

# FORD CDx788 AR HUD WIREFRAME

2021.11.19

## 适用范围与目的

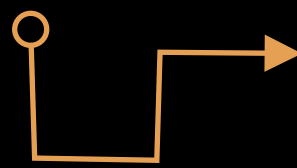
- 本文档适用于FORD CDx788项目AR HUD功能信息说明与基础框架布局；
- 本文档用于说明CDx788项目AR HUD的信息交互与显示规范；
- 建议产品设计与开发的相关人员，仔细阅读设计概述，已更好了解产品需求，文档规范；统一设计目标，实现产品预期效果；

## 设计要求与声明

- 交互设计师，必须对应版本需求列表更新文档，并更新版本记录；
- 视觉设计师，在设计方案与交互原型有一定变动时，必须与交互设计师确认是否影响交互逻辑；
- 软件工程师，在HMI开发过程中，如双方沟通后针对功能进行逻辑更改时，需以QA列表形式描述更改需求；

Version	Date	Description	Contact
V1.0	2021-08-26	First version	dongyuchen@auto-future.com
V1.1	2021-09-14	<p>【All】 调整优化设计文件的细节像素， 更换全文说明演示效果图；</p> <p>【P4】 增加修改/新增内容、删除内容标识；</p> <p>【P9】 优化造型参考位置布局；</p> <p>【P10】 优化DTE信息显示区域大小、参考字号与参考位置布局；</p> <p>【P11】 优化时速信息参考位置布局， TST信息显示区域大小与参考位置布局 新增TSR显示状态说明；</p> <p>【P12】 优化NCC/ACC/IACC/LIM显示区域大小与参考位置； 修改显示状态说明列表</p> <p>【P13】 优化map显示区域大小与信息显示状态；</p> <p>【P14】 新增AR区域显示范围说明；</p> <p>【P15】 优化导航弹窗显示参考位置与提示文字大小变化 新增演示页面弹窗-区间测速起点； 新增平均车速与区间测速进度条显示示意图与状态说明；</p> <p>【P17】 优化LCA状态下时速字号大小；</p> <p>【P18】 优化HA状态下图标显示大小；</p> <p>【P28】 删除该功能页面；</p>	dongyuchen@auto-future.com
V1.2	2021-09-15	<p>【P15】 新增拥堵信息时， 同步中控弹窗提醒的操作说明 调整该页面说明演示顺序；</p>	dongyuchen@auto-future.com
V1.3	2021-09-24	<p>【P12】 优化调整NCC/LIM显示状态颜色</p> <p>【P25】 删除该功能页面</p> <p>【P30】 新增开机动画说明页面</p>	dongyuchen@auto-future.com
V2.0	2021-11-19	<p>【All】 调整HUD比例及其相关字符画面大小 优化说明页面</p>	dongyuchen@auto-future.com zhengqianyun@auto-future.com

Annotations/注释

- 

Link page  
关联页面
- 1

Annotations, general comment about the HMI  
说明注释，一般HMI界面说明文字
- 1

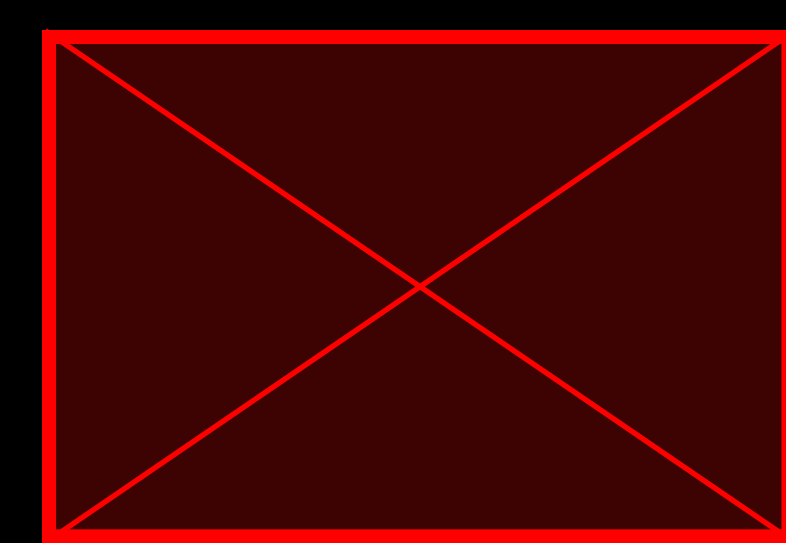
Logical ID, display logic for page migration  
说明注释，界面迁移显示逻辑的说明
- 1

Animation ID, display logic for page animation  
动画ID，动画状态的逻辑说明

Add:

XXXXX

Add or modify information  
新增/修改内容说明



Deletion information  
删除内容说明

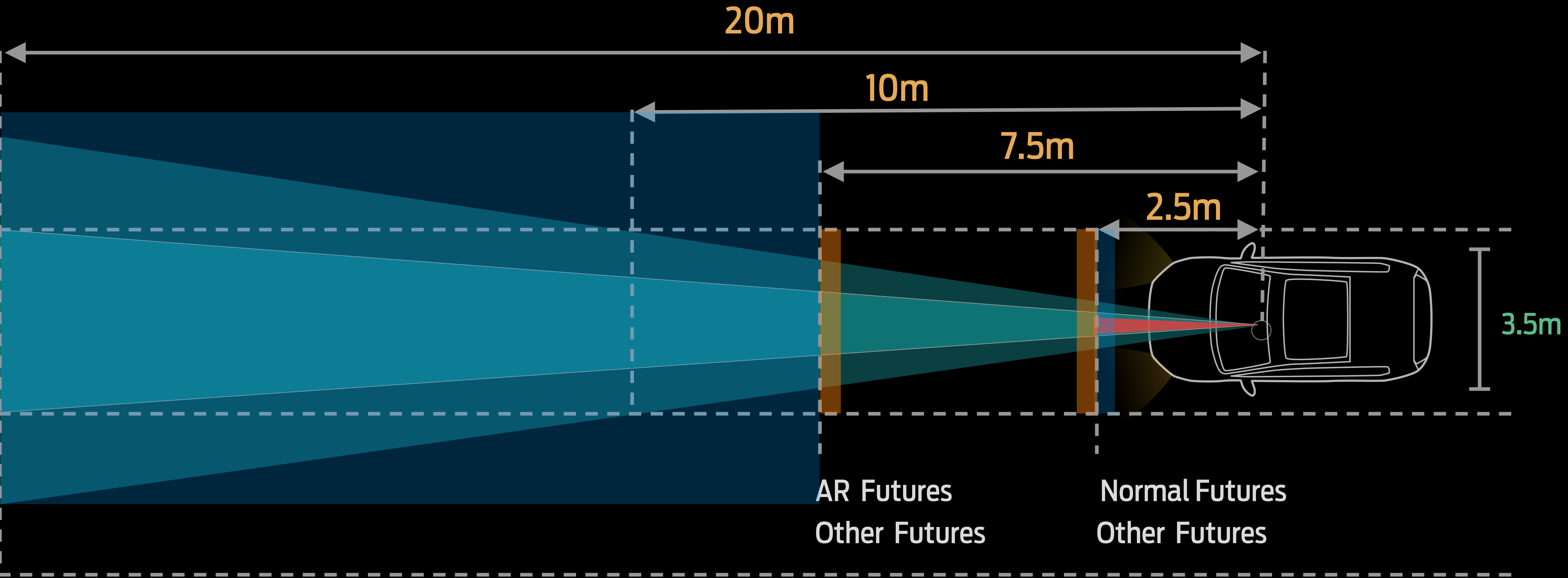
FONT&SIZE/字体字号

Antenna35FF_S_MdCd	22px
Antenna35FF_S_MdCd	24px
Antenna35FF_S_MdCd	26px
Antenna35FF_S_MdCd	30px
Antenna35FF_S_MdCd	32px
Antenna35FF_S_MdCd	36px
Antenna35FF_S_MdCd	40px
Antenna35FF_S_MdCd	58px
Antenna35FF_S_MdCd	68px

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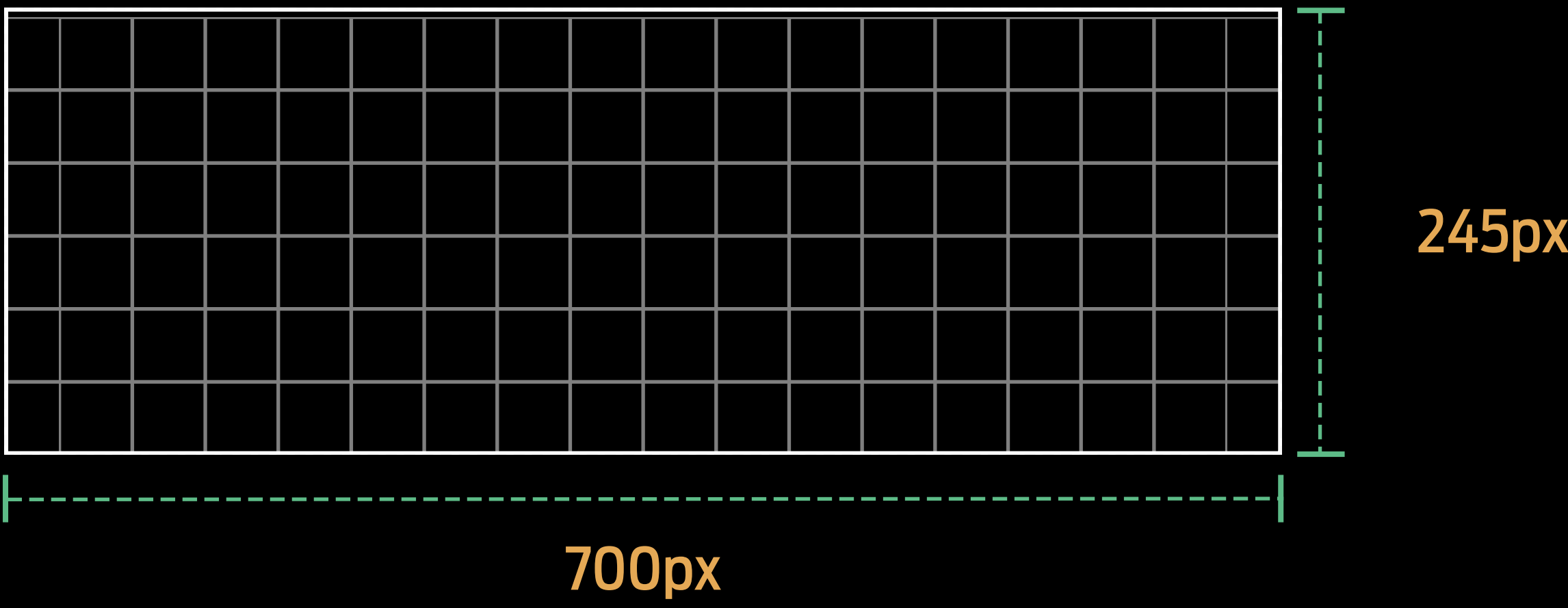
Normal Features	AR Features	Other Features	TBD
1. Distance to Empty	1. LKA/LDW	1. BLIS	1. Voice assistant
2.Speedometer	2.FVDW	2.Turning signal	2.Easter eggs
3.NCC/ACC/IACC	3.FCW	3.Bluetooth phone	3.POI
4.LCA	4.AR Nav	4.Popup	4.Bluetooth phone
5.TSR	5.V2I		
6.Highway Assist			
7.Speed Limiter			
8.Map			
9.HUD Adjustment			

FORD AR HUD FOV: 10\*3.5 VID 7.5  
This is a schematic of the imaging area ▼

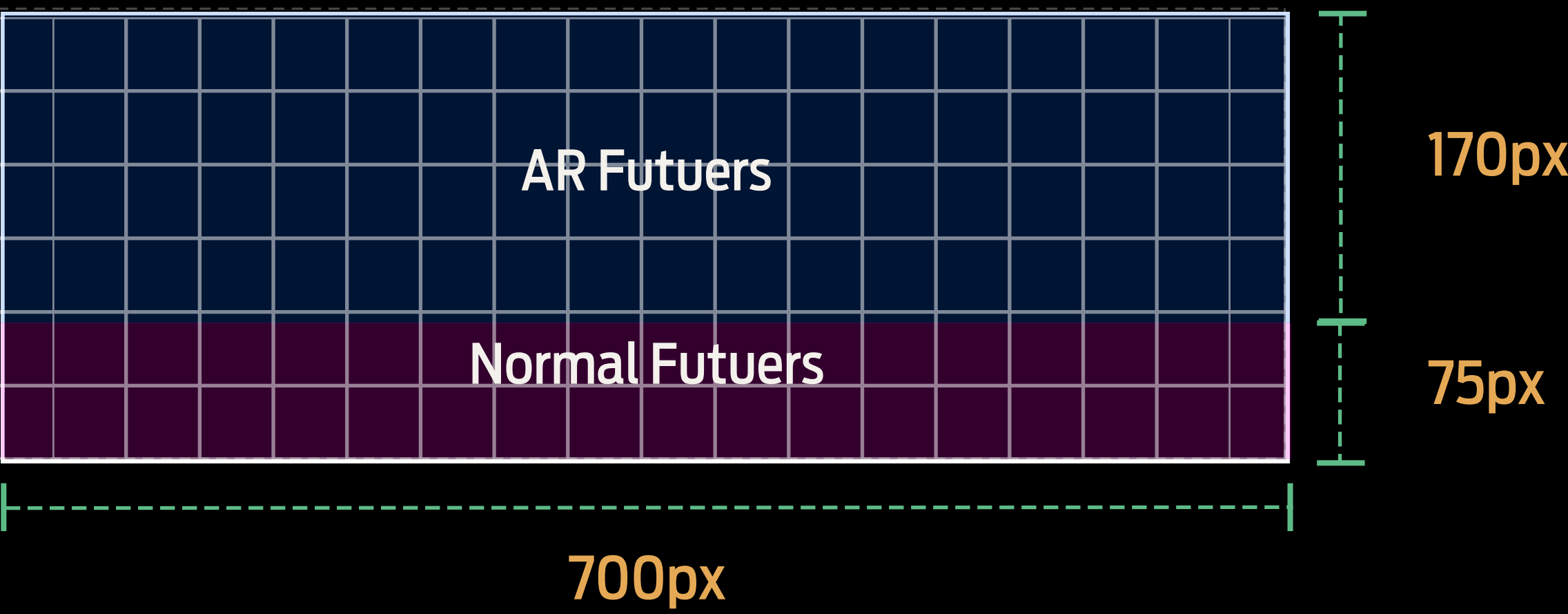




Canvas resolution



Layout area division



The canvas resolution size is 700\*245, The Blue background area is the display area of the AR function, The reference resolution region is 170px.

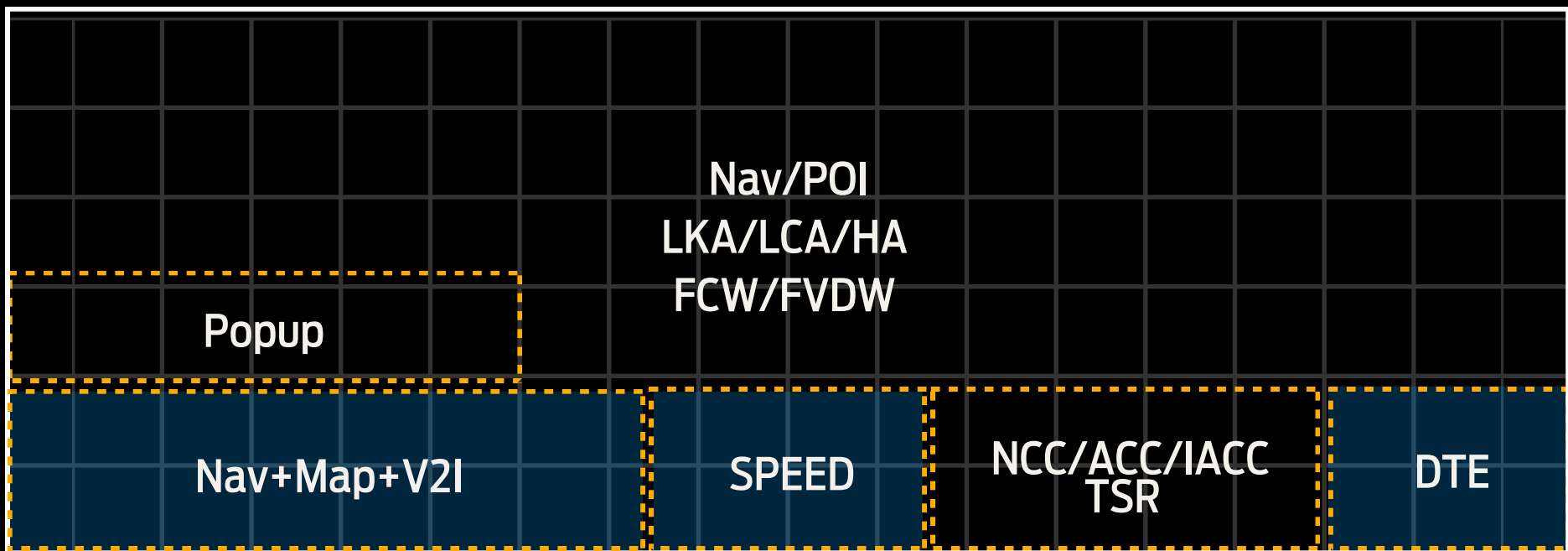
The Purple background area is the display area of the Normal Function,The reference resolution region is 75px.

当前画布分辨率尺寸为700\*245，蓝色背景区域作为AR功能的主要显示区域，参考画布区域为170px；紫色背景区域作为基础功能的主要显示区域，参考画布区域为75px；

We set up two modes for the HUD, AR on and AR off;  
The information layout varies with the functional scenario;

我们为HUD设置了AR开启和AR关闭两种模式; 信息布局会随功能场景的不同而产生变化;

1/ Information Layout (AR ON)



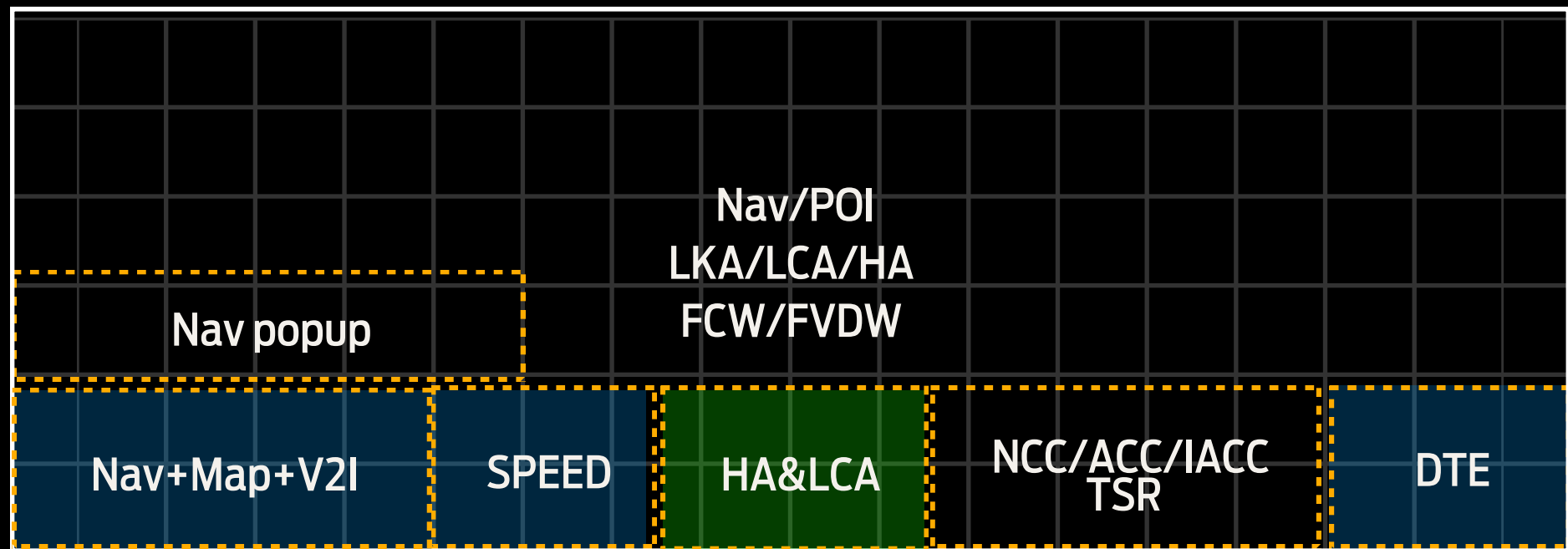
If the LCA or HA function is disabled,

Speed information is displayed in the bottom center

The navigation information area is large, see Page-13

当LCA或HA功能未开启，时速信息显示在底部中间区域；  
导航信息相对较大，详见第13页；

2/ Information Layout (AR ON–LCA&HA)



When the LCA or HA function is enabled,

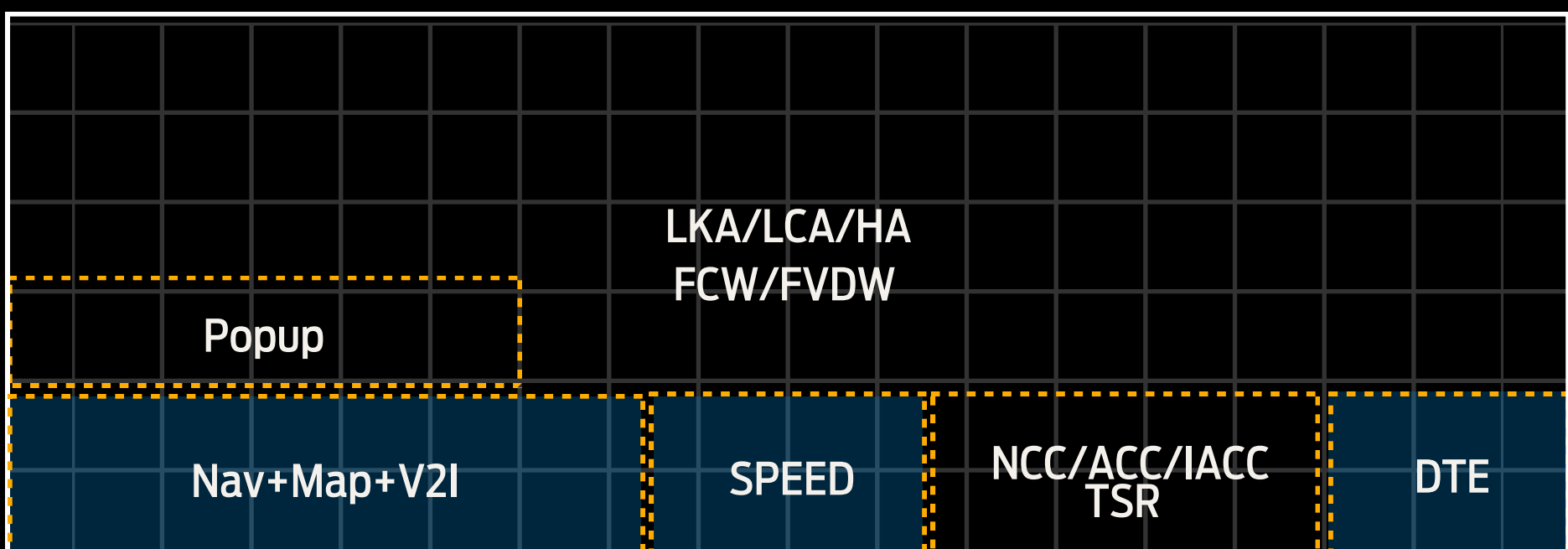
Speed information moved to the left information area

Navigation information is displayed in a smaller area

The LCA or HA icon is displayed in the bottom center

当LCA或HA功能开启时，时速信息移动至左侧区域；  
导航信息相对较小，LCA或HA功能图标显示在底部中间区域；

3/ Information Layout (AR Off)



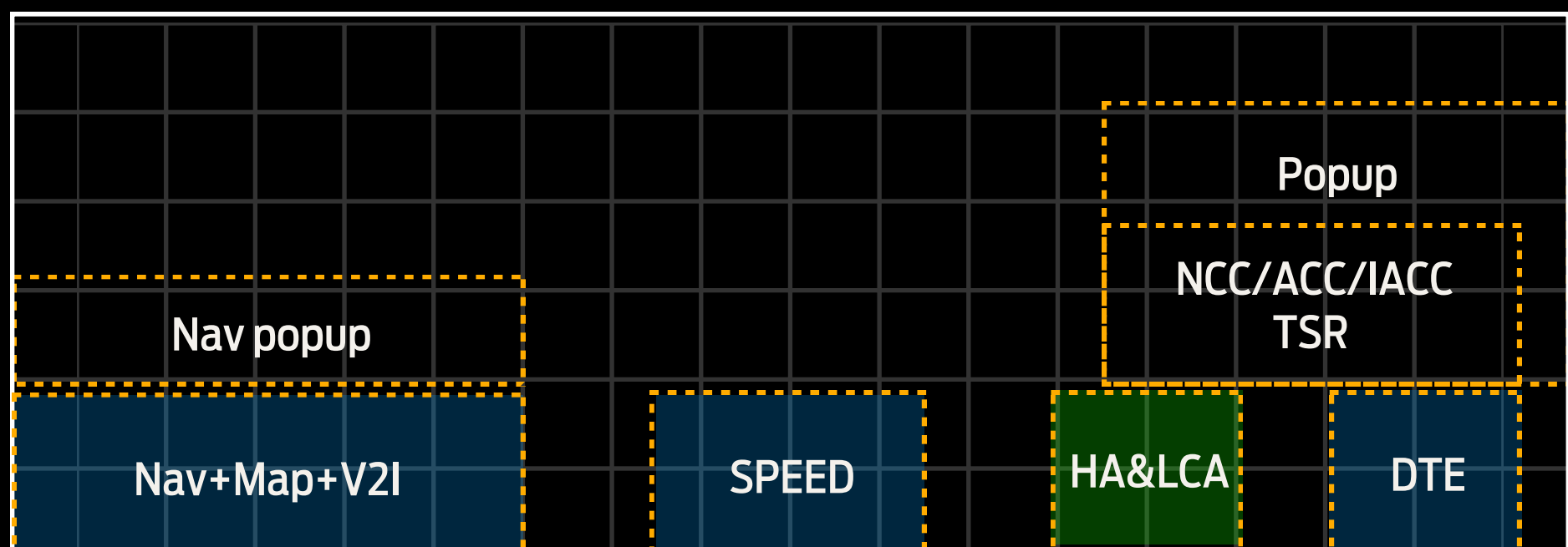
When the AR off mode is set,

the navigation information is displayed in the left pane;

HUD modeling display changes, see next page.

当设置为AR off模式时，导航信息将显示在左侧区域；  
HUD造型将进行翻转变换，详见第9页。

4/ Information Layout (AR Off–LKA LCA&HA)



When the AR off mode is set,and the LKA, LCA, or HA function is enabled

HUD modeling changes dynamically, see Page-16、17、18

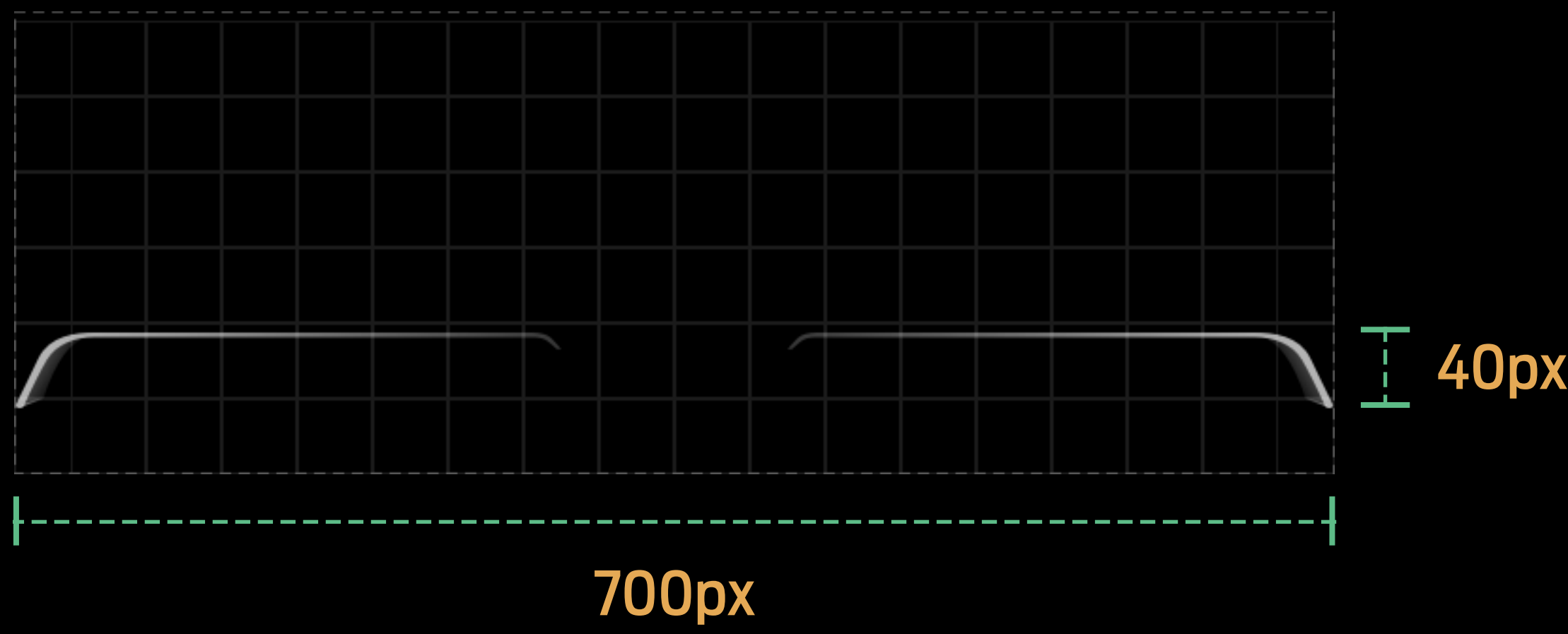
The LCA and HA icons are moved to the right area.

The popover will briefly override the LCA or HA icon display

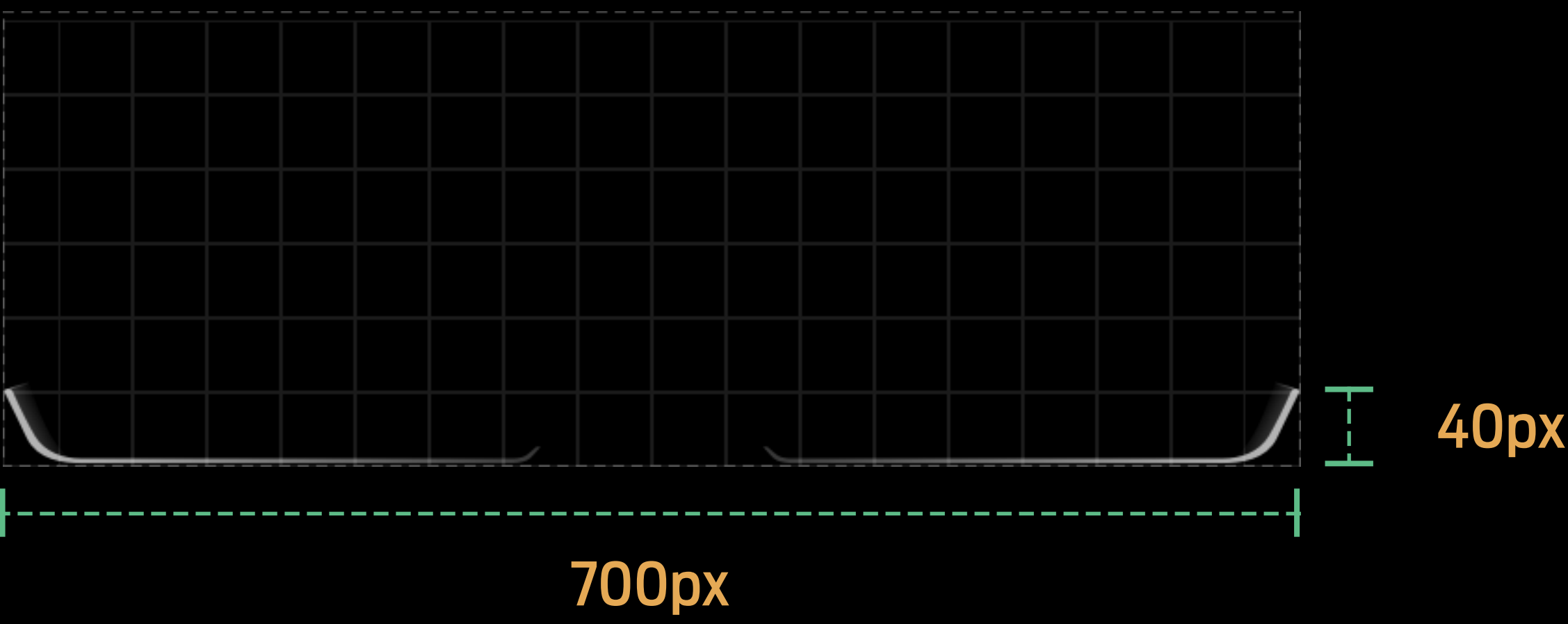
当设置为AR off模式时，LKA、LCA或HA功能开启状态下，  
HUD造型将产生变化，详见第16、17、18页；  
LCA或HA功能图标将移动至右侧区域显示；  
Popup弹窗将短暂遮挡该信息区域；



Basic modeling - AR ON



Basic modeling - AR Off



As for the basic modeling of HUD, we suggest that the modeling will produce the dynamic effect of flipping according to the different mode switching;

The modeling design area is 700\*40px; The reference location area is canvas X-0, Y-170

When switching to AR OFF mode; The reference location area is canvas X-0, Y-203

关于HUD的基础造型，我们建议造型将根据不同模式的切换产生翻转的动态效果；造型设计分辨率为700\*40px；

参考画布位置X-0,Y-170;当AR Off模式时，参考位置区域为X-0，Y-203；

When the user turns on the turn signal,The left and right sides of the modeling will display the turning signal

When BLIS is working,the user turns on the turn signal, which will show the warning orange or red.

