



T-COMM

User Manual

AV-over-IP Encoder and Decoder Management Software

For TNET-ENC-C211-DA, TNET-ENC-H101-DA, and TNET-DEC-H211-DA

All Rights Reserved

Version: T-COMM_2026V1.2

About this manual

This guide explains how to use T-COMM to discover, organize, monitor, configure, and route supported TiGHT AV-over-IP devices. It is for installers, AV technicians, and operators.

Before you begin: Connect the computer and managed devices to the intended network. Permit local UDP communication through the computer firewall.

Supported devices

- **Encoders:** TNET-ENC-C211-DA and TNET-ENC-H101-DA. These publish AV streams to the network.
- **Decoder:** TNET-DEC-H211-DA. This receives a selected network stream and presents it at an output.

Overview

Site

Routing

Tools

Settings

Video Routing
Connect and configure video streams seamlessly

Open Dante controller
 Help

Site

Sort IP

☒ Audio Follow Video
☒ USB Follow Video

☐ Auto take
☒ Toggle header

Filter

TAKE

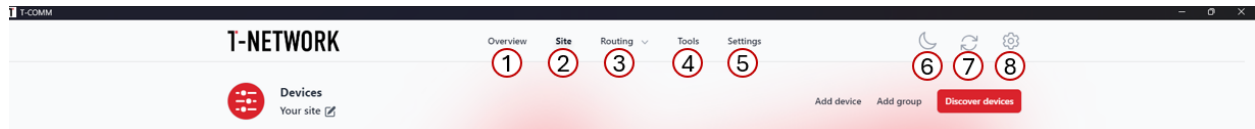
	TNET-DEC-H211-DA 192.168.130.198	TNET-DEC-ROOM1 192.168.130.172	TNET-DEC-H211-DA 192.168.130.164	TNET-DEC-H211-DA 192.168.130.159
TNET-ENC-H101-DA 192.168.130.104 				
TNET-ENC-C211-DA 192.168.130.124 				
TNET-ENC-H101-DA 192.168.130.137 				
TNET-ENC-H101-DA 192.168.130.183 				
TNET-ENC-H101-DA 192.168.130.190 				
TNET-ENC-H101-DA 192.168.130.247 				

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1. Getting started

Launch T-COMM. The main navigation provides Overview, Site, Routing, Tools, and Settings.. Refresh requests for current status from devices assigned to the site.



SCREENSHOT PLACEHOLDER — Top navigation

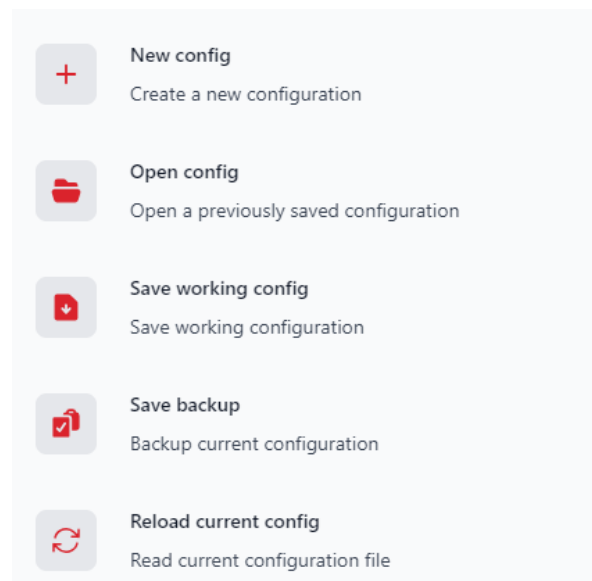
Show Overview, Site, Routing menu, Tools, Settings, theme control, Refresh, and configuration menu. Add numbered callouts.

Navigation at a glance

1. Overview: review current site status.
2. Site: organize device inventory into the installation tree.
3. Routing: select supported Video, Audio, USB, IR, or Serial signal paths.
4. Tools: perform controlled multi-device tasks.
5. Settings: configure T-COMM communication and preferences.
6. Switch between light and dark mode theme.
7. Refresh system information manually.
8. Configuration menu.

