

Temporary Maintenance Instruction TMI 189-054

Transceiver - Setup procedure

**All AW189 Helicopters that install
Satellite communication (Flightcell
DZMx) system kit P/N 8G4390F00411**

The technical content of this document is approved under the authority of DOA nr. EASA.21J.005.

The present TMI will be evaluated for its introduction in the standard set of Technical Publication.

If no further notice is received, the present document expires on: December 6th 2023.

2022-12-06

Introduction

The purpose of this Temporary Maintenance Instruction is to give you the evidence of the new Procedure, applicable to All AW189 Helicopters that install Satellite communication (Flightcell DZMx) system kit P/N 8G4390F00411, DM 89-B-23-16-01-00A-75BA-A - Transceiver - Setup procedure.

Transceiver - Setup procedure

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References

Table 1 References

Data Module	Title
89-A-00-20-00-00A-120A-A	Helicopter safety - Pre-operation (make helicopter safe for maintenance)
89-A-12-41-00-00A-510A-A	External electrical power - Disconnect procedure
89-A-12-41-00-00A-730A-A	External electrical power - Connect procedure
89-A-12-43-00-00A-510A-A	MLG microswitches test box - Disconnect procedure
89-A-12-43-00-00A-730A-A	MLG microswitches test box - Connect procedure
89-A-24-81-00-02A-100A-A	SSEPMS - Electrical control display units (ECDUs) - Operation

Table 1 References

Data Module	Title
89-B-23-16-01-00A-750A-A	Transceiver - Load software procedure

Table 2 Access points

Access Panel / Door Id	Data Module
None	

Table 3 Zones

Zone ID	Data Module
210	89-A-06-30-00-00A-010A-A

Preliminary Requirements

Required Conditions

Table 4 Required Conditions

Conditions	Data Module/Technical Publication
The helicopter must be safe for maintenance.	89-A-00-20-00-00A-120A-A
Connect the external electrical power to the helicopter.	89-A-12-41-00-00A-730A-A

Support Equipment

Table 5 Support Equipment

Nomenclature	Identification No.	Qty
MLG microswitches test box	AJ-02-00	1

Supplies

Table 6 Supplies

Nomenclature
No Supplies

Spares

Table 7 Spares

Nomenclature
No Spares

Safety Conditions

No Safety Condition

Procedure

Note

When you must set the circuit breakers on the Electrical Control Display Unit (ECDU), refer to [89-A-24-81-00-02A-100A-A](#).

- 1 Get access to the cockpit.
- 2 On the ECDU (2, [Figure 1](#)), make sure that the SATCOM circuit breaker is set to ON.
- 3 Make sure that the transceiver (3) is on.
- 4 **General settings**
 - 4.1 On the transceiver (3), push and hold the +/0/MENU button.
 - 4.2 Select the HARDWARE CONFIG option.
 - 4.3 Select the INSTALLER MENU ENABLE option.
 - 4.4 Digit the password 2468.
 - 4.5 Push the #/ENTER button.
 - 4.6 Push and hold the +/0/MENU button.
 - 4.7 Select the HARDWARE CONFIG option.
 - 4.8 Select the MODEM CONFIG option.
 - 4.9 Select the SLOT 1 option.
 - 4.10 Set the values that follows:
 - Modem Type > Iridium
 - Use for Tracking > Yes
 - SBD Enabled > Yes

- Use for Voice > Yes
- Edit Service Center Number > 00881662900005.

- 4.11 Push and hold the +/0/MENU button.
- 4.12 Select the HARDWARE CONFIG option.
- 4.13 Select the MODEM CONFIG option.
- 4.14 Select the SLOT 2 option.
- 4.15 Set the values that follows:
- Modem Type > 3G (4G if available)
 - Use for Tracking > Yes
 - SBD Enabled > No
 - Use for Voice > Yes.
- 4.16 Push and hold the +/0/MENU button.
- 4.17 Select the HARDWARE CONFIG option.
- 4.18 Select the INTERNET ADDRESS MODE option.
- 4.19 Select the DHCP SERVER option.
- 4.20 Push the #/ENTER button.
- 4.21 Push and hold the +/0/MENU button.
- 4.22 Select the HARDWARE CONFIG option.
- 4.23 Select the CELL DATA CONFIGURATION option.
- 4.24 Select the DATA ENABLED option.
- 4.25 Select the ALWAYS ON option.

Note

Can be necessary the APN settings. You can get this from the SIM-card cellular-service provider.

- 4.26 Push the #/ENTER button.
- 4.27 If necessary, disable the data roaming as follows:
- 4.27.1 Select the HARDWARE CONFIG option.