当用户开启转向灯，左侧或右侧造型将呈现转向灯反馈（闪烁效果）当BLIS工作时，用户开启转向灯，将呈现橙色或红色预警状态；

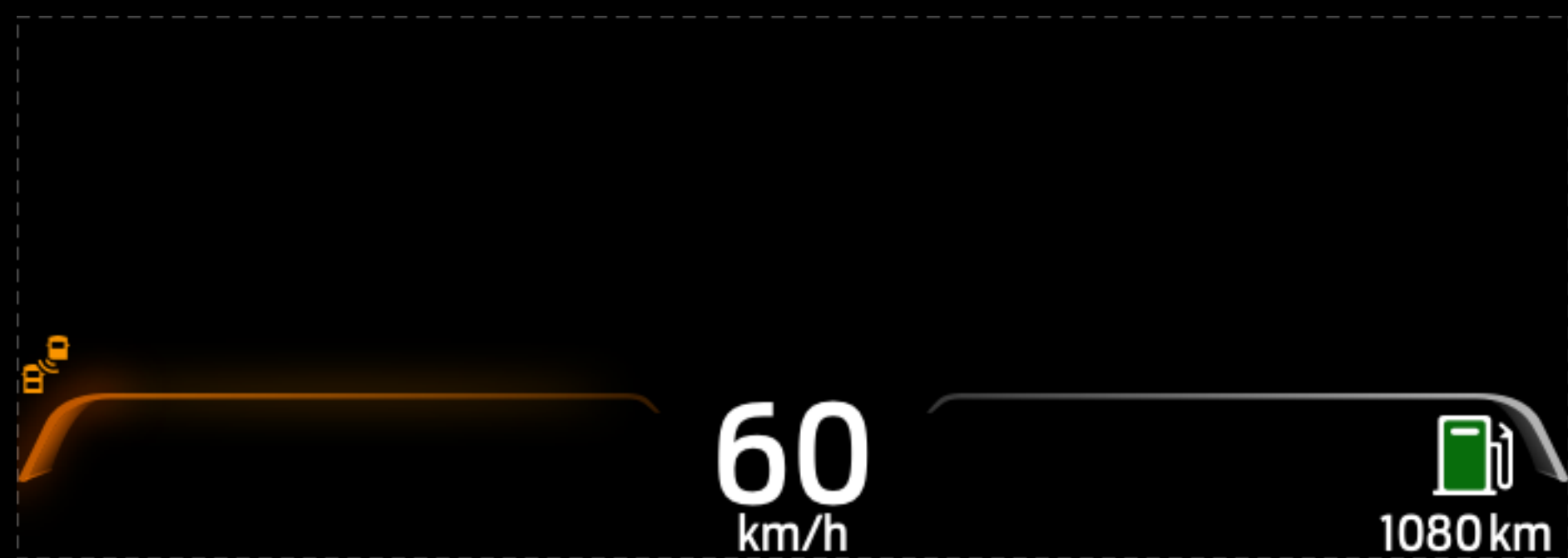
1/ Turning signal (AR ON)



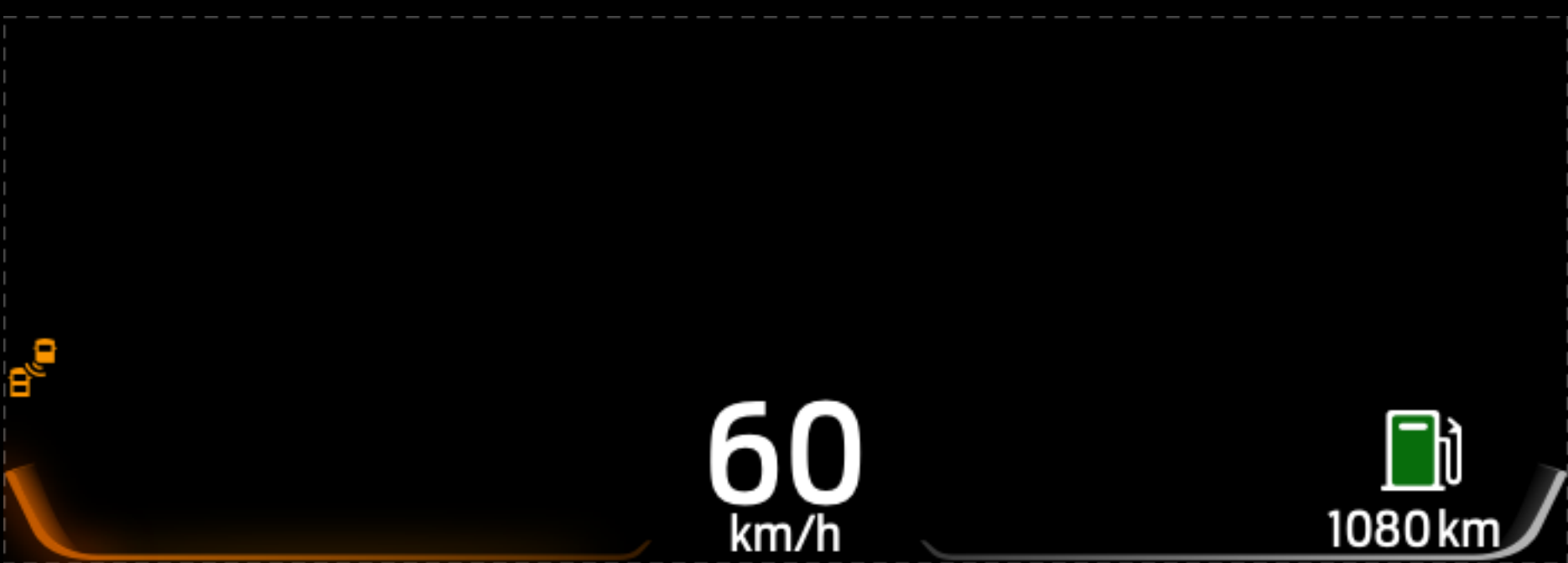
1/ Turning signal (AR OFF)



2/ Turning signal +BLIS1 (AR ON)



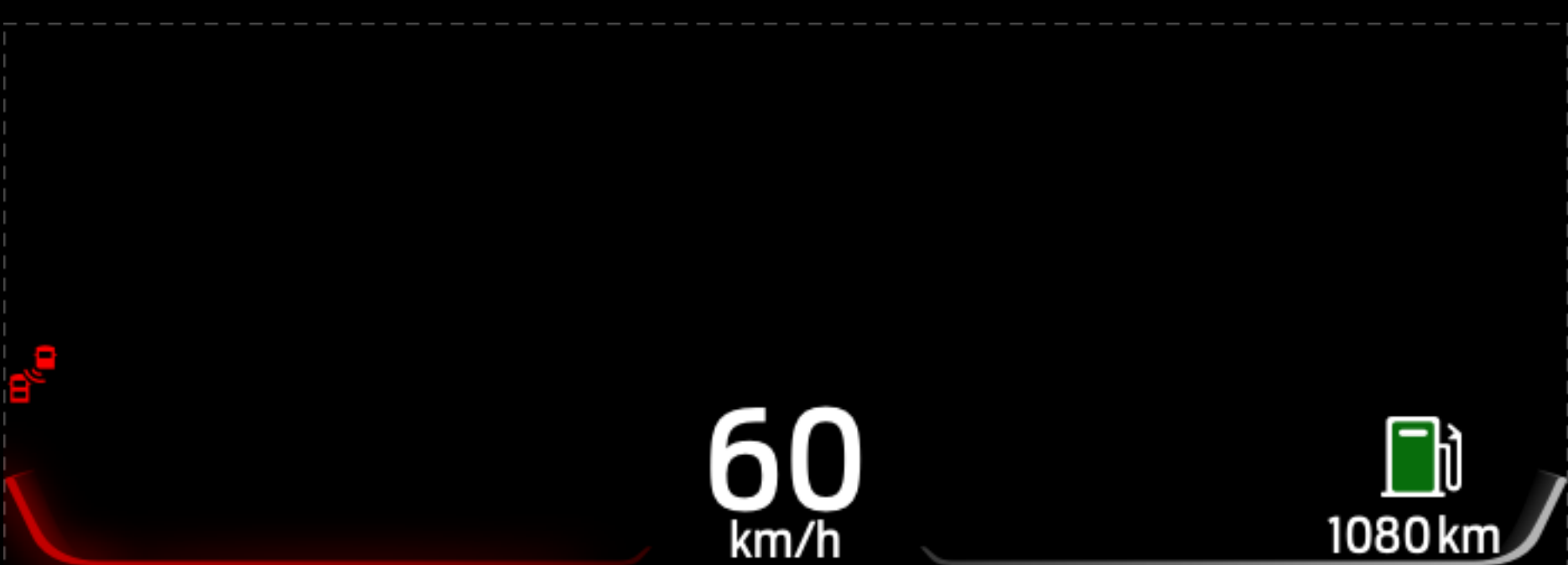
2/ Turning signal +BLIS1 (AR OFF)



3/ Turning signal +BLIS2 (AR ON)



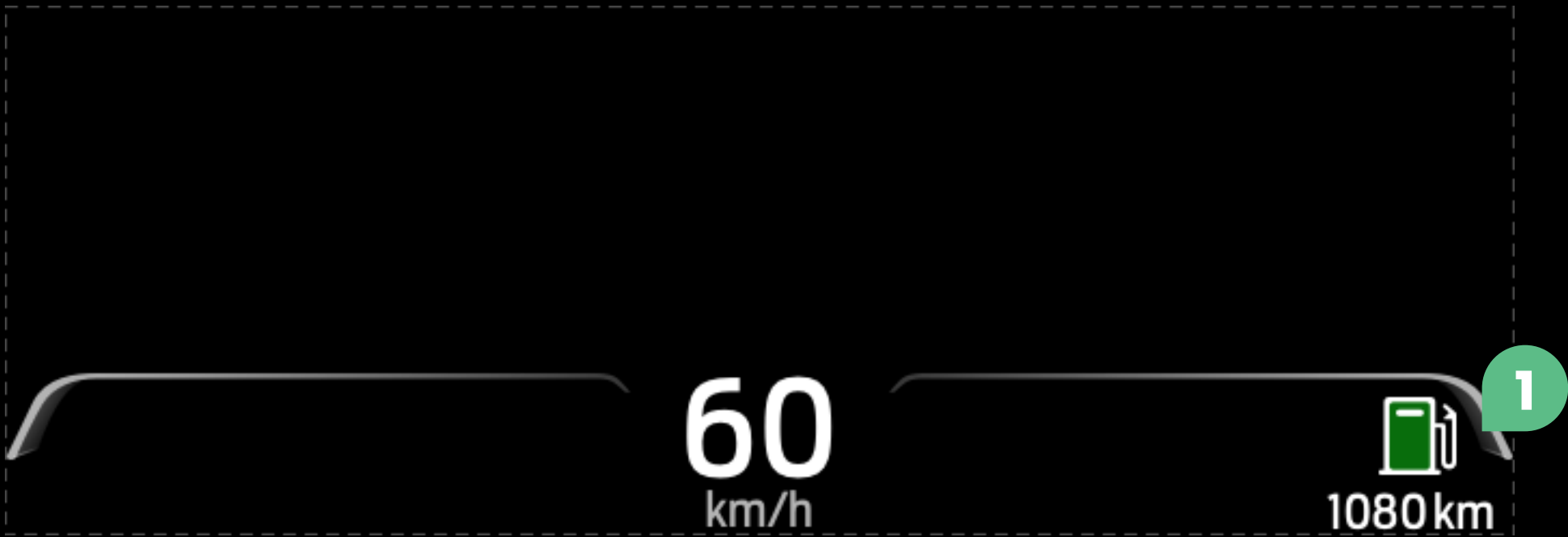
3/ Turning signal +BLIS2 (AR OFF)



In AR Off mode,Modeling will be combined with ADAS function for dynamic change, see page-16、17、18

在AR Off模式下，造型会根据ADAS功能产生变化，详见第16、17、18页

AR ON-DTE Full



AR Off- DTE Full



AR ON-DTE Less



AR Off-DTE Less



1、DTE Function description

The resolution of the DTE

The DTE display area is 90 x 70px

The font size should be 22px

The unit size is 22px

Icon actual display pixel is 40\*40p;

In default mode, the reference

positions are X-606 and Y-174

In AR Off mode, the reference

position is X-584, Y-170;

DTE 显示区域为90\*70px

字号大小为22px

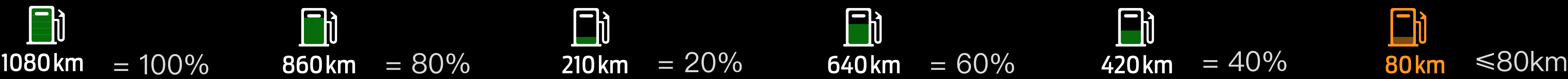
单位大小为22px

Icon实际显示像素为40\*40px;

ARon模式下，参考位置为X-606，Y-174

AROff模式时，参考位置为X-584，Y-170；

1 The functional state of DTE

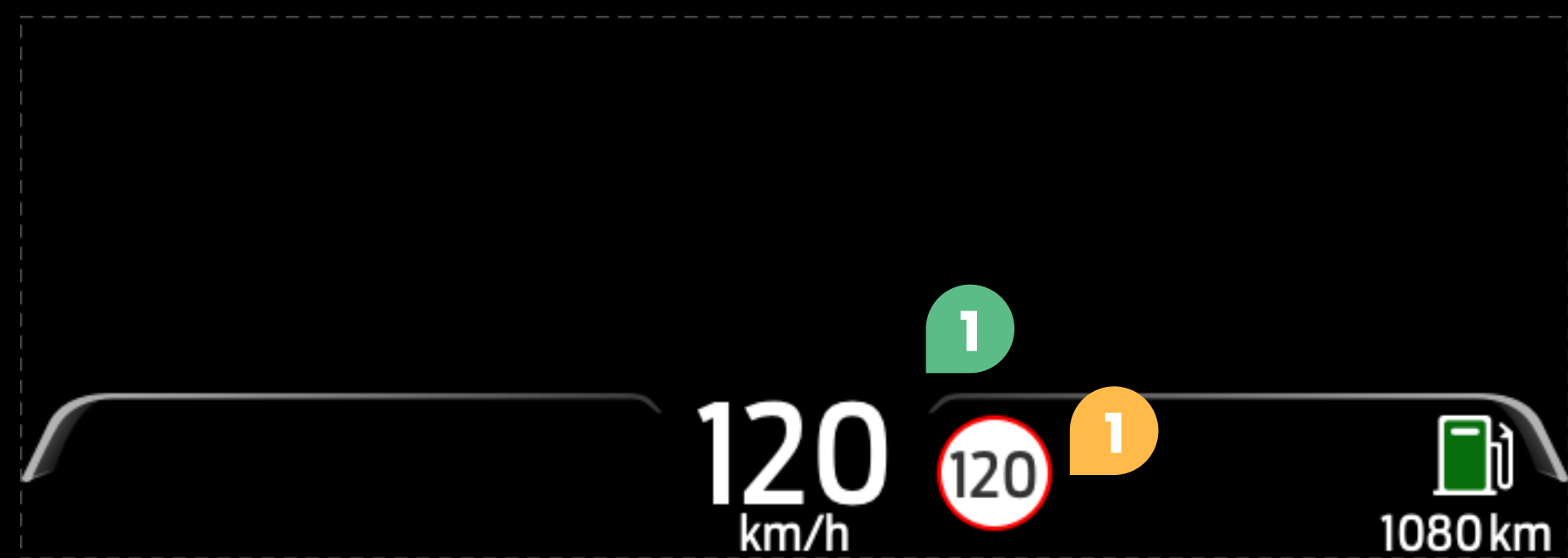


Function icon will display different mileage status, each 20% is a grid display status, when the mileage is only left 80km, icon display status changes to orange alert state;

功能图标将显示不同续航里程状态，每20%为一格显示状态，当续航里程仅剩余80km，图标显示状态切换为橙色预警状态；

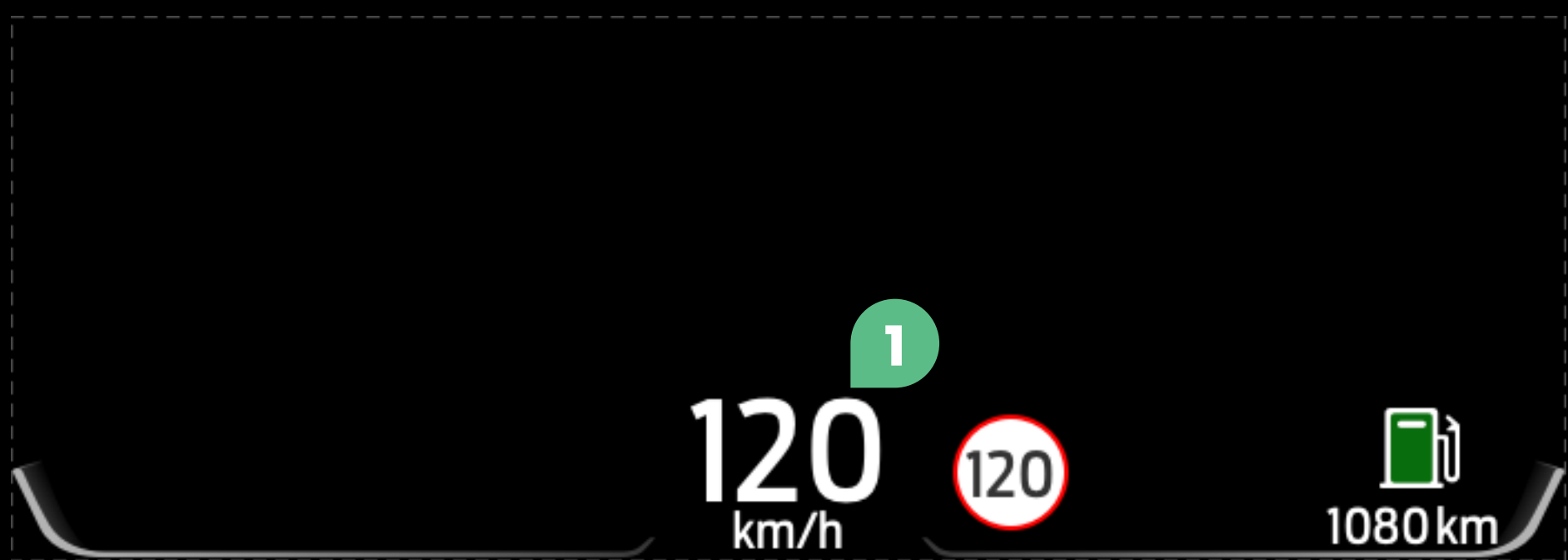


AR ON-Speed Normal

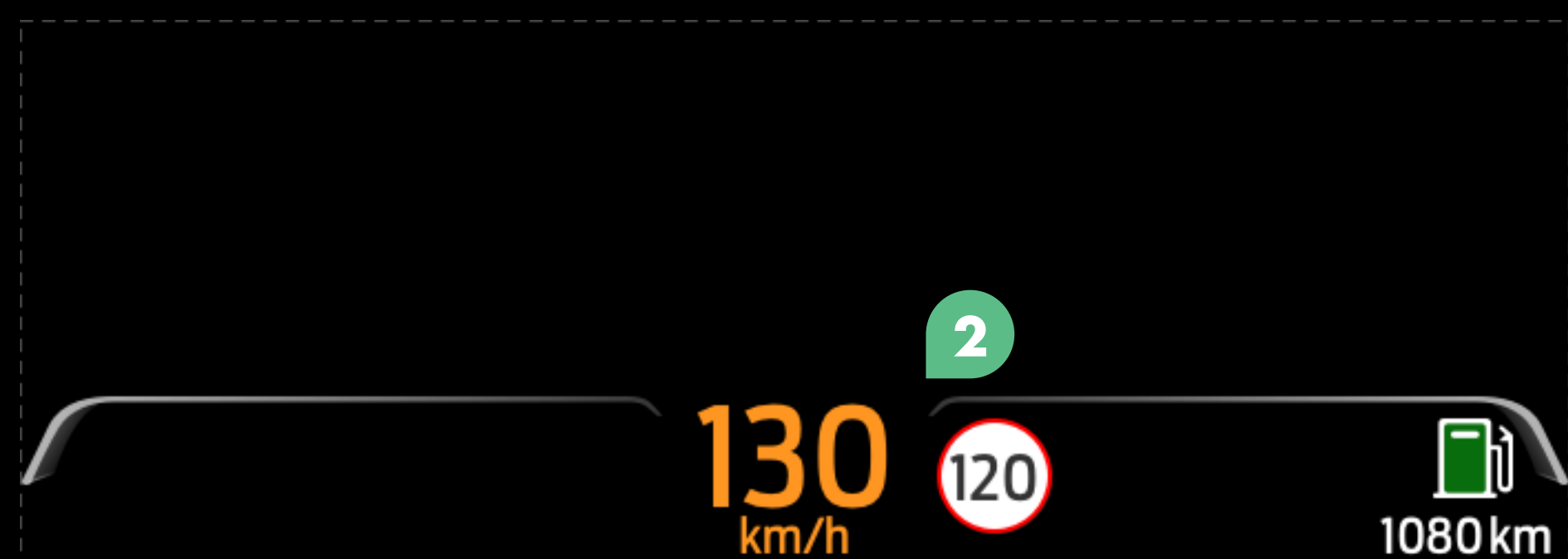


- 1 If the speed limit is not exceeded, the normal white state is displayed.  
未超过限速值时，保持显示正常白色状态；

AR Off-Speed Normal

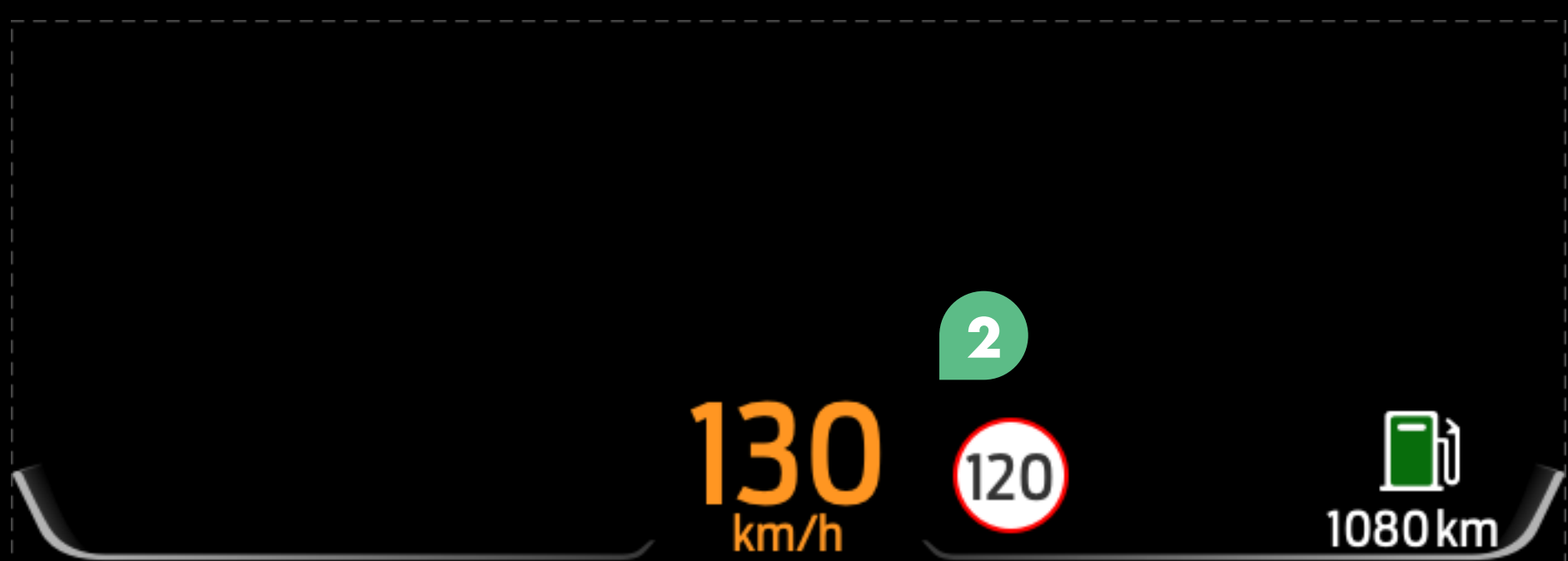


AR ON-overspeed≤10%

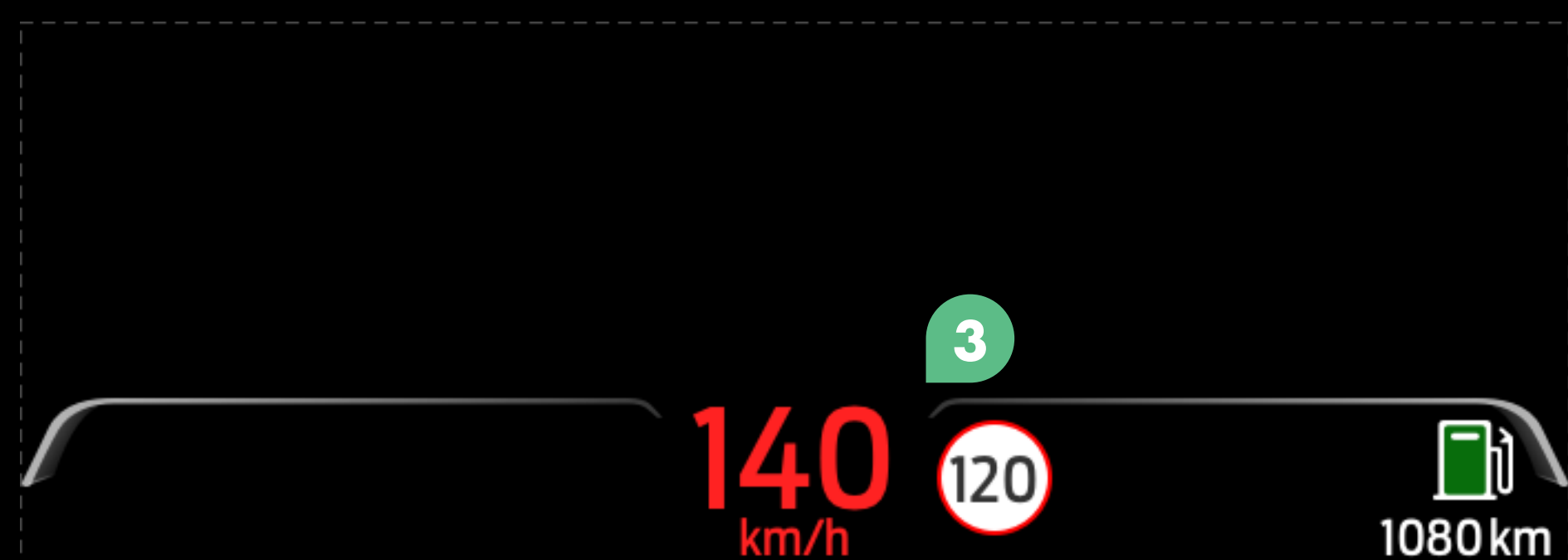


- 2 If the speed limit is exceeded by less than or equal to 10% (no fine), the warning orange state is displayed  
超过限速值，但小于等于10%（不罚款），显示预警橙色状态

AR Off-overspeed≤10%

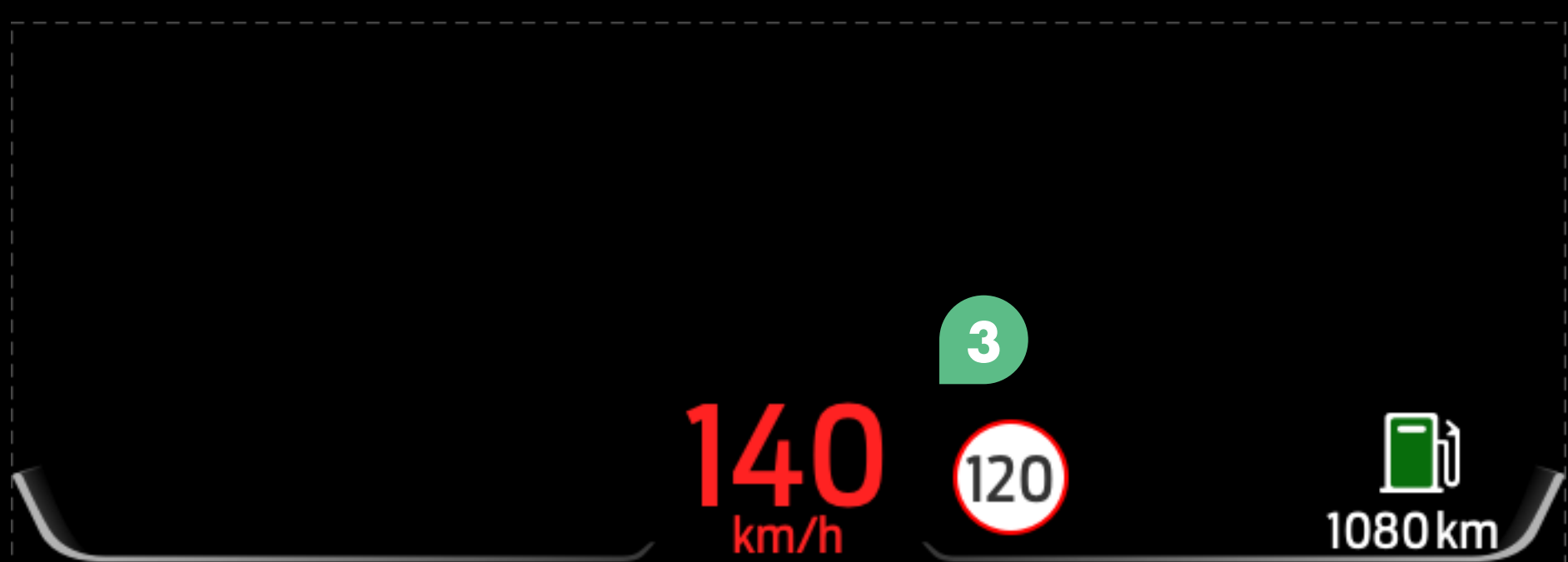


AR ON-overspeed > 10%

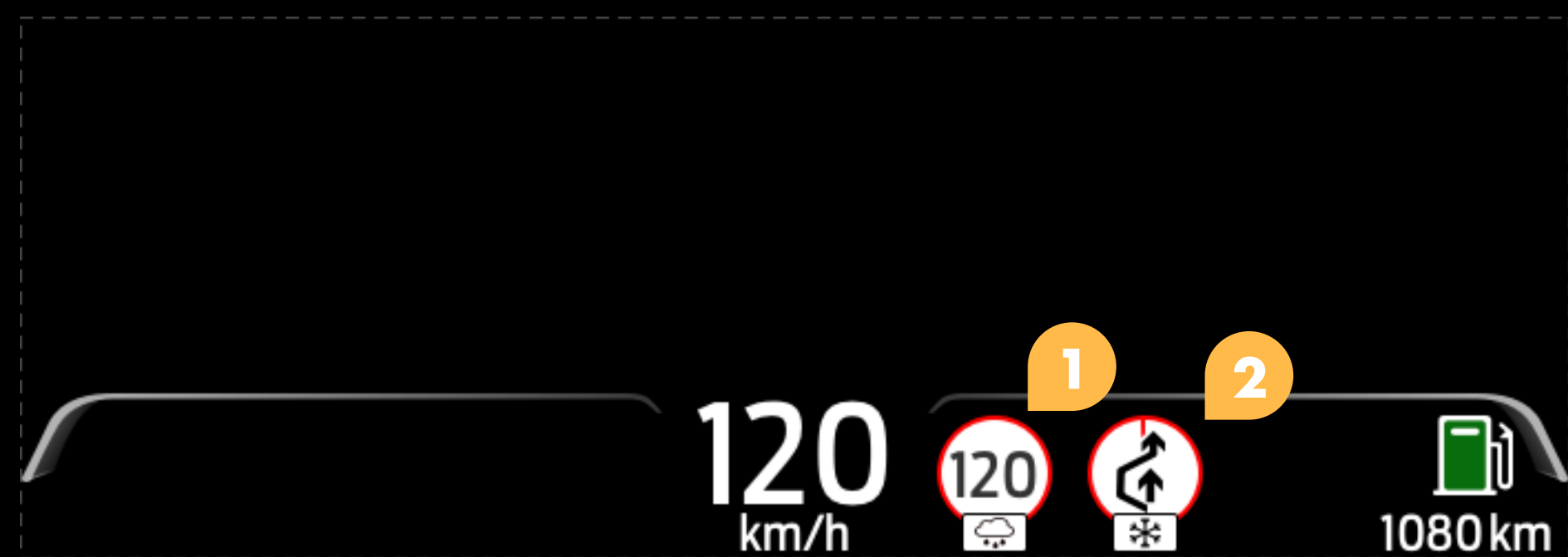


- 3 Exceeding the speed limit by more than 10% (in the fine range), the red state of warning is displayed.  
超过限速值大于10%（处于罚款范围），显示警示红色状态；

