# **PATEO INNOVATION**

## **User Manual**

**HEAD UNIT** 

PDD-PORSCHE PCM3 HEAD UNIT

AnpingTan

V1.0

2024/12/2

## **Revison History**

Date	Author	CONTENTS
2024/12/02	AnpingTan	Initial Version

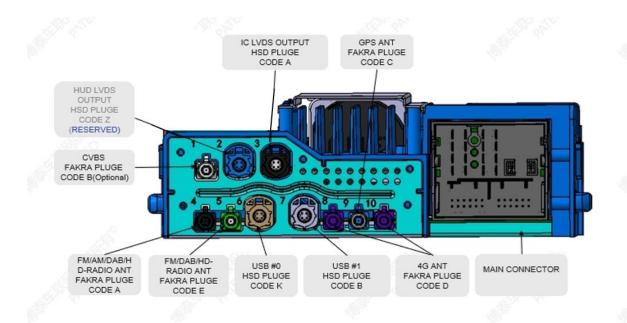
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### 1. Overview

This document specifies the specific requirements of the customer for the connectors, hardware and software functions, of the PCM3 Head Unit product.

### 2. Information of Connectors



## 3. Features of Hardware System

FEATURES	DESCRIPTION	
DDR	8GB	
UFS	128GB	
DISPLAY	7 寸	
FM/AM	Support	
DAB	Support	
MOST external Amplifier	Support	
CVBS Reverse Video	Support	
MIC (Analog)	External MIC * 1 + Internal MIC * 1	
Amplifier (Internal)	4 Channels	
USB	Front Panel USB TYPE C * 1	
	+ backend USB 2.0 * 2	
4G Netwrok	Support	
CAN	1 Channel	
Bluetooth	BT5.2	
WiFi	802.11 a/b/n/ac	
GNSS	support	

### 4. Feature List

Module	Function	Sub-features	
	Startup Display		
		Disclaimer Porsche-Typical Start Screen Time Device Connection Status Signal Bluetooth Switch Status Application List My Screen (MyScreen)  Application Entry Full Band Scan Playback Controls Radio Station List Radio Station Name RDS Radio Display Favourite / Unfavourite Playback Controls Radio Station Information Display Favourite / Unfavourite Playback Controls Radio Station Information Display Favourite / Unfavourite Playback Controls Radio Station List Radio Station List Radio Station List Radio Station Information Display Favourite / Unfavourite Playback Controls Radio Station Information Display Favourite / Unfavourite Full Band Scan Playback Controls Radio Station List Radio Station List Radio Station Name Recognition Radio Station Information Playback Controls Media Information Playback Controls Supported Fromats Media Information Playback Controls Playlist Search and Genres  List of favorites Top 100 Languages	
		Device Connection Status	
	Status Bar		
		Disclaimer Porsche-Typical Start Screen Time Device Connection Status Signal Bluetooth Switch Status Application List My Screen (MyScreen)  Application Entry Full Band Scan Playback Controls Radio Station List Radio Station List Radio Station List Radio Station List Radio Station Information Display Favourite / Unfavourite Playback Controls Radio Station List Radio Station Information Display Favourite / Unfavourite Playback Controls Radio Station List Radio Station List Radio Station Information Display Favourite / Unfavourite Playback Controls Radio Station List Radio Station Information Display Favourite / Unfavourite Full Band Scan Playback Controls Radio Station Information Favourite / Unfavourite Supported Formation Favourite / Unfavourite Supported Frotocols Media Information Playback Controls Supported Formats Media Information Playback Controls Playback Controls Playback Controls Playback Controls Supported Formats Media Information Playback Controls Playlist Search and Genres  List of favorites Top 100 Languages	
General	Launcher		
		(MyScreen)	
	Application Running in		
	Background		
	Content Function Blocking (CFB)		
	Notification Centre		
	Setup Wizard		
	Dock Bar		
	F14 / 414		
	FM / AM	Radio Station Name	
		RDS Radio Display	
		Favourite / Unfavourite	
		Playback Controls	
	DAR	Radio Station List	
	DAB	Radio Station Information Display	
Tuner		Favourite / Unfavourite	
runer		Playback Controls	
		Radio Station List	
	Onlione Radio	Radio Station Information Display	
		Full Band Scan	
	HD Radio	Radio Station Name Recognition	
		Favourite / Unfavourite	
	Bluetooth Music		
		Playback Controls	
Local Media			
	USB Music		
	Radio		
	(FM/DAB/HD Radio)		
NA - II - II -		List of favorites	
Media List		Top 100	
	Online Radio	Languages	
		Country	

