



TetraGraph Connectivity Solutions

## TetraCom™

TetraGraph® sets the standard for seamless integration in quantitative train-of-four (TOF) monitoring, offering unmatched connectivity across leading patient monitoring platforms. Designed to fit effortlessly into existing anesthesia workflows, its advanced interface ensures real-time, reliable data transmission, enhancing clinical decision-making and patient safety.

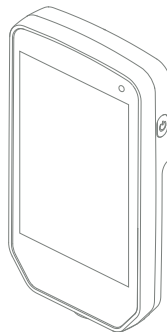
# CONNECT TRANSMIT DOCUMENT

As the market leader in interoperability, TetraGraph provides hospitals and anesthesia providers with a future-ready solution that optimizes efficiency and standardizes neuromuscular monitoring across diverse healthcare environments. With a strong focus on flexibility and ease of integration, it connects with a wide range of monitoring systems, eliminating barriers to adoption and streamlining implementation. By connecting through TetraHub™, Senzime empowers clinicians with the tools they need to enhance perioperative care.

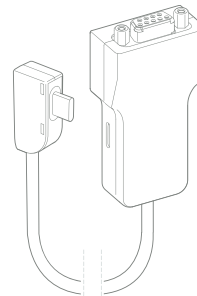
## Senzime Connectivity and Integration Components



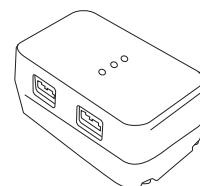
**SEN2015**  
TetraGraph



**SEN2017**  
TetraHub\*



**SEN2019**  
TetraCom\*\*



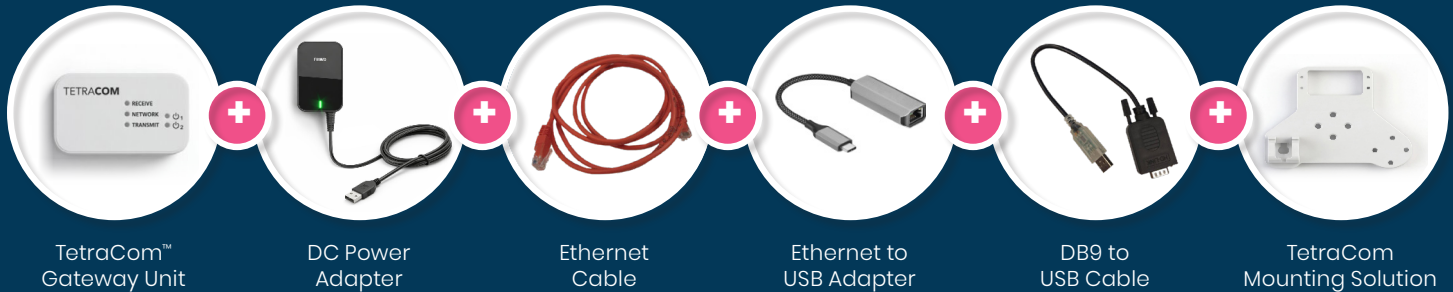
\*Includes a DB9 extension cable.  
This is not needed for TetraCom connection.

\*\*Offered in partnership with R Group (NY, NY).  
Available in the U.S. only.

