FuelTech FT500 LITE pinout

ecurecovery.com/pinouts/fueltech/ft500-lite · 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 LITE 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.

Pin	Function	Wire	FuelTech note
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 LITE 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 (written for the FT500: the same pins)

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