# FuelTech FT500 pinout

ecurecovery.com/pinouts/fueltech/ft500 · Every pin checked against 2 FuelTech documents · data checked 2026-11-04

**Connector 24-way · 24-pin**

**Connector 16-way · 16-pin**

FuelTech's documents list the pins but do not draw the plug, so we do not draw it either.

## FuelTech FT500 connector 24-way pinout (24-pin)

| Pin | Function | Wire | FuelTech note |
|---|---|---|---|
| MAIN-1 | Gray output #8 | Gray #8 Grey | These outputs are usually used for ignition control. When needed, they can be set up as injector outputs or auxiliary outputs. By standard, Gray output #8 is used as a tachometer output. |
| MAIN-2 | Blue output #6 | Blue #6 Blue | These outputs are usually used for injector control. When needed, they can be configured as auxiliary outputs. |
| MAIN-3 | White input #7 | White #7 White | Standard: oil pressure S t a n d a r d: c o o l a n t These inputs can be set up as any kind of Standard: fuel pressure analog or digital sensor. Standard: air temperature Standard: TPS signal |
| MAIN-4 | Blue output #7 | Blue #7 Blue | These outputs are usually used for injector control. When needed, they can be configured as auxiliary outputs. |
| MAIN-5 | White input #6 | White #6 White | Standard: oil pressure S t a n d a r d: c o o l a n t These inputs can be set up as any kind of Standard: fuel pressure analog or digital sensor. Standard: air temperature Standard: TPS signal |
| MAIN-6 | Blue output #8 | Blue #8 Blue | These outputs are usually used for injector control. When needed, they can be configured as auxiliary outputs. |

| Pin | Function | Wire | FuelTech note |
| --- | --- | --- | --- |
| **MAIN-7** | White input #5 | White #5 White | Standard: oil pressure S t a n d a r d: c o o l a n t These inputs can be set up as any kind of Standard: fuel pressure analog or digital sensor. Standard: air temperature Standard: TPS signal |
| **MAIN-8** | Magnetic RPM sensor reference | White wire from the 2 core shielded cable White Shielded | Connected to the negative wire of the magnetic sensor. When OEM ECU is reading the sensor in parallel, split this wire with OEM sensor negative - Do not connect when using hall effect sensor. |
| **MAIN-9** | White input #4 | White #4 White | Standard: oil pressure S t a n d a r d: c o o l a n t These inputs can be set up as any kind of Standard: fuel pressure analog or digital sensor. Standard: air temperature Standard: TPS signal |
| **MAIN-10** | Gray output #5 | Gray #5 Grey | These outputs are usually used for ignition control. When needed, they can be set up as injector outputs or auxiliary outputs. By standard, Gray output #8 is used as a tachometer output. |
| **MAIN-11** | White input #11 | White #11 White | Standard: oil pressure S t a n d a r d: c o o l a n t These inputs can be set up as any kind of Standard: fuel pressure analog or digital sensor. Standard: air temperature Standard: TPS signal |
| **MAIN-12** | Gray output #4 | Gray #4 Grey | These outputs are usually used for ignition control. When needed, they can be set up as injector outputs or auxiliary outputs. By standard, Gray output #8 is used as a tachometer output. |
| **MAIN-13** | Blue output #3 | Blue #3 Blue | These outputs are usually used for injector control. When needed, they can be configured as auxiliary outputs. |

