



## AIRCRAFT MAINTENANCE MANUAL

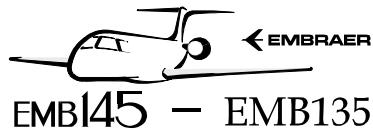
### ACARS CONFIGURATION MODULE - MAINTENANCE PRACTICES

EFFECTIVITY: AIRCRAFT WITH ACARS

#### 1. General

- A. This section gives the procedures to do the ACARS-Configuration Module Programming.
- B. The ACARS Configuration Module is a serial EEPROM designed to store configuration data that is specific to the aircraft installation and is attached to the ACARS mounting rack.
- C. The procedures in this section are given in the sequence below. The tasks identified with (♦) are part of the Scheduled Maintenance Requirements Document (SMRD).

TASK NUMBER	DESCRIPTION	EFFECTIVITY
23-22-03-860-801-A	ACARS CONFIGURATION MODULE - PROGRAMMING	AIRCRAFT WITH ACARS



EMB145 - EMB135

AIRCRAFT  
MAINTENANCE MANUAL

TASK 23-22-03-860-801-A

EFFECTIVITY: AIRCRAFT WITH ACARS

2. ACARS CONFIGURATION MODULE - PROGRAMMING

A. General

- (1) This task gives the procedures to do the ACARS-Configuration Module Programming.

B. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
223		Cockpit

C. Tools and Equipment

Not Applicable

D. Auxiliary Items

Not Applicable

E. Consumable Materials

Not Applicable

F. Expandable Parts

Not Applicable

G. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Cockpit

H. Preparation

SUBTASK 841-002-A

- (1) Make sure that these systems are in operation:

NOTE: For this procedure, only one CDU must be used.

- FMS 1 (Location Tip: DC BUS 1/NAV/FMS) or FMS 2 (Location Tip: DC BUS 2/NAV/FMS).
- ACARS (Location Tip: DC BUS 1/COMM/ACARS).

I. Programming Procedures ([Figure 201](#))

SUBTASK 860-002-A

- (1) Do the ACARS-Configuration Module Programming as follows:

- (a) On the CDU, push the "PWR DIM" function key.

Result:

1 The CDU turns on and the Power On Self-Test occurs.

- (b) On the CDU, push the 5L line-select key to set ACCEPT.

Result:

1 The field "ACCEPT" goes out of view.

- (c) Push the "DATA" function key.

Result:

1 The "DATA 1/4" page is shown on the CDU's display.

- (d) Push the 3R line-select key to set "UNILINK".

Result:

1 The "UNILINK MAIN MENU 1/2" page is shown on the CDU display.

- (e) Push the "NEXT" function key.

Result:

1 The "UNILINK MAIN MENU 2/2" page is shown on the CDU display.

- (f) Push the 4L line-select key to set "MAINT".

Result:

1 The "UNILINK MAINTENANCE" page is shown on the CDU display.

- (g) Push the 1L line-select key to set "CONFIG".

Result:

1 The "UNILINK CONFIG 1/2" page is shown on the CDU display.

- (h) Push the 1R line-select key.

Result:

1 The 1R field is highlighted.

- (i) With the CDU alphanumeric keyboard, enter with code "456789".

Result:

1 Code "456789" is shown on the 1R field.

- (j) Push the "ENTER" key.

Result:

1 The word "EDIT" is shown in the 1R field.

- (k) Push the 1R line select key to set "EDIT".

Result:

1 The word "EDIT" changes to "STORE".

- (l) Push the 1L line-select key to set "SYSTEM".

Result:

1 The "SYSTEM CONFIG 1/2" page is shown on the CDU display.

- (m) Push the 1L line-select key to set "AIRCRAFT".

Result:

- 1 The page "AIRCRAFT CONFIG" is shown on the CDU display and must be configured as follows. If not, push the related line-select key to change the configuration. After each parameter is configured, push the ENTER control key to complete the entry of data.

- TYPE (2L): E145 or E135 or E140 (as applicable)
- REG NO (3L): (Aircraft register)
- AIRLINE ID (4L): XX/ - - - (XX is the airline ID, according to the IATA two-letter designator)

- (n) Push the 5R line-select key to set "RETURN".

