

## User manual.

### Indicator reference.

!! NOTE !!

This user manual referent from VIS-T default setting only.  
Motogadget motoscope MINI / Motosign MINI display.

| Display state.                                                                                                            | Turn(MIX L+R).  | High beam  | N  | Oil pressure.  |
|---------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| Neutral gear.                                                                                                             |                                                                                                  |                                                                                             | Always ON                                                                             |                                                                                                   |
| Side stand down.<br>(Engine running.)                                                                                     |                                                                                                  |                                                                                             | Continue blinking.                                                                    |                                                                                                   |
| High beam.                                                                                                                |                                                                                                  | Always ON                                                                                   |                                                                                       |                                                                                                   |
| Heat grip step change.                                                                                                    |                                                                                                  | Blinking.*as step.                                                                          |                                                                                       |                                                                                                   |
| High temperature warning.                |                                                                                                  | Continue blinking.                                                                          |                                                                                       |                                                                                                   |
| Turn left. / Turn right.                                                                                                  | Blink as same turn bulb.                                                                         |                                                                                             |                                                                                       |                                                                                                   |
| Low fuel.                                | Always ON                                                                                        |                                                                                             |                                                                                       |                                                                                                   |
| Engine light.                            |                                                                                                  |                                                                                             |                                                                                       | Always ON                                                                                         |
| Oil pressure fail.<br>(Engine running.)  |                                                                                                  |                                                                                             |                                                                                       | Continue blinking.                                                                                |

High temperature warning is highest prioritize. - High beam and Heat grip step change will be ignore.

Oil pressure fail is highest prioritize. - Engine light will be ignore.

Heat grip step blinking. Step 1 blink 1 time >> Step 2 blink 2 times.

### VIS-T control setting. Info button setting / display.

| Press & hold info button on handle bar.<br>Release to enter setting.                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                         | Operate                                                                                                                                                                                | Indicator                                                                                                                                                                                                                                                                                             | Speed      | RPM  |                                                                                                                                                                                                                                                                     |    |      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|------|
| Step sequence                                                                                                                                                                                                                                                                | <div>1  +  + </div> <div>Fuel check.</div> <div>While indicator blinking.<br/>Press info button to exit.</div> | 100%                                                                                                                                                                                   | <div><br/><br/><br/><b>Blink</b></div> | 100        | 6000 |                                                                                                                                                                                                                                                                     |    |      |
| <div>1  +  + </div> |                                                                                                                                                                                                                                                                                                                                                                         | 90%                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                       | 90         | 5500 |                                                                                                                                                                                                                                                                     |    |      |
|                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                         | 80%                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                       | 80         | 5000 |                                                                                                                                                                                                                                                                     |    |      |
|                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                         | 70%                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                       | 70         | 4500 |                                                                                                                                                                                                                                                                     |    |      |
|                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                         | 60%                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                       | 60         | 4000 |                                                                                                                                                                                                                                                                     |    |      |
|                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                         | 50%                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                       | 50         | 3500 |                                                                                                                                                                                                                                                                     |    |      |
|                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                         | 40%                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                       | 40         | 3000 |                                                                                                                                                                                                                                                                     |    |      |
|                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                         | 30%                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                       | 30         | 2500 |                                                                                                                                                                                                                                                                     |    |      |
|                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                         | 20%                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                       | 20         | 2000 |                                                                                                                                                                                                                                                                     |    |      |
|                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                         | 10%                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                       | 10         | 1000 |                                                                                                                                                                                                                                                                     |    |      |
|                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                         | 0%                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                       | 0          | 0    |                                                                                                                                                                                                                                                                     |    |      |
|                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                         | <div>2  + </div> |                                                                                                                                                                                                                                                                                                       | Ride mode. | RAIN |  +   | 20 | 2000 |
|                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                       |            | ROAD |  +   | 40 | 4000 |
| SPORT / OFF-ROAD                                                                                                                                                                                                                                                             |   +                                                                                                      |                                                                                                                                                                                        | 60                                                                                                                                                                                                                                                                                                    |            | 6000 |                                                                                                                                                                                                                                                                     |    |      |
| <div>3  + </div>                                                                                       | Traction control operate.                                                                                                                                                                                                                                                                                                                                               | TC ON (Active)                                                                                                                                                                         |  +                                                                                                                          | 20         | 2000 |                                                                                                                                                                                                                                                                     |    |      |
|                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                         | TC OFF (Deactivated)                                                                                                                                                                   |                                                                                                                             | 60         | 6000 |                                                                                                                                                                                                                                                                     |    |      |
| <div>4  + </div>                                                                                       | ABS operate.                                                                                                                                                                                                                                                                                                                                                            | ABS ON (Active)                                                                                                                                                                        |  +                                                                                                                          | 20         | 2000 |                                                                                                                                                                                                                                                                     |    |      |
|                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                         | ABS OFF (Deactivated)                                                                                                                                                                  |                                                                                                                             | 60         | 6000 |                                                                                                                                                                                                                                                                     |    |      |
|                                                                                                                                                                                                                                                                              | Cancel                                                                                                                                                                                                                                                                                                                                                                  | None operate / Repeat process.                                                                                                                                                         |                                                                                                                                                                                                                                                                                                       |            |      |                                                                                                                                                                                                                                                                     |    |      |

Speed / RPM can be disable display. \*\*Speed display is KM/Hr by default.

