
- *Next Sending Time:* Displays the exact time of the next transmission.
- *Console:* Used internally for maintenance or advanced diagnostics.

3. Actions

- *Send Time[DPT_10] Now:* Send DPT_10 immediately.
- *Send Date[DPT_11] Now:* Send DPT_11 immediately.
- *Send DateTime[DPT_19] Now:* Send DPT_19 immediately.
- *Send ALL DateTime Now:* Send ALL immediately.

4. Commands

- *Send DateTime Now:* Broadcast DPT(s) depending of the option selected:
  - *ALL DateTime:* Send ALL
  - *Time[DPT_10]:* Send DPT_10
  - *Date[DPT_11]:* Send DPT_11
  - *DateTime[DPT_19]:* Send DPT_19

5. Events

N/A

6. Warranty and disclaimer

Barbini.dev provide drivers tested as much as possible. However, due to the highly variants of systems setups and the constant changing of the electronics systems, updates and/or modifications may be required to fixing bugs or improve the driver functionality.

Many of our drivers interact with systems APIs (like Control4 and/or any other 3rd party system). Therefore, if any API changes, the driver may stop functionating correctly. **Barbini.dev** cannot guarantee long-term functionality of any driver developed that uses APIs. **Barbini.dev** has the right to repair, provide updates, or discontinue a driver at any time. These repairments or updates could be free or required additional expenses. Despite the above, our efforts will always be to maintain the drivers as long as possible and free of charge of upgrades as much as possible.

This is a free driver! The support is limited.

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