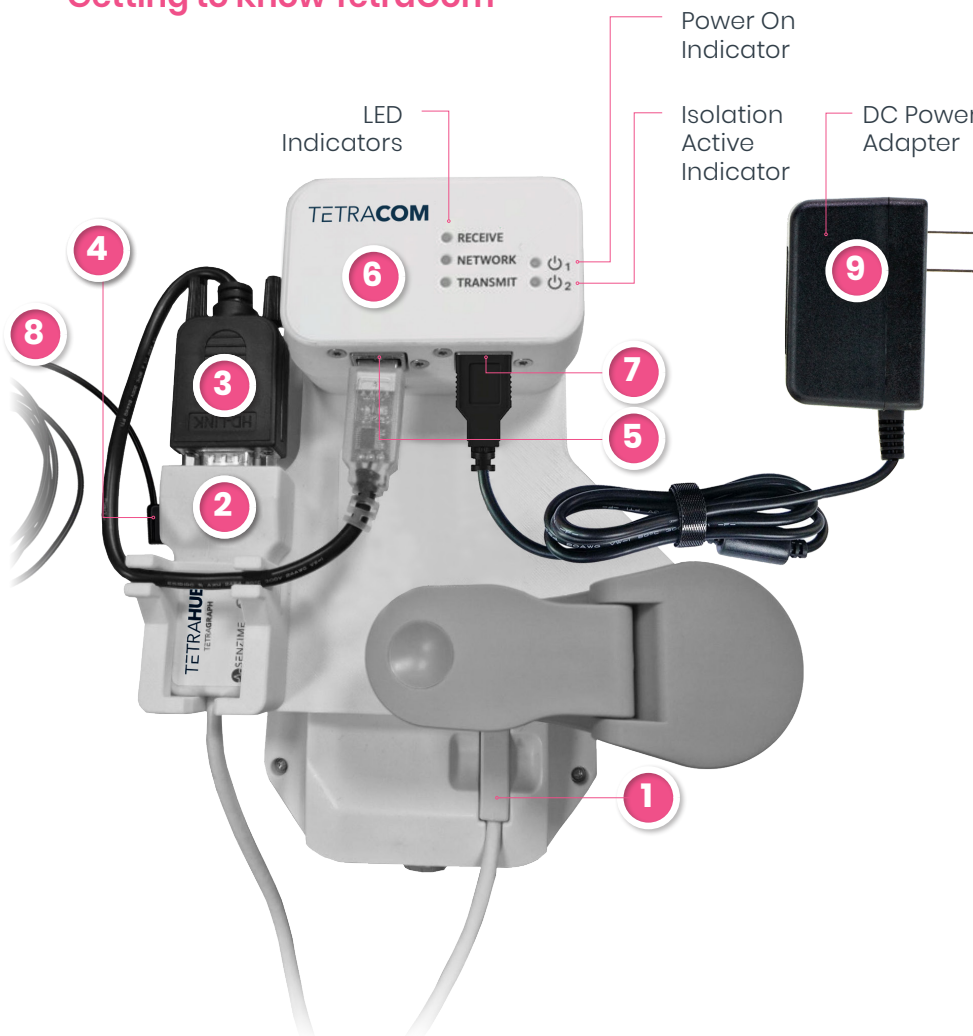


## What's Included with TetraCom™

- TetraCom Gateway Unit
- DC Power Adapter
- Ethernet Cable — For configuration use
- Ethernet to USB Adapter — For configuration and maintenance only. Used for initial setup and troubleshooting
- DB9 to USB Cable — Required for TetraHub connectivity
- TetraCom Mounting Solution — Enables secure mounting in the anesthesia workspace



## Getting to Know TetraCom



## Mount the Device (Optional)

If using the TetraCom Mounting Solution, attach it to TetraCom using the provided screws.

Ensure adequate ventilation and cable routing space.

## Power the Device

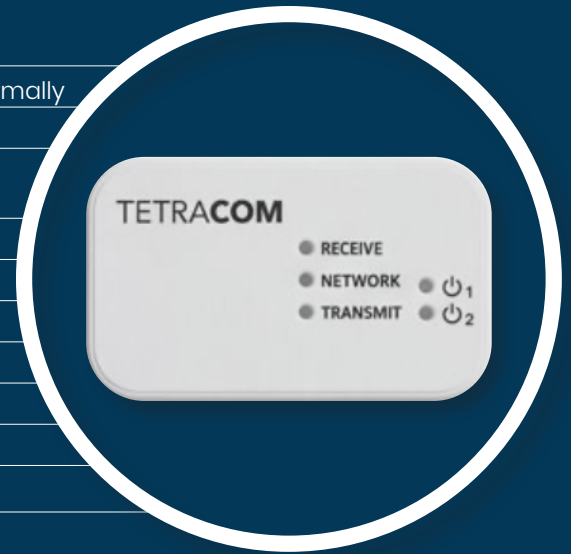
1. Plug the DC power adapter (9) into the Power Input port (7) on TetraCom (6)
2. Connect the TetraGraph power cord (8) to the USB-C port on TetraHub (4)

## Connect Data

1. Connect USB-C cable on TetraHub (1) to the back of the TetraGraph
2. Connect the DB9 end of TetraHub (2) to the DB9 to USB adapter (3)
3. Connect the USB end of DB9 to USB cable to the data hub (5) on TetraCom (6)