Use VIS-T PROG software to set setting. See "Software instruction.PDF" for more information.

### Heat grip control. Use OEM heated grip.

Press & hold heated grip switch for 1 second.  High beam indicator will lid up. Heat grip is on.

Press & Releash switch incress power to next step. Each step change  will blink as step. 1 time step 1 > 2 times step 2.

Press & hold heated grip switch for 2 seconds to turn off.

## CLEAR ENGINE CODE.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ignition key to ON and OFF-RUN position to ON. Engine not running.                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Press & hold info button over 10 seconds to access feature “CLEAR ENGINE CODE”                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Indicator:   +  +   will blinking than release info button.                                 |
| Wait until all indicator constant on.   +  +   Done process. Than turn ignition key to OFF. |

## Default VIS-T output setup for Motogadget motoscope MINI / Motosign MINI.

| [Channel] VIS-T connectors. |             | Operate                                                      |
|-----------------------------|-------------|--------------------------------------------------------------|
| [1] Info switch             |             | Directed connect to Info button on handle bar.               |
| [2] D+                      |             | Data+(A) USB tools signal.                                   |
| [3] D-                      |             | Data- (B) USB tools signal.                                  |
| [4] RPM                     |             | RPM signal.                                                  |
| [5] Speed                   |             | Speed signal.                                                |
| [6] Oil pressure            | Low drive.  | Oil press (Blink) + Engine (ON/OFF)                          |
| [7] N / BUS                 | Low drive.  | Neutral + Side stand.                                        |
| [8] H-Beam                  | High drive. | High beam + Temp warn (Blink) + Heat grip (Blink)            |
| [9] Turn                    | High drive. | Turn L+ R + Low fuel                                         |
| [10] AUX1                   | High drive. | ABS INDC + OFF                                               |
| [11] AUX2                   | Low drive.  | SIDE STAND                                                   |
| [12] AUX3                   | Low drive.  | TEMP WARNING                                                 |
| [13] AUX4                   | Low drive.  | FUEL <= LOW FUEL +10% Blink                                  |
| [14] AUX5                   | Low drive.  | TC INDC + OFF                                                |
| [15] AUX6                   | Low drive.  | ENGINE                                                       |
| [16] + BATT                 |             | +12v Direct form positive battery. (Always power)            |
| [17] + KEY                  |             | +12v Ignition key. (Power 12v while ignition key turn ON)    |
| [18] Fuel                   |             | Drive 0-5 volts fuel leveling signal. *Adjust from software. |
| [19] GND                    |             | Ground                                                       |

|                     |       |                                                |                  |
|---------------------|-------|------------------------------------------------|------------------|
| Wheel pulse / REV.  | 1     | Turn flash                                     | BLINK ON/OFF     |
| Wheel diameter (mm) | 2000  | Cycle                                          | 1                |
| RPM pulse / REV.    | 1     | On time                                        | 500              |
| Speed type.         | KM/Hr | Off time                                       | 500              |
| RPM Flash @REV.     | 6500  | Off hold time                                  | 500 *Not in use. |
| RPM Flash speed.    | 150   | Turn flasher can adjust timing as user decide. |                  |

| Fuel / Temp / Heat grip |                      |                 |      |
|-------------------------|----------------------|-----------------|------|
| Full level.             | 5.0 Volts. *Not use. | Heat grip step. | 2    |
| Empty level.            | 1.0 Volts. *Not use. | Step 1          | 50%  |
| Low fuel warning.       | ECU                  | Step 2          | 100% |
| Warning temperature.    | KM/Hr                | Step 3          | -    |
| Oil pressure midpoint.  | 50%                  | Step 4          | -    |

Continue.

| Info / Mode control |             |                                                  |
|---------------------|-------------|--------------------------------------------------|
| Fuel level.         | RPM & Speed | Ignition ON.                                     |
| Traction control    | RPM & Speed | Last setting.                                    |
| ABS                 | RPM & Speed | Last setting. *Some models bike will be DISABLE. |
| Ride mode           | RPM & Speed | Last setting. *Some models bike will be DISABLE. |

| Driver test Speed / RPM calibrate. |   |                       |
|------------------------------------|---|-----------------------|
| RPM calibrate.                     | 0 | [ ] Minus. *unchecked |
| Speed calibrate.                   | 0 | [ ] Minus. *unchecked |