	1			
		Schools (Genres)		
		Podcasts		
		Playlist		
		Artist		
		Album		
		Composer		
	USB Music	Song		
		Tracks		
		Compilation		
		Audiobooks		
	Adapt sorting of sources	Addiobooks		
	Adapt sorting of favourites	Display troffic nations		
		Display traffic notices		
Media Options		Station tracking to similar stations		
	Radio settings	Online station tracking in case of weak		
		reception		
		Alarm messages		
		Display View		
		Map Information		
		Vehicle Icon		
		Route Information		
		Enlarged View of Intersection		
		Map Interface Operation and Display		
		Go Home / Go to Office		
		"Return to Vehicle Location" Button		
		Tap to mute broadcast / unmute		
		Tap to turn on / off "Traffic Display on		
	Basic Features	Map Interface"		
		Navigation Preferences		
		Route Planning Information Display		
		Route Management		
		Guidance (TBT Information)		
		Exit Navigation		
		Alternative Route		
		Dynamic Route Calculation		
Navigation		Weather Warning		
		Destination Parking Lot		
		Route Editing		
		Resumed Navigation		
		Voice Broadcast		
		Navigation Settings		
		Storage Location		
		Storage Location		
	Offline Map	GPS Signal		
	Citime Map	Path Guidance		
		POI Search		
		Search Along Route		
		Nearby		
		At destination		
	Online Map	At stopover		
		Presearch		
		Search Results		
		History		
		Real-Time Traffic		
	-			

		Traffic Signs		
	Map Update	Upgrade Method		
	Route Prediction			
		Data Field		
		Cumulative Total		
		(Continuous)		
		Since Ignition		
		(Since···)		
	TRIP	Customization		
		(Personal)		
Vehicle		Reset trip since		
		Reset total trip values		
Vehicle		Reset max trip values		
		Reset all trip data		
		Reversing Camera Display		
		3D Car Model		
	Assisted Parking	Park Distance Control (PDC) area		
		Daytime Running Lights		
		Afterglow Duration		
Vehicle		Automatic Rear Wiper		
Vehicle		Automatic Rear sensor		
		Orientation light		
		Screen button		
		Air conditioning		
		Effective Scope of Unlocking		
	Personal Preferences Memory (Individual Memory)	Auto-Lock		
		Door opener		
		Return Journey Options		
		L/R driving PDC View		
		Daytime Running Lights		
		Afterglow Duration		
		Ambient light		
		Fade.out time		
		Automatic Rear Wiper		
		Automatic Rear sensor		
		Lowering mirror		
	Configure trip personally			
	Personal Speed limits			
		Bluetooth Pairing		
		Automatic Reconnection		
	Bluetooth Connection	Synchronise Data after Successful		
		Connection		
		Clear Data after Disconnection		
	Basic Services	Answer / Hang Up		
Phone Call	Dasic Services	Steering Wheel Control		
		Simultaneous Connection		
	Dual Phone Connectivity	Functions Supported		
		Set as Primary Phone		
		Synchronise Data Stored in the Phone		
	Address Book	Display Contacts in Alphabetical Order		
		Support Indexing by First Letter		
	_			