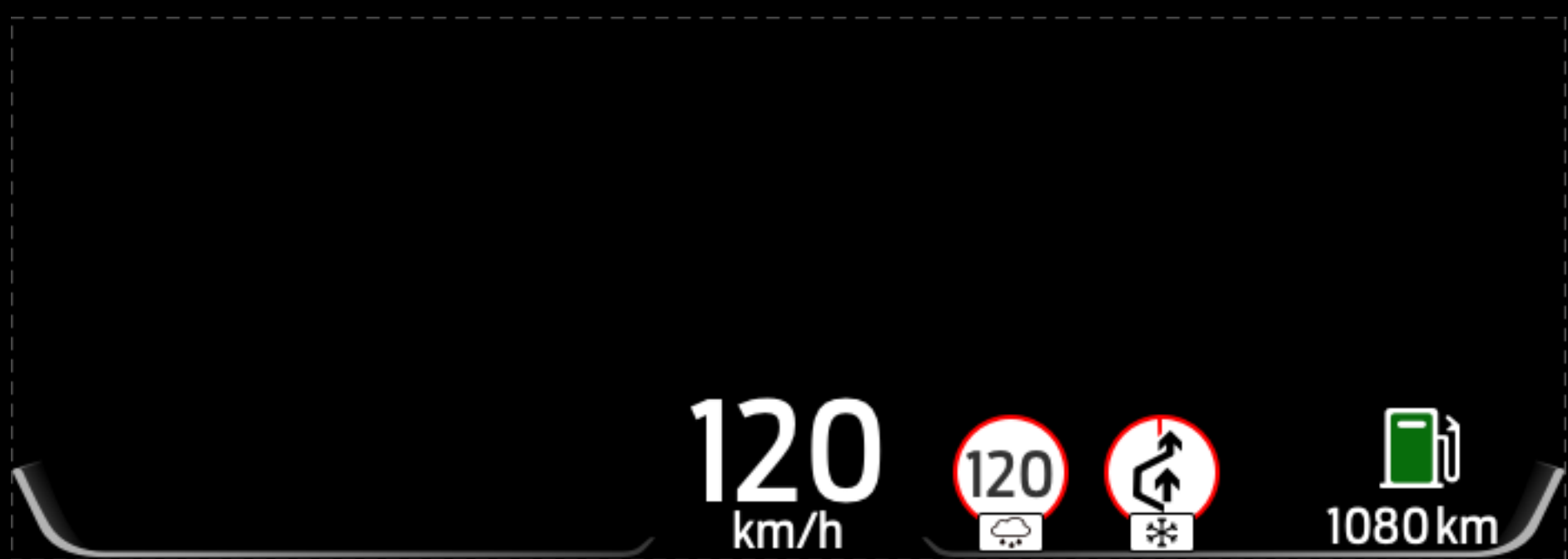
AR Off-overspeed > 10%



AR ON-Do not pass



AR Off-Do not pass



120 130 140  
km/h km/h km/h

1/ Speed Function description

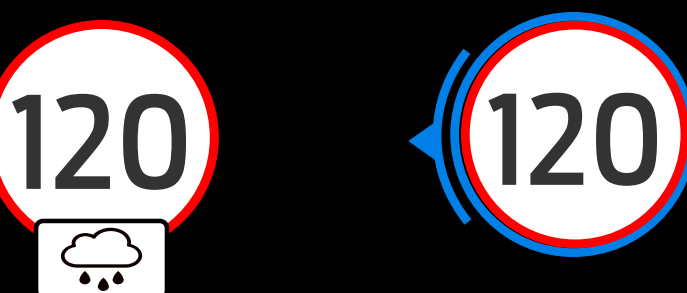
The resolution of the Speed  
The Speed display area is 120 x 75px  
Speed font size: 62px  
The unit size is 22px  
Reference positions are X-290, Y-170;  
时速显示区域为120\*75px  
时速字号大小为62px  
单位字号大小为22px  
参考位置为X-290，Y-170；

The functional state of speed  
The speed information will be combined with the overspeed state to display different warning color changes.  
时速信息将结合超速状态显示不同预警颜色变化；

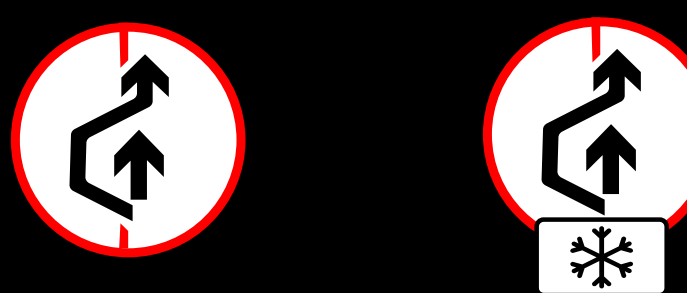


2/ TSR Function description

The resolution of the TSR speed limit  
The TSR speed limit area is 68 x 68px  
The actual icon size is 52 x 52px  
The speed limit font size is 28px  
Reference positions are X-400, Y-176;  
When switching between different modes, the position remains unchanged;  
TSR限速区域大小为68\*68px  
实际显示图标大小为52\*52px  
限速字号大小为28px  
参考位置为X-400，Y-176；  
不同模式切换时，位置不变；



The resolution of the Other marks  
TSR speed limit other logo, display icon bottom;  
When the IACC function is enabled, the connection status is displayed. See the P12  
The display area is 68 × 68px;  
TSR限速的其他标识,显示图标底部；  
IACC功能开启时，显示连接状态；详见P12；  
显示区域大小为68\*68px；

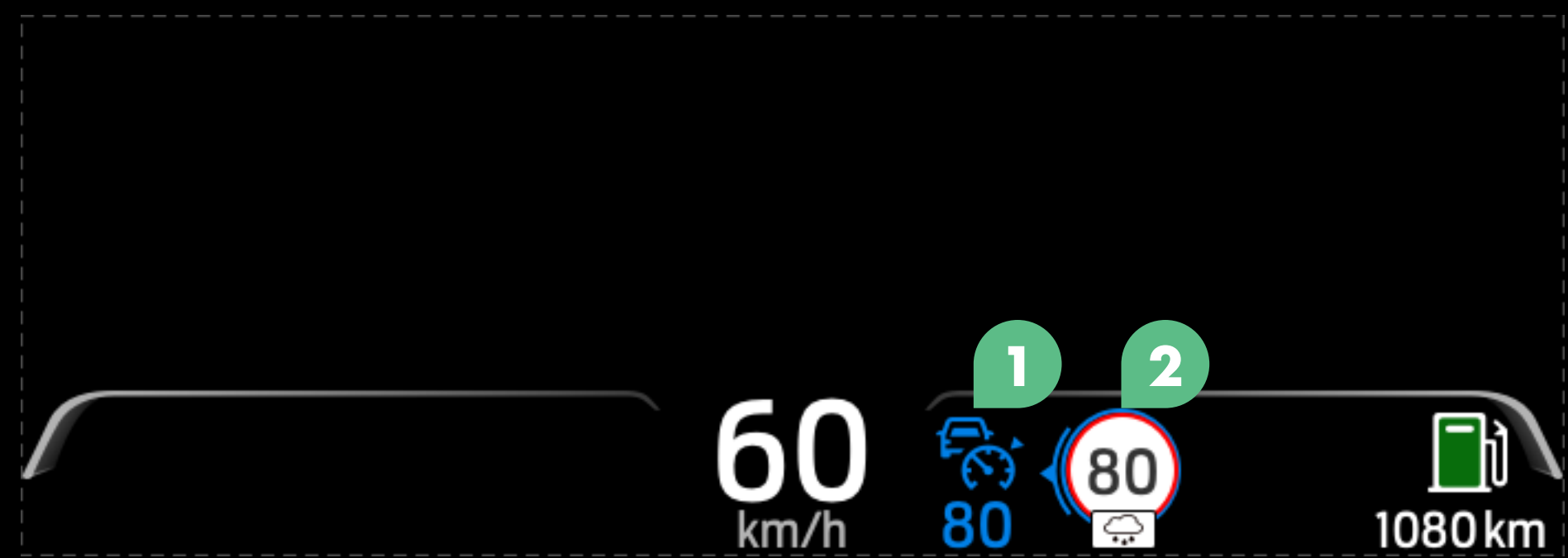


2 TSR Function description

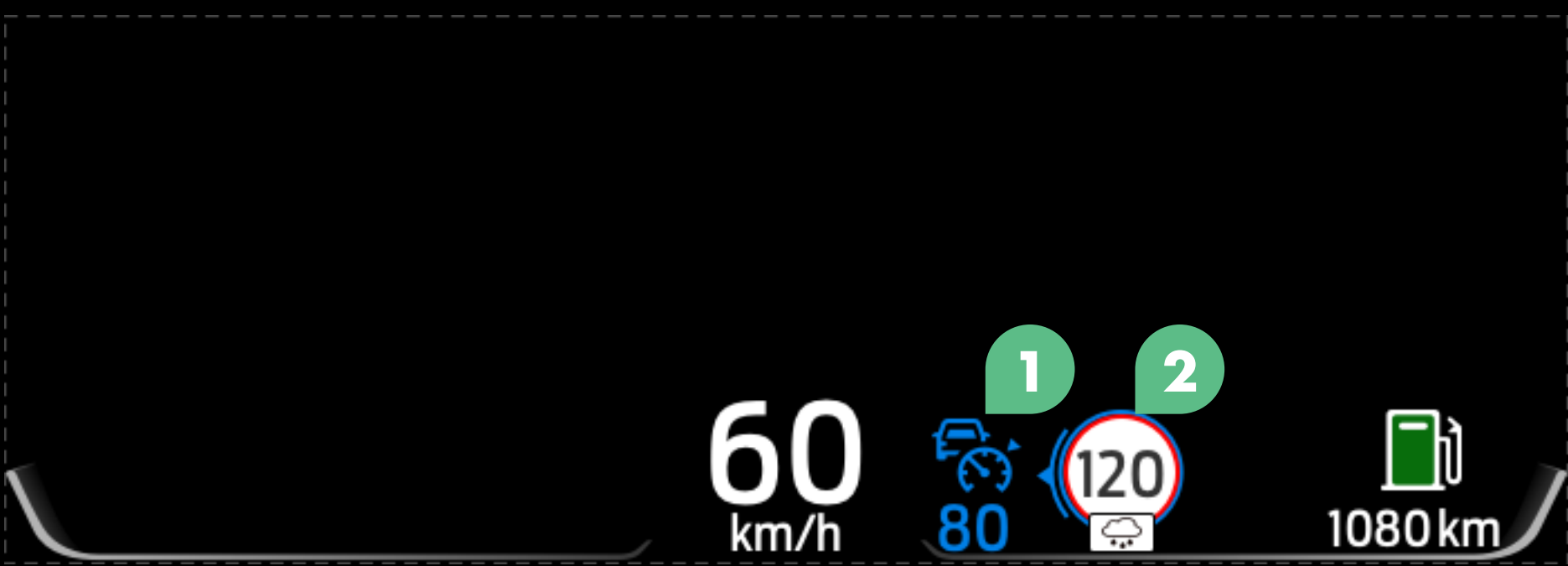
The resolution of the TSR Do not pass  
The TSR -Do not pass area is 68 x 68px;  
The reference position is X-468, Y-176;  
TSR禁止超车区域大小为68\*68px  
参考位置为X-468，Y-176；



AR ON-IACC



AR Off-IACC



- 1

This location area displays the functional status of NCC/ACC/IACC&SPEED LIMTER; Function display logic, see the following table;

In AR ON mode , the reference position is X-400,Y-176;

AR OFF mode, the reference position is X-400,Y-174;

Function ICONS are 60 x 68px in size and values are 28px in size.

该位置区域显示NCC/ACC/IACC&SPEED LIMTER的功能状态；功能显示逻辑，详见下表；

AR ON 模式时，参考位置为x-400,Y-176;

AR OFF模式时，参考位置为x-400,Y-174;

功能图标大小为60\*68px,数值显示大小28px；
- 2

When IACC is enabled, TSR displays the connection status.

When ACC is enabled, TSR will turn right which is reference location is X-460, Y-176.

IACC功能开启时，TSR显示连接状态；

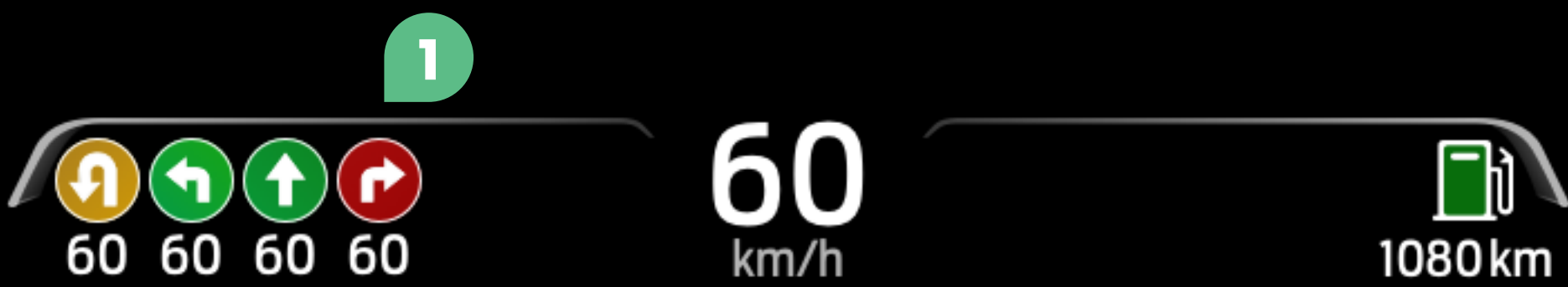
当ACC功能开启时，TSR信息向右侧移动，参考位置X-460，Y-176

Display specification for NCC/ACC/ IACC, SPEEDLIMTER function status;

关于NCC/ACC/IACC/SPEEDLIMTER功能状态的显示规范;

	SET/Standby	Active	Set Speed Disapper	Override (Flashing)	Canceled			
						Intelligent Speed Lim		
Speed Limter								
ISA								
NCC								
						StopAndGo-Resume	StopAndGo-Auto Resume	StopAndGo-Stopped
ACC								
						StopAndGo-Resume	Active(Set Speed time out RTT move down)	StopAndGo-Stopped
IACC								

AR ON-V2I(Nav off)

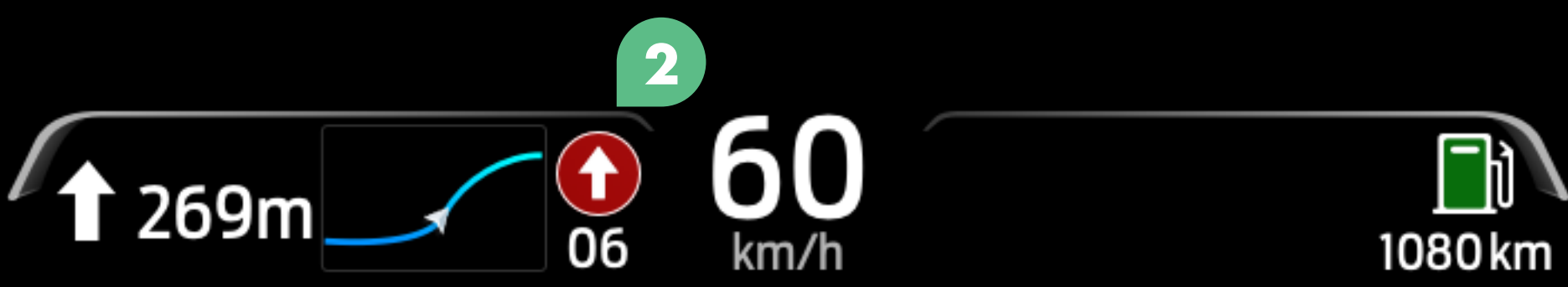


- 1 When the navigation is closed, the lane information and corresponding traffic light information are displayed;  
The reference location area ARon is X-20,Y-177, ARoff is X-20,Y-175
- 导航关闭时，显示车道信息与对应的红绿灯信息；  
ARON 参考位置X-20， Y-177； AROFF参考位置X-20， Y-175

AR Off-V2I(Nav off)

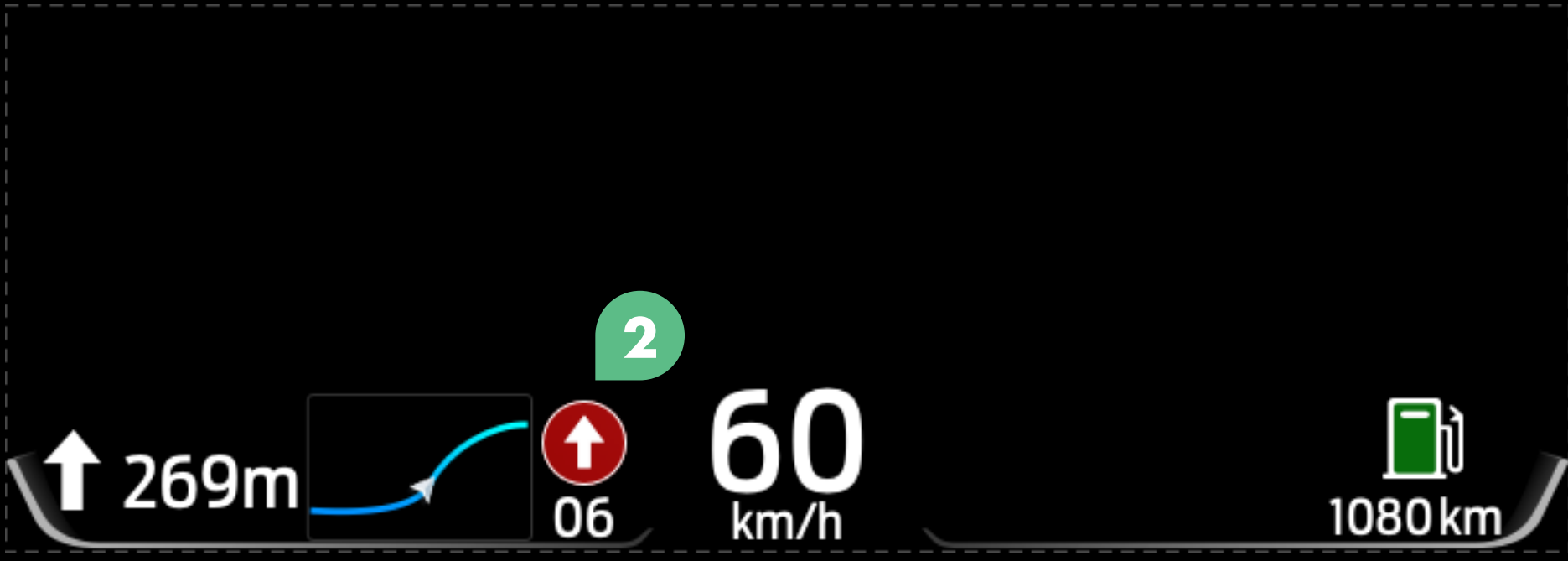


AR ON-V2I(Nav on)



- 2 When navigation is enabled, V2I displays only traffic lights of the driving lane.  
The reference location area is X-244,Y-177
- 导航开启时，V2I信息仅显示行驶车道的红绿灯信息；  
参考位置X-244， Y-177； AROFF参考位置X-244， Y-175

AR Off-V2I(Nav on)



1/ V2I Function description

The functional state of V2I

When the navigation is off, V2I information displays the traffic light information of all lanes ahead.

When the navigation is on, V2I information only displays traffic light information and seconds of the road to be driven.

当系统未开启导航时，V2I信息显示前方所有车道的红绿灯信息，  
当导航开启时，V2I信息仅显示即将行驶道路的红绿灯信息与秒数

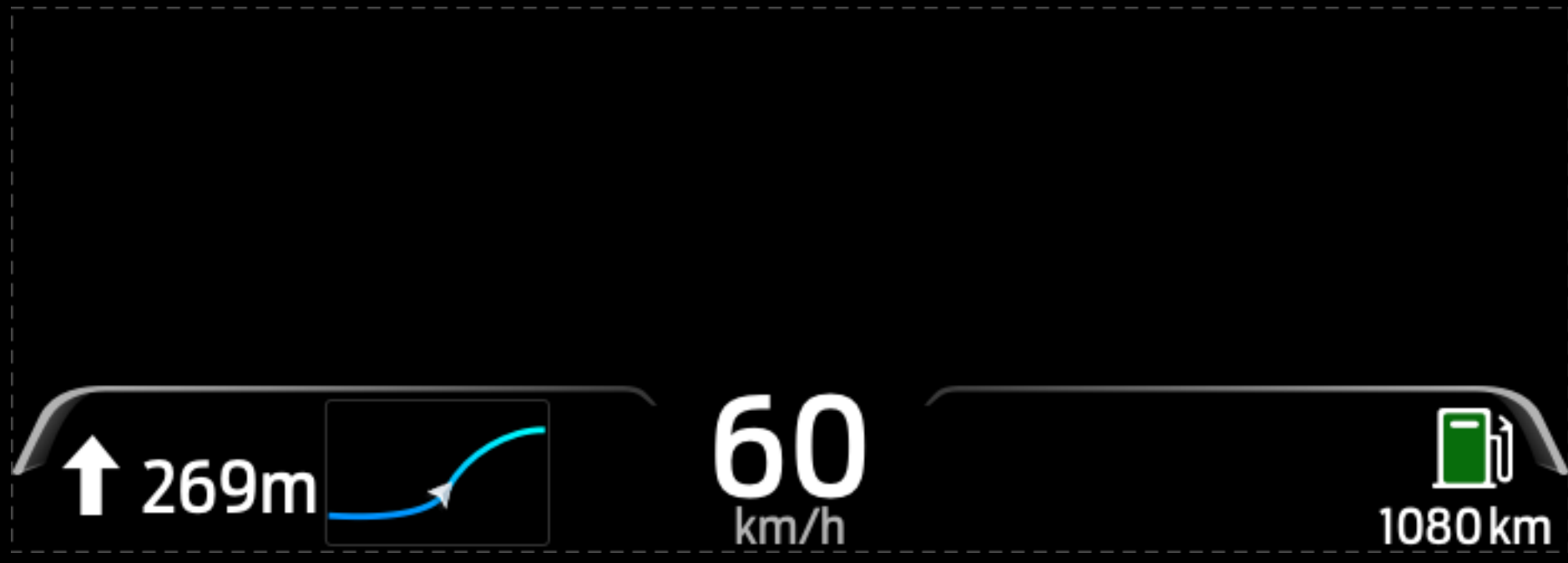
The resolution of the V2I

The traffic light size is 42 x 68px, and the countdown value is 24px

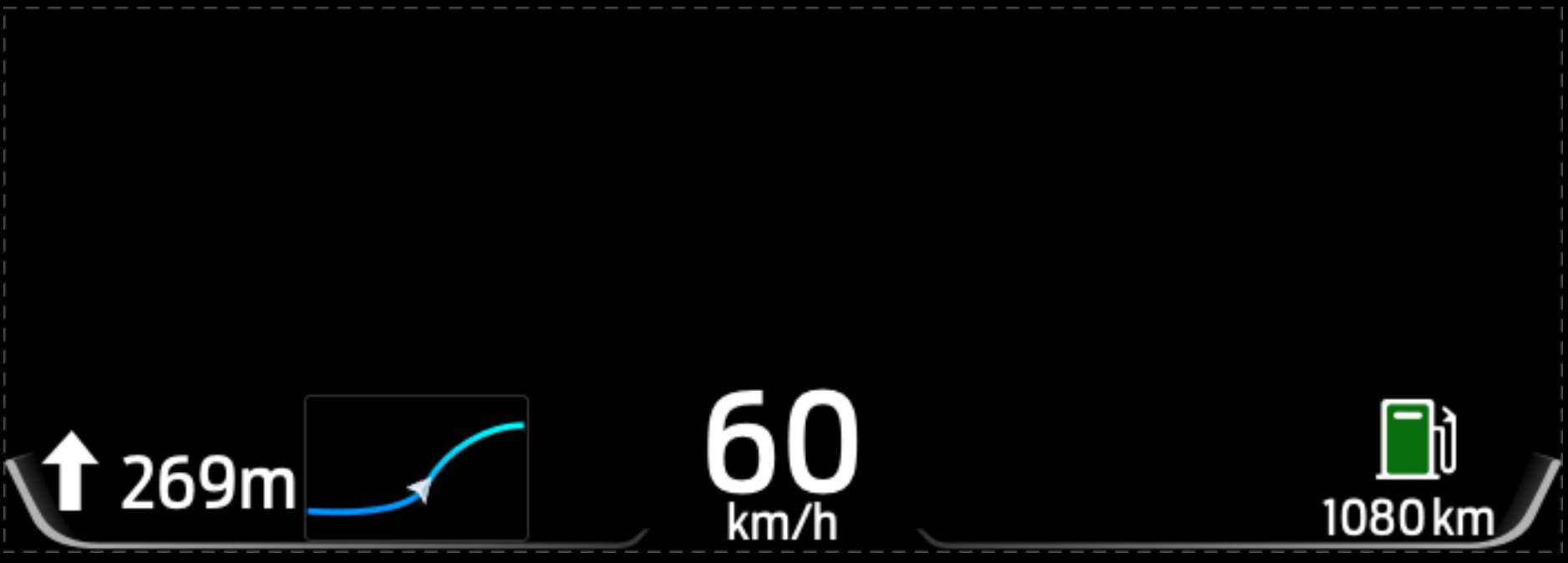
红绿灯大小为42\*68px，  
倒计时数值为24px



AR ON-Nav 2D



AR Off-Nav 2D



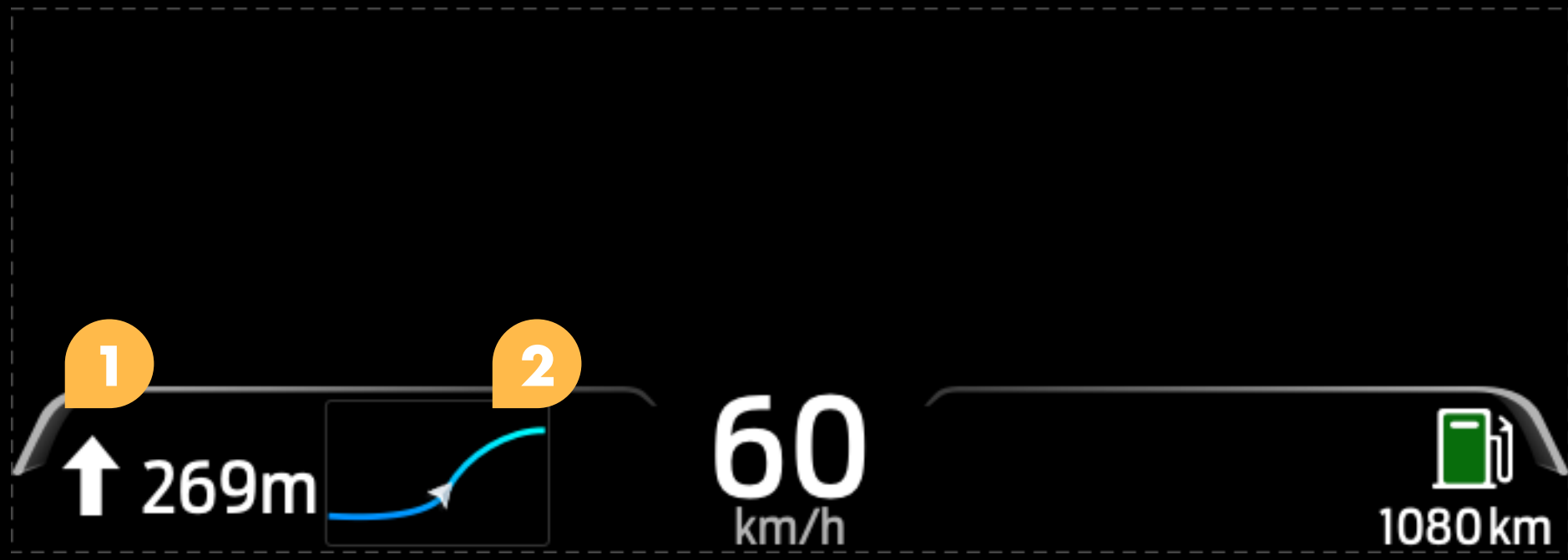
HUD navigation information mainly consists of map, route guidance and intersection information, which are mainly displayed;

Map and route guidance information are always displayed;

The intersection information is displayed according to the signal;