Result:

- 1 The "SYSTEM CONFIG 1/2" page is shown on the CDU display.

- (o) Push the 2L line-select key to set "POS RPT".

Result:

- 1 The "POS REPORT CONFIG" page is shown on the CDU display and must be configured as follows. If not, push the related line-select key to change the configuration or, with the CDU alphanumeric keyboard, enter the new data configuration. After each parameter is configured, push the ENTER control key to complete the entry of data.

- IN AIR AUTO (2L): ENABLED
- IN AIR INTV (3L): 15 MINS
- ON GND AUTO (2R): DISABLED
- ON GND INTV (3R): 60 MINS
- (Aircraft with ACARS 12) MEDIA (4L): VHF TEL

- (p) Push the 5R line-select key to set "RETURN".

Result:

- 1 The "SYSTEM CONFIG 1/2" page is shown on the CDU display.

- (q) Push the 3L line-select key to set "VHF COMM".

Result:

- 1 The "VHF COMM CONFIG" page is shown on the CDU display and must be configured as follows. If not, push the related line-select key to change the configuration. After each parameter is configured, push the ENTER control key to complete the entry of data.

- CONTACT TIMER (2L): DISABLED
- TRACKER TIMER (3L): DISABLED

- (r) Push the 1L line-select key to set "NETWORK CRTL".

Result:

- 1 The "NETWORK CONTROL" page is shown on the CDU display and must be configured as follows. If not, push the related line-select key to change the configuration. After each parameter is configured, push the ENTER control key to complete the entry of data.

- ALL FIELDS: ON

- (s) Push the 5R line-select key to set "RETURN".

Result:

- 1 The "VHF COMM CONFIG" page is shown on the CDU display.

- (t) Push the 2R line-select key to set "RADIO".

Result:

- 1 The "RADIO CONFIG" page is shown on the CDU display and must be configured as follows. If not, push the related line-select key to change the configuration. After each parameter is configured, push the ENTER control key to complete the entry of data.

- RADIO (2L): COLLINS VHF22
- IDENT (3L): COMM3
- (VHF 3 not enabled for voice communication) ACCESS (4L): DEDICATED
- (Aircraft with ACARS 12 and VHF 3 enabled for voice communication) ACCESS (4L): SHARED
- (Aircraft with ACARS 12) VHF MODEM (3R): INTERNAL
- (VHF 3 not enabled for voice communication) VOX FREQ CTRL (4R): DISABLED
- (Aircraft with ACARS 12 and VHF 3 enabled for voice communication) VOX FREQ CTRL (4R): ENABLED

- (u) Push the 5R line-select key to set "RETURN".

Result:

- 1 The "VHF COMM CONFIG" page is shown on the CDU display.

- (v) Push the 5R line-select key to set "RETURN".

Result:

- 1 The "SYSTEM CONFIG 1/2" page is shown on the CDU display.

- (w) Push the 4L line-select key to set "TEL COMM".

Result:

- 1 The "TEL COMM CONFIG" page is shown on the CDU display and must be configured as follows. If not, push the related line-select key to change the configuration. After each parameter is configured, push the ENTER control key to complete the entry of data.

- AIR PHONE (2L): NONE

NOTE: All the other fields of the "TEL COMM CONFIG" page are not applicable.