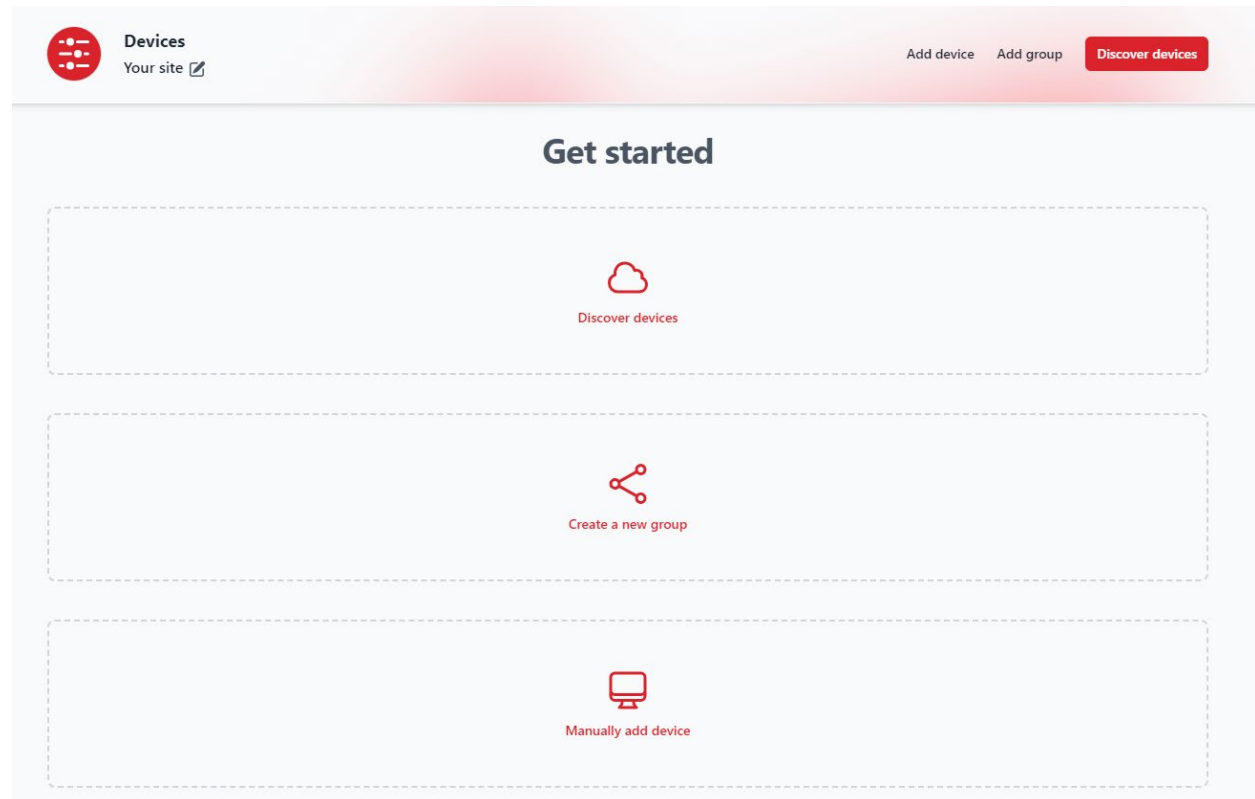
Configuration menu

New config creates a new configuration; Open config loads a saved configuration; Save working config saves current work; Save backup exports a backup; Reload current config reads the saved file again.



2. Site- Build and save a site

The Site view is the operational map of an installation. Build it to match how operators think about the physical system: a small room may need one group, while a campus may need Building, Floor, Room, Rack, and Device levels.



Build levels

1. Go to Site and choose Create a new group or Add group.
2. Select the Parent category where the new level belongs. Select the site root for your first level.
3. Enter a clear Name, such as Building A, Floor 2, Boardroom 2.14, or Display Wall.
4. Select Save. Repeat to create lower levels, choosing the previous level as parent.
5. Stop adding levels when they no longer help an operator find a device quickly.