## LED Status Reference

LED	Status	Meaning
POWER ON	Solid	Device is powered and operating normally
POWER ON	Off	No power – check power connection
ISOLATION ACTIVE	Solid	Electrical isolation active – safe operation confirmed
NETWORK	Solid Green	Wi-Fi connection active
NETWORK	Blinking	Searching for Wi-Fi network
NETWORK	Off	No Wi-Fi connection
DATA INPUT	Solid Green	Receiving data from medical device
DATA INPUT	Off	No data from medical device
DATA OUTPUT	Solid Green	Transmitting data to clinical systems
DATA OUTPUT	Off	No active data transmission



## Initial Configuration

### Connect Ethernet for Configuration

- Connect the USB-to-Ethernet adapter to the data hub on the TetraCom.
- Connect an Ethernet cable from the adapter to your configuration PC or hospital network.

### Access Device via TetraCom Web Application

- Open a web browser and navigate to the device IP address (obtain via Command Center or DHCP).
- **Enter the default credentials:**
  - **Username:** admin
  - **Password:** [last 8 characters of device ID]
- Click “Sign In” to access the TetraCom Web Application.

### Security

Change the default administrator password immediately after first login. Use a strong password with at least 12 characters including uppercase, lowercase, numbers, and symbols.

## Configure Wi-Fi and Destinations

Navigate to Network Settings in the TetraCom Web Application.

### Configure Wi-Fi connection:

- Enter hospital network SSID
- Select security type (WPA2-Enterprise recommended)
- Enter network credentials

### Configure data destinations:

- Enter clinical information system endpoints
- Configure data protocols (HL7, FHIR, JSON, or XML)
- Set transmission intervals

Save configuration and verify connectivity.

## Operational Mode

- Once Wi-Fi and destinations are configured, transition the device to operational mode.
- Disconnect the Ethernet cable from the TetraCom.
- Verify the NETWORK LED on the top panel indicates active Wi-Fi connection (solid green).
- Connect the TetraGraph to the USB CONNECTION port on the front panel using the supplied DB9 to USB cable.
- Verify the DATA INPUT LED on the top panel illuminates when the device is recognized.

**During normal operation, the TetraCom communicates exclusively via Wi-Fi. Ethernet connection is only required for initial configuration and maintenance activities.**

When the TetraGraph monitor is connected to the TetraCom using TetraHub, the following data is transmitted to the electronic medical record (EMR).

- TOF Ratio (%)
- TOF Count (0–4)
- T1–T4 Amplitudes (mV)
- Post-Tetanic Count (PTC)
- Baseline Twitch Value
- Stimulation Current (mA)
- Device Mode
- Device Serial Number
- Status/Quality Flags

## TetraCom Web Application

There is a monthly or annual subscription fee associated with the TetraCom Web Application required for use. Contact your local representative for more information or to purchase.

### The TetraCom Web Application allows you to View dashboard:

- CPU and memory usage
- Disk usage and available storage
- System uptime
- Network interface status (Wi-Fi signal strength, connection status)
- Connected device information

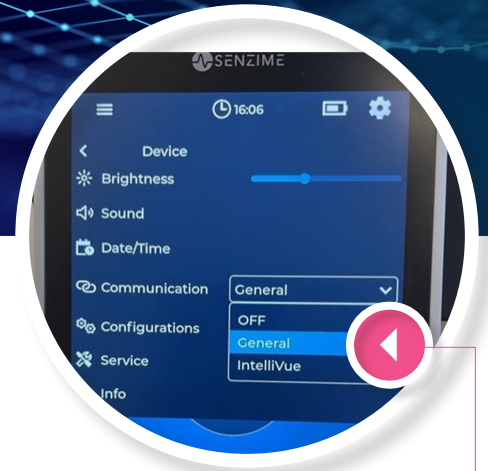
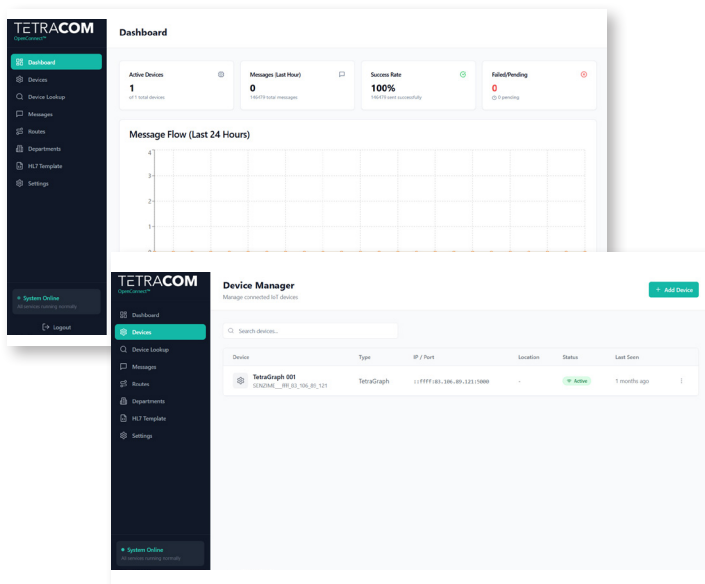
### Configure network settings