		Support One Tap to Dial		
		Contact information		
		Delete contacts		
		Voicemail number		
	Phone settings	Sorting criteria		
		Mute navigation during call		
		Synchronise Data Stored in the Phone		
	Call Log	Contacts Sorted by Time		
	Call Log	Support One Tap to Dial		
		Search by Initial Letter		
	Search for Contacts	•		
		Search by Phone Number		
	Favourites	Add favourite		
		Favourites list		
	Phone Call	Answer / On a Call / Hang Up		
		Phone Call Window		
		Numeric Keypad Display		
	Dial Pad	Predictive Number Input		
		Dial		
	ADB	Android Function Debugging		
	Connection Manager	Device name		
	Apple CarPlay			
	Android Auto			
	Factory Reset			
	Switchover for Day/Night Design			
	Brightness	5 to +5		
	Touch tone setting	Off, Quiet, Medium, Loud		
	Toddir tone setting	You can reactivate the central display by		
	Switch off central display	touching it.		
	Navigation anouncements	0 - 10		
	ParkAssist	oud / regular / Quiet		
	Volume lower whenParkAssist is			
	acitye	0 - 5		
	oeed-dependent			
	volumeadaption (only	0 - 7		
	withoutBose or Burmester)			
	Mute navigationduring call	ON / OFF		
	Wate navigationaamig oan	Bluetooth Switch		
		List of Connected Bluetooth Devices		
0		Device Connection Control		
Settings		Device Permission Control		
		Phone settings		
		Bluetooth setting		
		WiFi settings		
	Connected Device Control	Configure Wi-Fi hotspots		
		Select preferred phone		
		Select device to use music		
		Select equipment information		
		Select device to use carplay		
		Select device to use call		
		List of known devices		
		Serial number (IMEI)		
		Connect new phone		
		Connect new music player		
	Connected Device	Connect Apple CarPlay		
		Connect Apple Carriay  Connect Android Auto		
	J	Connect Anarola Auto		

	Media setting			
		Route Overview		
		Avoid		
		Alternative routes		
	Navigation setting	Display routes whenstarting route		
		guidance		
		Further navigation settings		
		Receive vehicle messages		
	Notification centre settings	Receive smartphone messages		
	1 votineation centre settings	Receive information messages		
	Set date and timeautomaticalky	on / off		
	Set time manually	Time selection control		
	Set date manually	Date selection control		
	Set time zone automatically	on / off		
	Set time zone manually	Time zone list selection		
	Set time format	12h / 24h		
		DD.MM.YYYY		
	Set date format	MM/DD/YYYY		
		YYYY-MM-DD		
	Speed and Distance	km/h, km		
		mph, mi		
	Temperature	°C		
	'	°F		
		I/100km		
	Consumption	mpg (US)		
	·	mpg (UK)		
		km/l		
	Standby	TBD		
	Software information	TBD		
	Free and Open SourceSoftware Notice	TBD		
		Legal Notice		
	Privacy	Data Privacy Information		
	Set-up assistant	TBD		
	Reset system to factory settings	TBD		
		Treble and Bass		
		Sound Field Focusing		
		Surround (only Bose)		
		Linear (only Bose)		
		AudioPilot (only Bose)		
		Smooth (only Burmester)		
		Surround (only Burmester)		
	Advanced Sound Effects	Live (only Burmester)		
		Sound Conditioner (only Burmester)		
Sound Effects		Balance and fader		
Settings		Loudness		
Settings		Channel Settings		
		Speed-Adjusted/-Dependent Volume		
		Control		
		Bose Surround		
		Bose Linear		
		Burmester Listening Position		
	MOST Bus	Burmester Smooth		
		Burmester Smooth  Burmester Surround		
		Burmester Live		
	J	Dutitiestel Five		

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	Other Settings		
Others		Languages Available in the Device	
	Text Language	Keyboard	
		Languages Required for User Manuals	
	System Upgrade (Update)	Upgrade (update) via USB	
		Phase Diversity (FM/AM)	
Radio Features	Features Required	MRC (DAB)	
		Background Scan	