HUD导航信息主要由Map、路线引导与路口信息，3种信息显示为主；其中，MAP与路线引导信息为常显信息；路口信息根据信号显示；

AR ON-Nav 2D常显信息



1/ Nav A Function description

The resolution of the Nav A 路线引导

显示路线引导图标与距离

距离显示字号为32px

显示路线引导图标为36\*36px，

参考区域X-14，Y-174

2/ Nav B Function description

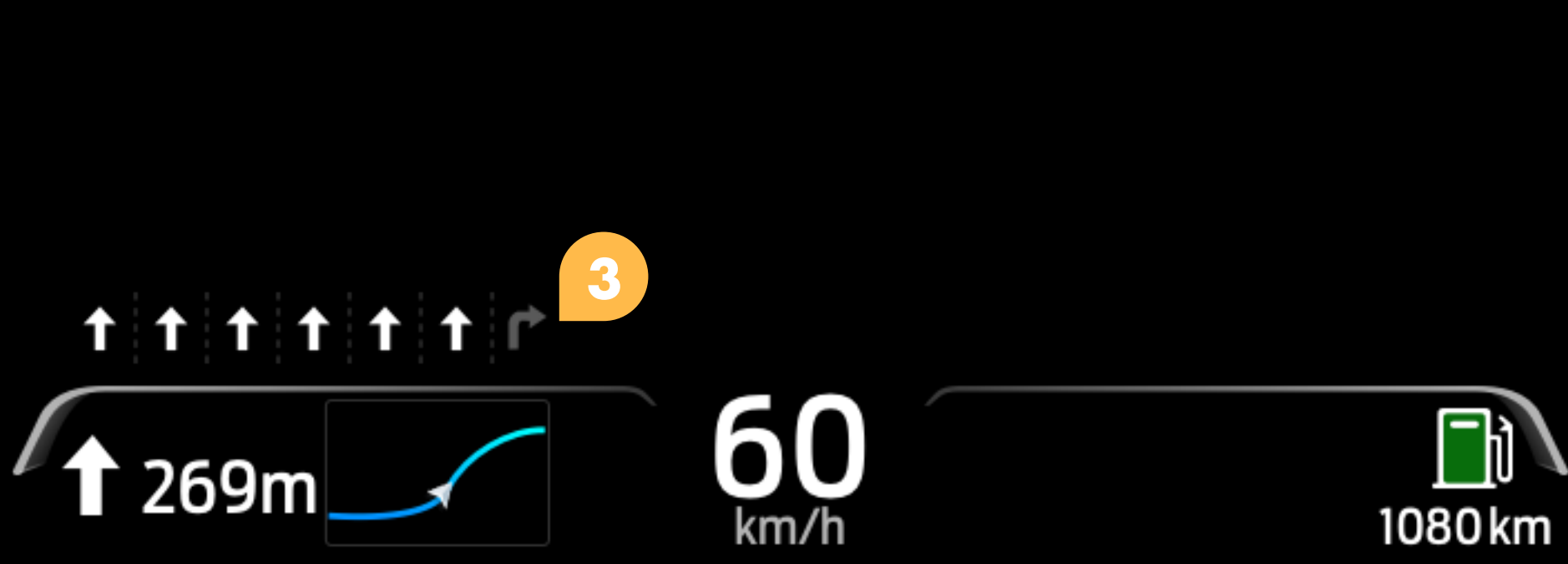
The resolution of the Nav B Map

显示路线俯瞰与实时路况，根据导航信息数据缩放显示

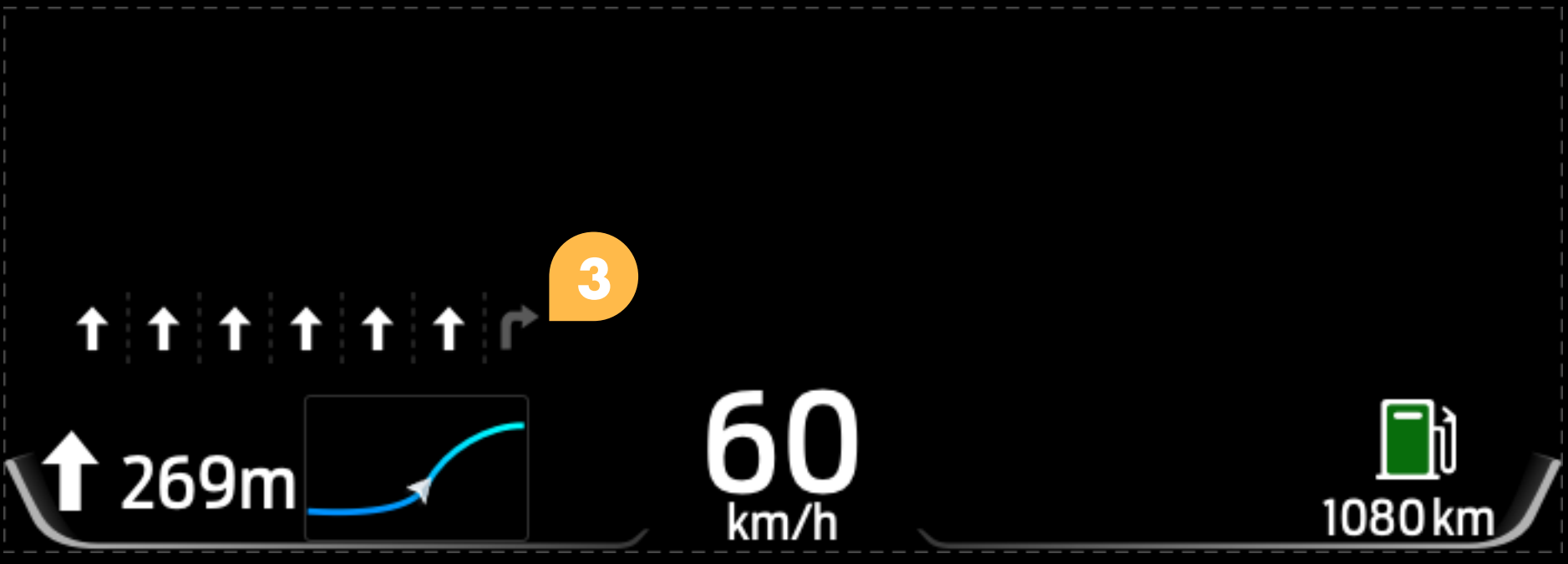
显示区域为106\*70px

e.g.不同的路线走向/拥堵情况，Map会随着当前道路情况发生变化

ARON-Nav 2D



AROff-Nav 2D路口信息



3/ Nav D Function description

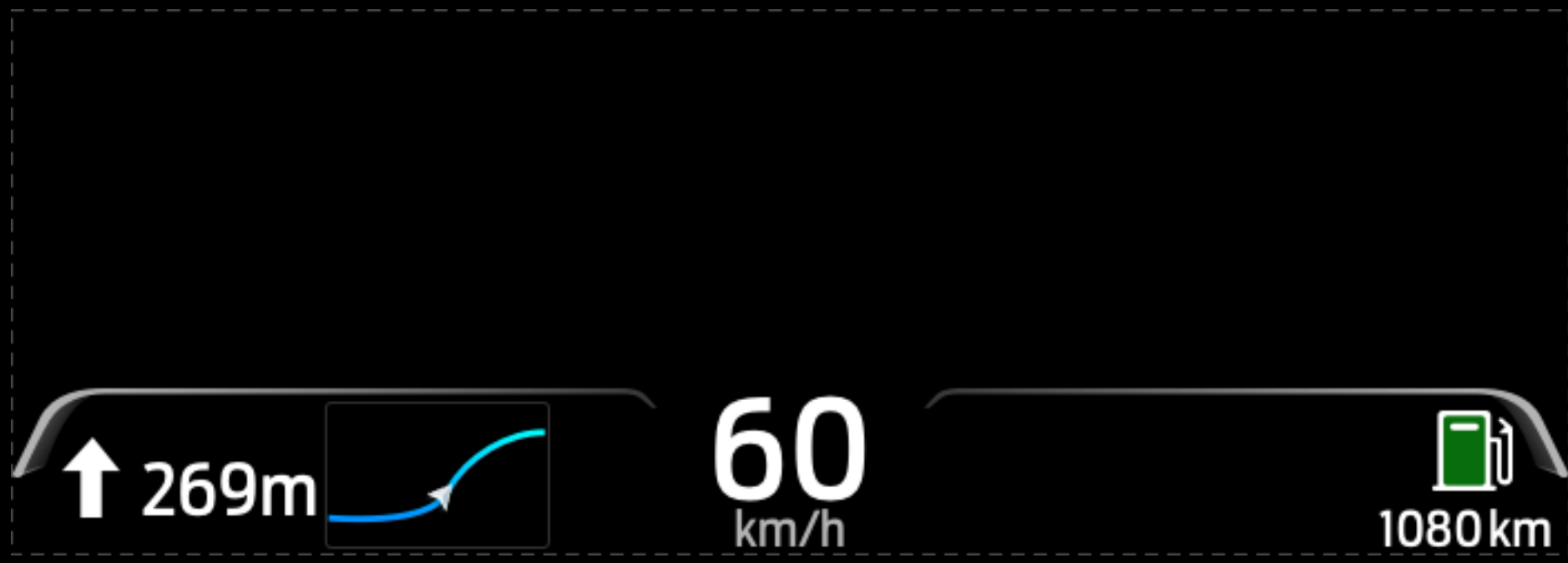
The resolution of the Nav D 路口信息

若当前路段识别到道路线信息，则会结合导航指示显示行驶道路；

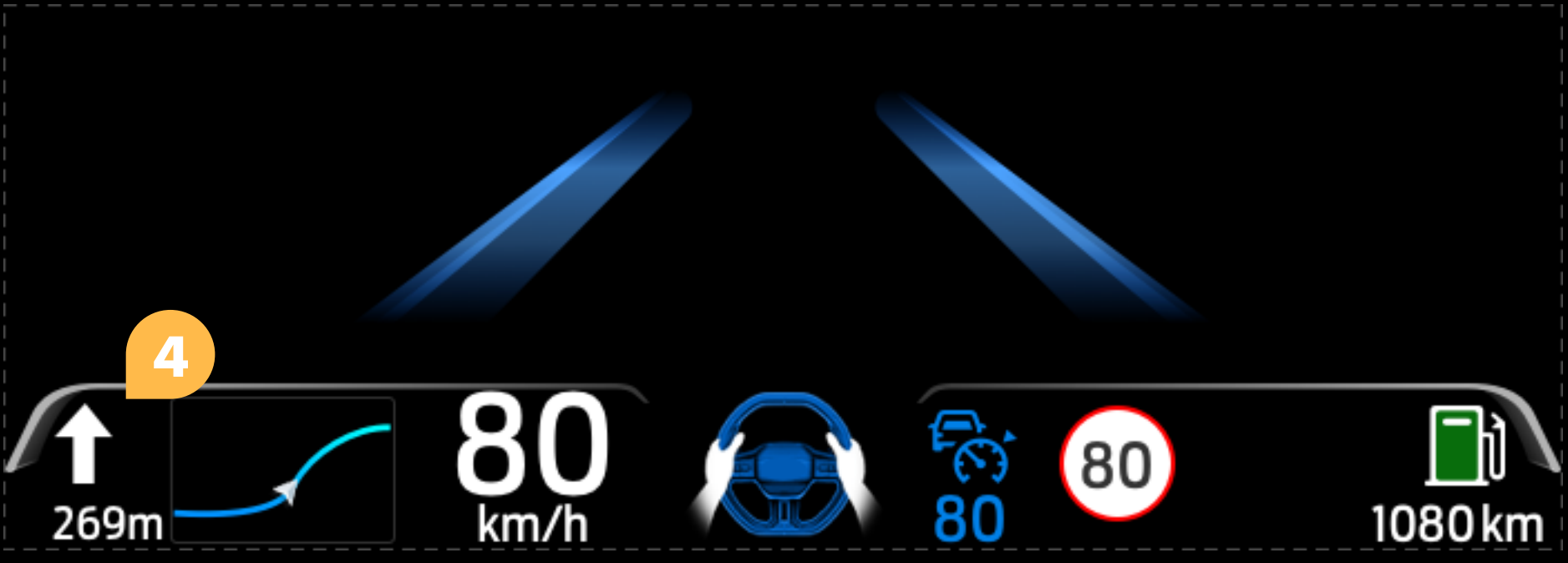
通过后则会自动消失

道路图标参考分辨率为30\*30px；

ARON-Nav 2D



ARON-Turn on the LCA



When the LCA or HA function is enabled, 2D navigation information is displayed in thumbnails.

Route guidance, remaining mileage and arrival time are displayed;The size of the MAP information area remains unchanged.

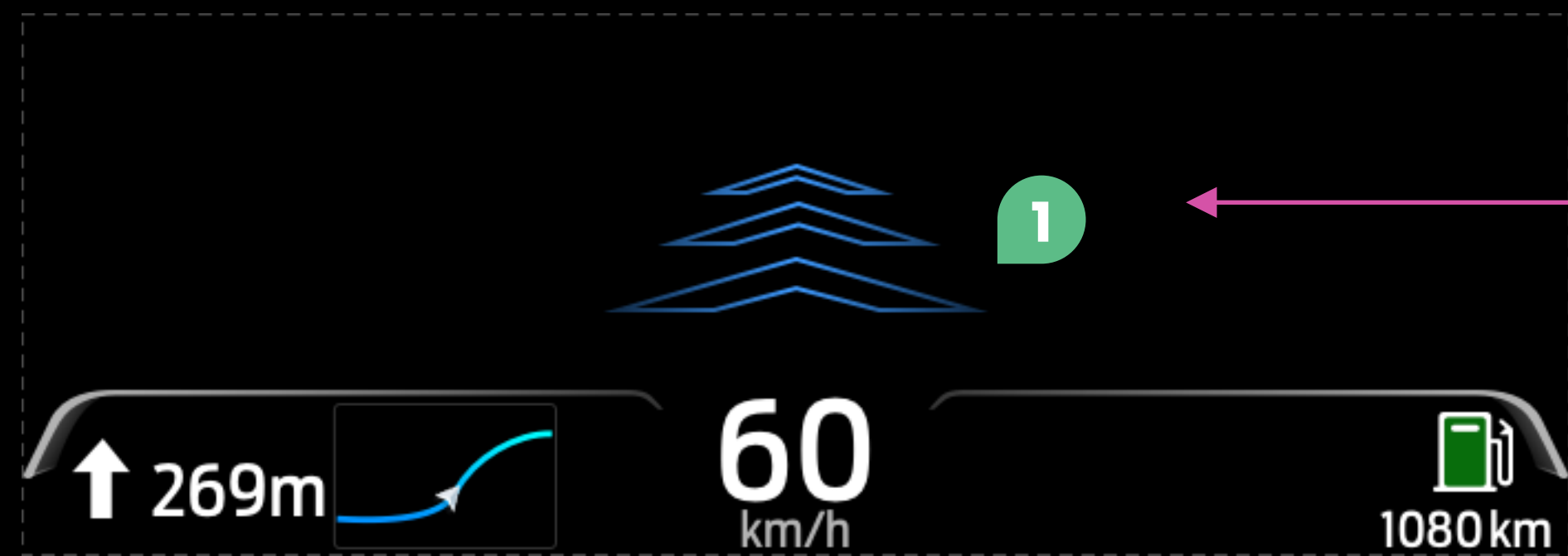
The location of navigation area information is narrowed.

开启LCA或HA功能时，2D导航信息区域缩小，路线引导箭头向上移动至X-8，Y-174；文字显示信息缩小为20px；

MAP信息区域大小不变；导航区域信息位置缩小；



Nav AR-Boot straight



- 1
- When navigation is on, it displays straight guidance according to navigation information.
- It is recommended that the time from the entry to the drawing of the guide instruction graph is 3s;
- The display frequency is 2-3 times, and the dynamic flashing mode is presented to enhance the direct guidance;
- The AR display area is 700 × 170px

导航开启时，根据导航信息，显示直行引导；

建议引导指示图形入画到出画时长为3s；显示频率2–3次，动态闪烁方式呈现，增强直行引导提示；

AR显示区域范围700\*170px

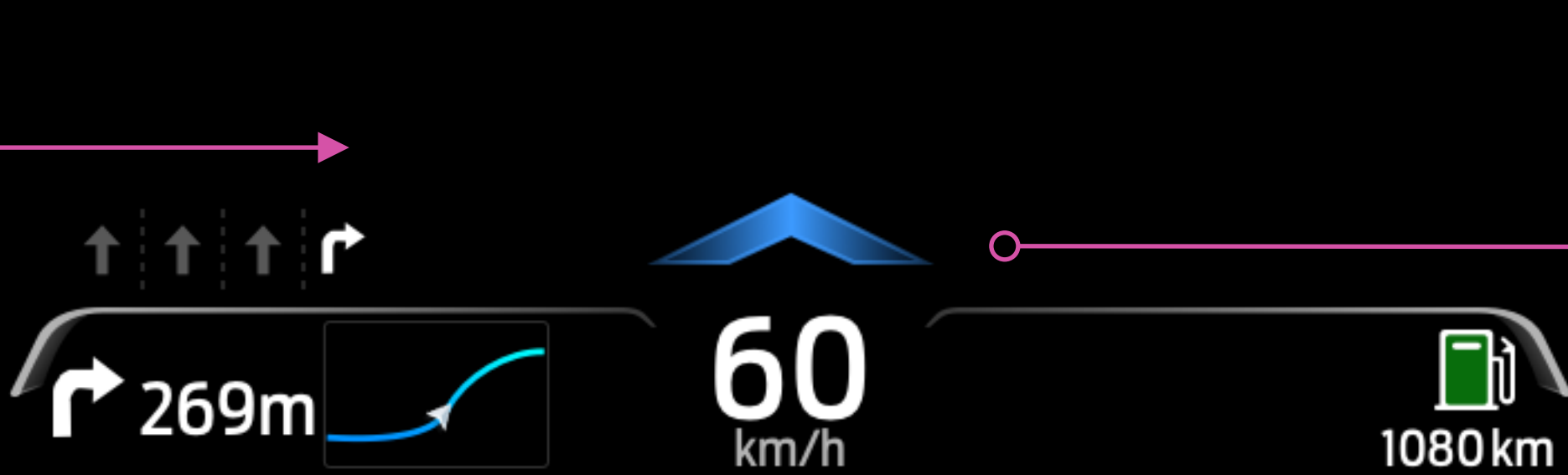
Nav AR-Lead change lanes1



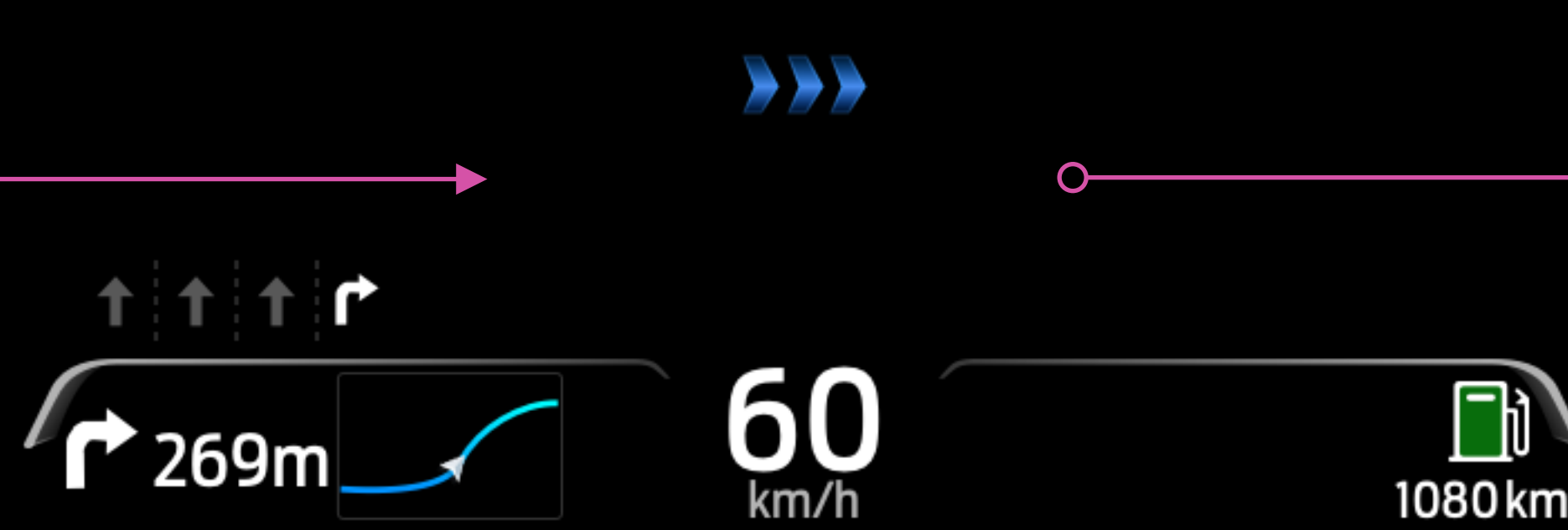
- 1
- When the navigation is on, according to the navigation information, the ready guide arrow is preferentially displayed when the front is turning left or right.
- [Fixed] Arrow animation is switched from full speed top to ready guide arrow 2.Focus on the user's attention to information acquisition before turning
- 导航开启时，根据导航信息，前方左转或右转时优先显示预备引导箭头；箭头动画从时速上方显示完全后切换为预备引导箭头2状态；集中在转向前，用户对信息获取的注意力

- 2
- Preparatory guide arrow 2 After the end of the preparatory state,
- the arrow extends dynamically to the prospective turning intersection area; Indication turning junction
- 预备引导箭头准备状态结束后，箭头动态延伸至远景转向路口区域；提示转向路口

Nav AR-Lead change lanes2



Nav AR-To distance Far



- 3
- The turning guidance arrow at the intersection gradually enlarges and displays according to the real distance, until it disappears after the turning action.
- In addition, according to the actual navigation information, the display is switched back and straight guidance

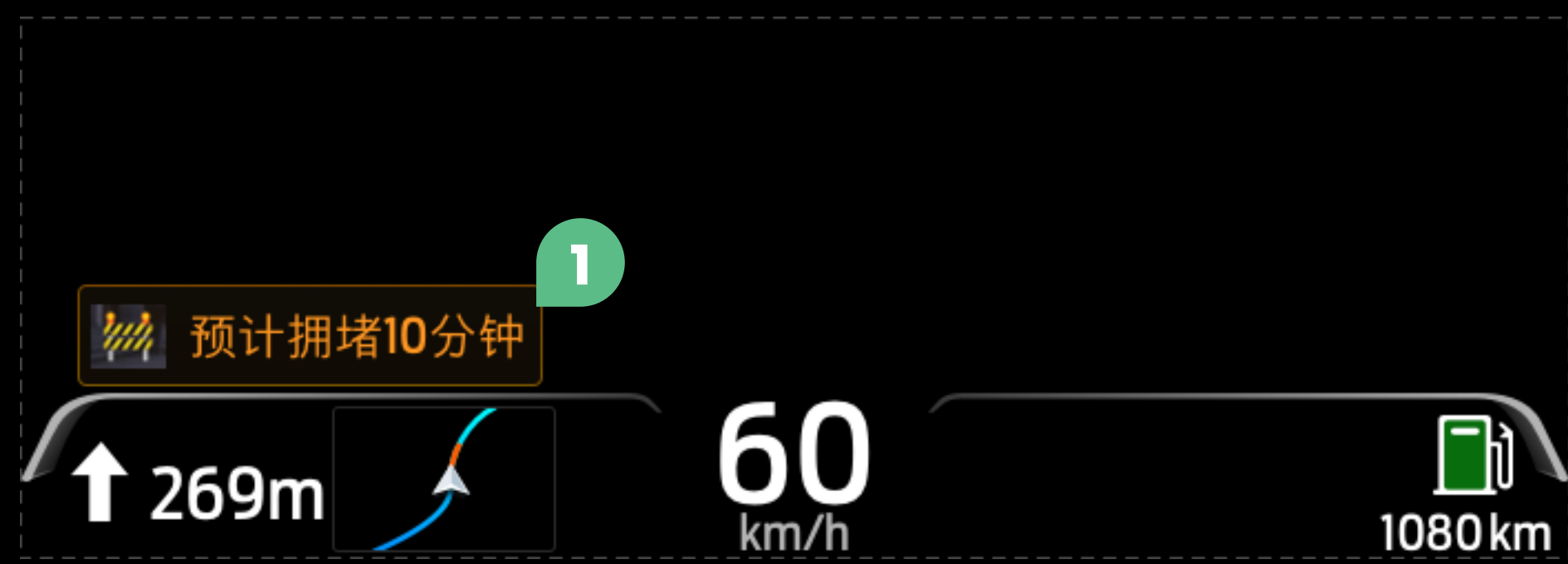
路口转向引导箭头根据实景距离逐渐放大显示，直至转向动作结束后消失，并根据实际导航信息，切换显示回转向后直行引导

Nav AR-To distance Near





Nav Popup-Traffic information



1

The congestion popup window is displayed according to the navigation information, and the estimated congestion time information changes synchronously in real time. The popup window disappears after the congested road is passed

The current popover size resolution is 210\*48px; The reference position area is X-26,Y-120

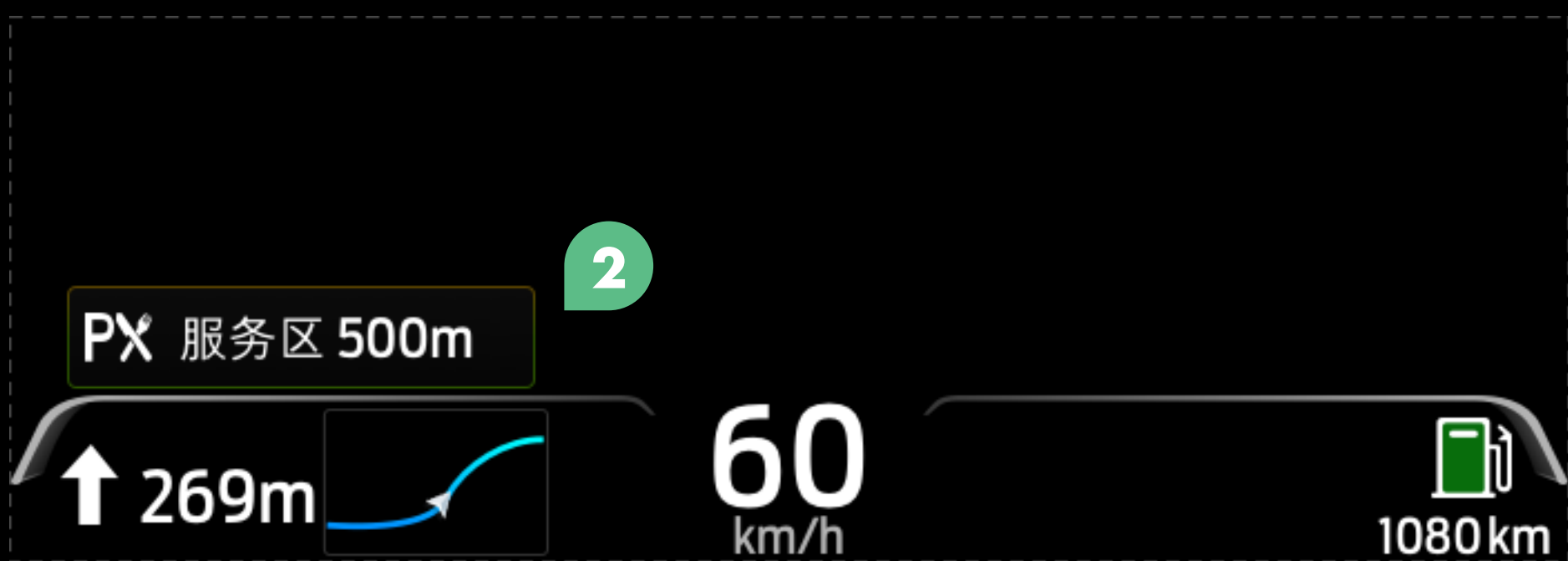
The icon display size is 46 by 46px and the text display size is 22px

根据导航信息显示拥堵弹窗,预计拥堵时间信息实时同步变化，通过拥堵路段后弹窗消失

当前弹窗大小分辨率为210\*48px;参考位置区域为X-26,Y-120

图标显示大小为46\*46px,文字显示大小为22px

Nav Popup-Other information A



2

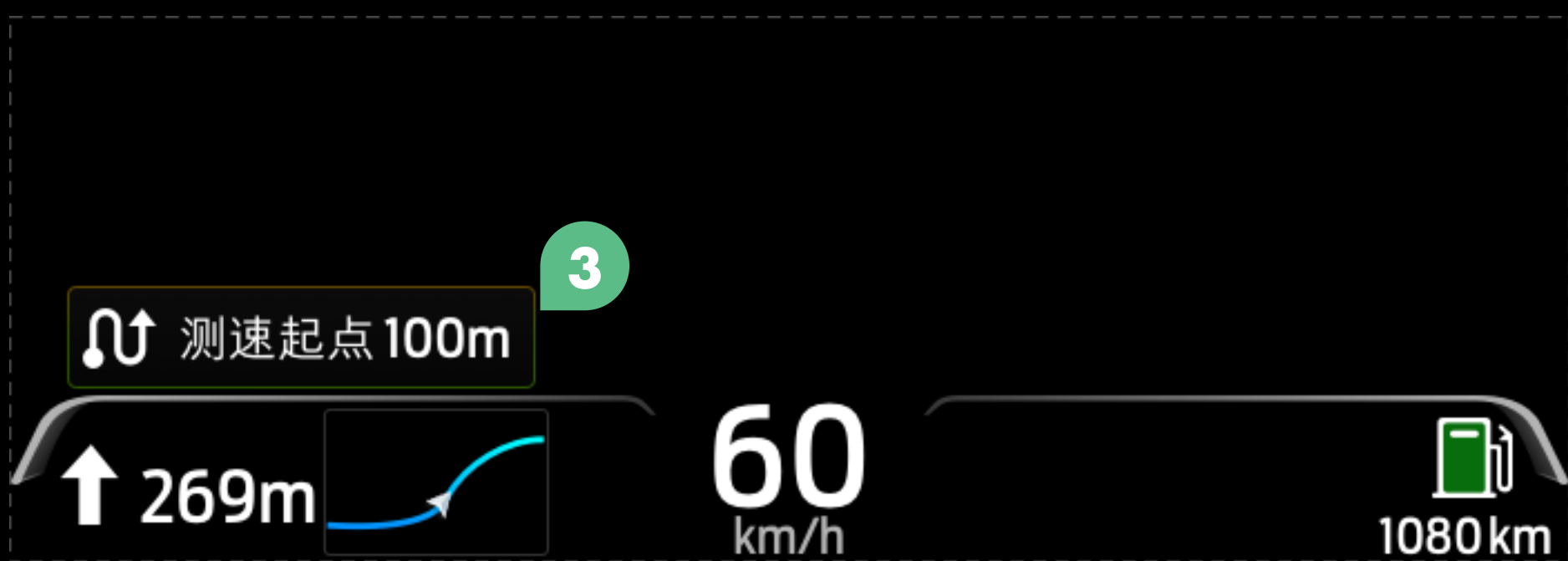
In the highway section, a pop-up reminder will be displayed when the navigation gets to the front service area, and the pop-up will disappear after 3s.

The size specification of pop-ups is consistent with congestion pop-ups; Zoom in on the text message with a font size of 26px

高速路段，导航获取到前方服务区时显示弹窗提醒,该弹窗显示3s后消失；

弹窗显示大小规范与拥堵弹窗一致；距离文字信息放大显示，字号大小为26px

Nav Popup-Other information B



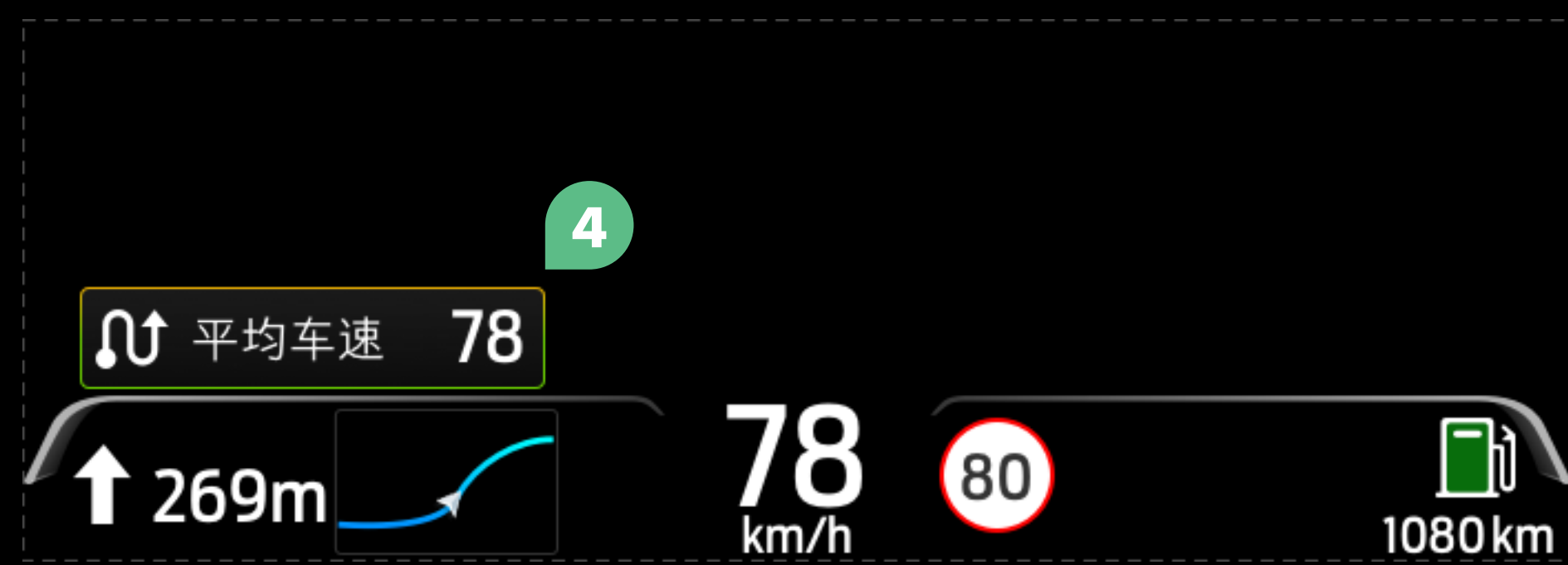
3

In the highway section, the navigation gets the display when the starting point of speed measurement is in front, and switches to the popup information of average speed when the user reaches the starting point of speed measurement

The size specification of pop-ups is consistent with that of congestion pop-ups

高速路段，当导航获取到前方为测速起点时显示，至用户抵达测速起点后切换为平均车速弹窗信息；弹窗显示尺寸规范与拥堵弹窗一致

Nav Popup-Average speed normal



4

When entering the high-speed speed measurement section, the average speed information will be displayed.

