PHONE: 6-03-8778 4106
Email ais@caam.gov.my
URL: aip.caam.gov.my

MALAYSIA
CIVIL AVIATION AUTHORITY OF MALAYSIA
AERONAUTICAL INFORMATION SERVICES
AIR TRAFFIC CONTROL TOWER (TOWER WEST)
JALAN KLIA 2/4,
64000 KLIA,
SELANGOR DARUL EHSAN
MALAYSIA.

AIRAC AIP SUP
43/25
Effective Date: 04 SEP 2025 to 14 February 2027
Publication Date: 24 JUL 2025

KUALA LUMPUR INTERNATIONAL AIRPORT AERODROME – WORK IN PROGRESS (UPGRADED VERSION OF ADVANCED VISUAL DOCKING GUIDANCE SYSTEM (AVDGS) AT TERMINAL 2)

1 INTRODUCTION

1.1 This section supplements the following portion(s) of the AIP: AD 2.20.12.

1.2 The purpose of this AIP Supplement is to inform all aircraft operators and pilots of the newly upgraded version of Advanced Visual Docking Guidance System (A-VDGS) at Kuala Lumpur International Airport, Terminal 2 which will be upgraded for 80 aircraft stands by phase. However, the existing VDGS is still in used until the migration is completed within the duration of 24 months. The effective date for the new upgraded version of A-VDGS will be notified by NOTAM.

2 DESCRIPTION OF SYSTEM

2.1 The RLG GIS206-2 Laser Guided Docking System is a fully automatic aircraft docking guidance system for various types of modern aircraft.

2.2 The RLG GIS206-2 Laser Guided Docking System utilizes 2-axis laser scanning technique to track both the lateral and longitudinal positions of the incoming aircraft and guide the aircraft to the programmed stopping position. In addition, the system also has an aircraft ID verification feature to identify the incoming aircraft and check it against the one selected by the operator. If the incoming aircraft fails to match the expected aircraft, an **'ID FAIL'** indication is immediately issued via display information console to both the pilot and the co-pilot.

2.3 Aircraft type, continuous closing distance, and azimuth guidance, etc., are presented on a single console clearly visible to both the pilot and co-pilot, simultaneously.

2.4 ***Figure A*** shows the Aircraft Display console, mounted on the terminal in front of the aircraft stand.

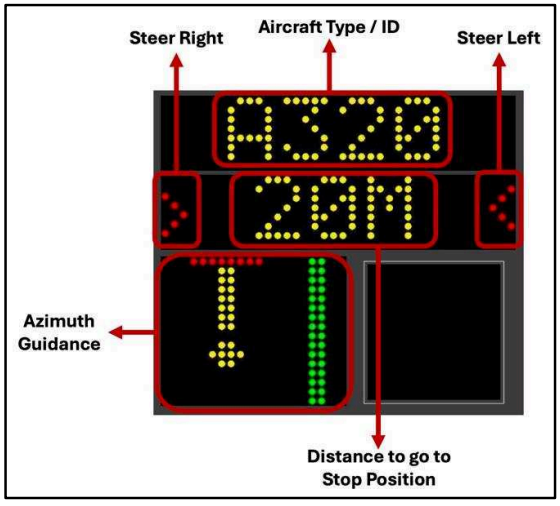


Figure A

2.5 The system is operated only in the automatic mode. If the system fails, the aircraft must then be marshalled into the stand manually.