- (x) Push the 5R line-select key to set "RETURN".  
 Result:  
 1 The "SYSTEM CONFIG 1/2" page is shown on the CDU display.
- (y) Push the "NEXT" function key.  
 Result:  
 1 The "SYSTEM CONFIG 2/2" page is shown on the CDU display and must be configured as follows. If not, push the related line-select key to change the configuration. After each parameter is configured, push the ENTER control key to complete the entry of data.
  - ALL FIELDS: ENABLE
- (z) Push the 5R line-select key to set "RETURN".  
 Result:  
 1 The "SYSTEM CONFIG 1/2" page is shown on the CDU display.
- (aa) Push the 2L line-select key to set "DISCRETES".  
 Result:  
 1 The "DISC CONFIG" page is shown on the CDU display.
- (ab) Push the 2L line-select key to set "DISCRETE IN".  
 Result:  
 1 The "DISC IN 1/3" page is shown on the CDU display and must be configured as follows. If not, push the related line-select key to change the configuration. After each parameter is configured, push the ENTER control key to complete the entry of data.
  - DISC IN 3 (4L): BRAKES
  - DISC IN 4 (2R): DOORS
  - ALL OTHERS FIELDS: NOT USED
- (ac) Push the "NEXT" function key.  
 Result:  
 1 The "DISC IN 2/3" page is shown on the CDU display and must be configured as follows. If not, push the related line-select key to change the configuration. After each parameter is configured, push the ENTER control key to complete the entry of data.
  - ALL FIELDS: NOT USED
- (ad) Push the "NEXT" function key.  
 Result:  
 1 The "DISC IN 3/3" page is shown on the CDU display and must be configured as follows. If not, push the related line-select key to change the configuration. After each parameter is configured, push the ENTER control key to complete the entry of data.
  - ALL FIELDS: NOT USED
- (ae) Push the 5R line-select key to set "RETURN".  
 Result:  
 1 The "DISC CONFIG" page is shown on the CDU display.

- (af) Push the 3L line-select key to set "DISCRETE OUT".

Result:

- 1 The "DISC OUT 1/3" page is shown on the CDU display and must be configured as follows. If not, push the related line-select key to change the configuration. After each parameter is configured, push the ENTER control key to complete the entry of data.
  - DISC OUT1 (2L): PUSH TO TLK
  - (Aircraft with ACARS 12) DISC OUT2 (3L): VOX ANNUNC
  - ALL OTHERS FIELDS: NOT USED

- (ag) Push the "NEXT" function key.

Result:

- 1 The "DISC OUT 2/3" page is shown on the CDU display and must be configured as follows. If not, push the related line-select key to change the configuration. After each parameter is configured, push the ENTER control key to complete the entry of data.
  - ALL FIELDS: NOT USED

- (ah) Push the "NEXT" function key.

Result:

- 1 The "DISC OUT 3/3" page is shown on the CDU display and must be configured as follows. If not, push the related line-select key to change the configuration. After each parameter is configured, push the ENTER control key to complete the entry of data.
  - ALL FIELDS: NOT USED

- (ai) Push the 5R line-select key to set "RETURN".

Result:

- 1 The "DISC CONFIG" page is shown on the CDU display.

- (aj) Push the 5R line-select key to set "RETURN".

Result:

- 1 The "SYSTEM CONFIG 1/2" page is shown on the CDU display.

- (ak) Push the 3L line-select key to set "ARINC".

Result:

- 1 The "ARINC CONFIG" page is shown on the CDU display.

- (al) Push the 2L line-select key to set "RECEIVE".

Result:

- 1 The "ARINC RCV 1/2" page is shown on the CDU display and must be configured as follows. If not, push the related line-select key to change the configuration. After each parameter is configured, push the ENTER control key to complete the entry of data.
  - PORT 1 (2L): FMS/CDU1
  - PORT 2 (3L): FMS/CDU2
  - PORT 4 (2R): 740/744 PRT
  - (Aircraft with ACARS 12) PORT 5 (3R): VM CMC
  - ALL OTHERS FIELDS: NOT USED

(am) Push the "NEXT" function key.

Result:

- 1 The "ARINC RCV 2/2" page is shown on the CDU display and must be configured as follows. If not, push the related line-select key to change the configuration. After each parameter is configured, push the ENTER control key to complete the entry of data.
  - ALL FIELDS: NOT USED

(an) Push the 5R line-select key to set "RETURN".

Result:

- 1 The "ARINC CONFIG" page is shown on the CDU display.

(ao) Push the 3L line-select key to set "TRANSMIT".

Result:

- 1 The "ARINC XMIT" page is shown on the CDU display and must be configured as follows. If not, push the related line-select key to change the configuration. After each parameter is configured, push the ENTER control key to complete the entry of data.
  - PORT 1 (2L): LOW
  - PORT 2 (3L): LOW
  - PORT 3 (4L): LOW

(ap) Push the 2R line-select key to set "PORT 1".