- 4.27.2 Select the CELL DATA CONFIGURATION option.
- 4.27.3 Select the DATA ROAMING option.
- 4.27.4 Select the OFF option.
- 4.28 [K087] or [K143] or [K244] Do the steps that follow:
 - 4.28.1 Push and hold the +/0/MENU button.
 - 4.28.2 Select the HARDWARE CONFIG option.
 - 4.28.3 Select the HEAD B ENABLE option.
 - 4.28.4 Select the ON option.
 - 4.28.5 Push the #/ENTER button.
- 4.29 Push and hold the +/0/MENU button.
- 4.30 Select the DIAGNOSTICS MENU option.
- 4.31 Select the ABOUT DZMx option.
- 4.32 Make sure that the firmware version is correct.
- 4.33 If the firmware version is v0.4.8 or v1.x.x do the load software procedure. Refer to [89-B-23-16-01-00A-750A-A](#).
- 4.34 If the firmware version is v2.xx continue with the procedure.
- 4.35 Push and hold the +/0/MENU button.
- 4.36 Select the DIAGNOSTICS MENU option.
- 4.37 Select the ABOUT DZMx option.
- 4.38 Make sure that the UNIT SERIAL NUMER is the same shown on the label of the transceiver (3).
- 5 **Input setting**
 - 5.1 Connect the [MLG microswitches test box \(AJ-02-00\)](#) to the helicopter. Refer to [89-A-12-43-00-00A-730A-A](#).
 - 5.2 Set the WOW switches on the MLG microswitches test box to the FLIGHT position.
 - 5.3 Push and hold the +/0/MENU button.

- 5.4 Select the HARDWARE CONFIG option.
- 5.5 Select the INPUT CONFIGURATION option.
- 5.6 Select the TAKE-OFF SWITCH option.
- 5.7 Set the values that follows:
 - Input Type > Squat Switch
 - Input Designation > Input 1.
- 5.8 Make sure that the AIRBORNE message comes in view. Differently, do as follows:
 - 5.8.1 Select the HARDWARE CONFIG option.
 - 5.8.2 Select the INPUT CONFIGURATION option.
 - 5.8.3 Select the INPUT FUNCTION option.
 - 5.8.4 Select the INPUT CONFIGURATION option.
 - 5.8.5 Select the applicable condition.
- 5.9 Set the WOW switches on the MLG microswitches test box to the GROUND position.
- 5.10 Make sure that the LANDED message comes in view.
- 5.11 Disconnect the MLG microswitches test box from the helicopter. Refer to [89-A-12-43-00-00A-510A-A](#).
- 6 **Audio setting**
 - 6.1 Push and hold the +/0/MENU button.
 - 6.2 Select the AUDIO option.
 - 6.3 Select the ICS option.
 - 6.4 Select the SIDE TONE option.
 - 6.5 Set the WHEN ON CALL option to enable only during a call.
 - 6.6 Save the setting.
 - 6.7 Push and hold the +/0/MENU button.
 - 6.8 Select the AUDIO option.
 - 6.9 Select the ICS option.

- 6.10 Select the MIC BIAS option.
- 6.11 Set the OFF option to disable Mic Bias function.
- 6.12 Save the setting.
- 6.13 Push and hold the +/0/MENU button.
- 6.14 Select the AUDIO option.
- 6.15 Select the ICS option.
- 6.16 Select the MIC option.
- 6.17 Push the 2/UP or 8/DOWN buttons to adjust the volume.
- 6.18 Save the setting.

7 **Backlighting settings**

- 7.1 Push and hold the */BACK button for 2 seconds.
- 7.2 Select the BACKLIGHT MODE option.
- 7.3 Push the 4/LEFT or 6/RIGHT buttons to adjust the backlighting.

8 **External lighting minimum level setting**

- 8.1 Push and hold the */BACK button for 2 seconds.
- 8.2 Select the ADVANCED option.
- 8.3 Push the #/ENTER button.
- 8.4 Select the EXT LIGHTING CONFIG LOW option.
- 8.5 Push the #/ENTER button.
- 8.6 On the ECDU (2), push the LT button.
- 8.7 On the LIGHTS page, push the CKPT LTS button.
- 8.8 On the CKPT LTS page, push the OFF button to set the green bar of the INSTR potentiometer to the minimum level.
- 8.9 Push the 4/LEFT or 6/RIGHT buttons to adjust the brightness of the display and keypad in accordance to the interseat console.

8.10 Select the INPUT CALIB option.

8.11 Push the #/ENTER button.

8.12 Select the END option.

9 **External lighting maximum level setting**

9.1 Push the */BACK button for 2 seconds.

9.2 Select the ADVANCED option.

9.3 Push the #/ENTER button.

9.4 Select the EXT LIGHTING CONFIG HIGH option.

9.5 Push the #/ENTER button.

9.6 On the ECDU (2), push the LT button.

9.7 On the LIGHTS page, push the CKPT LTS button.

9.8 On the CKPT LTS page, push the BRT button to set the green bar of the INSTR potentiometer to the maximum level.

9.9 Push the 4/LEFT or 6/RIGHT buttons to adjust the brightness of the display and keypad in accordance to the interseat console.