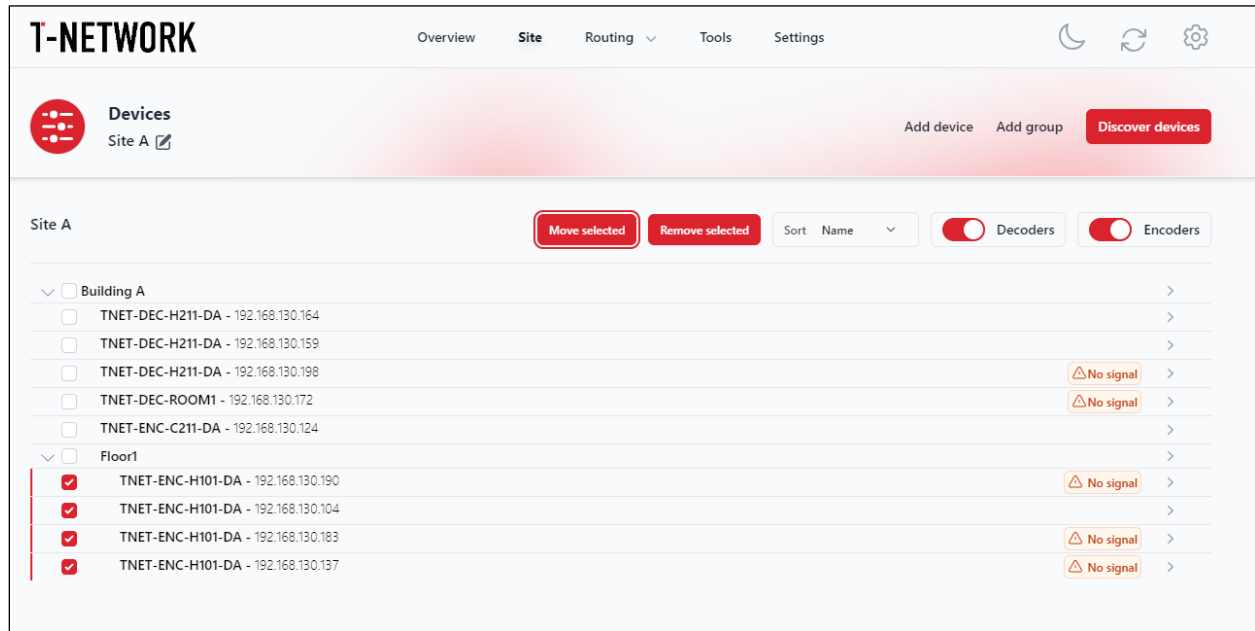
Add, assign, and name devices

Add a device to create or record its endpoint, then use Assign device to place it in the correct site group. Do not recreate a device simply because it moves to another room. Use names that state location and role, for example BR-214-Presentation-ENC or BR-214-Display-DEC.

Reorganize safely

Create the new group first, assign existing devices to it, then check Routing to ensure the structure is understandable. Rename groups with Edit group; a rename does not change hardware identity, IP

address, stream number, or routing. Save a backup before a large reorganization and save the working configuration when complete.



3. Device discovery and assignment

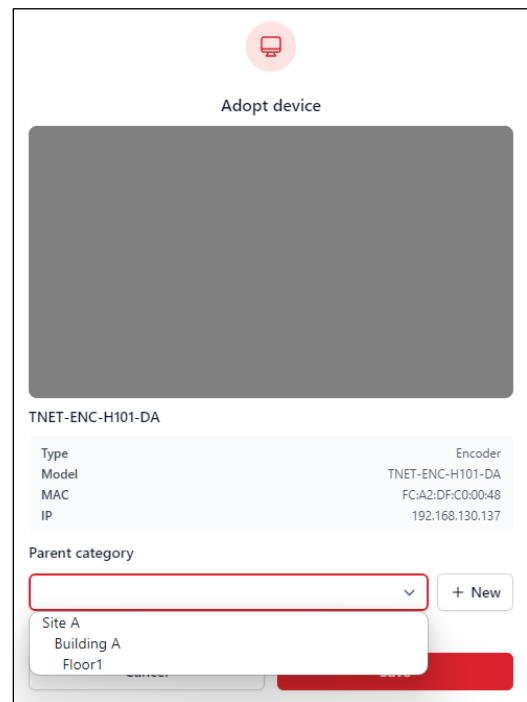
T-COMM uses UDP network communication to discover and query supported devices. Discovery and status normally use port 6797; control commands normally use port 6798. Both are user configurable in Settings.

