

GSU gun stabilize unit highlight features -

GSU is an optional module of ACU (auxiliary control unit). When GSU is turned on, it will detect the gun rotation and elevation and will stabilize the gun automatically. When the operator moves the control sticks, the GSU will return control back to the operator. When the operator stops, GSU will stabilize the gun in its new position. GSU have the following features:

- 2-axis gun stabilization in turret rotation and gun elevation.
- Two mounting directions select by jumper.
- Turns on/off by CH5, or by stick motions for 2-4 CH receivers.
- Stabilization in each axis can be disabled by jumper.
- Gun elevation angle adjustable by trimmer.
- Optional engine deck sensor. Gun raise automatically when gun turned above engine deck.
- Engine deck level adjustable by trimmer.
- Dimensions: 25.4 x 31 x 10mm (1" x 1.2" x 0.4")

GSU connection - See Fig.1 for connection of GSU to ACU and MTC-2.

Power on reset - When power on, GSU will undergo a reset process and must be kept stationary. **The led indicator will blink during reset and you must not move the GSU during reset. The MTC-2 and ACU will freeze control during reset.** The motion sensors are very sensitive and you should not touch or vibrate the GSU during power on reset. The process will take a few seconds. The led indicator will turn on when reset completed.

Mounting of GSU - The GSU must be mounted securely on the turret by two M1.7 screws. **For accurate motion detection, it must be kept within 5 degree with turret base plate.** There are two mounting directions as shown in Fig.2. and the DIR jumper must be set accordingly.

Turning GSU on/off by CH5 - GSU can be turned on/off by CH5 connected to MTC-2 (Fig.1).

Turning GSU on/off by stick motions - For 2 – 4 CH receivers, GSU can be turned on/off by stick motion as shown in Fig.3. The speed control stick must be kept in center position throughout the process.

Adjusting gun elevation angle - (Fig.4) The gun elevation (GE) trimmer is used to adjust the gun elevation angle. Turns GSU on and moves the gun to horizontal position. Tilt the tank for 15-20 degree. Adjust the GE trimmer until the gun is horizontal again.