Result:

- 1 The "PORT 1 DEVICES 1/2" page is shown on the CDU display and must be configured as follows. If not, push the related line-select key to change the configuration. After each parameter is configured, push the ENTER control key to complete the entry of data.
  - FMS 1 <SEL>

(aq) Push the 5R line-select key to set "RETURN".

Result:

- 1 The "ARINC XMIT" page is shown on the CDU display.

(ar) Push the 3R line-select key to select "PORT 2".

Result:

- 1 The "PORT 2 DEVICES 1/2" page comes into view on the CDU displays and must be configured as follows. If not, push the related line-select key to change the configuration. After each parameter is configured, push the ENTER control key to complete the entry of data.

- FMS 2 <SEL>

- (as) Push the 5R line-select key to select "RETURN".

Result:

- 1 The "ARINC XMIT" page comes into view on the CDU displays.

- (at) Push the 4R line-select key to select "PORT 3".

Result:

- 1 The "PORT 3 DEVICES 1/2" page comes into view on the CDU displays and must be configured as follows. If not, push the related line-select key to change the configuration. After each parameter is configured, push the ENTER control key to complete the entry of data.

- 740 PRT <SEL>

- (For aircraft with ACARS 12) Push the "NEXT" key to select the "VM CMC" option.

- (au) Push the 5R line-select key to select "RETURN".

Result:

- 1 The "ARINC XMIT" page comes into view on the CDU displays.

- (av) Push the 5R line-select key to select "RETURN".

Result:

- 1 The "ARINC CONFIG" page comes into view on the CDU displays.

- (aw) Push the 5R line-select key to select "RETURN".

Result:

- 1 The "CONFIG 1/2" page comes into view on the CDU displays.

- (ax) Push the 4L line-select key to select "SERIAL".

Result:

- 1 The "SERIAL CONFIG" page comes into view on the CDU displays.

- (ay) Push the 2L line-select key to select "PORT TYPES".

Result:

- 1 The "SERIAL PORT TYPES" page comes into view on the CDU displays and must be configured as follows. If not, push the related line-select key to change the configuration. After each parameter is configured, push the ENTER control key to complete the entry of data.

- PORT 7/8 (3R): RS422

- ALL OTHER FIELDS: NOT USED

- (az) Push the 5R line-select key to select "RETURN".

Result:

- 1 The "SERIAL CONFIG" page comes into view on the CDU displays.

- (ba) Push the 3L line-select key to select "PORT DEVICES".

Result:

- 1 The "SERIAL DEVICES 1/2" page comes into view on the CDU displays and must be configured as follows. If not, push the related line-select key to change the configuration. After each parameter is configured, push the ENTER control key to complete the entry of data.
  - ALL FIELDS: NOT USED

- (bb) Press the "NEXT" function key.

Result:

- 1 The "SERIAL DEVICES 2/2" page comes into view on the CDU displays and must be configured as follows. If not, push the related line-select key to change the configuration. After each parameter is configured, push the ENTER control key to complete the entry of data.

- PORT 7 (2L): CSDB TUNE
- PORT 8 (3L): NOT USED

- (bc) Push the 5R line-select key to select "RETURN".

Result:

- 1 The "SERIAL CONFIG" page comes into view on the CDU displays.

- (bd) Push the 5R line-select key to select "RETURN".

Result:

- 1 The "CONFIG 1/2" page comes into view on the CDU displays.

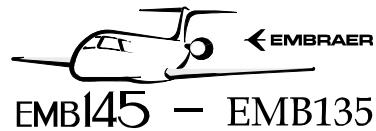
- (be) Push the "STORE" right line-select key (1R) twice to save the new configuration.

NOTE: After you push "STORE" (line key), the "UNILINK/FMS COMM ERROR" message comes into view on the CDU.

Result:

- 1 All the configuration data will be stored in the configuration module memory.