When devices do not appear

- Confirm the computer and devices are on the intended VLAN or subnet.
- Select the correct local network interface in Settings when the computer has multiple adapters.
- Allow T-COMM through the firewall for local UDP traffic.
- Confirm the device is powered, booted, and has the expected IP configuration.
- Use a manual entry when broadcast discovery is unavailable.

4. Site- Configure a device

Select a device from the Site view to open its record. Controls depend on device model and reported capabilities. Do not apply a setting simply because it is familiar from a different model.



T-NETWORK Overview **Site** Routing Tools Settings

TNET-DEC-H211-DA
Manage device settings

Get full status Open WebUI Quick command

< Device settings
Configure the device settings.

Device name: TNET-DEC-H211-DA

Parent category: Building A

IP Address: 192.168.130.159

MAC Address: 82:95:A6:12:61:48

Device type: Decoder

Model: TNET-DEC-H211-DA

Save

Current device
TNET-DEC-H211-DA -0s ago

- Input signal:** Signal present
- HDCP:** Inactive
- Resolution:** 3840x2160p 60Hz RGB
- Firmware:** V1.2.0

Stream preview: A video frame showing a dark scene with a bright light source and the text 'TIGHT AV' in the top right corner.

Configuration workflow

1. Confirm the model and device identity.
2. Review and record values that must be preserved.
3. Apply one deliberate change at a time where practical.
4. Refresh status and verify the device accepted the change.
5. Save the T-COMM configuration after validation.

Stream preview

Where an MJPEG preview is available, use it as an operational check, not as a substitute for display-side verification.

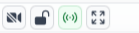
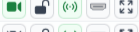
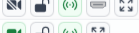
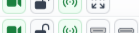
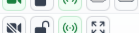
5. Overview- Monitor, export, import, and publish

Overview provides a site-level status table for devices assigned to the Site tree. Use Refresh before export, before applying changes, and after publishing, so that your work begins with the latest reported state.


Overview
 Site A 

Site status overview

Export Import Refresh Filter Columns X

☐	Status	Device name	SN	IP address LAN1	Model	Mac address	Dante Audio Only mode	Dant
☐		TNET-ENC-H101-DA	670-05001-03003	192.168.110.249	TNET-ENC-H101-DA	FC:A2:DF:C0:00:02	True	False
☐		TNET-DEC-H211-DA	670-05011-010034	192.168.110.245	TNET-DEC-H211-DA	82:95:A6:12:61:48	True	False
☐		TNET-DEC-H211-DA		192.168.110.244	TNET-DEC-H211-DA	82:64:47:38:A0:D0	True	False
☐		TNET-ENC-H101-DA	670-05001-03066	192.168.110.242	TNET-ENC-H101-DA	FC:A2:DF:C0:00:41	True	False
☐		TNET-DEC-H211-DA	670-05011-04033	192.168.110.246	TNET-DEC-H211-DA	FC:A2:DF:C0:00:E8	True	False
☐		TNET-DEC-ROOM1	670-05011-04005	192.168.110.243	TNET-DEC-H211-DA	FC:A2:DF:C0:00:CC	True	False
☐		TNET-ENC-H101-DA		192.168.110.247	TNET-ENC-H101-DA	02:4E:13:C6:15:6F	True	False
☐		TNET-ENC-C211-DA	670-05002-03099	192.168.110.241	TNET-ENC-C211-DA	FC:A2:DF:C0:00:C6	True	False
☐		TNET-ENC-H101-DA	670-05001-03073	192.168.110.248	TNET-ENC-H101-DA	FC:A2:DF:C0:00:48	False	False

Export an editable device list

Export creates an XLSX spreadsheet from the visible table columns. Select one or more rows first to export only those devices; if no rows are selected, T-COMM exports all displayed rows. Before exporting, use Columns to choose the information you need and Filter to focus on a group of devices. Keep the id and mac columns unchanged; T-COMM uses either one to match imported rows back to a device.

Prepare and import changes

1. In Overview, select units to be exported.
2. Click Export and save the XLSX file as your working copy.
3. Edit only the supported configuration columns. Do not change device identity fields such as id or mac.
4. Return to Overview and click Import, then select the XLSX file.
5. T-COMM compares each imported value with the currently displayed value and stages only actual changes. It reports the filename and number of changed devices.
6. Review red import errors immediately. A row that cannot be matched by id or mac is not staged.