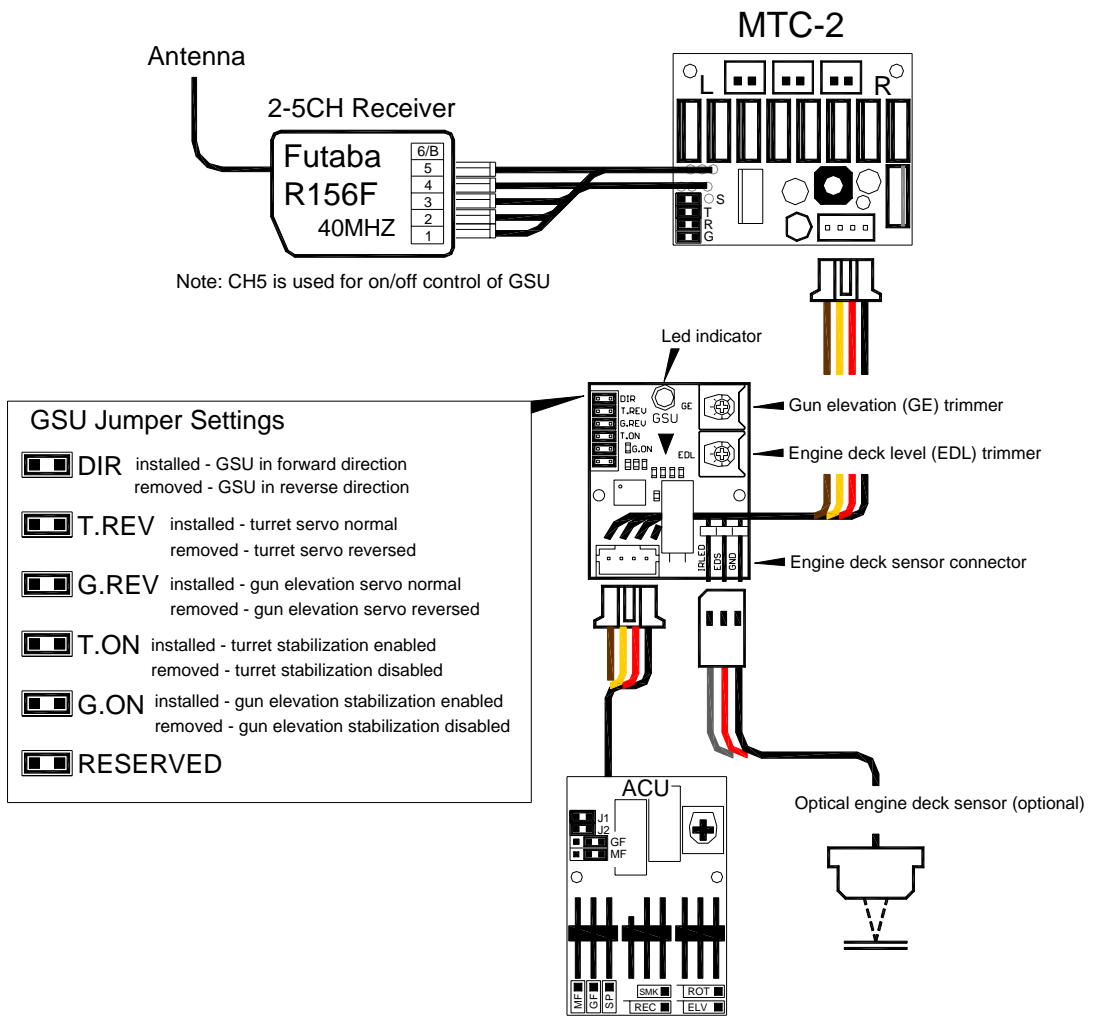


Fig.1 - GSU connection with MTC-2 and ACU

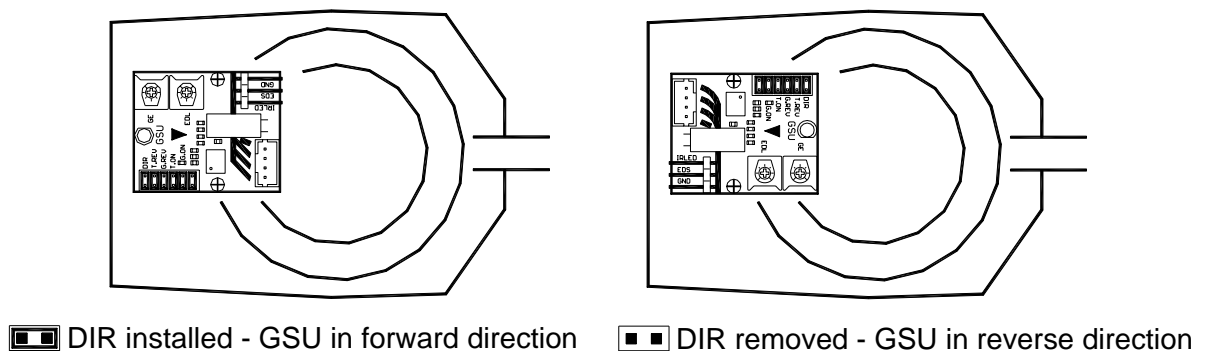


Fig.2 - GSU mounting directions and jumper settings

Engine Deck Sensor - The engine deck sensor is an optional sensor for detecting the engine deck position. Gun will raise automatically when the gun rotations above the engine deck position.

Adjusting Engine Deck Level - (Fig.5) The engine deck level (EDL) trimmer is used to adjust the engine deck level. With engine deck sensor connected and the gun rotated to engine deck position, adjust the trimmer until the gun can avoid the engine deck.

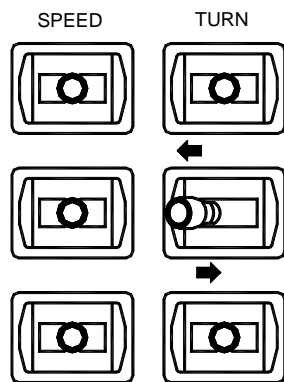
T.REV jumper - When the T.REV jumper is removed, the turret servo will rotate in reverse direction. Do this when the turret servo needs to rotate in opposite direction.

G.REV jumper - When the G.REV jumper is removed, the gun elevation servo will rotate in reverse direction. Do this when the gun elevation servo needs to rotate in opposite direction.

T.ON jumper - When the T.ON jumper is removed, the turret rotation stabilization will be disabled.

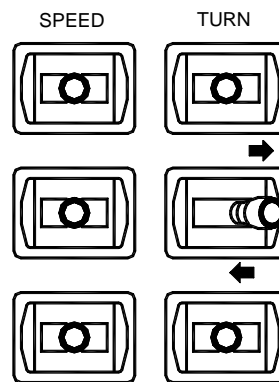
G.ON jumper - When the G.ON jumper is removed, the gun elevation stabilization will be disabled.

Fig.3A - GSU on



With SPEED and TURN at center, move TURN to left and then back to center.

Fig.3B - GSU off



With SPEED and TURN at center, move TURN to right and then back to center.

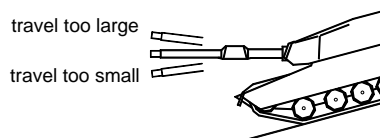


Fig.4 - Adjust gun elevation (GE) trimmer

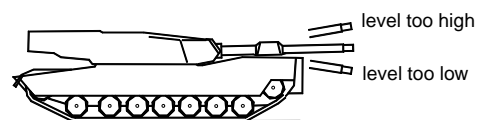


Fig.5 - Adjust engine deck level (EDL) trimmer