## 5. RF frequency

_	Band	TX (MHz)	RX (MHz)	
	WCDMA Band V	824 ~ 849	869 ~ 894	
_	LTE Band 5	824 ~ 849	869 ~ 894	
_	LTE Band 41	2496 ~ 2690	2496 ~ 2690	
_	WCDMA Band V	824 ~ 849	869 ~ 894	
_	Bluetooth- SISO	2400 ~ 2483.5	2400 ~ 2483.5	
_	Bluetooth LE- SISO	2400 ~ 2483.5	2400 ~ 2483.5	
FCC _	Wi-Fi 2.4GHz- SISO	2400 ~ 2483.5	2400 ~ 2483.5	
Frequency	Wi-Fi 5GHz (U-NII-1) MIMO 2*2	5150 ~ 5250	5150 ~ 5250	
_	Wi-Fi 5GHz (U-NII-3) MIMO 2*2	5725 ~ 5850	5725 ~ 5850	
	GPS L1 C/A	/	1559 ~ 1610	
	GLONASS G1	/	1559 ~ 1610	
_	Galileo E1	/	1559 ~ 1610	
_	FM	/	87.5 ~ 108	
_	AM (MF)	/	526.5 kHz to 1606.5 kHz	
	DAB	/	174 to 240	
	WWAN antenna gain: 6.85 dBi			
A	Bluetooth: 2.90 dBi			
Antenna Gain	Wi-Fi 2.4GHz: 5.90 dBi			
	Wi-Fi 5GHz: 7.80dBi			

#### 6. CE Caution:

#### **RF** Exposure

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator and your body.

#### **EU DECLARATION OF CONFORMITY**

Hereby, PATEO CONNECT Technology (Shanghai) Corporation declares that the radio equipment type PCCM Plus 997/987 II/ PCCM Plus 991/981 I are in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following Internet address: https://www.pateo.com.cn/

#### Restrictions in the 5 GHz band:

According to Article 10 (10) of Directive 2014/53/EU, the packaging shows that this radio equipment will besubiect to some restrictions when placed on the market in Belqium (BE), Bulgaria (BG), the Czech Republic(CZ),Denmark (DK), Germany (DE), Estonia (EE), reland (IE), Greece (EL), Spain(ES), France (FR), Croatia(HR), Italy (IT), Cyprus (CY), Latvia (LV), Lithuania(LT), Luxembourg (LU), Hungary (HU), Malta (MT),Netherlands (NL), Austria(AT), Poland (PL), Portugal (PT), Romania (RO), Slovenia (SI), Slovakia (SK).Finlanc(FI). Sweden (SE).. Turkey (TR). Norway). Switzerland (CH). Iceland (IS), and Liechtenstein (LI).

The WLAN function for this device is restricted to indoor use only when operating in the 5150 to 5350 MHz frequency range.

ES	LU	RO	CZ	FR	HU	SI
DK	HR	BE	BG	DE	EE	IE
EL	IT	Су	LV	LT	SK	MT
NL	AT	PL	PT	FI	SE	TR
NO	СН	IS	LI			

The radio equipment is so constructed that it can be operated in at least one Member State without infringing applicable requirements on the use of radio spectrum.

Manufacturers:

PATEO CONNECT Technology (Shanghai) Corporation

Room 3701, No. 866 Dongchangzhi Road, Hongkou District, Shanghai, 200080, PR.China

### 7. FCC Regulations

- This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
- This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
  - —Reorient or relocate the receiving antenna.
  - —Increase the separation between the equipment and receiver.
  - —Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
  - —Consult the dealer or an experienced radio/ TV technician for help.
- Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the
  equipment.

FCC RF Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. To comply with FCC RF Exposure compliance requirements, this grant is applicable to only Mobile Configurations. The antennas used for the transmitter must be installed to provide a separation distance of at least 20cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

## 8. Ending

This concludes the document