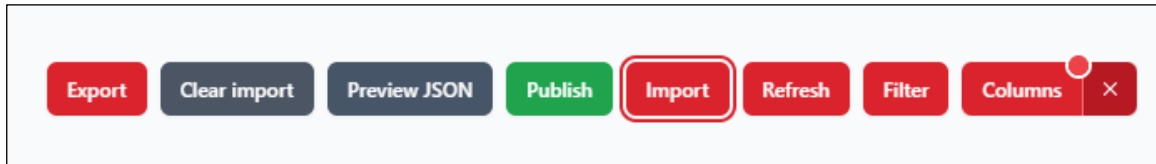
Review before publishing

Use Preview JSON to inspect the per-device payload that T-COMM will send. This is the last opportunity to verify the target address and each changed setting. Use Clear import to discard all staged imported changes without sending them. Importing alone does not change hardware.

Publish staged changes to devices

1. Confirm every staged change and affected device in Overview.

2. Click Publish. T-COMM warns that selected units will **reboot** after configuration is published.
3. Confirm only when the reboot interruption is acceptable.
4. Wait for publishing to finish. Successful device changes are cleared from the staged list; failures remain visible as errors with the relevant device address.
5. Wait for devices to return, click Refresh, and verify status and the real endpoint behavior.



6. Routing

Routing views present a matrix of supported encoder sources and decoder destinations. Open Video, Audio, USB, IR, or Serial from Routing, then use the source/destination labels rather than only row or column position. Decoders on top changes the matrix orientation only; it does not reverse the route direction.

Site	Sort IP	☒ Audio Follow Video	☒ USB Follow Video	☐ Auto take	☒ Toggle header	Filter	TAKE
	TNET-ENC-H101-DA 192.168.130.104	TNET-DEC-H211-DA 192.168.130.159	TNET-DEC-H211-DA 192.168.130.164	TNET-DEC-ROOM1 192.168.130.172	TNET-DEC-H211-DA 192.168.130.198		
TNET-ENC-H101-DA 192.168.130.104							
TNET-ENC-C211-DA 192.168.130.124							
TNET-ENC-H101-DA 192.168.130.137							
TNET-ENC-H101-DA 192.168.130.183							
TNET-ENC-H101-DA 192.168.130.190							

Auto Take - one immediate route

With Auto take ON, clicking a compatible cell sends the route immediately. Confirm source and destination, click the intersection once, then wait for the matrix and destination output to update before making another change.

Manual Take - stage several routes

With Auto take OFF, clicking a cell only stages it; selected cells are red. Choose one desired source for each destination, review all red selections, then click TAKE to send them together. Click the same selected cell again to remove it before TAKE. A later selection for the same destination replaces the earlier staged selection.

Read, hover, sort, and filter

A green bolt indicates the active route, a neutral bolt indicates an available route, and a red selection is awaiting Manual Take. Hover a device header to verify its preview state, Name, Model, Stream IP, Dante/AES67 IP, Control IP, MAC, serial number, and encoder stream number where available. Sort by Name, IP, or Model; use Filter for a focused task and remove it afterward so devices are not mistaken for offline.