After the end of the speed measurement section, the popover disappears;

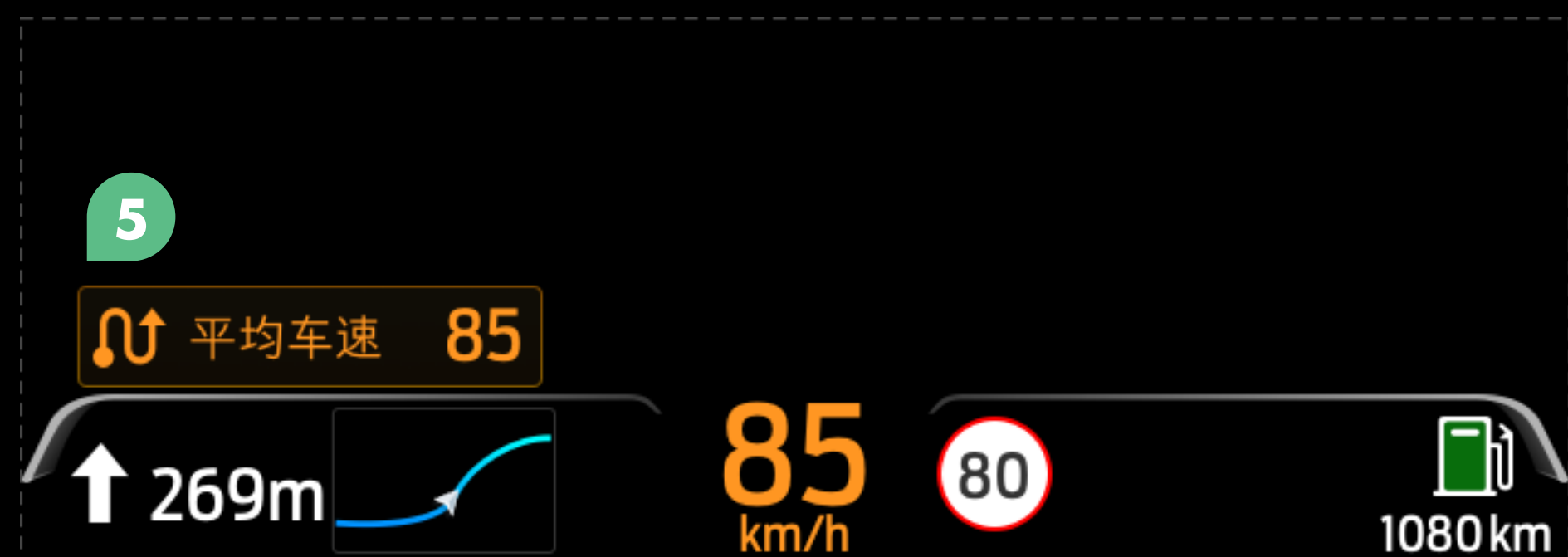
The size specifications of pop-ups are consistent with congestion pop-ups;

进入高速区间测速路段时，显示平均车速信息；

结束区间测速路段行驶后，弹窗消失；

弹窗显示尺寸规范与拥堵弹窗一致；

Nav Popup-Average speed ≤10%



5

When the average speed exceeds the speed limit, the speed information and the average speed popup display the speed state synchronously, and the speed reminder mechanism is consistent.

The average speed is less than 10%, indicating orange alert status;

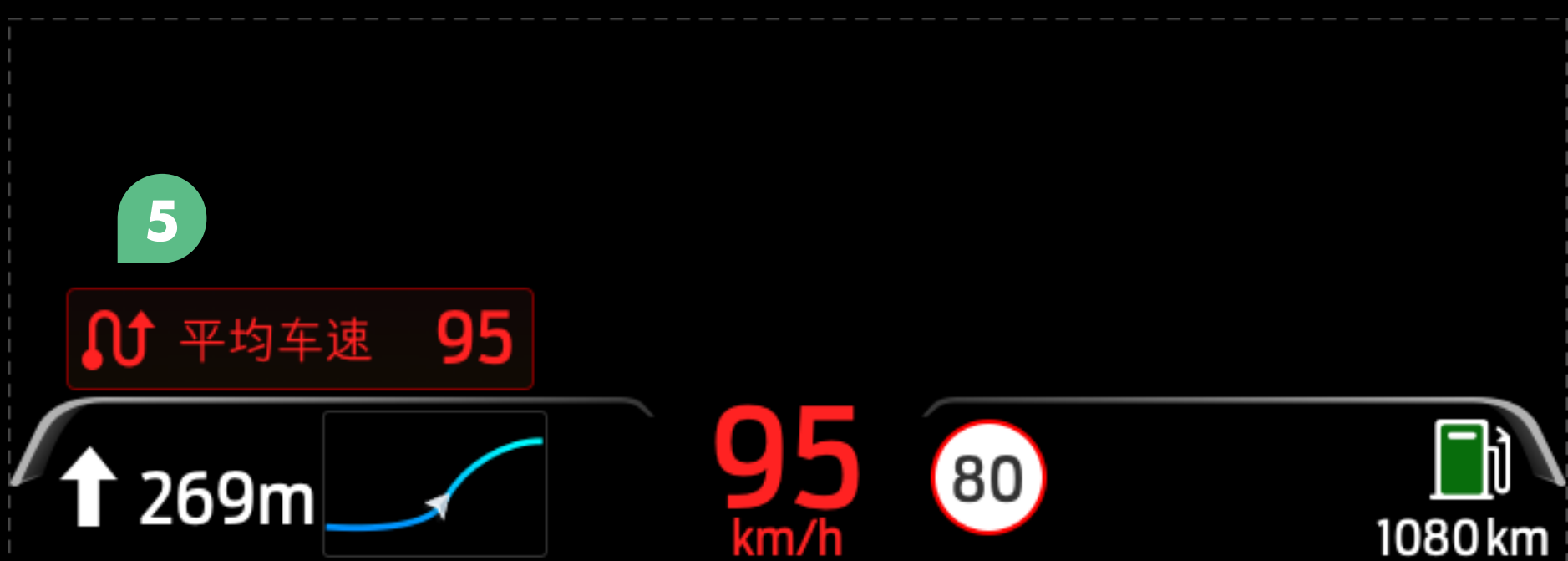
When the average speed exceeds 10%, the red warning state is displayed.

当平均时速超速时，时速信息与平均车速弹窗同步显示超速状态，超速提醒机制一致；

平均车速超速≤10%，显示橙色预警状态；

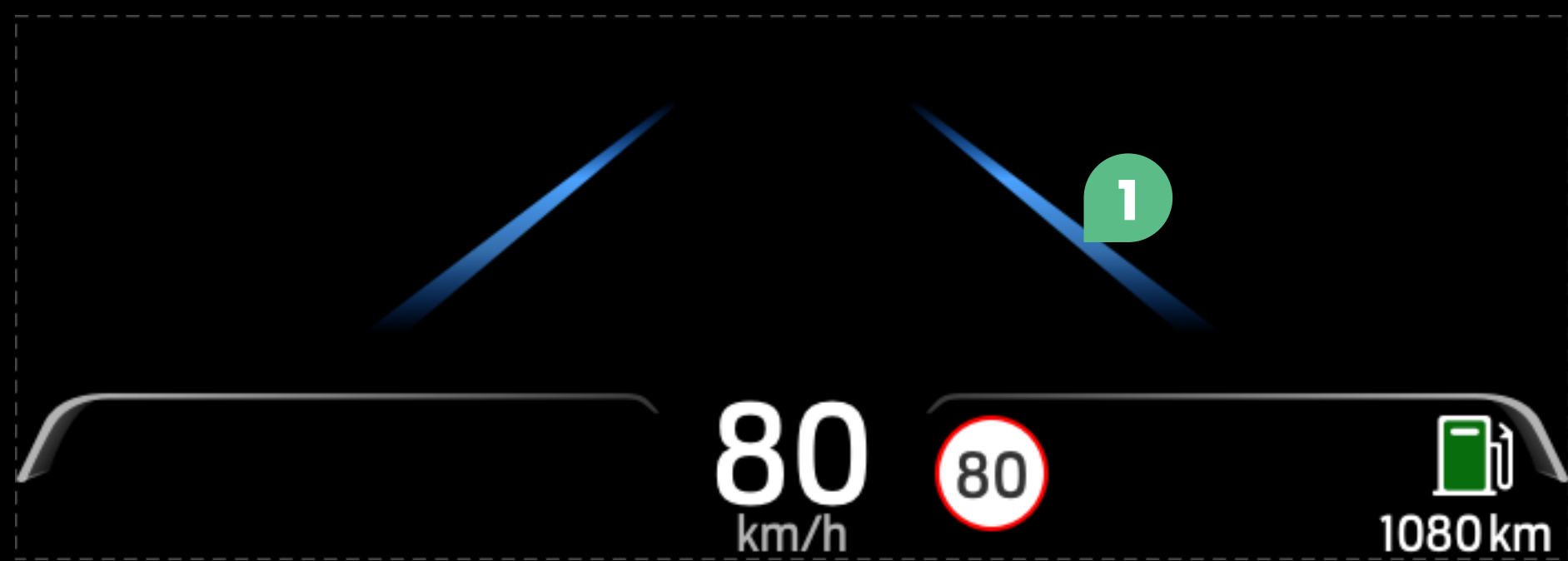
平均车速超速>10%，显示红色警示状态；

Nav Popup-Average speed > 10%



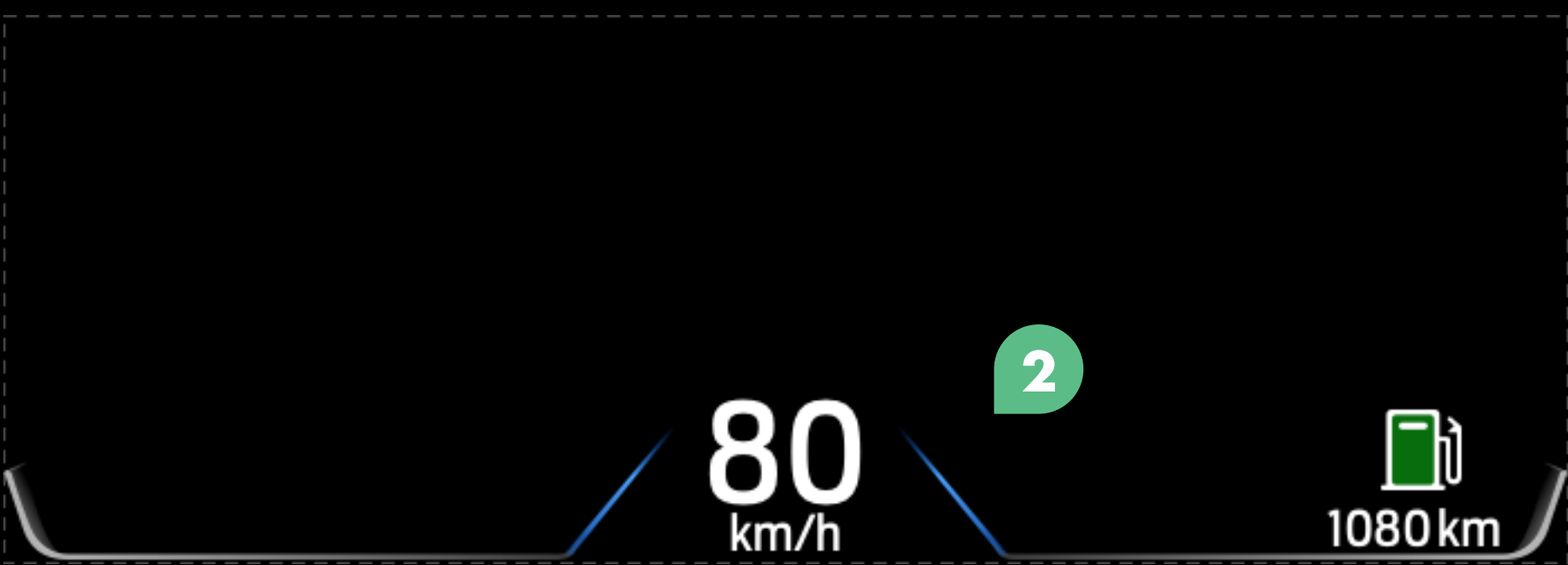


AR ON-LKA



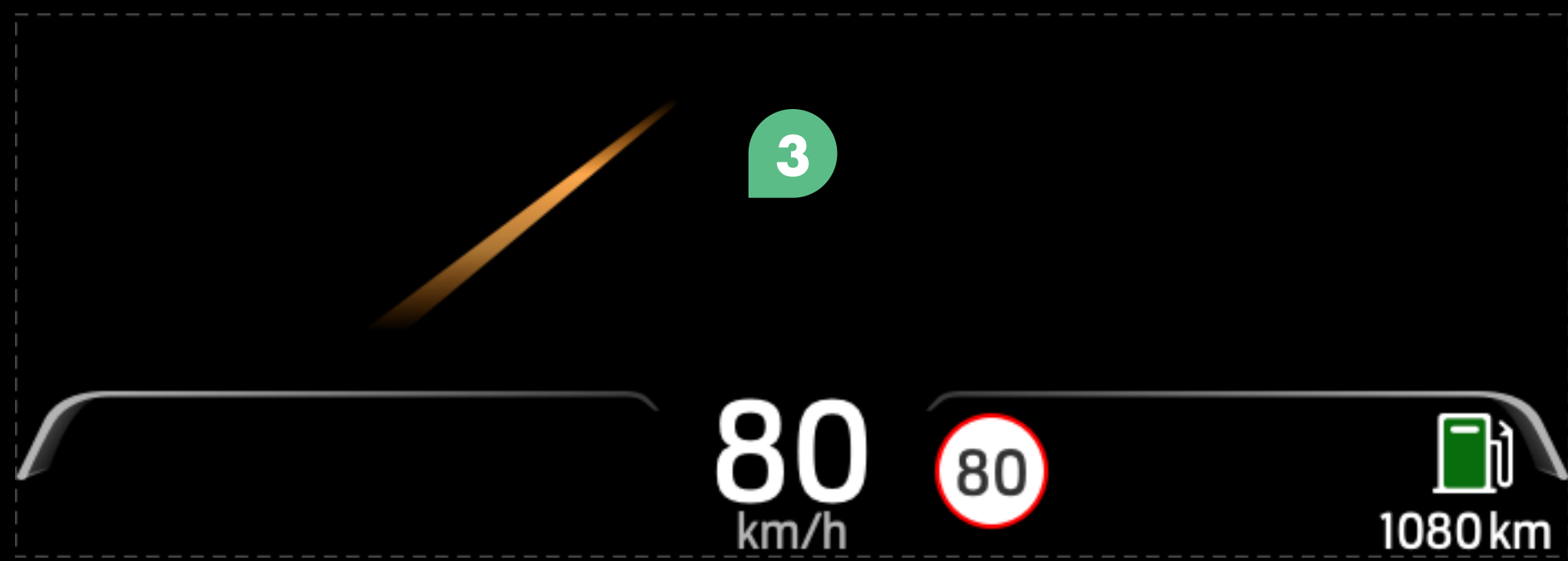
- 1 When LKA is on, the AR area merges the lane lines to display the activation state of LKA.  
Lane line activation status will disappear after 5s display; When lane departure, display orange alert/red alert status;
- LKA开启时，AR区域融合车道线，显示LKA激活状态；  
车道线激活状态显示5s后消失；当车道偏离时，显示橙色预警/红色警示状态；

AR Off-LKA

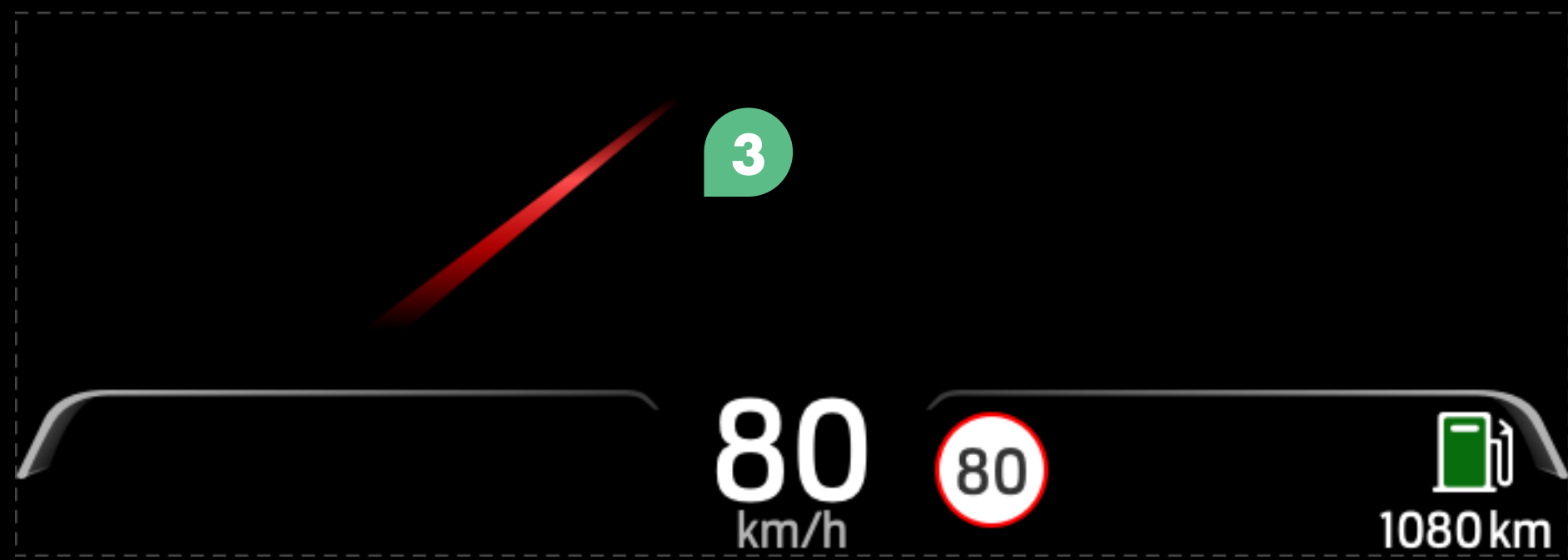


- 2 In AR OFF mode, after the LKA function is activated, the fusion basic modeling will switch and display as lane line modeling.  
AR OFF模式时，LKA功能激活后，融合基础造型切换显示为车道线造型；

AR ON-LKA Warning1

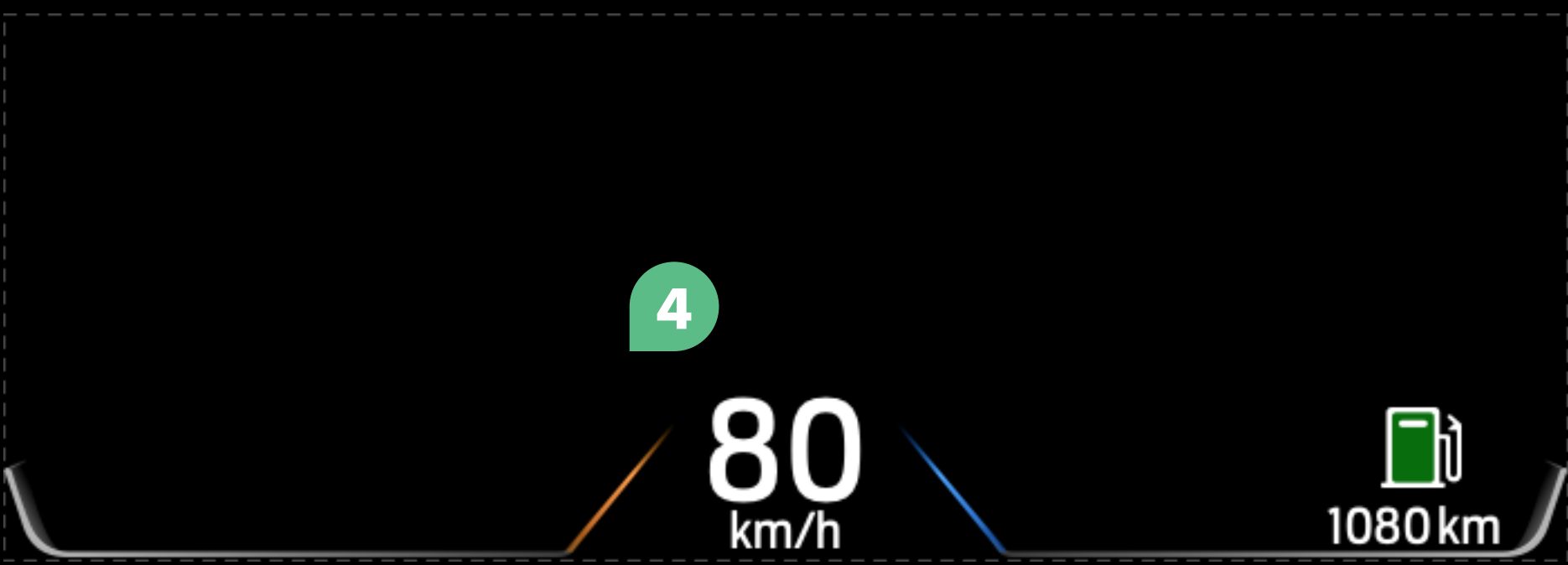


AR ON-LKA Warning2

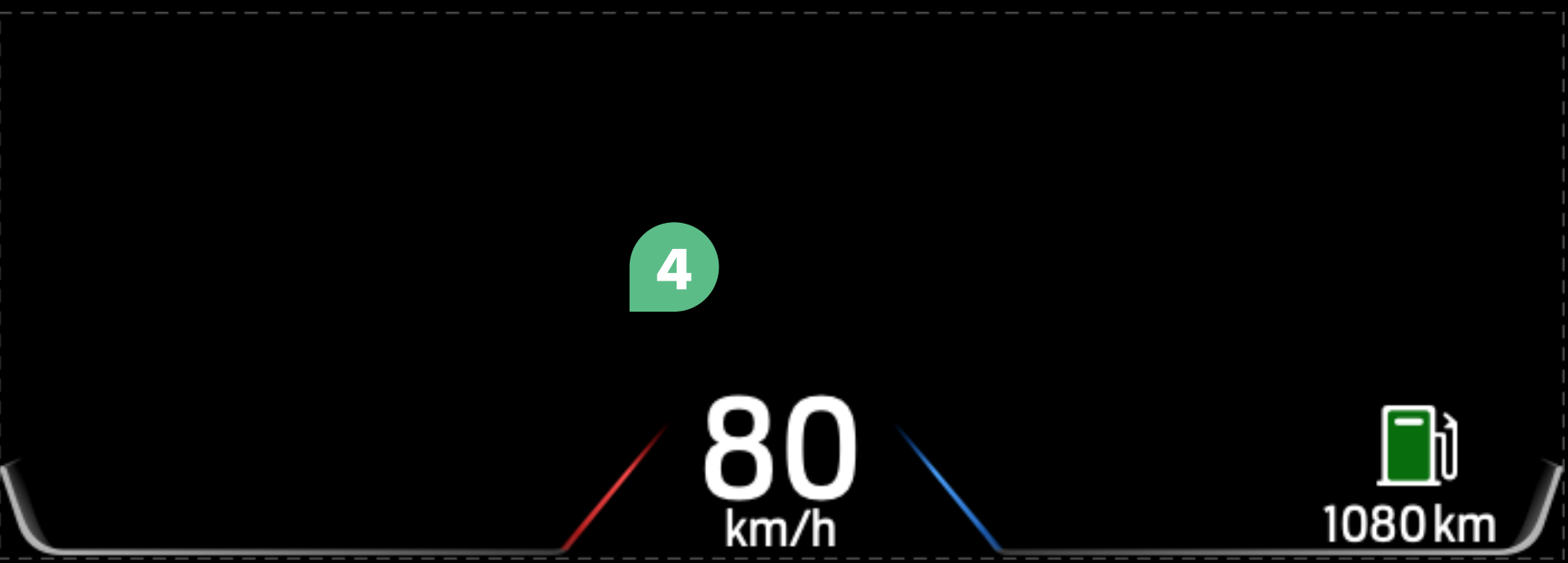


- 3 When the system detects lane departure, the AR area displays the warning/warning status of lane departure.AR area fusion lane line, flashing to remind deviation from the side lane line; Disappear after the vehicle is in non-deviating state;
- 当系统检测偏离车道时，AR区域显示偏离侧车道的预警/警示状态；  
AR区域融合车道线，闪烁提醒偏离侧车道线；至车辆非偏离状态后消失；

AR Off-LKA Warning1



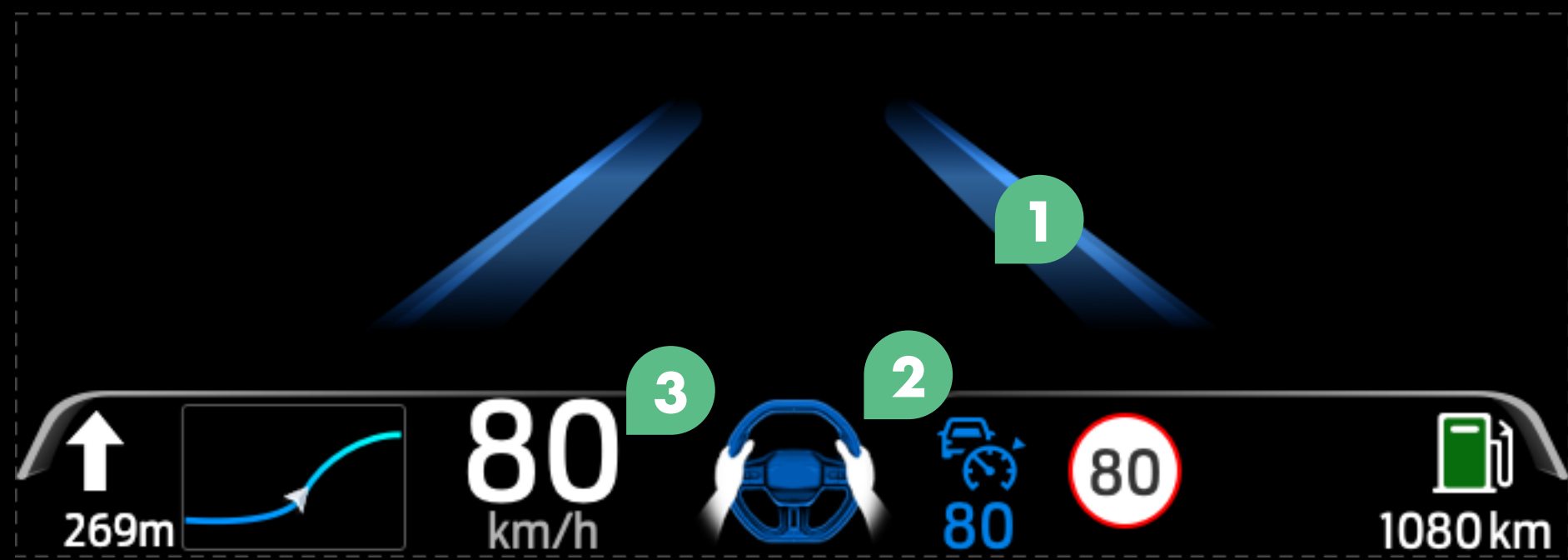
AR Off-LKA Warning2



- 4 In AR OFF mode, when the vehicle is in lane departure state after LKA activation, Orange alert/red alert state is displayed on the basis of lane line modeling; Remind the side lane line to blink once every 1s  
Disappear after the vehicle is in non-deviating state;
- AR OFF模式时，当车辆在LKA激活后处于偏离车道状态时，  
在车道线造型基础上显示橙色预警/红色警示状态；提醒侧车道线造型每1s闪烁一次  
至车辆非偏离状态后消失；

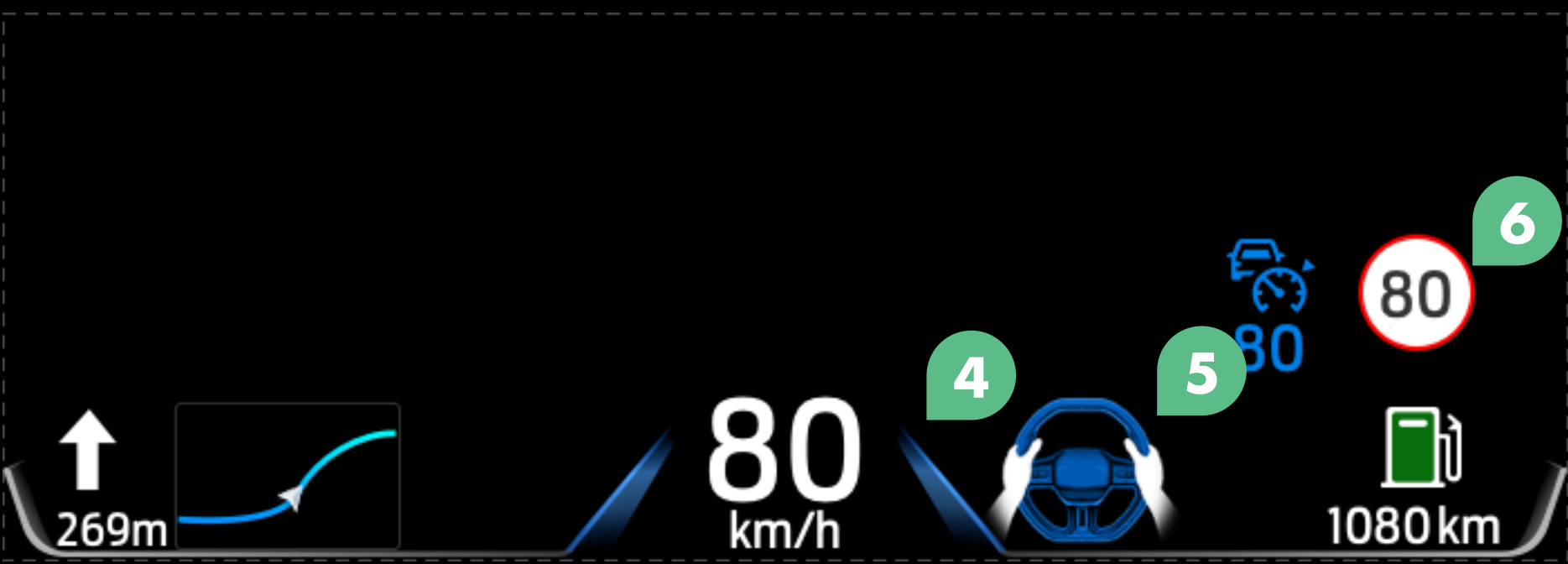


AR ON-LCA



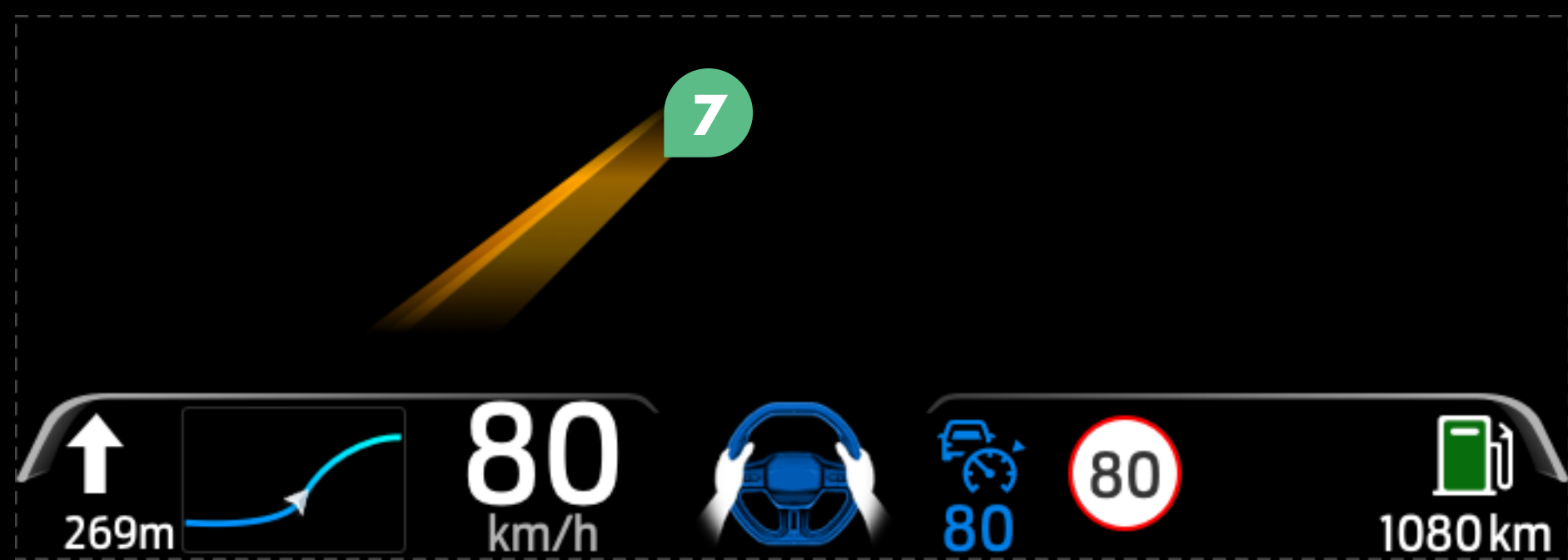
- 1** When LCA is turned on, the AR area merges the lane lines and displays the LCA activation state.  
Lane line activation status will disappear after 5s display;  
When lane departure, display orange alert/red alert status;  
LCA开启时，AR区域融合车道线，显示LCA激活状态；  
车道线激活状态显示5s后消失；当车道偏离时，显示橙色预警/红色警示状态；
- 2** The LCA status icon is displayed in the center at the bottom,  
Reference resolution: 90\*68px;  
底部居中显示LCA状态图标，参考分辨率为90\*68px；
- 3** The speed information moves to the left, and the navigation information area is displayed in a smaller size.  
时速信息左侧移动，导航信息区域缩小显示；