### Manage devices

- View connected medical devices and their status
- Configure automatic device recognition settings
- Manually select medical device types
- Assign bed numbers for location tracking
- Start/stop data transmission

### Manage user accounts and access permissions

To download the configuration package visit: <https://gofile.me/6YzWw/ARpZrejD0>



## Operation on TetraGraph

Consult the user manuals for the TetraGraph monitor and any connected external devices for device-specific handling and instructions for use.

### Starting measurement sessions

1. Turn ON the TetraGraph monitor.
2. Settings > Device > Communication > General.
3. Check that the external monitor indication symbol is displayed in the information bar on TetraGraph.
 

External Monitor Indicator
4. Connect the patient to the system.
5. Start TOF measurements.
6. The external hub or monitor will start displaying information from the TetraGraph monitor.

### Finishing measurement sessions

Consult the user manual for the corresponding external hub or monitor to shut down the device.

Consult the IFU for the TetraGraph monitor to shut down the device.

Disconnect TetraHub from the power supply, the external hub or monitor, and the TetraGraph monitor. Proceed to clean and disinfect TetraHub.

## Data Mapping

- A request is submitted by a stakeholder (e.g., MD, IT representative, Biomed, Anesthesia Manager) to the EMR/IT team.
- Three data fields should be added to the Anesthesia Chart: TOFr, TOFc, and PTC.

**Key data points to consider for EMR integration. For a complete list, see the table below.**

Parameter Label	Description	MDIL Text ID	Range	Unit
TOFrat	Train-of-four (TOF) ratio: the ratio between the first and the fourth TOF response	0002-f897	0-100	Percent
TOFcnt	Train-of-four (TOF) count: the number of TOF responses	0002-f8ab	0-4	Unitless
PTC	Post tetanic count (PTC): the number of responses following tetanic stimulation, used to assess deep levels of neuromuscular block	0002-f88b	0-20	Unitless

## List of Labels

**In the table below, all labels are provided with numeric codes from the Medical Device Interface Language (MDIL).**

MDIL Text ID	Label	Unit of Measure	Display Range	Definition	Description
002-593c	EMG	Percent	0-120	"EMG"	Electromyography Low EMG
002-f8ab	TOFcnt	Unitless	0-4	"TOFcnt"	Train-of-four (TOF) count – Number of TOF responses
002-f897	TOFrat	Percent	0-120	"TOFrat"	Train-of-four (TOF) ratio – the ratio between the first and fourth TOF response
002-f88b	PTC	Unitless	0-20	"PTC"	Post Tetanic Count stimulation – PTC
002-f8ac	Twitch	mV	0-50	"Twitch"	Twitch height of the 1Hz/0.1Hz stimulation response
002-f8a7	TOF1	mV	0-50	"TOF1"	Train-of-four (TOF) first response value
002-f8a4	TOF4	mV	0-50	"TOF4"	Train-of-four (TOF) fourth response value
002-f8a8	TOF2	mV	0-50	"TOF2"	Train-of-four (TOF) second response value
002-f8a9	TOF3	mV	0-50	"TOF3"	Train-of-four (TOF) third response value

### Disclaimer:

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For additional product information, please contact Senzime or your local representative.

**[Senzime.com/connectivity](https://senzime.com/connectivity)**