



tekmar tN4 482 Gateway

Compatible Control4 Systems:

Designed to work with OS 2.10.6, 3.0+

Compatible Hardware:

tekmarNet4 Gateway 482 - Serial Interface Snow Melting Control 654 (105801) - Snow Melt Group zone control

<https://www.watts.com/products/hvac-hot-water-solutions/controls/boiler-mixing-controls/482/482>

Driver Download & Change Log:

Please visit <https://www.drivercentral.io>

Documentation:

<https://drivercentral.io/platforms/control4-drivers/climate-fan-fireplace/tekmar-hvac-driver/>

Content

- [Overview](#)
 - [Features](#)
 - [License Purchase & Assignment](#)
 - [Driver Setup](#)
 - [Device Setup](#)
 - [Control4 Setup](#)
 - [Snowmelt Groups](#)
 - [Driver Settings](#)
 - [Driver Properties](#)
 - [Composer Variables](#)
 - [Showroom and Free Trial](#)
 - [Support](#)
 - [Warranty & Disclaimer](#)
 - [Developer Information](#)
-

Overview

Control tekmar tN4 thermostats easily over local RS232 communication.

Features

- Reliable RS232 communication with tekmar thermostats (Does not use Cloud for communication)
- Automatic configuration of thermostat settings for fast and reliable installations
- Thermostat Functions: Heat, Cool, Auto, Off
- Fan: Variable Speed, Normal/Auto
- Humidify: Level + Control

- Dehumidify: Level + Control
- Floor or Air Temperatures with the ability to change value via Control4 MyHome App
- Radiant floor heating systems
- Preset + Scheduling supported (using Control4 MyHome App)
- Snow melt integration (Using [654 Thermostat](#))
- Single [Setpoint Thermostats](#) supported

License Purchase & Assignment

A single license will unlock as many instances of the driver as needed in your project. One instance of the Cloud Driver is required to activate all drivercentral licenses and trials. Here is a quick video that demonstrates the licensing process: <https://www.youtube.com/watch?v=xXiXleuk9bU1>

1. Create your project on the drivercentral.io website (this will generate a unique token used in the next step).
2. To download the driver, locate the downloads tab on the driver page on drivercentral.io. Once downloaded, unzip the file and add the driver to your drivers folder.
3. Install and activate the drivercentral's Cloud Driver in your project by pasting the previously generated token in your project. If there is no license associated with the project a trial will automatically activate so long as the driver has not been installed in the past on the controller.
4. To purchase a license, locate the driver on drivercentral.io website and add to the cart. Once checked out the purchased license will be found under available licenses in the projects portal.
5. Using the available licenses tool, add a license to activate the driver in that project.
6. Once the Cloud Driver checks in to the project (it does so once every hour) the driver will activate.
7. If needed, use the Cloud Driver's action "Check Drivers" to force the check in and activate the driver right away.

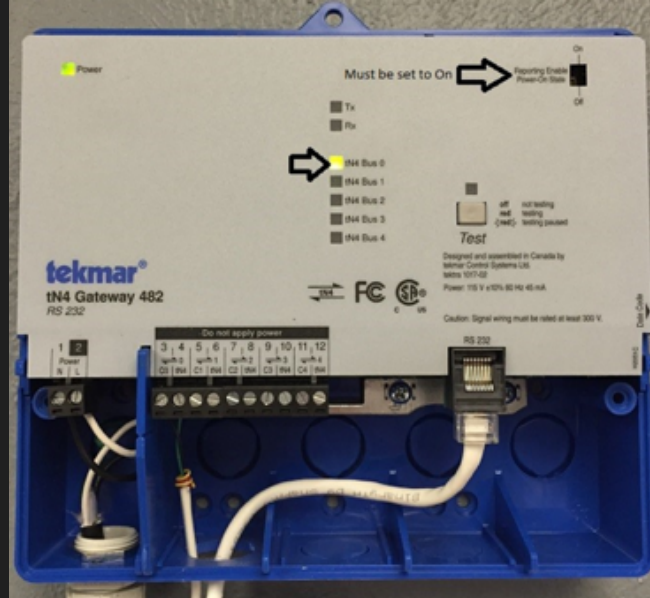
Your driver activation is now complete! You may now continue to Driver Setup. Further clarification with visual representation can be found in the articles on