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|---|---|---|---|
| **MAIN-14** | Gray output #3 | Gray #3 Grey | These outputs are usually used for ignition control. When needed, they can be set up as injector outputs or auxiliary outputs. By standard, Gray output #8 is used as a tachometer output. |
| **MAIN-15** | Cam sync signal input | White wire from the 1 core shielded cable White Shielded | Connected to the cam sync sensor (hall or magnetic) - Use the shield as negative to the sensor |
| **MAIN-16** | Gray output #2 | Gray #2 Grey | These outputs are usually used for ignition control. When needed, they can be set up as injector outputs or auxiliary outputs. By standard, Gray output #8 is used as a tachometer output. |
| **MAIN-17** | RPM signal input | Red wire from the 2 core shielded cable Red Shielded | Connected to the crank trigger sensor (hall or magnetic) or to the distributor. To VR sensors, use the shield wire the sensor shield. To Hall sensor, use the |
| **MAIN-18** | Gray output #1 | Gray #1 Grey | These outputs are usually used for ignition control. When needed, they can be set up as injector outputs or auxiliary outputs. By standard, Gray output #8 is used as a tachometer output. |
| **MAIN-19** | Battery negative input | Black | Connected directly to the battery negative with no seams. Do not connect this wire to the chassis, engine block or head. |
| **MAIN-20** | 5V output for sensors | Green/Red | 5V voltage output for TPS, electronic throttle and pedal sensors |
| **MAIN-21** | 12V input from relay | Red | Connected to the pin 87 of the Main Relay. |
| **MAIN-22** | Power ground input | Black/White | wired to the battery negative terminal with no seams. Do not tap any other grounds to this wire, it must run clean straight to the battery negative |

| Pin | Function | Wire | FuelTech note |
|---|---|---|---|
| MAIN-23 | Blue output #2 | Blue #2 Blue | These outputs are usually used for injector control. When needed, they can be configured as auxiliary outputs. |
| MAIN-24 | Blue output #1 | Blue #1 Blue | These outputs are usually used for injector control. When needed, they can be configured as auxiliary outputs. |

## FuelTech FT500 connector 16-way pinout (16-pin)

| Pin | Function | Wire | FuelTech note |
|---|---|---|---|
| AUX-1 | White input #1 | White #1 White | These inputs can be set up as any kind |
| AUX-2 | Gray output #6 | Gray #6 Grey | Ignition output #6 can be configured as injector or auxiliary output |
| AUX-3 | White input #10 | White #10 White | white #5, #7, #10 or #11. |
| AUX-4 | Gray output #7 | Gray #7 Grey | Ignition output #7 can be configured as injector or auxiliary output |
| AUX-5 | White input #2 | White #2 White | These inputs can be set up as any kind |
| AUX-6 | Blue output #4 | Blue #4 Blue | Ignition output #7 can be configured as injector or auxiliary output |
| AUX-7 | White input #3 | White #3 White | These inputs can be set up as any kind of analog or digital sensor. |
| AUX-8 | Blue output #5 | Blue #5 Blue | wired to the battery negative terminal with no seams. Do not tap any |
| AUX-9 | Power ground inputs | Black/White | wired to the battery negative terminal with no seams. Do not tap any |
| AUX-10 | White input #9 | White #9 White | white #5, #7, #10 or #11. |
| AUX-11 | Power ground inputs | Black/White | other grounds to this wire, it must run clean straight to the battery negative |
| AUX-12 | White input #8 | White #8 White | MAP signal output can only be set up on |
| AUX-13 | Yellow output #1 | Yellow #1 Yellow | Electronic throttle and step motor outputs. Also used as injection or |
| AUX-14 | Yellow output #2 | Yellow #2 Yellow | Electronic throttle and step motor outputs. Also used as injection or |
| AUX-15 | Yellow output #3 | Yellow #3 Yellow | Electronic throttle and step motor outputs. Also used as injection or |
| AUX-16 | Yellow output #4 | Yellow #4 Yellow | Electronic throttle and step motor outputs. Also used as injection or |

## Where this comes from

**FuelTech manual for this ECU (harness connections table)**

FuelTech FT500 / FT500LITE manual (4.1 / 4.2 harness connections)

**FuelTech FT450 / FT550 / FT600 manual, chapter 9: the old harness wire by wire**

FuelTech FT450 / FT550 / FT550LITE / FT600 manual, chapter 9.4 (old FT500 harness, wire by wire)

**FuelTech connector drawing in the same manual, read by eye**

FuelTech FT500 manual connector drawing ("Harness Connector Rear View"), read by eye