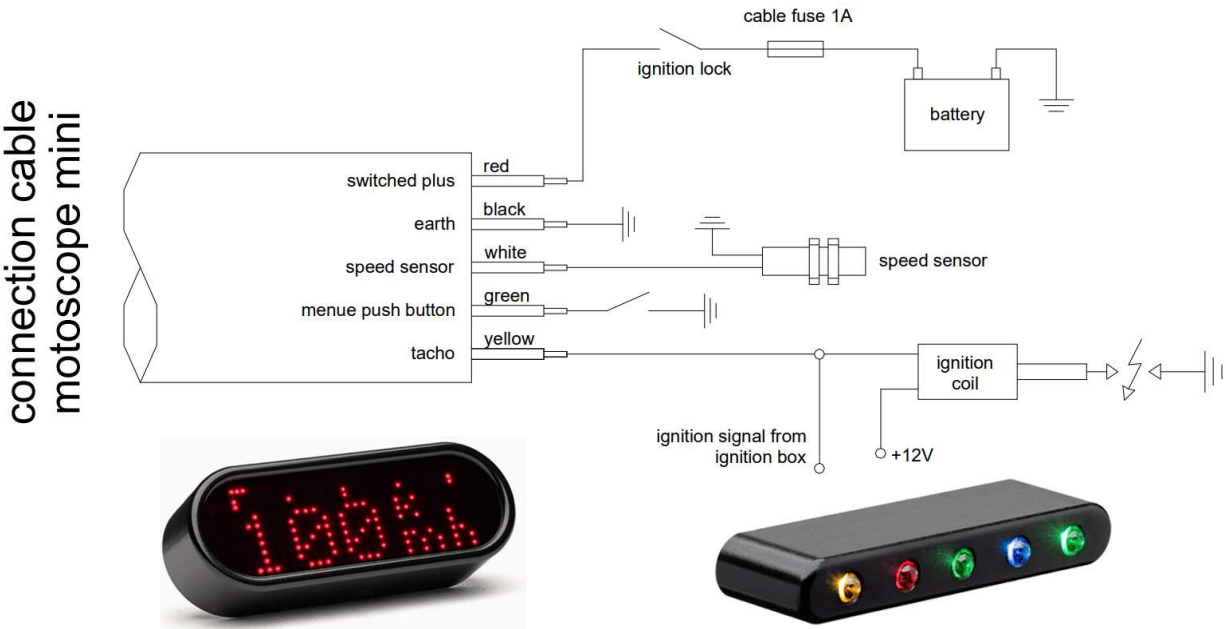
| Wiring diagram motoscope mini.                   |                |             |
|--------------------------------------------------|----------------|-------------|
| [Channel] VIS-T connectors.                      | Signal wire.   | Wire color. |
| [4] RPM                                          | RPM signal.    | Yellow      |
| [5] Speed                                        | Speed signal.  | White       |
| [17] + KEY                                       | Switched plus. | Red         |
| [19] GND                                         | Earth.         | Black       |
| [19] GND --- Button --- Green                    | Push button.   | Green       |
| All wire from gauge can direct connect to VIS-T. |                |             |



| Wiring diagram motosign mini. |                |
|-------------------------------|----------------|
| [Channel] VIS-T connectors.   | Wire color.    |
| [6] Oil pressure              | Violett        |
| [7] N / BUS                   | Black          |
| [8] H-Beam                    | Green          |
| [9] Turn                      | Red            |
| [10] AUX1 (ABS indicator)     | Blue           |
| [17] + KEY                    | White, brown   |
| [19] GND                      | Orange, yellow |

Motosign mini instruction. (Reference only.)

| cable color | function     | polarity |
|-------------|--------------|----------|
| red         | turn left    | +12V     |
| blue        | turn right   | +12V     |
| orange      | turn earth   | Masse    |
| green       | high beam    | +12V     |
| yellow      | high beam    | Masse    |
| white       | neutral      | +12V     |
| black       | neutral      | Masse    |
| brown       | oil pressure | +12V     |
| violett     | oil pressure | Masse    |



## Motogadget motoscope mini setting value.

| Motogadget motoscope mini SETUP. | Value                                                           |
|----------------------------------|-----------------------------------------------------------------|
| CIRC                             | 2000 * This value not circular of tire. Set same as VIS-T prog. |
| ImpW                             | 1                                                               |
| ImpE                             | 1                                                               |
| ImpF                             | A                                                               |
| SEL                              | KM *Default is kilometers.                                      |

**VIS-T PROG Preset setting.** \*\* For more description detail / instruction of software PDF available in website.

VIST PRO

FW VERSION 1.01

Model bike : Street scrambler / Scrambler 900 (2021-2024)