Driver Setup

Thermostat Compatibility

- tekmarNet4 Setpoint Control 161 (101101) - 1 Stage Heat
- tekmarNet4 Setpoint Control 162 (101102) - 1 Stage Heat/Cool
- tekmarNet2 Thermostat 527 (102301) - 1 Stage Heat
- tekmarNet2 Thermostat 528 (102302) - 1 Stage Heat
- tekmarNet2 Thermostat 529 (102303) - 2 Stage Heat
- tekmarNet2 Thermostat 530 (102304) - 1 Stage Heat, 1 Stage Cool, 1 Fan
- tekmarNet4 Thermostat 537 (100102) - 1 Stage Heat
- tekmarNet4 Thermostat 538 (100103) - 1 Stage Heat
- tekmarNet4 Thermostat 540 (100101) - 1 Stage Heat, 1 Stage Cool, 1 Fan
- tekmarNet4 Thermostat 541 (99301) - 1 Stage Heat
- tekmarNet4 Thermostat 542 (99302) - 1 Stage Heat
- tekmarNet4 Thermostat 543 (99401) - 2 Stage Heat
- tekmarNet4 Thermostat 544 (99203) - 1 Stage Heat, 1 Stage Cool, 1 Fan
- tekmarNet4 Thermostat 545 (99202) - 2 Stage Heat, 1 Stage Cool, 1 Fan
- tekmarNet4 Thermostat 546 (99201) - 2 Stage Heat, 2 Stage Cool, 2 Fan
- tekmarNet Thermostat 532 (107201) - 1 Stage Heat
- tekmarNet Thermostat 552 (105103) - 1 Stage Heat
- tekmarNet Thermostat 553 (105102) - 2 Stage Heat, 1 Stage Cool, 1 Fan, Humidity
- tekmarNet Thermostat 554 (105101) - 1 Stage Heat, 1 Stage Cool, 1 Fan
- tekmarNet Thermostat 557 (104401) - 2 Stage Heat, 2 Stage Cool, 1 Fan, Humidity

Gateway Wiring/Installation



- Wire (568-A) from Gateway RS232 input to Control4 system using the RJ45/DB9 Adapter included with gateway
 - **Note** the illuminated tN4 Bus number. This number is the PORT value you'll use in the thermostat address
- Enable Dip Switch: Reporting Enable. Note: Reboot the gateway if you change this dip setting.

Gateway includes a preconfigured RJ45/DB9 Adapter that must be used

Gateway must be on Protocol 3 (2017) or higher for full functionality. Floor/Slab settings may be incorrect if gateway is on lower protocol. Note: once RS232 communication is set up, the driver will display the Protocol value.

Assign addresses to each thermostat (keep track of each address). Each thermostat is slightly different in how to access the setting, but normally, press n' hold the main button until the settings options are present and go to the Toolbox menu. The address field is under the installer (INST) settings. Refer to the thermostat manual for specific locations. Note: Thermostat may already have an address, change this to a fixed address by using the arrows. A dynamic address will be noted with a * next to the address field on the thermostat.



Setup Control4

1. Add tekmar tN4 482 Gateway driver to project
2. Make binding to RS232 connection
3. Driver should now display Firmware and Protocol information
4. Add thermostat drivers into project

See thermostat documentation for configuration settings

Snowmelt Groups

The driver can activate (turn on) and deactivate (turn off) snow melting groups on a tekmar bus. The driver CANNOT adjust the snowmelt setpoint as the API does not support this. To use, create a driveway heater or other relay device and bind to the correct snowmelt group connection. Snowmelt Group 12 (Storm Mode) is a special melting group where upon activation, the boiler will activate but start melting until the snow melt sensor for a melting group is activated. This can be helpful to 'pre-heat' the boiler so proper snow melting can take place.

Properties, Connections, Commands, Variables

Driver Properties

- **Cloud Status:** Displays driver license state
- **Driver Status:** Displays driver related information
- **Driver Version:** Displays driver version
- **Driver Actions:**
 - **Setup Communication:** Connects to tekmar and sets up communication

- **Request Thermostat Changes:** Requests latest information for all connected thermostats
- **Reset Device Configurations:** Resets any customized configurations and defaults them based on tekmar thermostat types
- **View Gateway Information:** Prints (on Lua tab) all stored information about all thermostats connected to the tekmar system
- **Automatic Updates:** Allows the 'Cloud Driver' to automatically update the driver when a new version is available
- **Debug Mode:** Displays additional information on the lua tab for debugging purposes
- **Device Connection:** Displays the current connection status between tekmar and Control4
- **Device Info:** Displays the current firmware and protocol
 - <https://www.watts.com/our-story/brands/tekmar/482firmware>

Composer Variables

- **DeviceConnectionStatus:** (string) The polling status of the driver (Online, Failed to Check In, Stopped)
- **ERROR:** (string) The current error being reported by tekmar
- **OutdoorTemp:** (number) the reported temperature (Fahrenheit) from tekmar (must have outdoor temp installed)

Showroom and Free Trial

All Cindev drivers for Control4 come with a 7-day trial. Simply add the DriverCentral licensing driver, *Cloud Driver*, along with this driver and you can fully test the driver before purchasing. Including Cindev drivers in your DriverCentral showroom project will give you unlimited use without purchase.

Support

If you require additional driver assistance or are having some issues please visit our help desk: <https://help.drivercentral.io>

Warranty & Disclaimer

www.cindev.com/terms-and-conditions

Developer Information

brought to you by:
Cinegration Development, LLC



www.cindev.com
www.drivercentral.io/cindev/

We are always looking to improve our drivers.
Please send your suggestions to: info@cindev.com