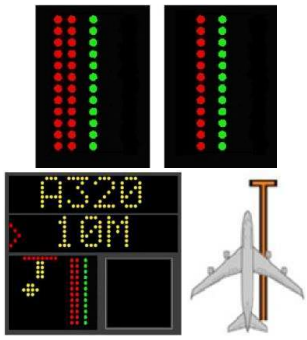
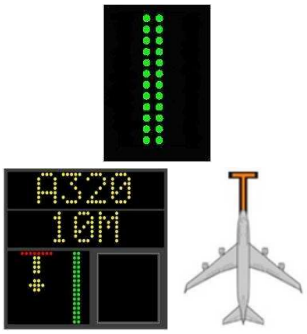
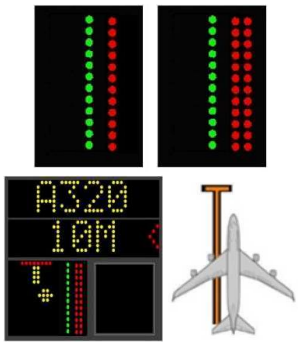
3 DOCKING PROCEDURES

3.1 Confirm that the correct aircraft type is displayed on the LED Display Console and proceed slowly forward to the terminal gate. The pilot or co-pilot should follow the centre azimuth steering bars to keep the aircraft at the centre, and to keep the aircraft to a reasonable speed.

3.2 The azimuth indication consists of a central green bar and two red bars – one to each side of the green bar. The centre green bar will always be on, while the red side bars will only come on, one at a time, when the aircraft is off centre.

3.3 If the aircraft veers too far to the right, the right red bar will come on, along with the centre green bar. Conversely, if the aircraft veers too far to the left, the left red bar will come on, along with the centre green bar. The pilot should steer towards the green bar to get back to the centre line.

3.4 The azimuth guidance status on the LED Display Console indicating the aircraft azimuth position when an aircraft approaching to the terminal gate are shown as below:

Aircraft left of center line, steer towards ***GREEN***	Aircraft on ***GREEN*** center line	Aircraft right of center line, steer towards ***GREEN***
		
If red light bar appears on the left side of the green light bar, the aircraft is off centre line to left. It should be moved rightwards.	Green light bar illuminates, the aircraft is on centreline. Keep straight ahead.	If red light bar appears on the right side of the green light bar, the aircraft is off centre line to right. It should be moved leftwards.
Azimuth guidance status on the LED Display Console indicating the aircraft azimuth position when an aircraft approaching to the terminal gate. Red arrow (blinking) instructing the pilot to steer or re-centre back accordingly.		
⚠ ***Caution: Always steer and follow to the GREEN AZIMUTH CENTER BAR***		

3.5 When the aircraft is approaching approximately 40 metres from the stop position, closing information will start to display. The display information below the aircraft type is the digital readout of the close-in distance, in 1-meter decimal place decrement from 40-5 metres and in 0.2-metre decrement below 5 metres. The close-in distance is also displayed in the form of a progress pointer to the target red line at the lower left corner of the display console. The progress pointer starts to activate approximately at 40 metres, moving forward at 2.5 metres decrement, and will reach the target line at the stop position.

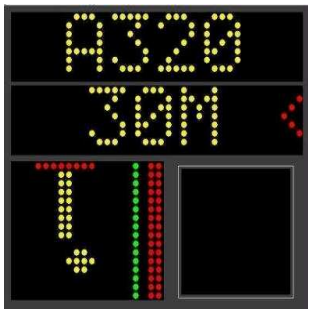
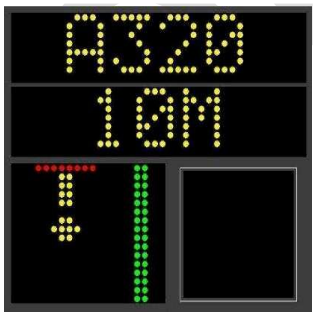
3.6 When the correct position is reached, the digital readout will display the word '**STOP**'. The progress meter will indicate the merging of the pointer and the target line.

3.7 If the aircraft stops at the correct position, the word '**OK**' will be displayed after a few seconds, then the entire display will turn off, indicating the completion of the docking sequence.