AR Off-LCA



- 4** In AR OFF mode, after the LCA function is activated, the fusion basic modeling will switch and display as lane line modeling. The LCA status is displayed simultaneously  
AR OFF 模式时，LCA功能激活后，融合基础造型切换显示为车道线造型；并同步显示LCA状态
- 5** The LCA status icon is displayed to the left of the DTE information  
The reference rate is 90\*68px.  
LCA状态图标显示与DTE信息左侧,参考分辨率为90\*68px;
- 6** ACC and TSR information is displayed above DTE information at X-530 and Y-95  
ACC与TSR信息显示与DTE信息上方，参考位置X-530，Y-95

AR ON-LCA Warning1

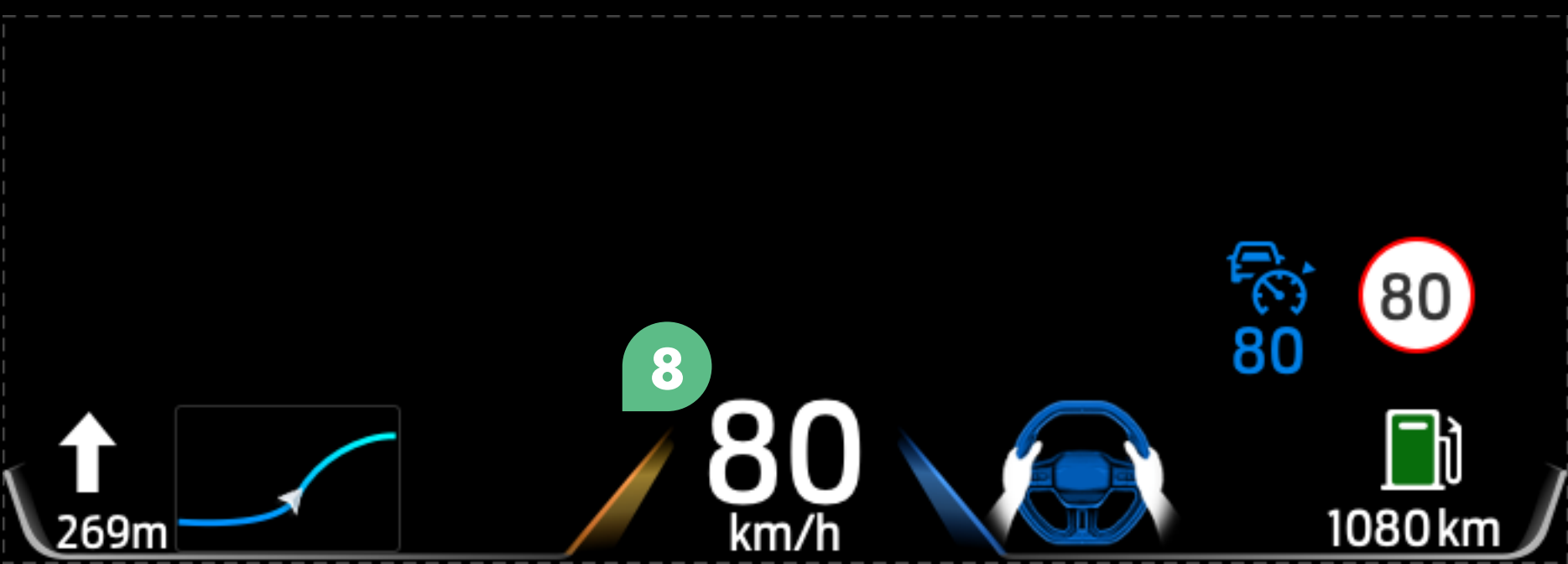


AR ON-LCA Warning2

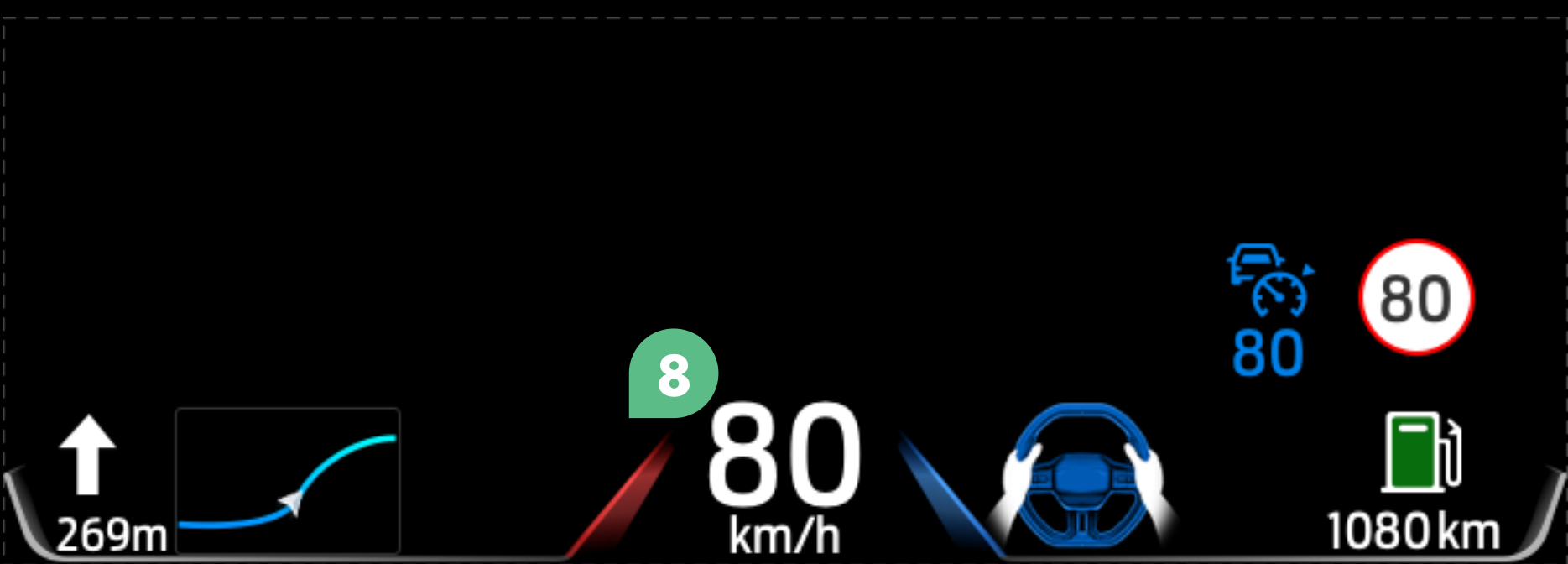


- 7** When the system detects lane departure, the AR area displays the warning/warning status of lane departure.AR area fusion lane line, flashing to remind deviation from the side lane line; Disappear after the vehicle is in non-deviating state;  
当系统检测偏离车道时，AR区域显示偏离侧车道的预警/警示状态；  
AR区域融合车道线，闪烁提醒偏离侧车道线；至车辆非偏离状态后消失；

AR Off-LCA Warning1



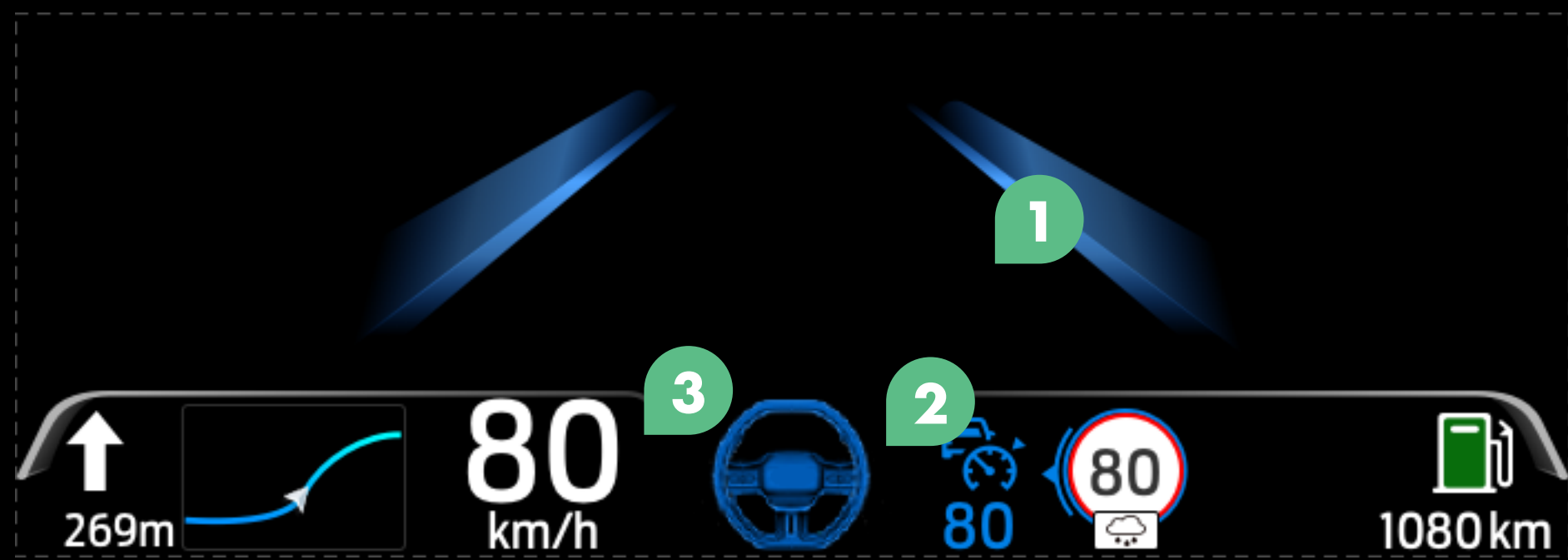
AR Off-LCA Warning2



- 8** In AR OFF mode, when the vehicle is in lane departure state after LCA activation, Orange alert/red alert state is displayed on the basis of lane line modeling; Remind the side lane line to blink once every 1s  
Disappear after the vehicle is in non-deviating state;  
AR OFF模式时，当车辆在LCA激活后处于偏离车道状态时，在车道线造型基础上显示橙色预警/红色警示状态；提醒侧车道线造型每1s闪烁一次至车辆非偏离状态后消失；

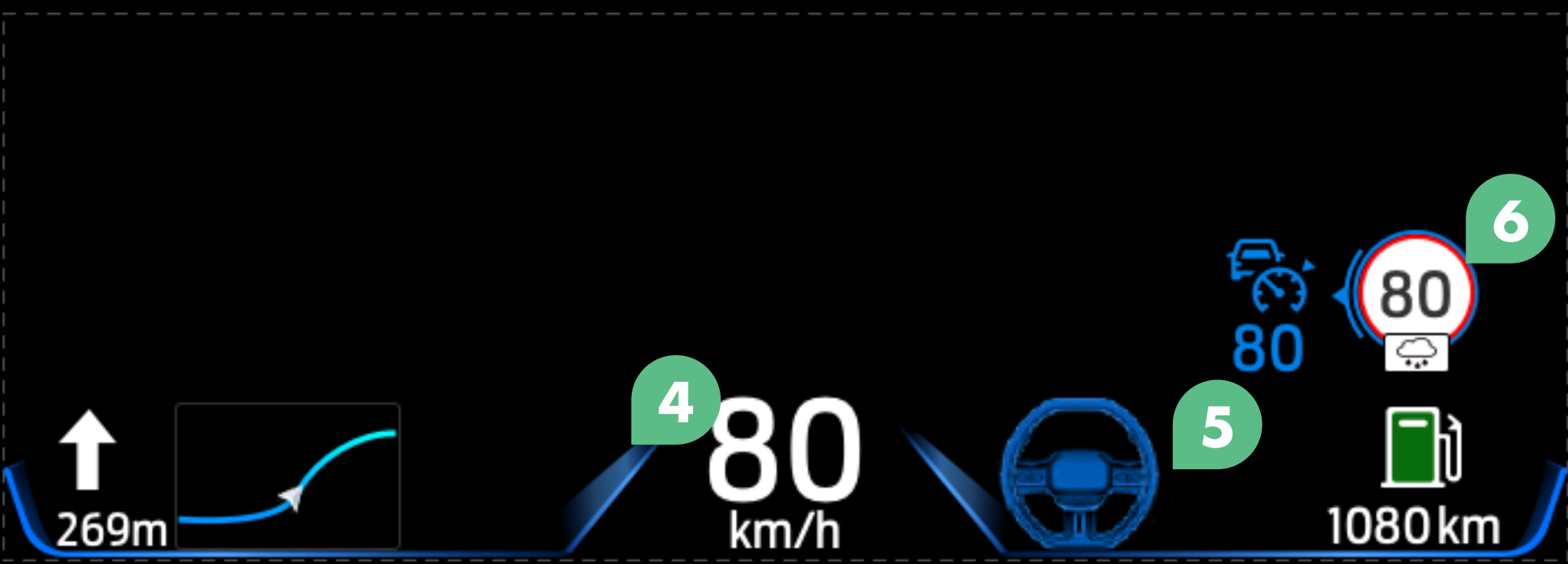


AR ON-HA



- 1 When HA is turned on, the AR area merges the lane lines and displays the HA activation state.  
Lane line activation status will disappear after 5s display;  
When lane departure, display orange alert/red alert status;  
HA开启时，AR区域融合车道线，显示HA激活状态；  
车道线激活状态显示5s后消失；当车道偏离时，显示橙色预警/红色警示状态；
- 2 The HA status icon is displayed in the center at the bottom,  
Reference resolution: 90\*68px;  
底部居中显示HA状态图标，参考分辨率为90\*68px；
- 3 The speed information moves to the left, and the navigation information area is displayed in a smaller size.  
时速信息左侧移动，导航信息区域缩小显示；

AR Off-HA

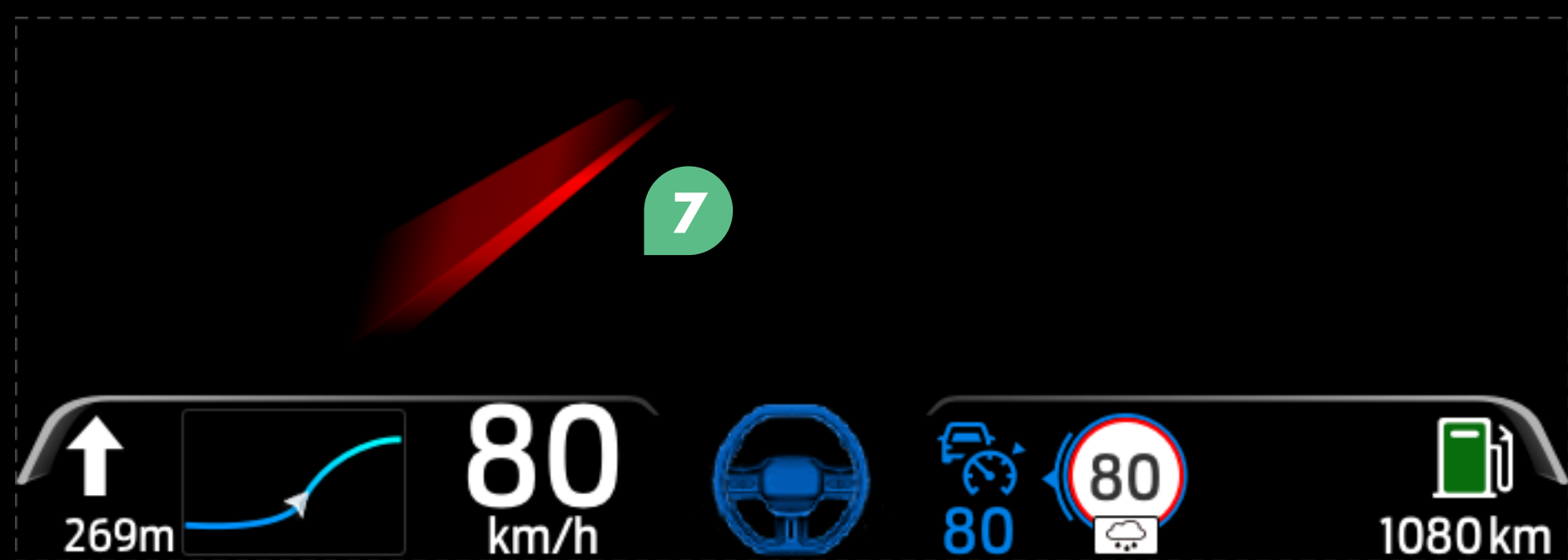


- 4 In AR OFF mode, after the HA function is activated, the fusion basic modeling will switch and display as lane line modeling. The HA status is displayed simultaneously;  
The overall color of the shape is switched to the full trusteeship state;  
AR OFF 模式时，HA功能激活后，融合基础造型切换显示为车道线造型；  
并同步显示HA状态，造型整体颜色切换为全托管状态；
- 5 The HA status icon is displayed to the left of the DTE information  
The reference rate is 90\*68px.  
HA状态图标显示与DTE信息左侧,参考分辨率为90\*68px;
- 6 ACC and TSR information is displayed above DTE information at X-530 and Y-95  
ACC与TSR信息显示与DTE信息上方，参考位置X-530，Y-95

AR ON-HA Warning1

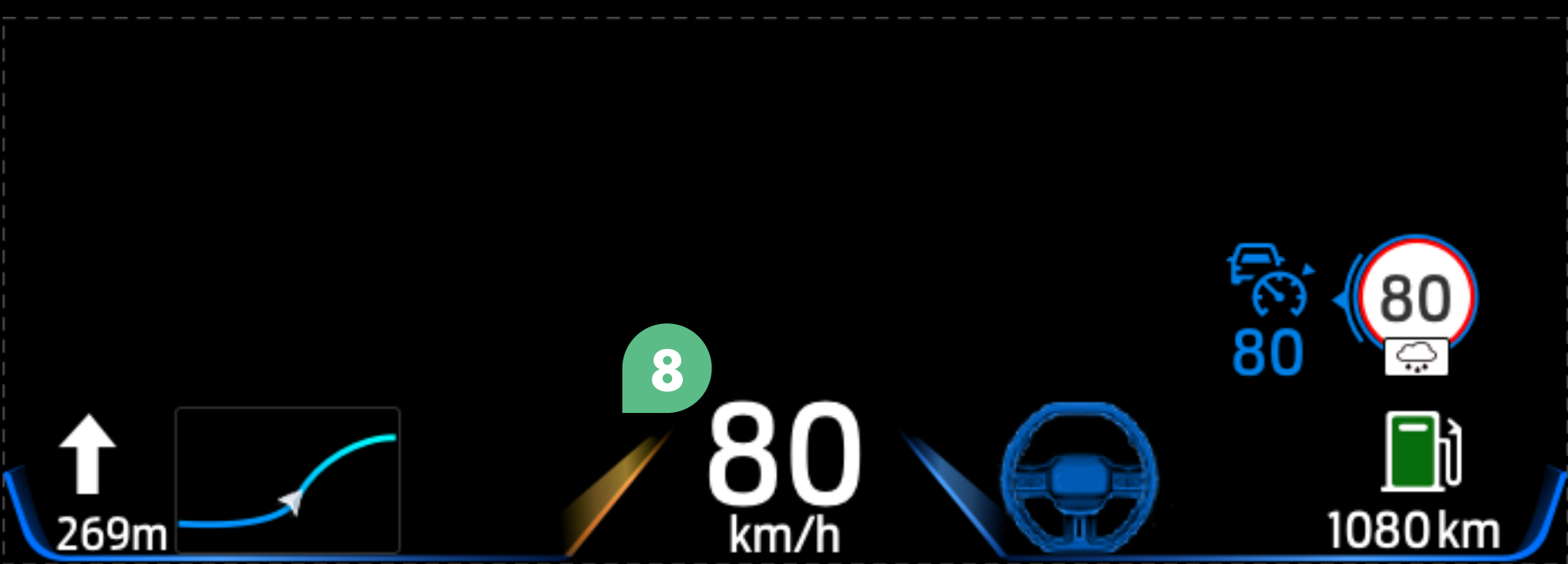


AR ON-HA Warning2

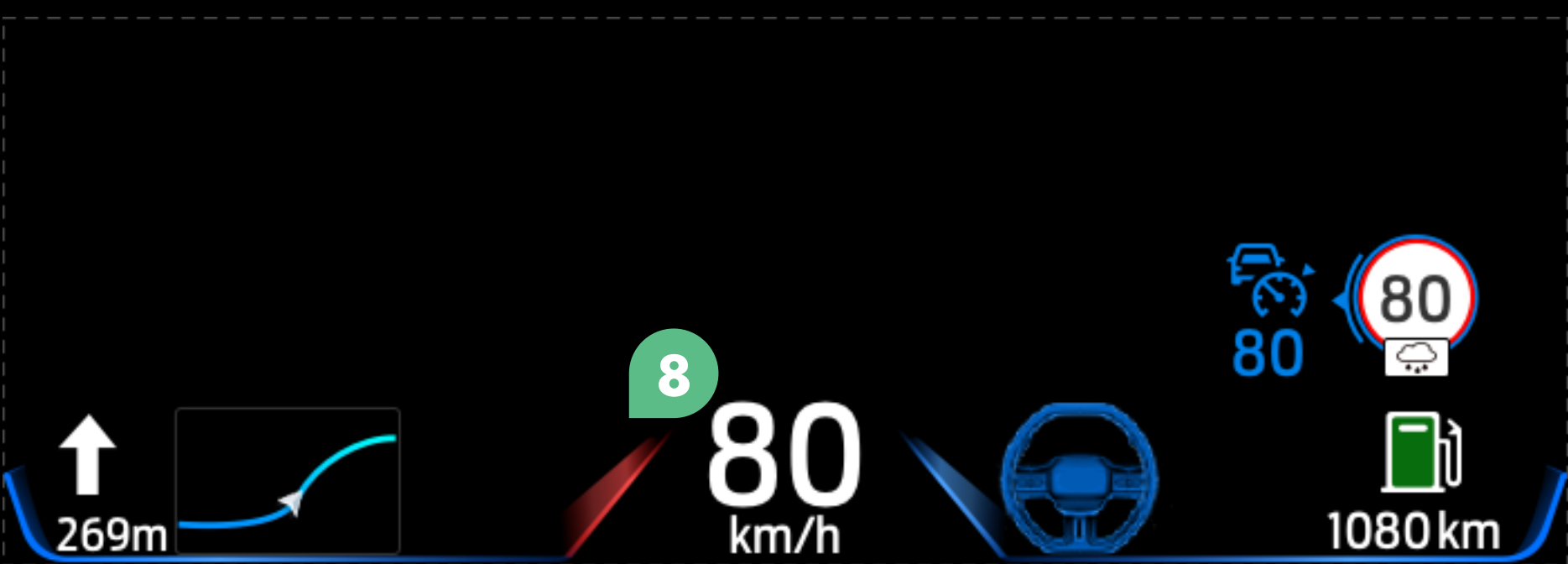


- 7 When the system detects lane departure, the AR area displays the warning/warning status of lane departure.AR area fusion lane line, flashing to remind deviation from the side lane line; Disappear after the vehicle is in non-deviating state;  
当系统检测偏离车道时，AR区域显示偏离侧车道的预警/警示状态；  
AR区域融合车道线，闪烁提醒偏离侧车道线；至车辆非偏离状态后消失；

AR Off-HA Warning1



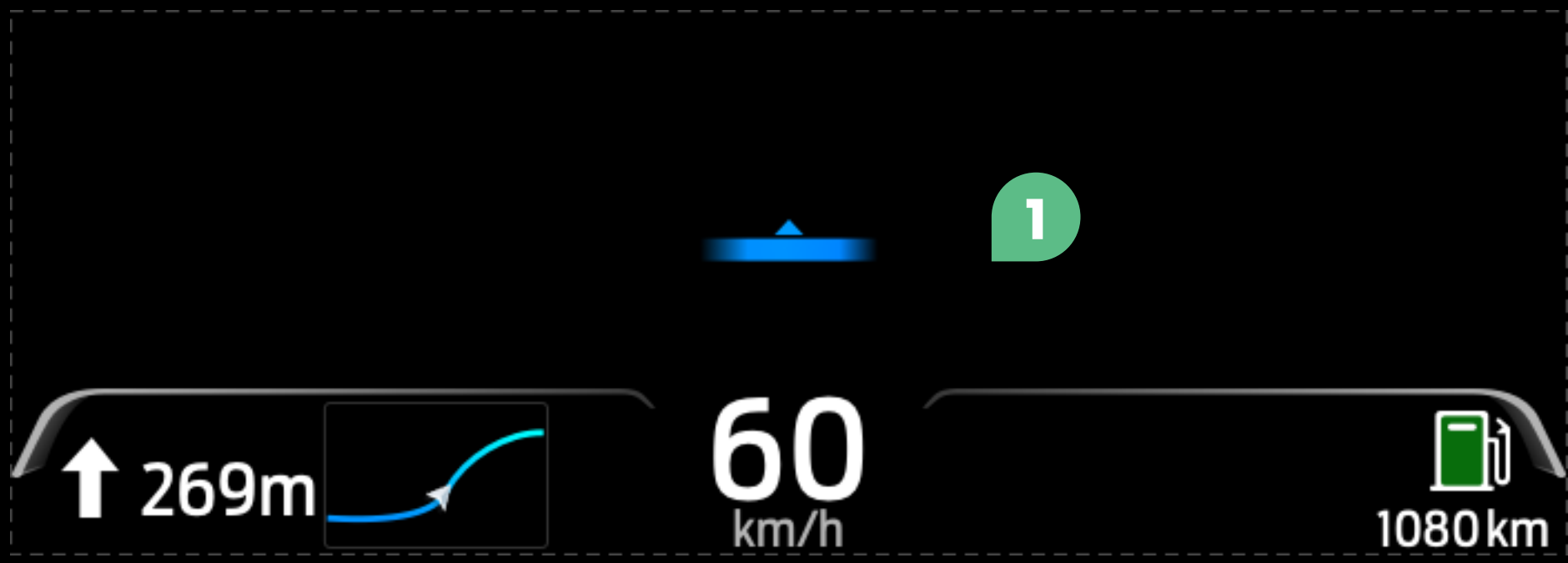
AR Off-HA Warning2



- 8 In AR OFF mode, when the vehicle is in lane departure state after HA activation, Orange alert/red alert state is displayed on the basis of lane line modeling; Remind the side lane line to blink once every 1s  
Disappear after the vehicle is in non-deviating state;  
AR OFF模式时，当车辆在HA激活后处于偏离车道状态时，  
在车道线造型基础上显示橙色预警/红色警示状态；  
提醒侧车道线造型每1s闪烁一次，至车辆非偏离状态后消失；

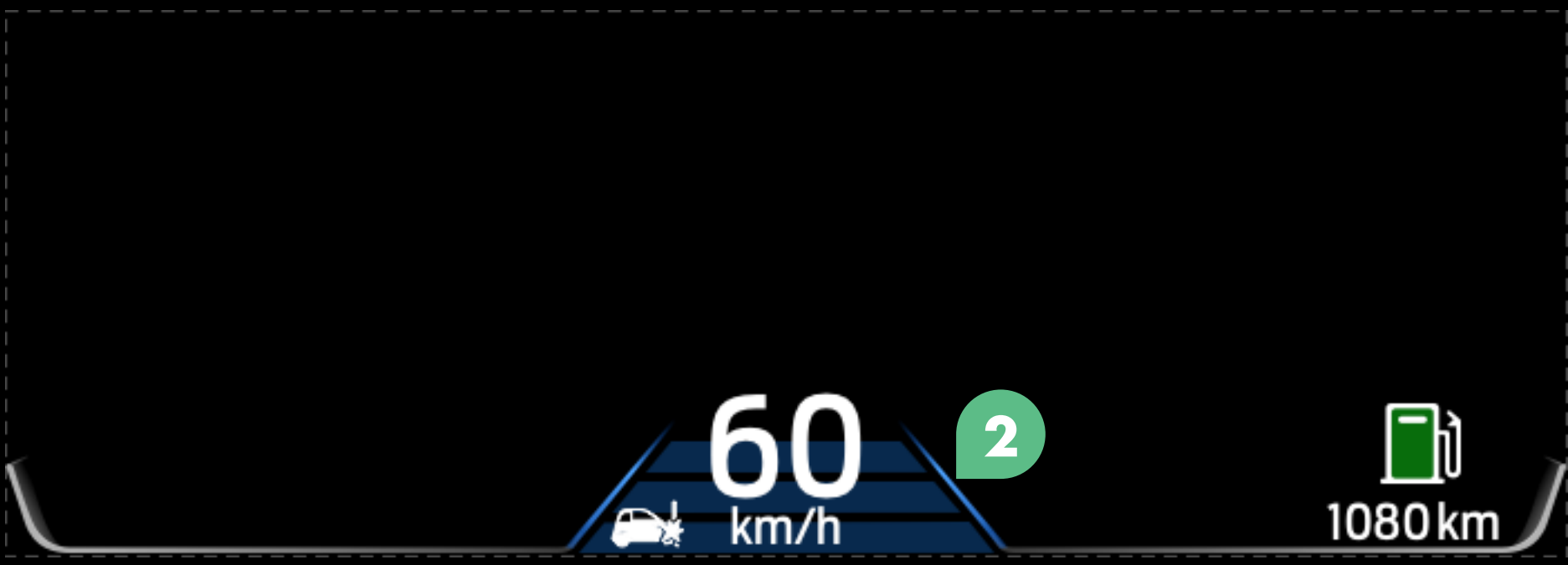


AR ON-FCW1



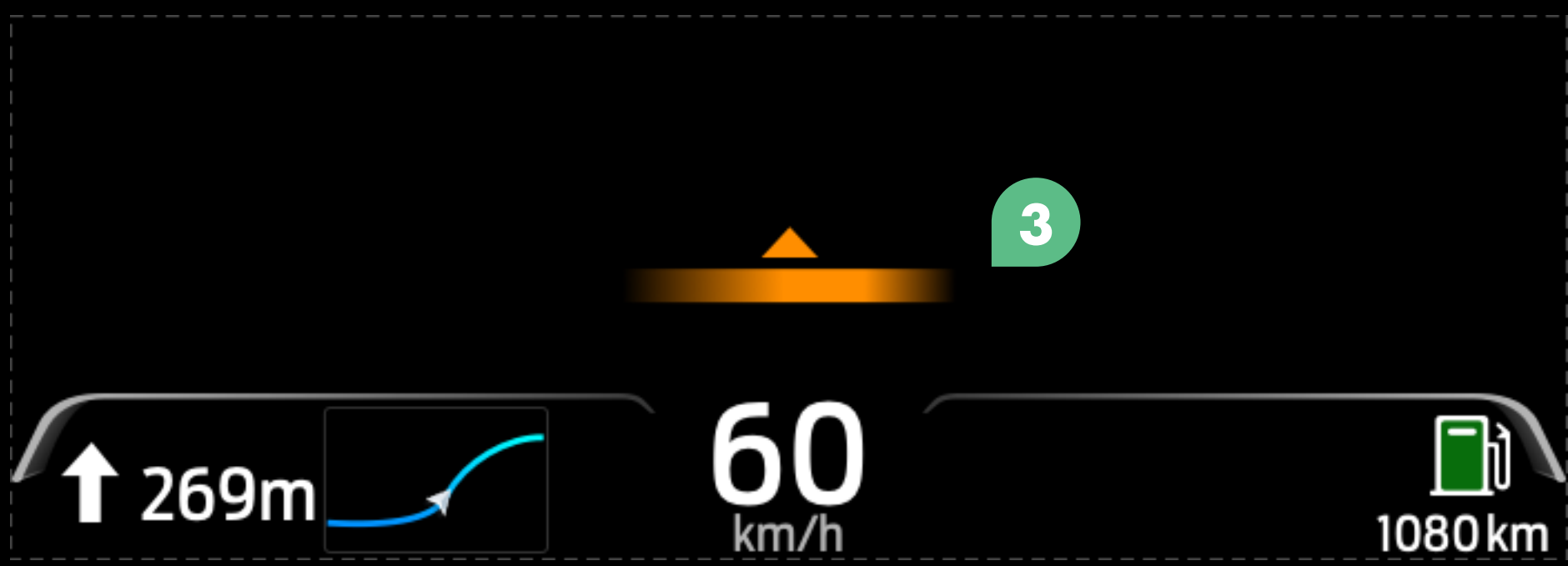
- 1 Under normal conditions, Fusion real information display blue;  
前车识别正常状态下，融合实景信息显示蓝色；