Disconnect

**VIS-T PROG**

Series : Single ID : VS35---

Operate life time : 0 hour 0 min

COMPORT COM6

Function/Output Setup

Fuel / Temp / Heatgrip

Info/Mode control

Driver test

Models

| Channal       | Driver          | Invert signal | Operate                             | SPEED | RPM |
|---------------|-----------------|---------------|-------------------------------------|-------|-----|
| [6] Oil press | Low drive only  | --            | Oil press (Blink) + Engine (ON/OFF) |       |     |
| [7] N         | Low drive only  | --            | Neutral + Side stand                |       |     |
| [8] High beam | High drive only | --            | High beam + Temp warn + Heat grip   |       |     |
| [9] Turn left | High drive only | --            | Turn L+ R + Low fuel                |       |     |
| [10] AUX1     | High drive      | --            | ABS INDC + OFF                      |       |     |
| [11] AUX2     | Low drive       | --            | SIDE STAND                          |       |     |
| [12] AUX3     | Low drive       | --            | TEMP WARNING                        |       |     |
| [13] AUX4     | Low drive       | --            | FUEL <= LOW FUEL +10% Blink         |       |     |
| [14] AUX5     | Low drive only  | --            | TC INDC + OFF                       |       |     |
| [15] AUX6     | Low drive only  | --            | ENGINE                              |       |     |

Wheel pulse / rev 1

Wheel dia (mm) 2000

RPM pulse / rev 1

Speed type KM/Hr

RPM Flash @rev. 6500

RPM Flash speed(mSec) 150

SET

Reload

Turn flasher BLINK ON/OFF

Turn flasher cycle 1

Turn flasher on time 500

Off time 500

Off hold time 0

milliseconds

Flasher set

Turn on left-right / hazard switch for check result of setting.

Preset guage profile

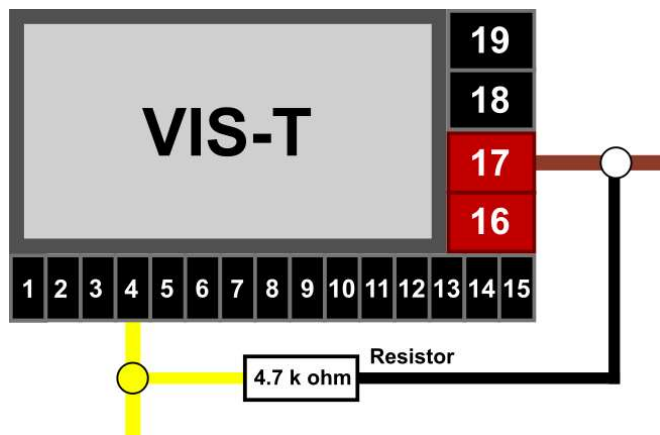
SET

Motogadget MTS MINI

## Improve RPM signal.

For motogadget RPM wire not required external resistor to drive 12volt signal. No need to add resistor.

Some issue appeared after engine running get RPM swing up/down or not stable.  
Make sure setup gauge **ImpF is A \*default**. Or Set another B, C and D of filter signal.  
Add resistor series on wiring below.  
Help to improve RPM signal driving to gauge.

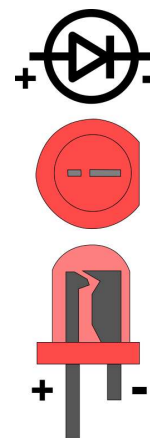
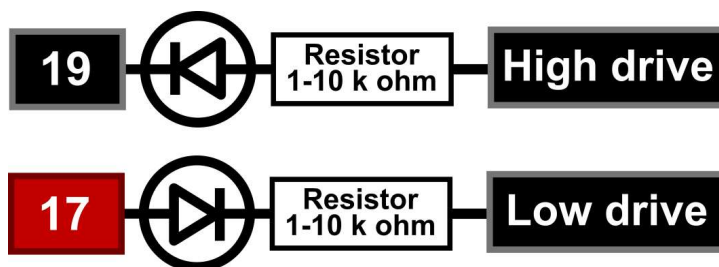


## External LED for VIS-T AUX channels.

High or Low drive should wiring as circuit below. Led polarity is important.

VIS-T power  
terminal.

VIS-T AUX  
Channels.



## ABS control available on models.

Street scrambler (2016-2018), Thruxton and Thruxton R.

### Ride mode.

Sport mode Thruxton, Thruxton R, Thruxton RS and Speed twin 1200.

Off-road mode Street scrambler (2019-2020), Street scrambler (2021) and Scrambler 900(2021-2024).

Off-road mode operate will force ABS & TC to OFF. \*Road & Rain mode. Traction control using last setting.