3.8 If the aircraft overshoots, the word '**TooFar**' will be displayed.

3.9 The new upgraded version of the Advanced Visual Docking Guidance System (A-VDGS) at KLIA Terminal 2.

The pilot display of the Advanced Visual Docking Guidance System (A-VDGS) is shown below:

	**Parking Sequence** In this picture the aircraft is at a distance greater than 40 meters from the parking position and is directly at the centre line. Note that the progress bar and digital close-in distance are not displayed when the aircraft is greater than 40 metres away from the docking position. An Airbus 320 aircraft is expected.
	In this picture the aircraft is at exactly 30 metres from the docking position, but is off to the right of the centre line. Starting at 30 metres, the digital close-in distance (second line of display) is displayed, in 1 meter decremental. The progress meter (lower left) will also be activated at this distance.
	The aircraft is at 20 metres from the docking position and has returned to the centre line. Note the position of progress meter. The arrow will advance one position every 2.5 metres.
	In this picture the aircraft is at 10 meters and is on the centre line.
	The aircraft is now at 3.2 metres from the docking position Note that at below 5 metres, the close-in distance is displayed in 0.2m decremental.

	Finally, the aircraft is perfectly parked at the stop position, and perfectly centred. The word '***STOP***' is displayed in red. Note also the merging of the arrow and the stop line on the progress meter.
	The word '***OK***' is displayed in yellow. Docking is successful.
	***SLOW*** During the docking process, the pilot must taxi into the aircraft stand at minimum speed. The system will display '***SLOW***' alternating SLOW message if the system detects the aircraft taxi speed is beyond the range of the preset speed and causing too fast for reliable detection. The '***SLOW***' message will return to close-in distance information once the aircraft speed is back to normal speed range.
 	***ID FAIL*** For this aircraft type ID verification features, the incoming aircraft must be identified and verified at least 12 metres before the stopping position or otherwise, the system will display '***ID FAIL***' alternating ID/ FAIL in the first row of the display. The second row of the docking screen will indicate '***STOP***', At this point, the aircraft must be manually guided in by a marshaller.

	***TooFar*** If the aircraft overshoots the preset range, the word **'TooFar'** will be displayed. The second row of the docking screen will indicate '***STOP***'. The aircraft shall stop immediately.
	***Error Stop*** The system will display "***Error***" message as indicated if the system detects any hardware error that might affect the normal docking process. The second row of the display will indicate '***STOP***' and no aircraft is to be allowed to march in until the maintenance personnel has rectified the issue.
	***Emergency Stop*** The first and second row of the display will show '***STOP***' The docking is aborted and aircraft must be manually guided in by a marshaller.

3.10 Safety Measures

Pilot must stop the aircraft immediately if he or she sees that:
a) The docking system is not activated.
b) A wrong type of aircraft shows '**ID FAIL**' is displayed.
c) The word '**STOP**' is displayed.

3.11 When using the automated docking system, the pilot must taxi into the aircraft stand at minimum speed. The system will display '**SLOW**' if the aircraft taxi speed is too fast for reliable detection.

3.12 To avoid overshoot, the pilot is advised to approach the stop position slowly and observed the closing rate information displayed. Closing information is displayed both as digital readout and in the form of progress meter. Pilot should stop the aircraft immediately when seeing '**STOP**' indication or when signalled by the marshaller.

3.13 If the aircraft overshoots and moves beyond the designated docking position, the Aircraft Display will display the message "**TooFar**" to indicate the over travel. The pilot should also stop the plane immediately if this happens.

4 CONTACT

4.1 Unit Engineering Passenger Boarding Bridge, PBB KLIA Terminal 2

Name : Mohd Hafifi Hafizat Bin Mazlan
(Project Coordinator)
Tel : 0108261702

4.2 Unit Engineering Contract & Project Management (ECPM)

Name : Ir. Ts. Muhammad Kasyfurrahman bin Alli
(Project Manager)
Tel : 0136999004

5 VALIDITY

5.1 This AIP Supplement will remain in force until its contents have been incorporated in AIP Malaysia. Any changes of this AIP Supplement will be notified by NOTAM.

- END -