AR Off-FCW1



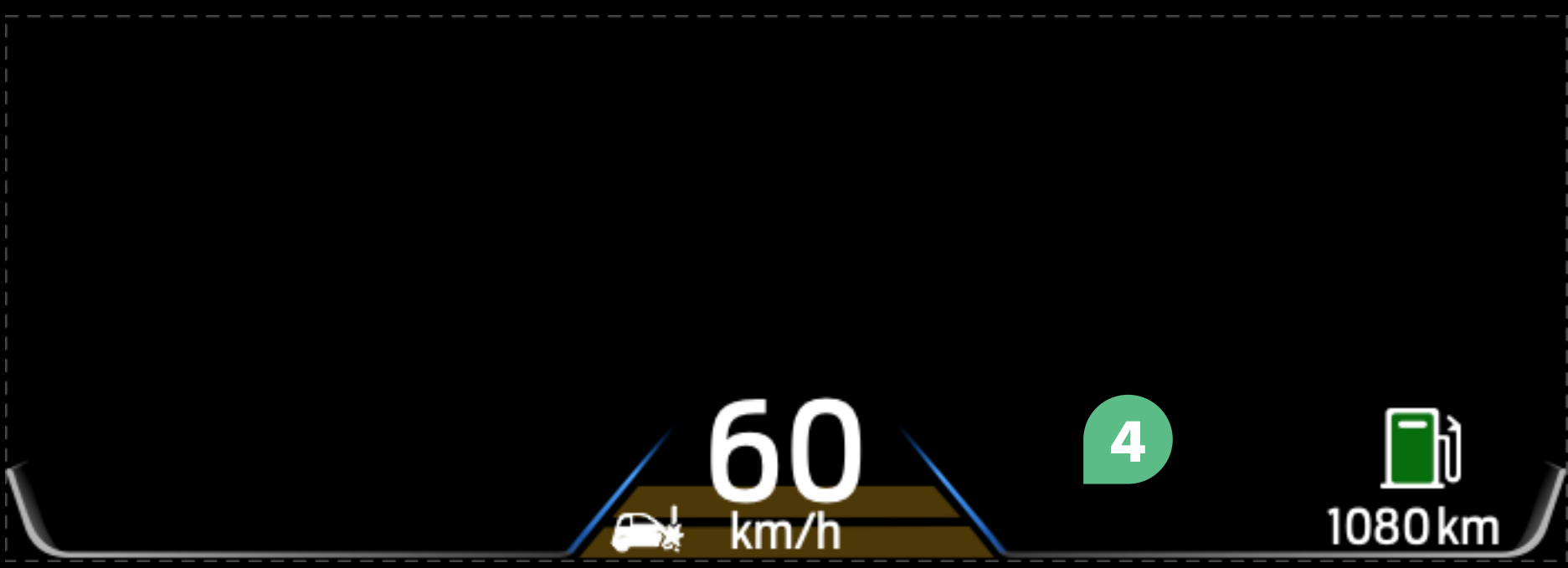
- 2 In AROFF mode, the vehicle in front recognizes the normal state, The change of fusion shape,Display distance prompt and icon prompt information with blue background;The icon display size is 32 x 20px.  
AROFF模式时，前车识别正常状态下，融合造型的变化，显示蓝色背景的距离提示与图标提示信息；图标显示大小32\*20px；

AR ON-FCW2



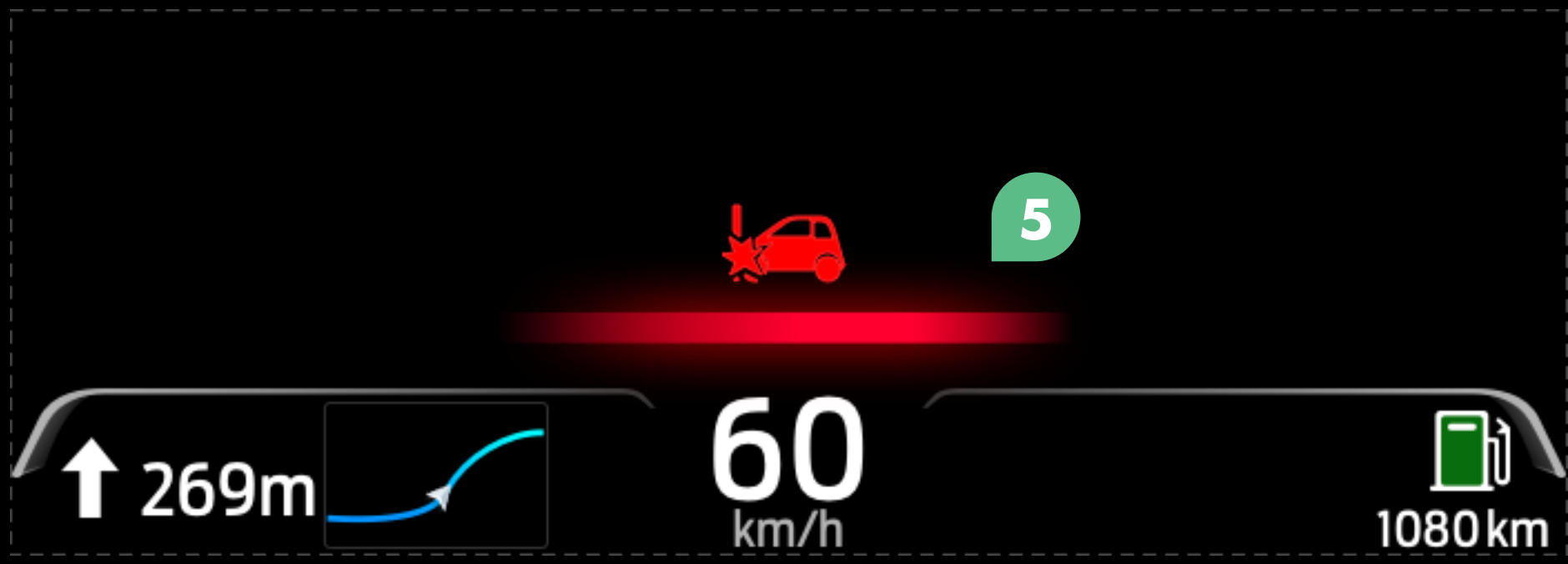
- 3 When the vehicle in front recognizes the warning state, Fusion real information display orange;  
前车识别预警状态时，融合实景信息显示橙色；

AR Off-FCW2



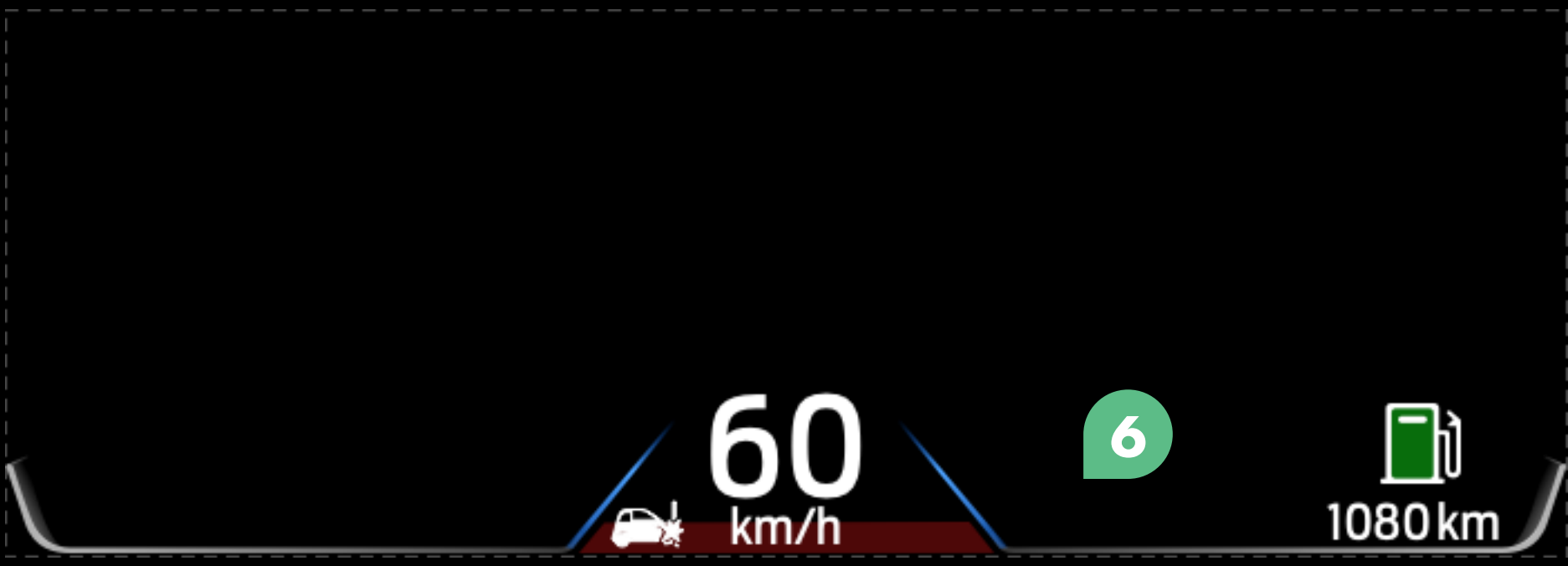
- 4 In AROFF mode,Under the recognition and warning state of the vehicle in front,The change of fusion shape,Displays distance prompt and icon prompt with orange background.  
AROFF模式时，前车识别预警状态下，融合造型的变化，显示橙色背景的距离提示与图标提示信息；

AR ON-FCW3



- 5 When the vehicle in front recognizes the warning status, Integration of real information display red warning;  
前车识别警示状态时，融合实景信息显示红色警示；

AR Off-FCW3

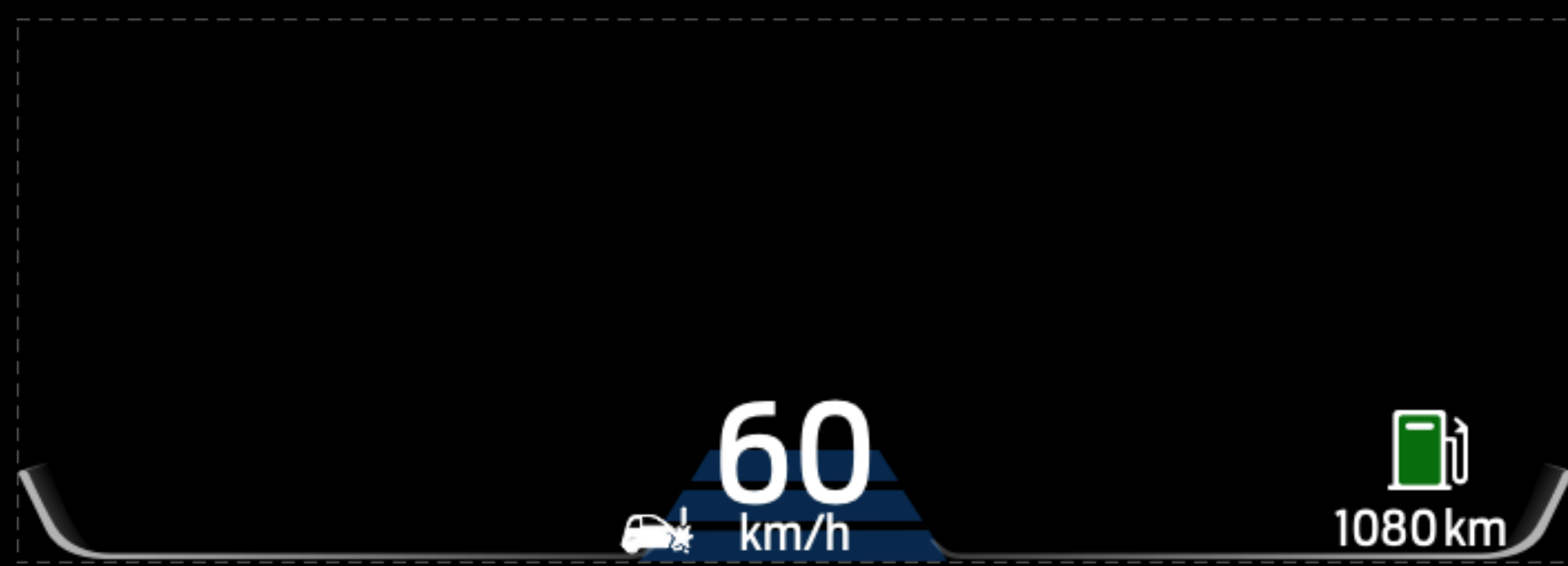


- 6 In AROFF mode,Under the warning status of the vehicle in front,The change of fusion shape,Display distance prompt and icon prompt information with red background;  
AROFF模式时，前车识别警示状态下，融合造型的变化，显示红色背景的距离提示与图标提示信息；

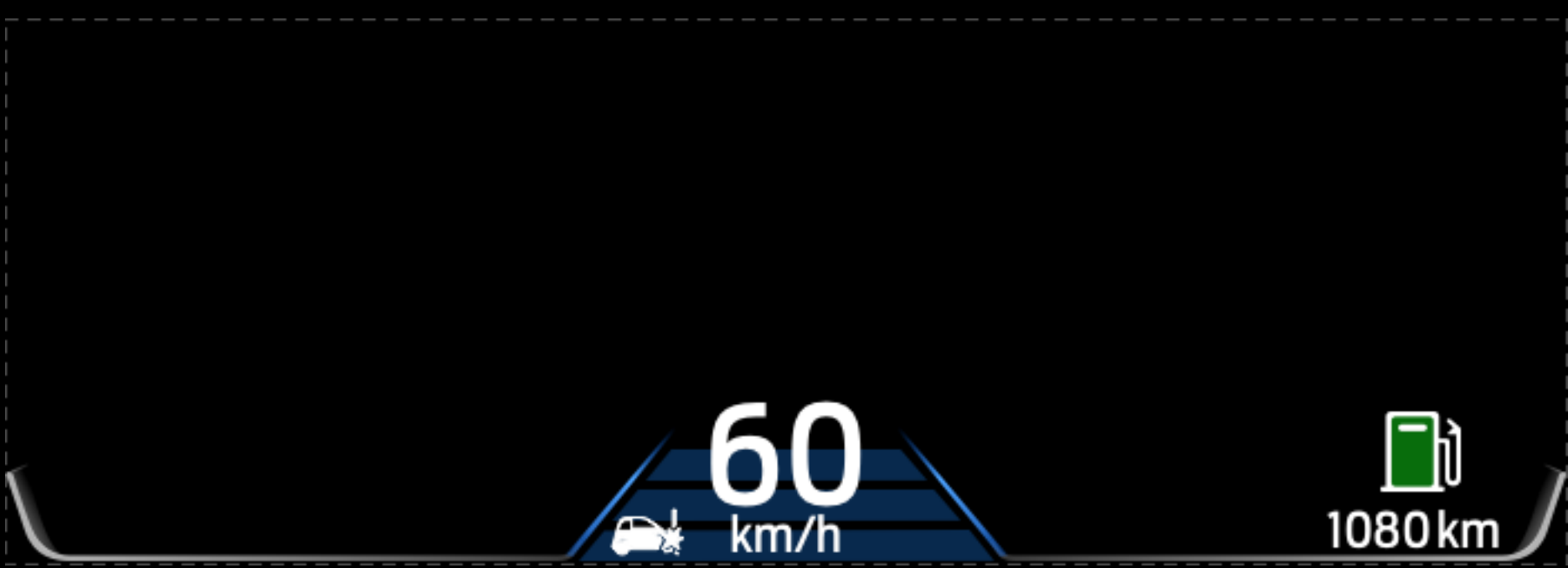
In AR OFF mode, the FCW displays the status effect,Will follow the LKA, LCA, HA status display changes, The following uses the LKA display status as an example.When the LKA function is enabled, The background distance prompt area of fusion shape change will be displayed in synchronous transformation

AR OFF模式下，FCW显示效果，将跟随LKA、LCA、HA状态显示进行变化，以LKA显示状态为例；  
当LKA功能状态开启时，融合造型变化的背景距离提示区域将同步变换显示

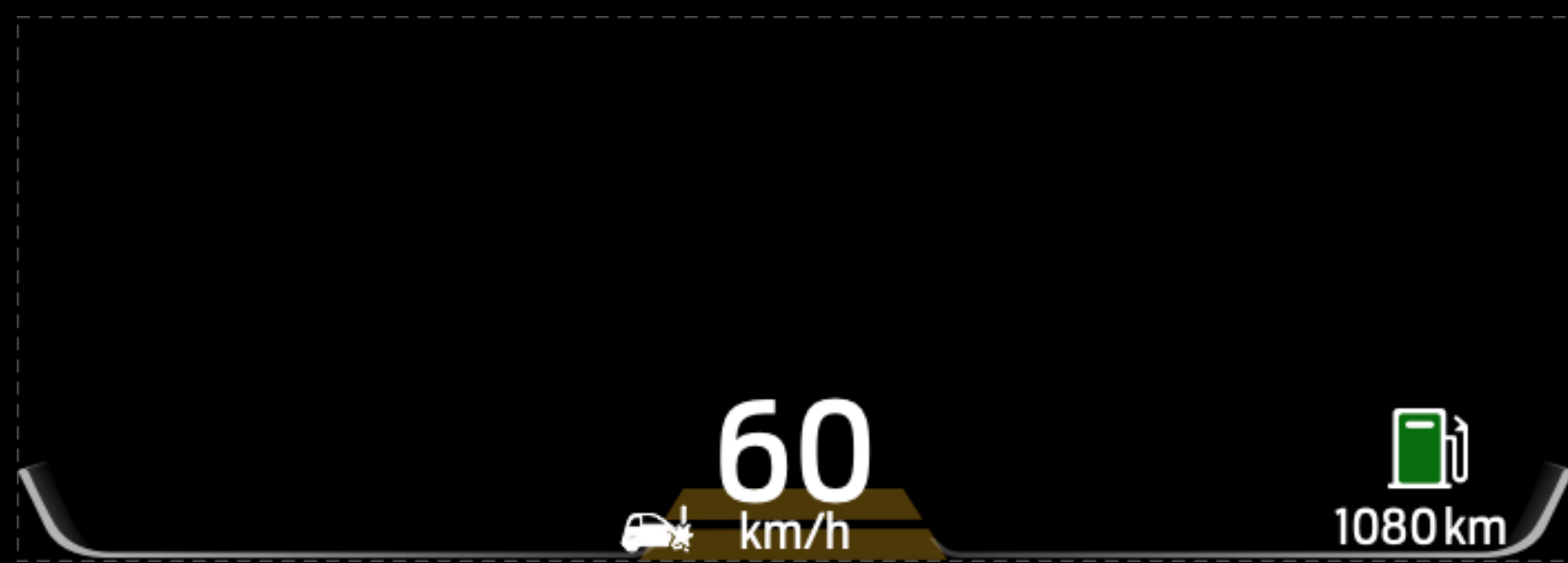
AR Off-FCW1



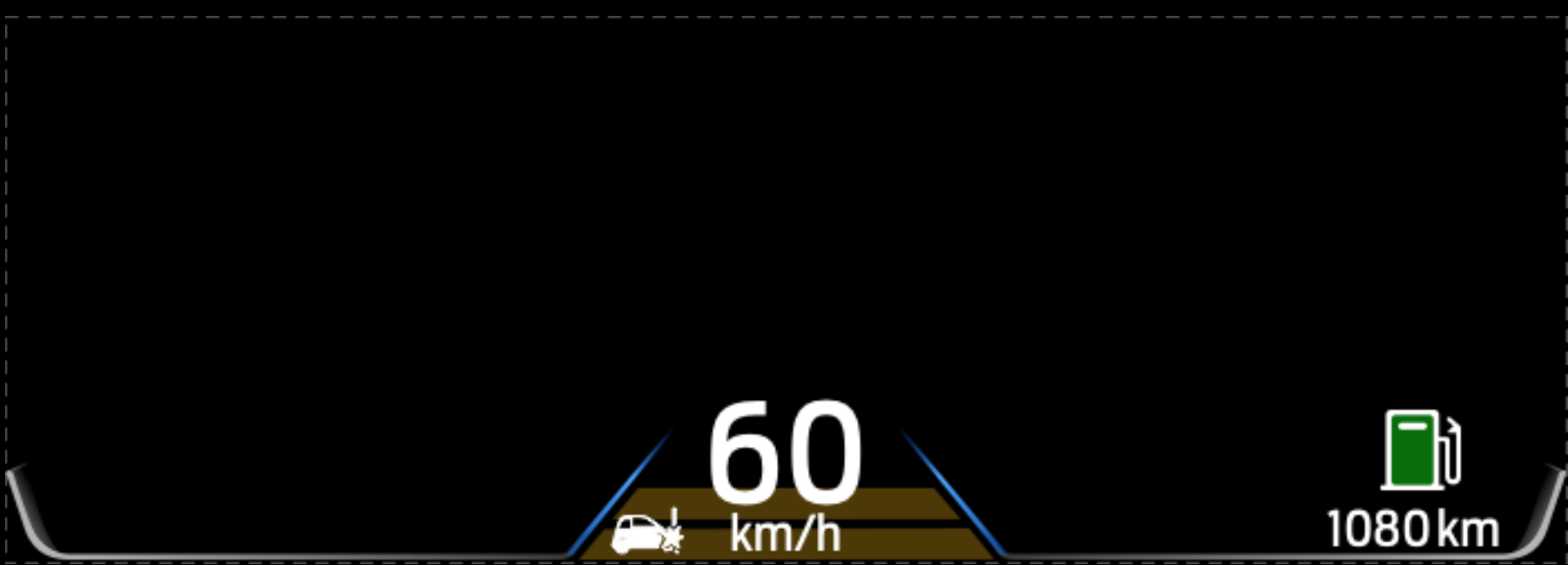
AR Off-FCW1 (LKA)



AR Off-FCW2



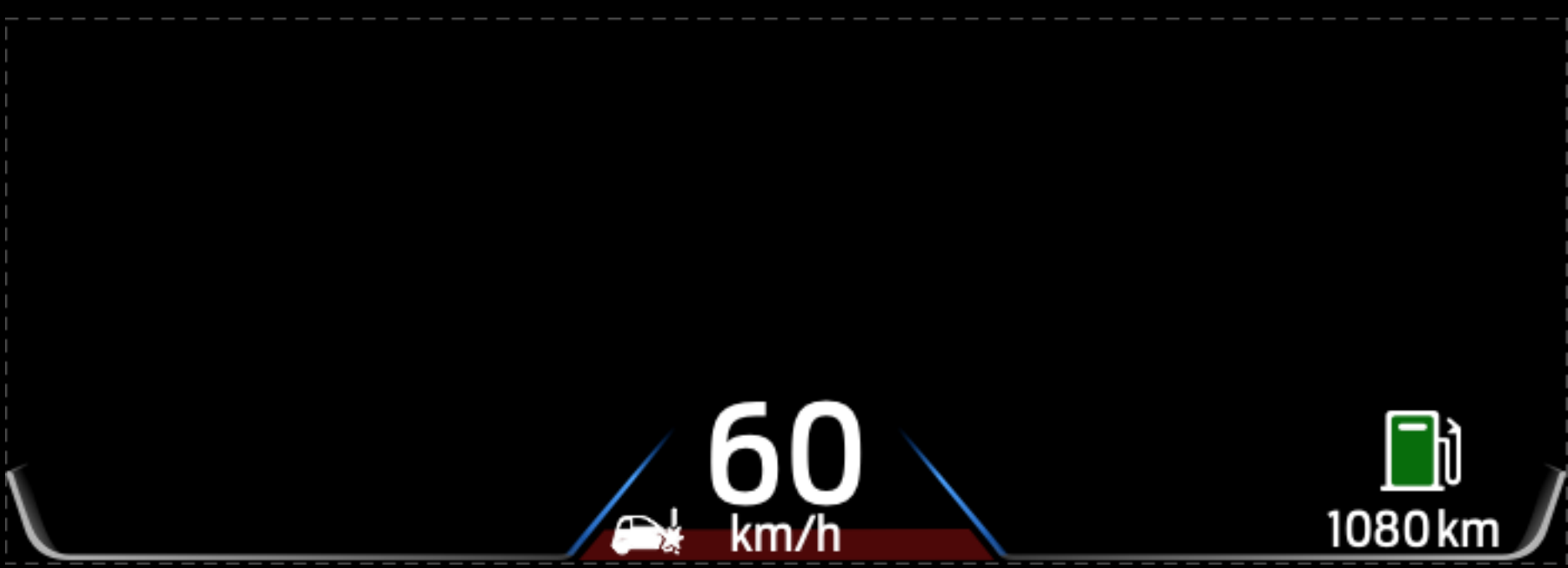
AR Off-FCW2 (LKA)



AR Off-FCW3



AR Off-FCW3 (LKA)





AR ON-FVDW



AR Off-FVDW



1 Recognize the FVDW alert popup when the car ahead starts

The AR ON mode is the same as the AR OFF mode, and disappears after the popup window displays for 3s.

The size of the popover area is 210 by 46px, and the reference position is X-246, Y-90

Popover text size is 22px, The icon display size is 40\*40px.

识别到前车启动时显示FVDW提醒弹窗

AR ON模式与AR OFF模式显示相同，弹窗显示3s后消失，

弹窗区域大小为210\*46px，参考位置为X-246,y-90

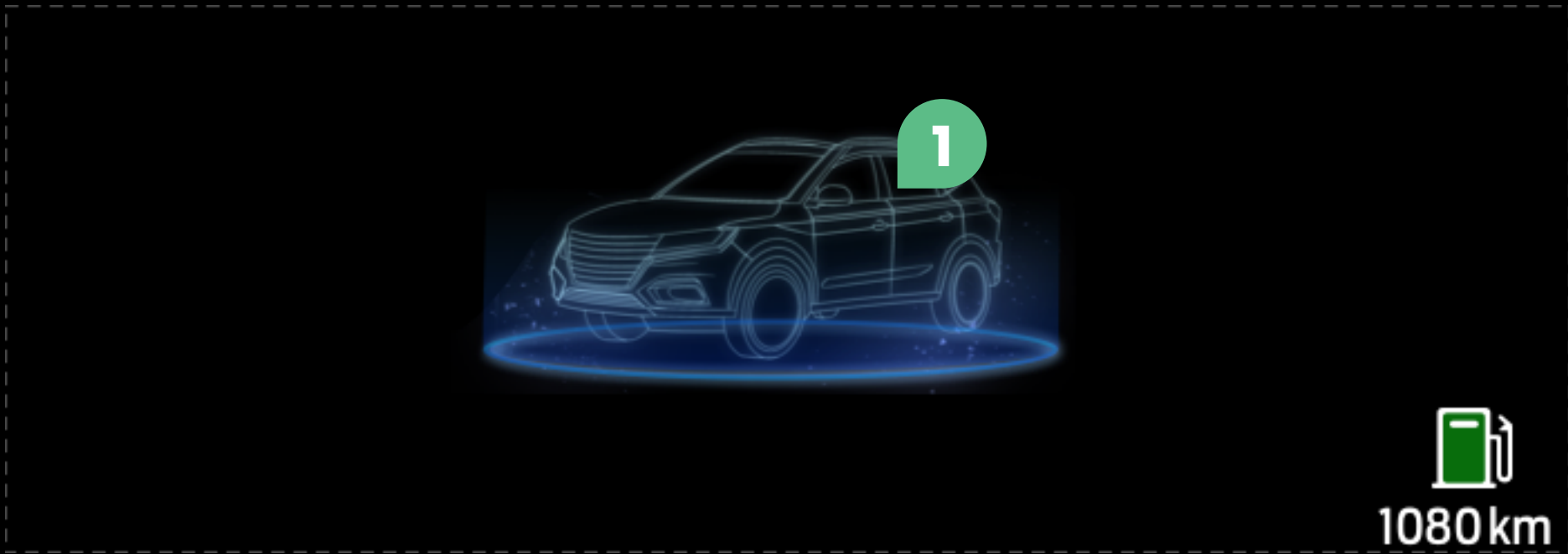
弹窗文字大小为22px,图标显示大小为40\*40px

SNOW MODE



- 1** In snow mode, white stroke was added to AR region graphics based on original color to enhance information recognition;  
雪地模式时，AR区域图形基于原有色彩增加白色描边，增强信息识别度；
- 2** In snow mode, the shape is displayed as blue and white outline is added to enhance information recognition.  
雪地模式时，造型显示为蓝色基础增加外轮廓白色描边，增强信息识别度；
- 3** In snow mode, blue stroke was added to speed information to enhance information recognition  
雪地模式时，时速信息增加蓝色描边，增强信息识别度

## Boot animation



- 1 Virtual car model dynamic display, after starting, AR area shows the dynamic effect of car model, reflecting AR technology and sense of science and technology;  
It is suggested that the model drive in quickly from a distance,  
Added burners or cool effects.

虚拟车模动态显示，开机后，AR区域显示车模动态效果，体现AR技术与科技感；  
建议车模从远处快速驶入，增加烧胎或酷炫效果；

SETTING



- 1** When ARHUD is set, the size of the display area is 24\*78px, reference position X-650, y-56;  
After the adjustment is confirmed, the display icon disappears.