9.10 Select the INPUT CALIB option.

9.11 Select the END option.

10 **GPS display setting**

10.1 Push and hold the +/0/MENU button.

10.2 Select the DISPLAY SETUP MENU option.

10.3 Select the GPS DISPLAY OPTION option.

10.4 Push the #/ENTER button.

10.5 Push the 2/UP or 8/DOWN buttons to enable the clock view (UTC time).

10.6 Push the #/ENTER button.

10.7 Make sure that the clock data are correct and the same of the helicopter.

- 10.8 Push and hold the +/0/MENU button.
- 10.9 Select the DISPLAY SETUP MENU option.
- 10.10 Select the GPS DISPLAY OPTION option.
- 10.11 Push the #/ENTER button.
- 10.12 Push the 2/UP or 8/DOWN buttons to enable the DEGREES - MINUTES coordinate view.
- 10.13 Push the #/ENTER button.
- 10.14 On the Multifunction Control Display Unit (MCDU) (1), push the MENU button.
- 10.15 Push the GPS line-selection key.

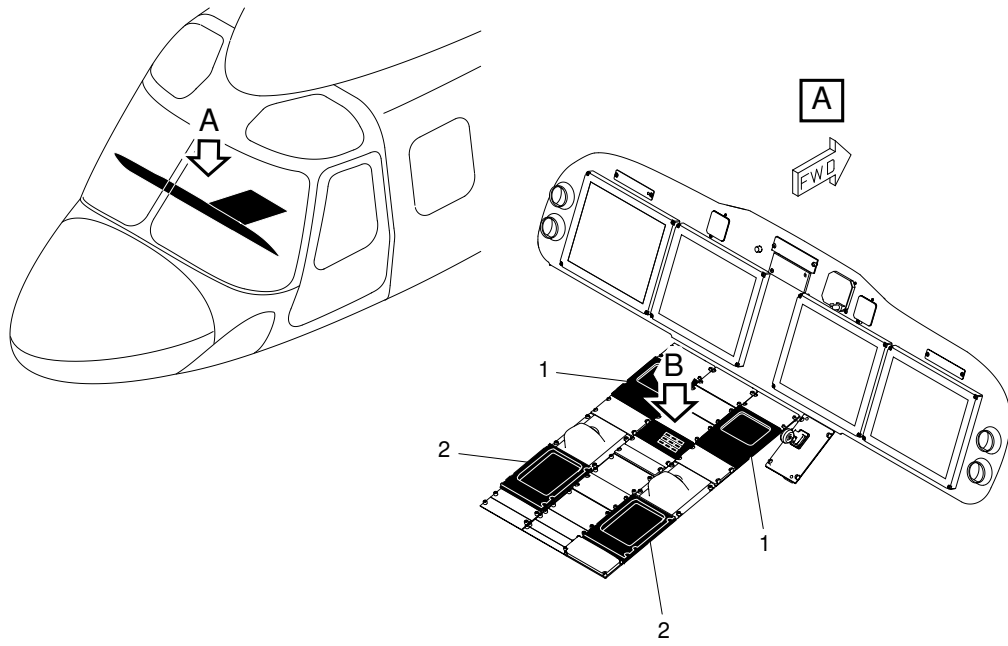
Note

The first GPS data acquisition can get 26 seconds.

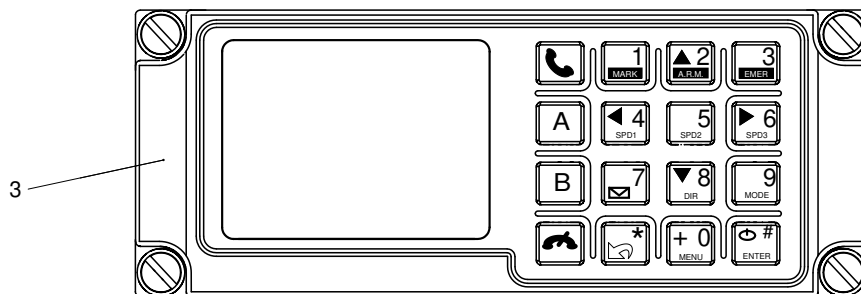
- 10.16 Make sure that the GPS coordinates shown on the transceiver (3) are the same shown on the GPS page of the MCDU (1).
- 10.17 Push and hold the +/0/MENU button.
- 10.18 Select the DHardware CONFIG option.
- 10.19 Select the OUTPUTS CONFIG option.
- 10.20 Set the values that follows:
 - Incoming Call Output > Output 1
 - Incoming Call Mode > Solid
 - Off Hook Output > Disabled
 - Off Hook Mode > Off
 - Received Msg Output > Disabled
 - Received Msg Mode > Off
 - Power Indicator Output > Disabled
 - Power Indicator Mode > Off.

Requirements After Job Completion

- 1 Remove all the tools and the other items from the work area. Make sure that the work area is clean.
- 2 Disconnect the external electrical power from the helicopter. Refer to [89-A-12-41-00-00A-510A-A](#)



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Figure 1 Transceiver - Setup procedure

End of Data Module