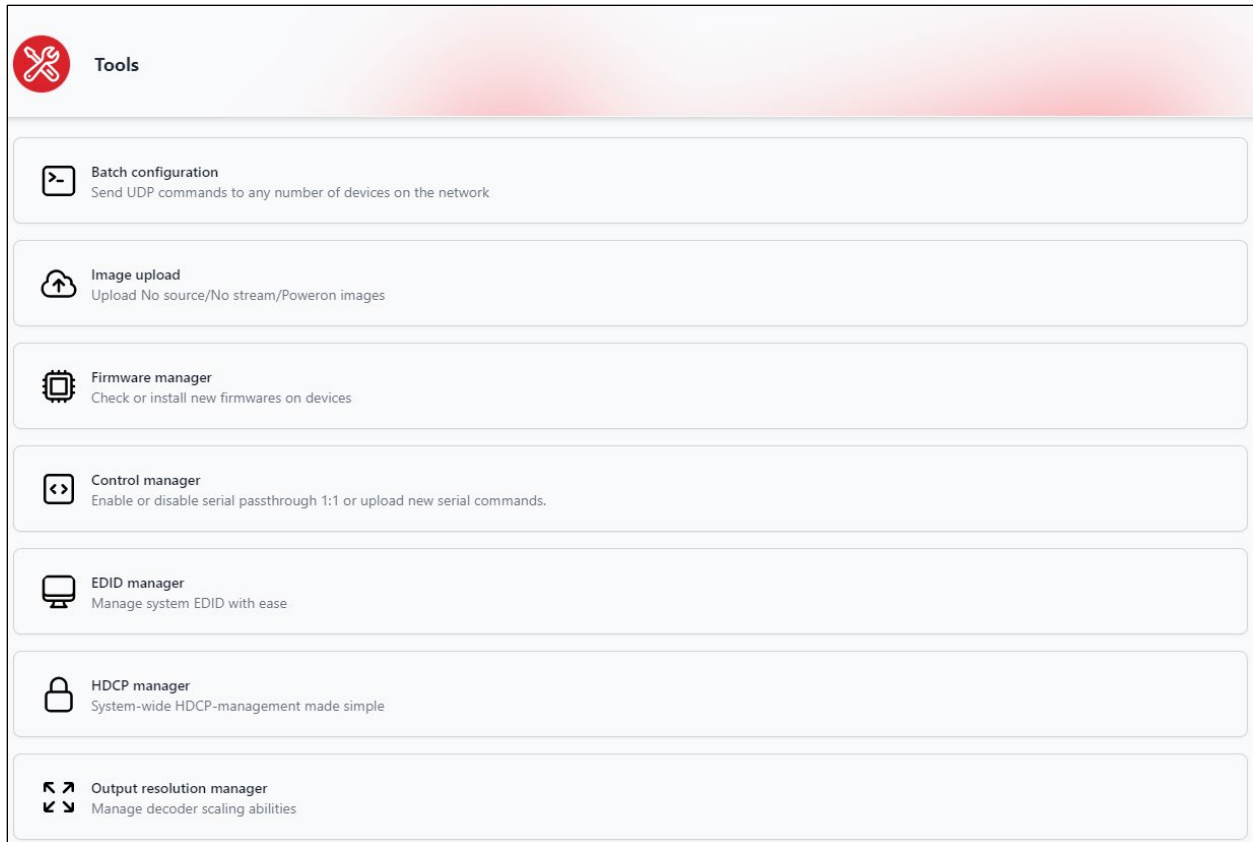
Video follow settings

On Video routing, Audio follow video and USB follow video can route the associated signal with a video take. Confirm these settings before taking video during a shared-source event.

Avoid repeated rapid clicks for the same destination. Let each requested route resolve so final state is clear.

7. Tools- Easy system management

Tools perform controlled work across selected devices. First expand the Site tree and select only the endpoints in scope; the selection summary confirms encoder and decoder counts. Test a new workflow on a representative endpoint before selecting an entire site.



Batch configuration

Open Tools - Batch configuration, select devices, then click Quick command. Choose a documented command from the palette only after confirming each selected model supports it. Send the command, refresh status, and verify the result per device.

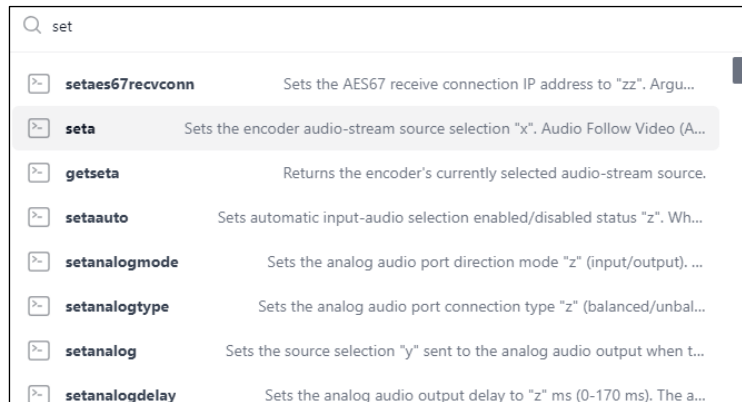


Image upload

Open Tools - Image upload, select target endpoints, choose Select file, then open Upload as. Choose Power on image or No stream image. Wait for completion and verify the corresponding device state with an approved test.