当系统设置ARHUD时显示，图形显示区域大小24\*78px，参考位置x-650，y-56；  
调节确认后，显示图标消失；

AI - wake up



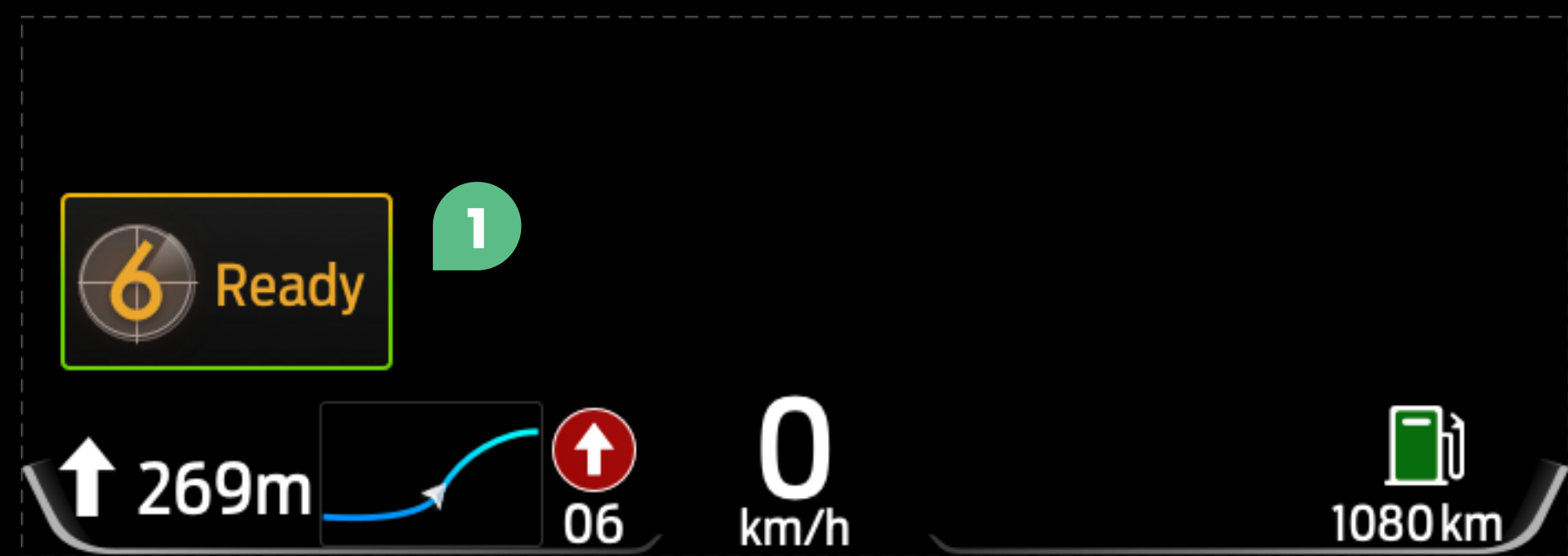
- 1 When the voice assistant wakes up, the dynamic voice effect is displayed in the AR area,  
Suggest entry animation to consider real scene fusion  
Reference positions X-26, Y-118; The current display size is 50 × 50px  
语音助手唤醒时，语音动态效果显示在AR区域，  
建议入场动画考虑实景融合  
参考位置x-26,y-118;当前显示大小50\*50px

AI-Weather



- 2 When the voice function performs different functional tasks, the dynamic effect of the voice image is displayed. Some function modules, such as weather function feedback, can display text auxiliary information, As shown above  
当语音功能执行不同功能任务时，切换显示语音形象的动态效果；  
部分功能模块，如天气功能反馈，可显示文字辅助信息  
如上图示意

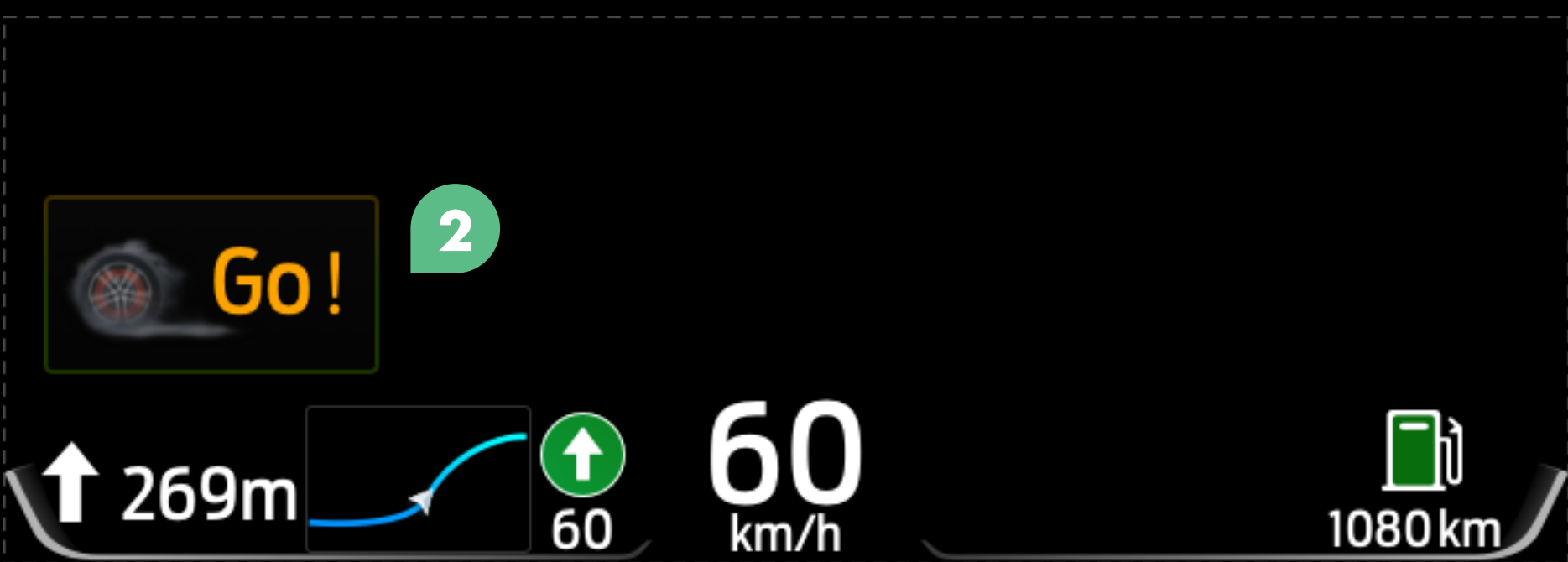
Speed-Instantaneous increase



- 1 When the user enables the V2I egg function, when the user waits for the green light at a traffic light intersection and is not in driving state, Red light information  $\leq 6$  seconds, display the egg countdown pop-up, combined with sound feedback reminder  
Popup ruler 150\*80px, reference position X-26, Y-80

用户开启V2I彩蛋功能时，当红绿灯路口，用户非行驶状态下等待绿灯时，红灯信息 $\leq 6$ 秒候，显示该彩蛋倒计时弹窗，结合音效反馈提醒  
弹窗参考尺150\*80px,参考位置X-26, Y-80

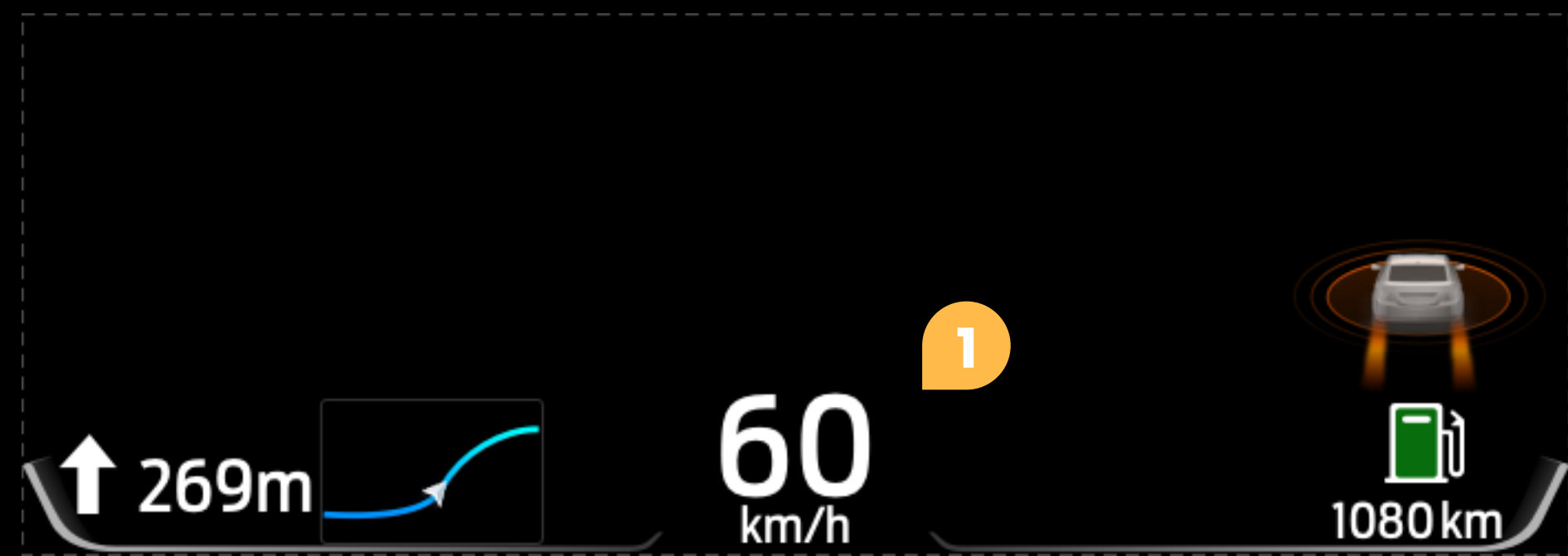
Speed-Normal



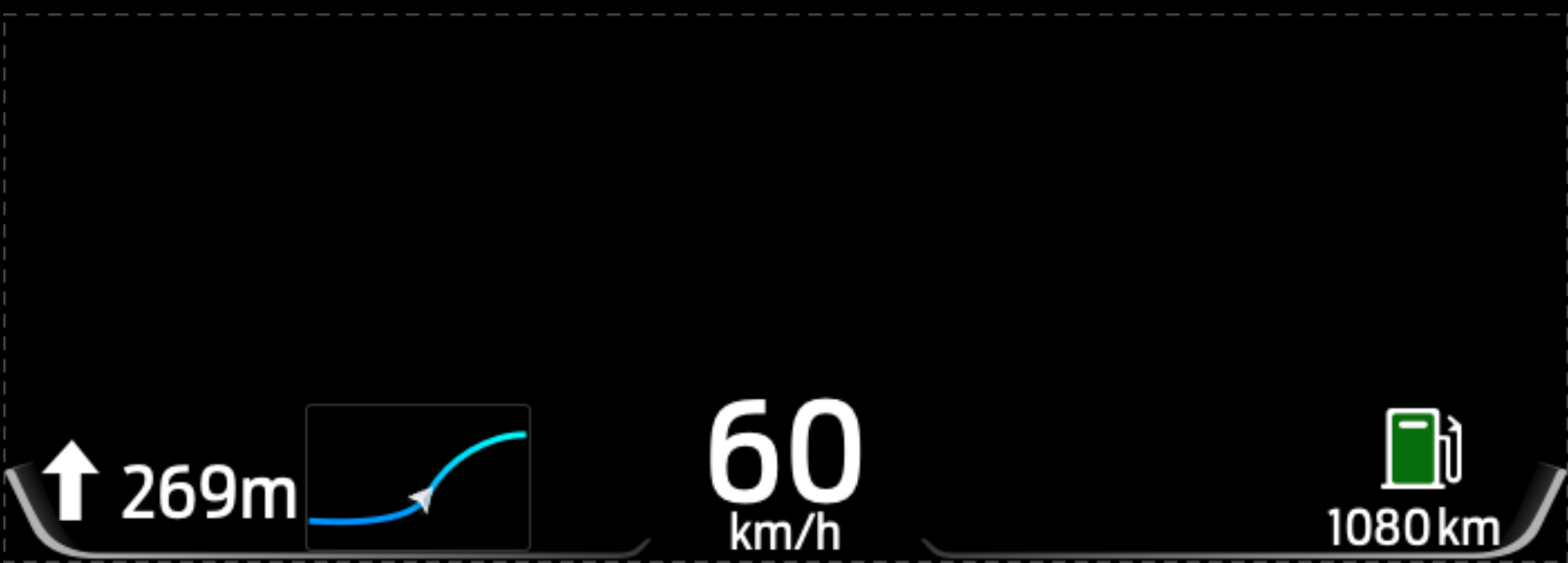
- 2 When the V2I egg function is enabled, the linkage countdown window pops up, and when the green light is turned on, the display is switched  
用户开启V2I彩蛋功能时，联动倒计时弹窗，绿灯时，切换显示



EGGS-Speed 1



Normal-Speed



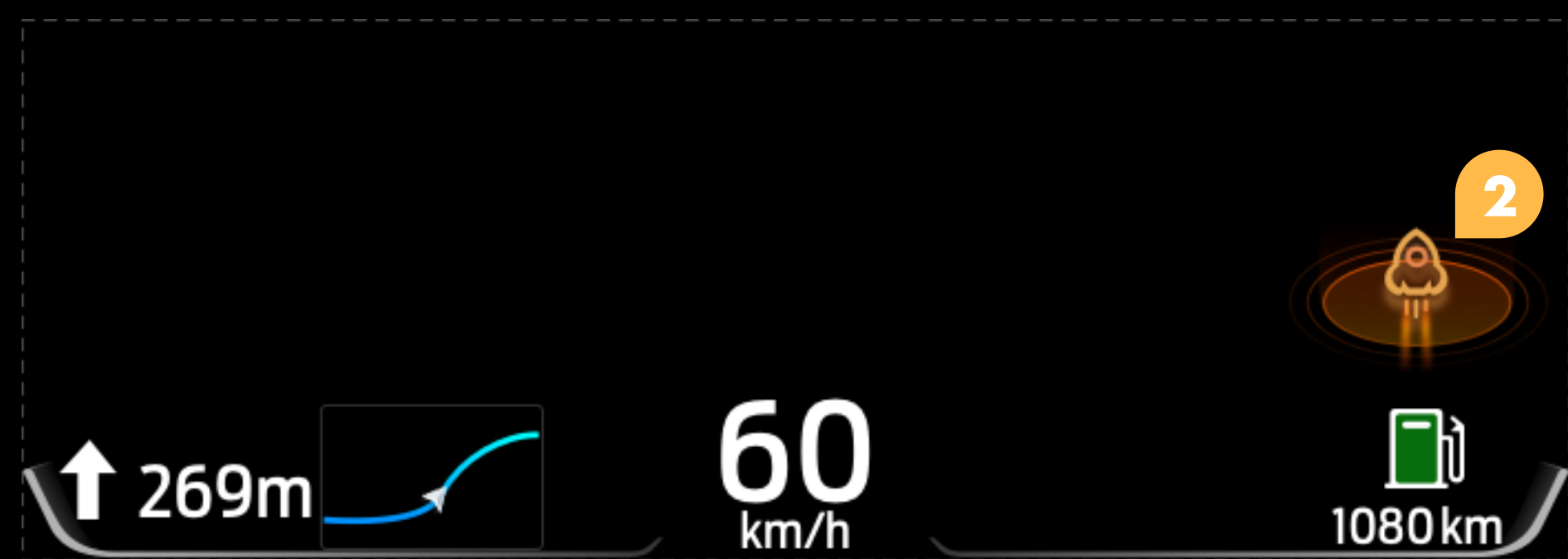
1/ Instantaneous acceleration≥10km/h

Function Scenario description

When the user starts the instant acceleration egg function, the speed exceeds 40km/h,  
The user's continuous acceleration (stepping on the accelerator),  
when the 1s acceleration growth ≥10km/h, combined with sound effect display acceleration animation  
When the user decelerates/releases the throttle, the graphic animation disappears

用户开启瞬时加速的彩蛋功能时，时速超过40km/h状态下，  
用户持续加速度（踩油门），当1s加速度增长≥10km/h时，结合音效显示加速动画  
当用户减速/松开油门时，该图形动画消失

EGGS-Speed 2



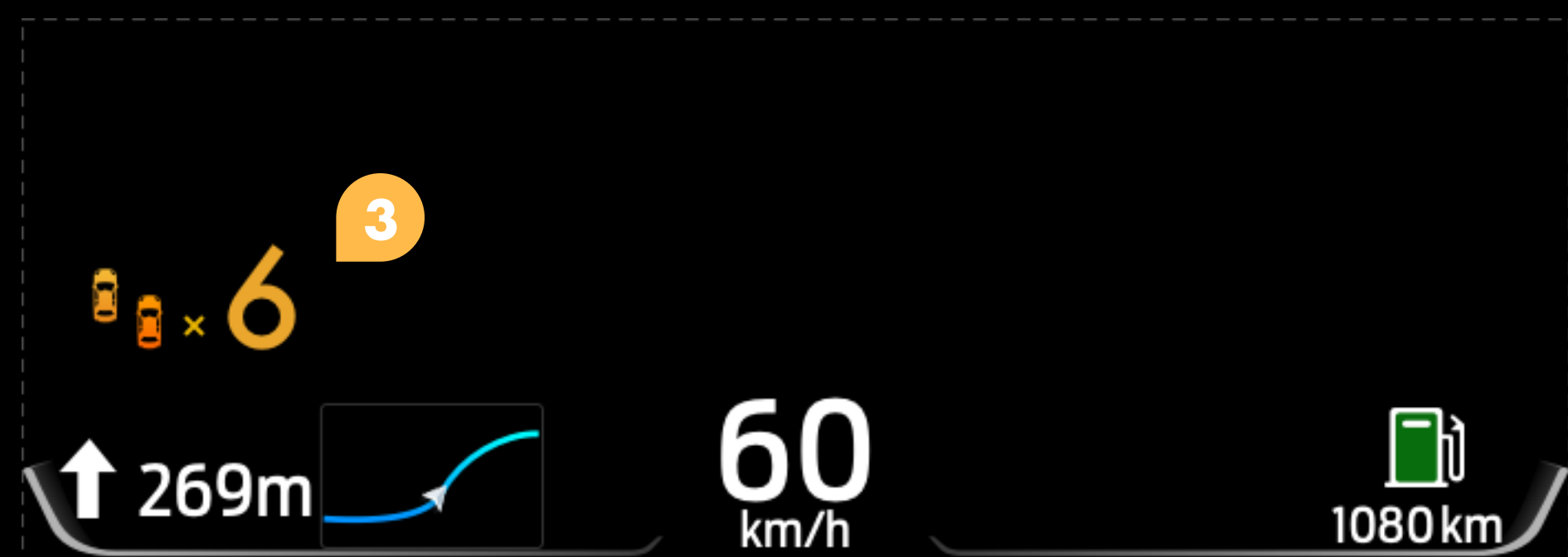
2/ Instantaneous acceleration≥20km/h

Function Scenario description

When the user starts the instant acceleration egg function, the speed exceeds 40km/h,  
User sustained acceleration (step on the accelerator), when the 1s acceleration growth ≥20km/h,  
Displays toggle accelerated animation state with audio and EGGS SPEED1  
When the user decelerates/releases the throttle, the graphic animation disappears

用户开启瞬时加速的彩蛋功能时，时速超过40km/h状态下，  
用户持续加速度（踩油门），当1s加速度增长≥20km/h时，  
结合音效与eggs SPEED1显示切换加速动画状态，当用户减速/松开油门时，该图形动画消失

EGGS-Speed 3



3/ Continuous overtaking

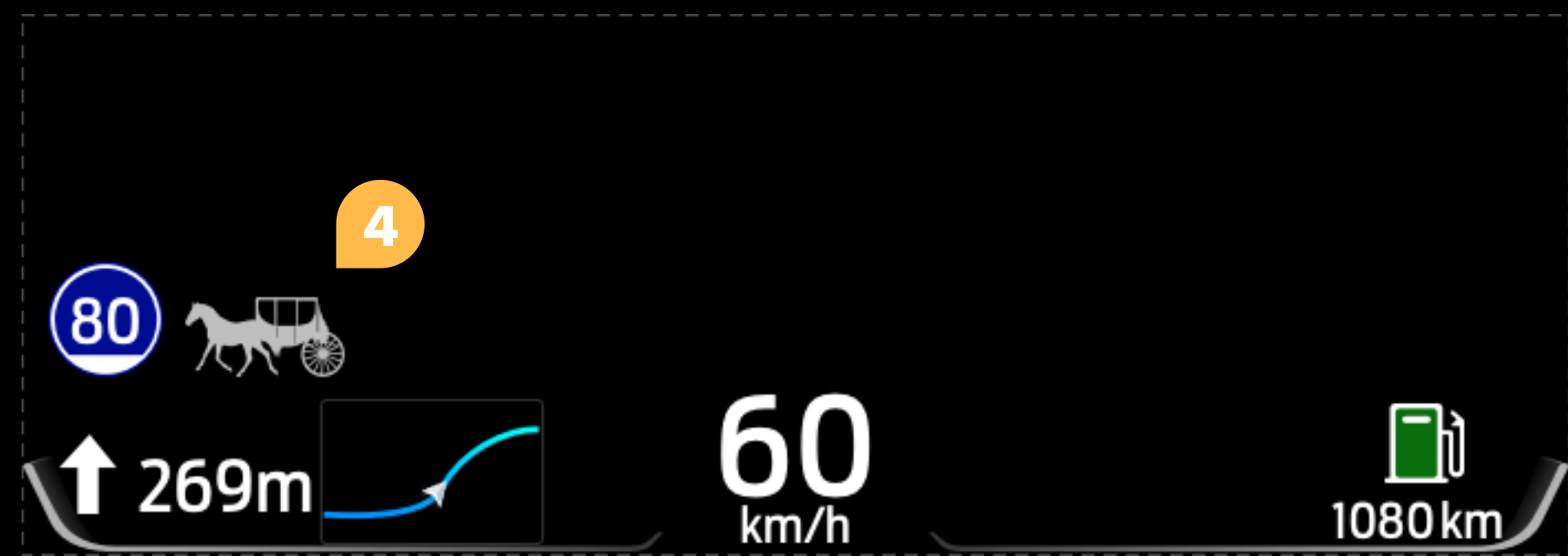
Function Scenario description

When the user starts the egg function of overtaking, combined with the FCW vehicle identification and counting function  
When the user's continuous overtaking behavior is ≥3 vehicles within 2 minutes, the overtaking counting animation will  
combined with sound effects

Increase the display value for each vehicle you pass  
When the user does not continue to overtake for 5 minutes, the display disappears

用户开启超车的彩蛋功能时，结合FCW识别车辆与计数功能，  
用户在2分钟内，连续超车行为≥3辆时，结合音效显示超车计数动画  
每曾超一个车辆，增加显示数值  
当用户持续5分钟未继续产生超车行为时，该显示消失

EGGS-Speed 4



4/ Drive slowly

Function Scenario description

When the user opens the low-speed Easter egg function,  
If the system identifies the low speed limit and the user's speed is below the low speed limit,  
Combined with sound effect, the low speed reminder effect will be displayed and disappear after 3 seconds  
If the user continues to drive at a low speed, the prompt will be displayed again 3 minutes later

用户开启低速彩蛋功能时，在高速行驶路段，  
如系统识别低速限制，且用户车速低于低速限制时，  
结合音效显示低速提醒动效，动效显示3秒后消失  
如用户持续低速行驶，则3分钟后再次显示该提示

Nav \_ Congestion popover

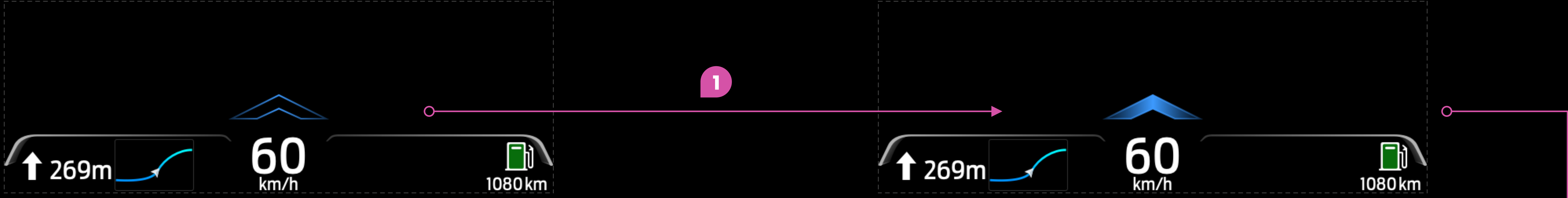


- 1 When the user opens the navigation egg function, the navigation user's bullet screen information will be displayed under the congested road according to the navigation information  
The text message display size is 18px  
当用户开启导航的彩蛋功能时，  
根据导航信息在拥堵路段下显示导航用户弹幕信息  
文字信息显示大小为18px



POI-Lead change lanes1

POI-Lead change lanes2



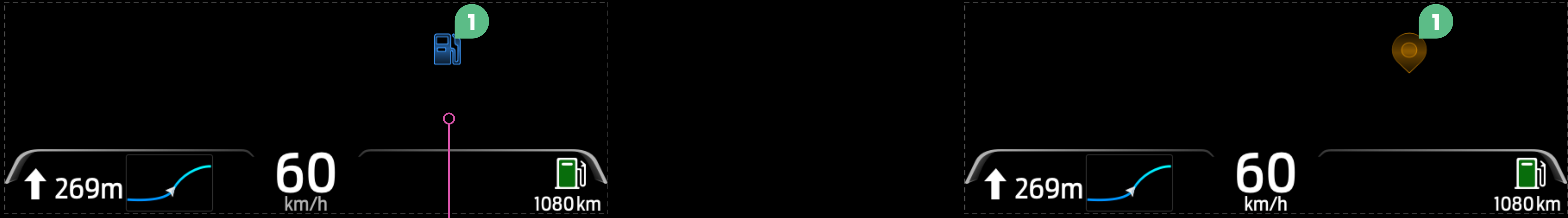
**1** In navigation, when the system recognizes that THE AR area can display POI information, the arrow animation appears from the top of the speed;  
And switch the display to solid boot state;

导航时，当系统识别到AR区域可显示POI信息时，箭头动画从时速上方出现；并切换显示为实心引导状态；

**2** Ready guide arrow After the ready state is over, the arrow extends dynamically to the POI area of vision recognition, displaying the position marker icon  
预备引导箭头准备状态结束后，箭头动态延伸至远景可识别POI区域，显示位置标记图标

POI≥100m(途经点)

POI≥100m(目的地)

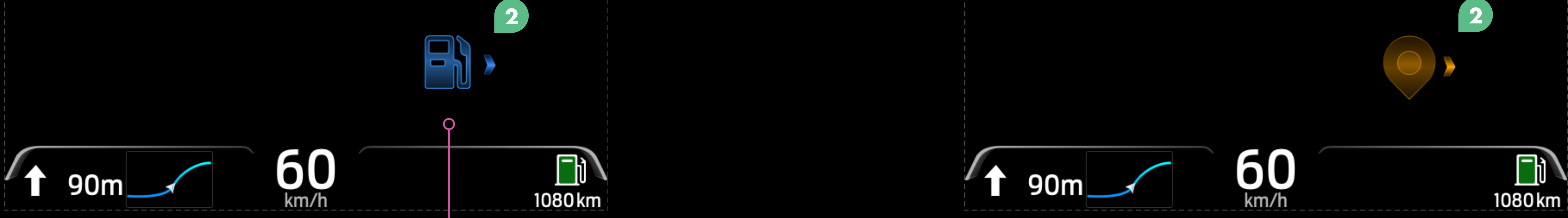


**3** **3**  
The POI position information is gradually enlarged and displayed according to the real distance until it reaches the POI position,  
and the AR region display is switched according to the passing point/destination information  
POI位置信息根据实景距离逐渐放大显示，直至抵达POI位置，根据途经点/目的地信息切换AR区域显示

**1**  
When a POI is identified as a passing point, a blue icon is displayed  
When a POI location is recognized as a destination, an orange icon is displayed  
  
当可识别POI位置为途经点时，显示蓝色图标提示  
当可识别POI位置为目的地时，显示橙色图标提示

POI < 100m(途经点)

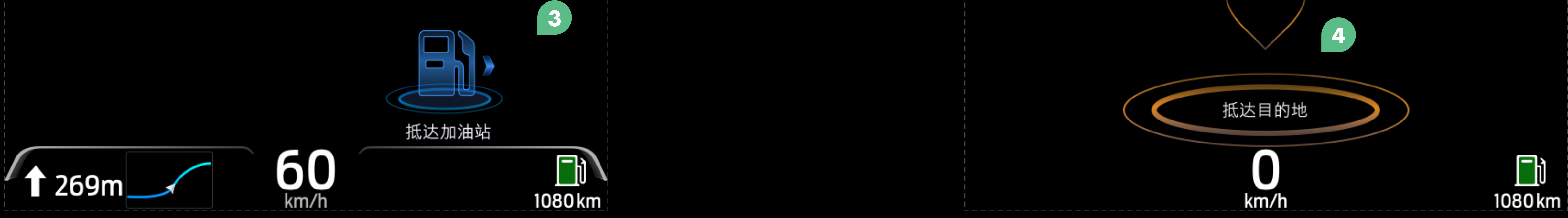
POI < 100m(目的地)



**2**  
When the POI information position is less than 100m, the POI position is displayed on the left or right side of the vehicle  
当POI信息位置 < 100m时，显示POI位置在车辆左侧或右侧提示

POI-arrive(途经点)

POI-arrive(目的地)



**3** When arriving at poi-passing point, the arrival animation of passing point is displayed by integrating real scene, and it is suggested to disappear after 3s.  
抵达POI-途经点时，融合实景显示途经点抵达动画，建议3s后消失；

**4** When arriving at POI-destination, after the navigation is finished, the GRAPHIC information of AR region POI will be switched and displayed as arrival animation.  
3S animation is recommended to enhance the sense of ending ceremony  
抵达POI-目的地时，导航结束后，AR区域POI图形信息切换显示为抵达动画，建议3s动画，增强结束仪式感

Other POI information

其他POI信息



When the home address/service area/gas station/hospital/park/business/collection is set as a navigation waypoint or destination display  
当家庭地址/服务区/加油站/医院/公园/商家/收藏被设置为导航途经点或目的地显示



General unrecognized path point display status  
通用未识别途经点显示状态



General unrecognized destination display status  
通用未识别目的地显示状态



PLAN A

Incoming Call



- 1

The pop-up information consists of the caller name or number, dynamic ripple, and incoming call ICON.

According to the resolution, the incoming call popover display area is 180 x 50px, the reference location is X-18,Y-118;

The icon is displayed as 44 x 44px

弹窗信息由名称/号码、来电动态波纹与来电状态的图标组成；

参考分辨率，来电弹窗显示区域为180\*50px，参考位置X–18，Y–118；

图标显示为44\*44px

In the call



- 2

After answering the call, the popover status changes to In the Call.

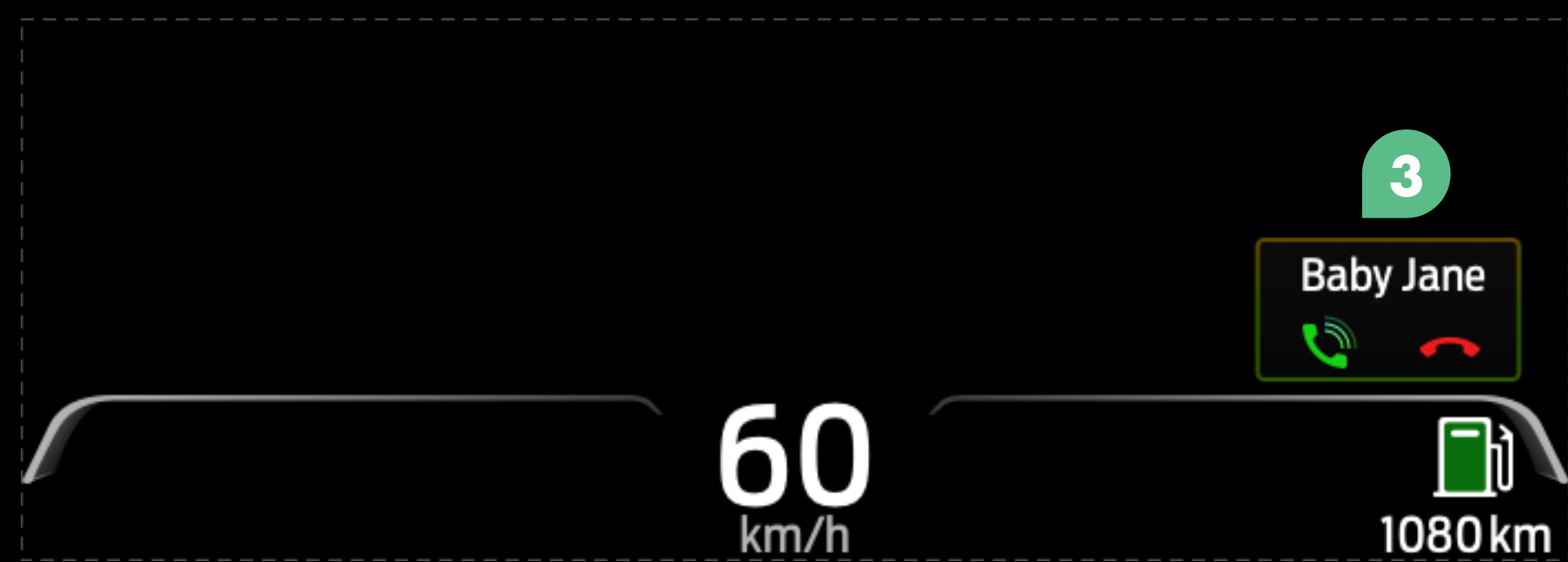
The call time and hang up ICONS are displayed.

接听后弹窗信息切换为in the call状态；

显示通话时间与挂断图标；

PLAN B

Incoming Call



- 3

The pop-up information consists of the caller name or number, dynamic ripple, and answer and hang up ICONS.

According to the resolution, the incoming call popover display area is 124 x 96px, the reference location is X-556,Y-96;

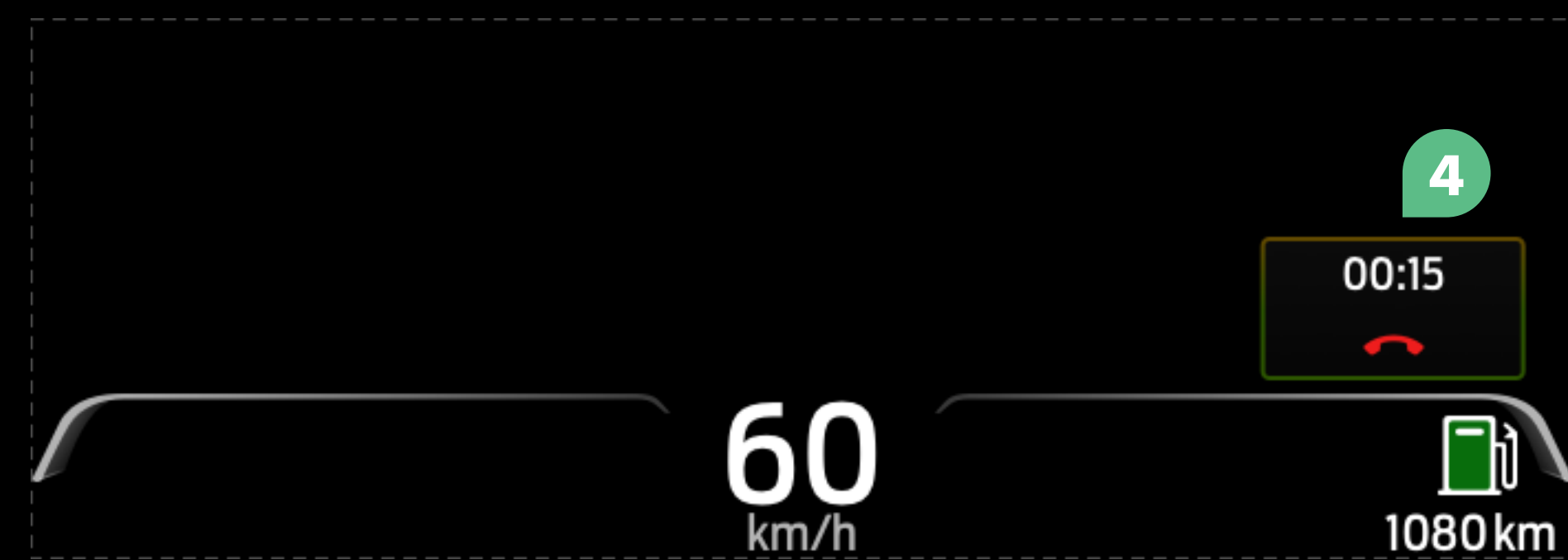
The answer and hang up icon is displayed as 44 x 44px

弹窗信息由名称/号码、来电动态波纹与接听、挂断的图标组成；

参考分辨率，来电弹窗显示区域为124\*96px，参考位置X–556，Y–96；

接听与挂断图标显示为44\*44px

In the call



- 4

After answering the call, the popover status changes to In the Call.

The call time and hang up ICONS are displayed.

接听后弹窗信息切换为in the call状态；

显示通话时间与挂断图标；