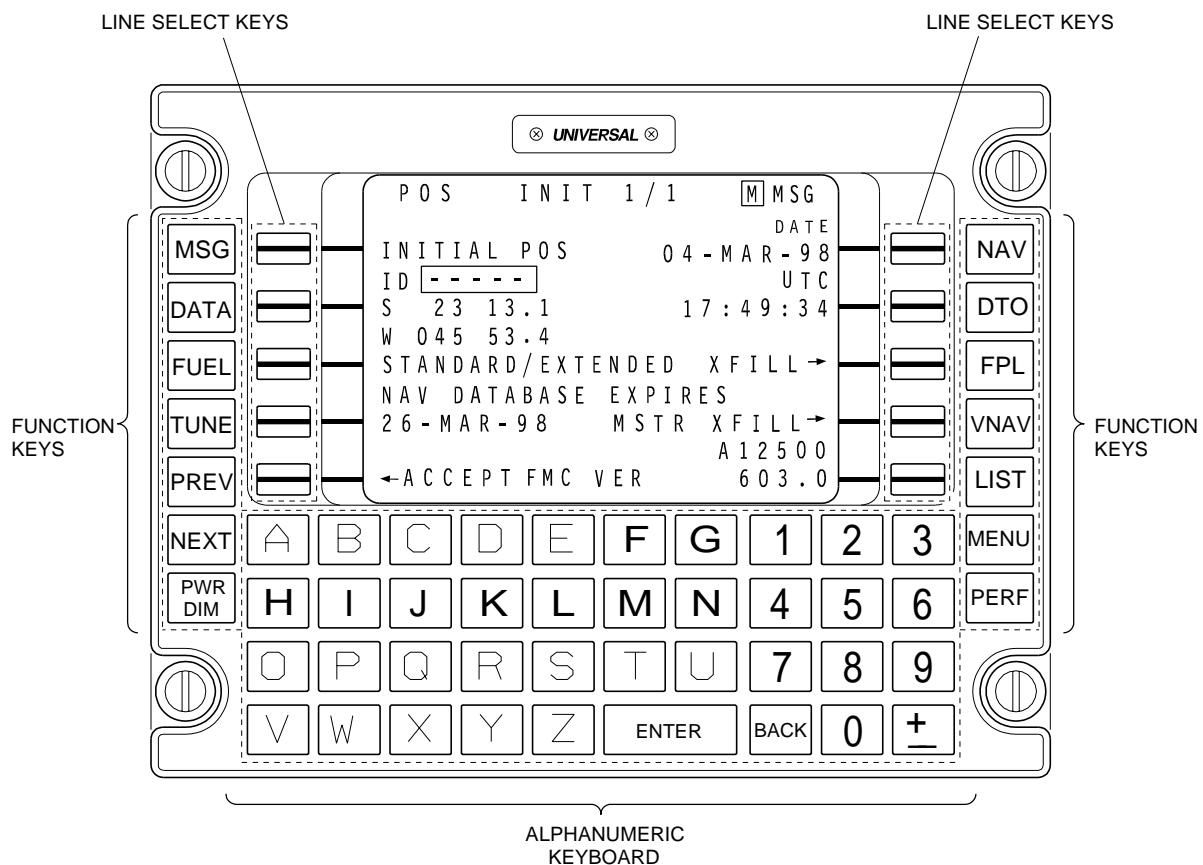
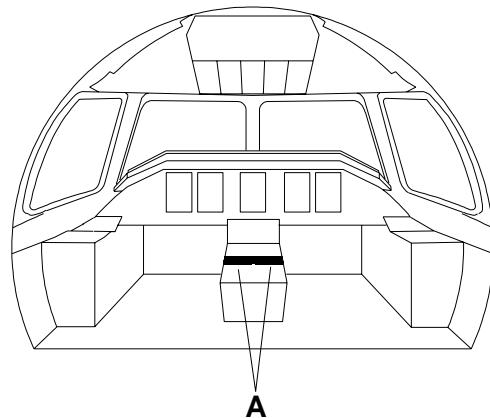
- (bf) Push the "POWER DIM" function key to restart the FMS/UNILINK.



EMB145 – EMB135

## AIRCRAFT MAINTENANCE MANUAL

EFFECTIVITY: AIRCRAFT WITH ACARS  
FMS CDU  
Figure 201



**DET. A**

EM145AMM341402A.DGN