Control manager

Open Tools - Control manager and select devices. Choose Select file then Upload as to upload IR commands or Serial commands. Choose Configure for IR Passthrough, Serial Passthrough, or Serial Settings; use the command palette as directed and test connected equipment carefully.

EDID, HDCP, and Output resolution

Use these managers for display-chain settings. Record original values, make the smallest necessary change, then test with the real source and display. EDID affects what a source believes the display supports; HDCP affects protected content; output resolution must match display capability.

Configure selected encoders

Predefined Copy from decoder

HDMI Input EDID ☒ 3. 3840x2160@30Hz 8bit Stereo Audio ☐ TNET-DEC-H211-DA - 192.168.130.159

USB-C Input EDID ☒ 3. 3840x2160@30Hz 8bit Stereo Audio ☐ TNET-DEC-H211-DA - 192.168.130.159

User EDID file

Configure selected decoders

HDMI/Stream EDID ☒ 3. 3840x2160@30Hz 8bit Stereo Audio ☐ Copy from Output

User EDID file

EDID manager

Configure selected encoders

HDMI Input HDCP Compatibility ☒

USB-C Input HDCP Compatibility ☒

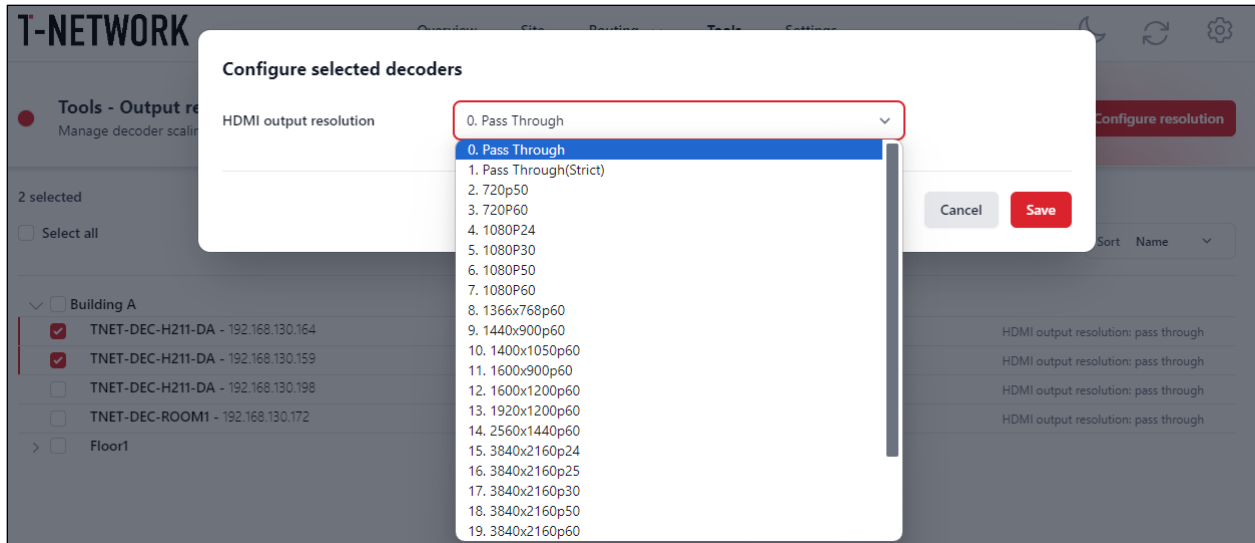
Loop HDMI Output HDCP Mode

Configure selected decoders

HDMI Output HDCP Mode

HDMI Input HDCP Compatibility ☒

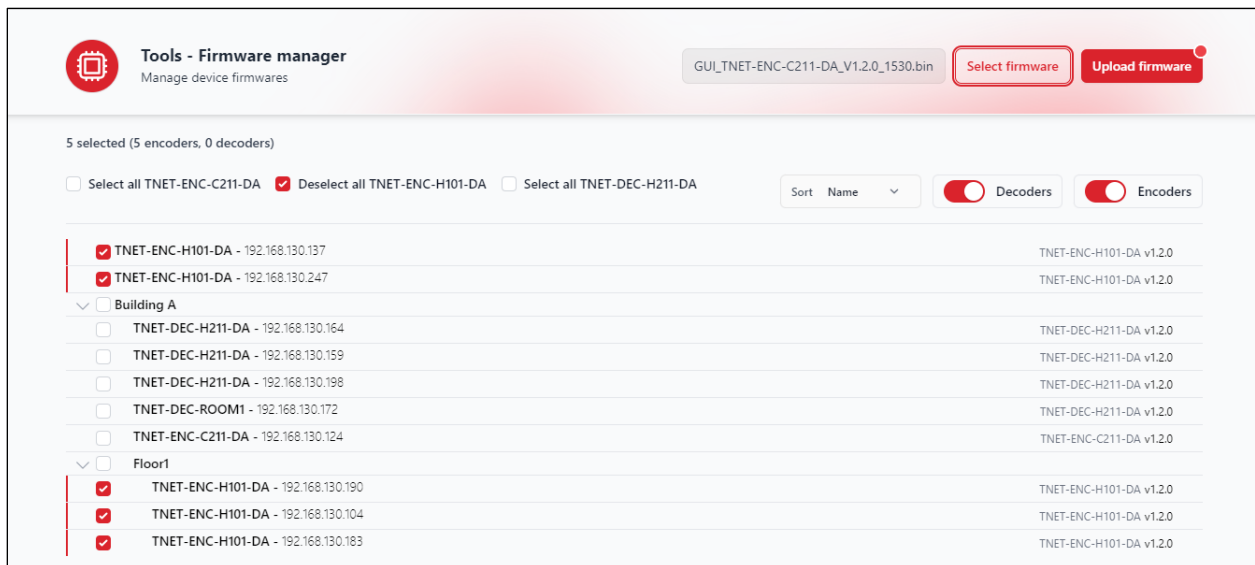
HDCP manager



Output resolution manager

8. Firmware Manager

Mass-upgrade firmware for the whole system or selected units. Schedule these tasks during an approved maintenance period whenever possible to avoid interruptions during firmware upgrade phase.



Firmware manager

1. Open Tools - Firmware manager and select endpoints with check boxes.
2. Check the selection summary, model, and current version for every endpoint.
3. Choose Select firmware and select the approved, model-compatible file.
4. Click Upload firmware only after confirming selection, file, stable power, and stable network.
5. Monitor each device progress. Do not start another upload for a device already uploading.

6. Refresh status after completion and verify normal service before returning the system to users.

Do not power-cycle, disconnect, or reroute a device simply to accelerate an active firmware update.

9. Settings

Settings control T-COMM communication and working-configuration behavior. Save changes intentionally. When leaving with unsaved changes T-COMM will prompt options, choose whether to save, discard, or remain on the page.

T-NETWORK Overview Site Routing Tools **Settings**

T-COMM Settings Save

About
T-COMM version: v1.2.0

On startup
Settings implemented on each application startup.

☒ **Discover devices**
Send network discovery requests to the network.

☒ **Auto claim discovered devices**
Automatically assign newly discovered or unassigned devices to the root site group.

☐ **Clear unassigned devices**
Clear all devices on startup.

System settings
Settings for system behaviour and device communication.

Default config path: C:\ Select

Default firmware path: C:\ Select

Key settings

- Bind IP address: normally any local interface; select a specific adapter on multi-homed computers.
- Discovery and status methods and intervals selections.
- Communication port: UDP 6798 by default; sends control commands. Can be configured to be any UDP port by user. By doing this all units in system will update to use this new port.
- Discovery port: UDP 6797; carries discovery and status traffic.
- Firmware folder: approved firmware repository for the browser for easy access to firmware files from Firmware manager.

- Dante Controller path: Dante Controller external application location for opening the Dante Controller software from routing views.

VLAN boundaries and managed switches can constrain broadcast/multicast discovery. Coordinate with the network administrator.

10. Operational checklist

Get started

- Confirm required encoders and decoders appear in the site tree with meaningful names.
- Refresh status and investigate offline or warning conditions.
- Verify the computer uses the correct AV network interface.
- Save a working configuration and export a backup if needed.

Before routing

- Confirm source and destination with the operator or run sheet.
- Select the correct category: Video, Audio, USB, IR, or Serial.
- Make the route, wait for confirmation, and check destination output.

After maintenance

- Refresh all device status.
- Confirm firmware or configuration changes on affected endpoints.
- Test representative signals and required control paths.
- Save the final configuration and store a backup with project records.