Dorland Industrial Intrinsically Safe Smartphone
Quick Guide

EX_08

DORLAND
Your safety is our mission

EX_08
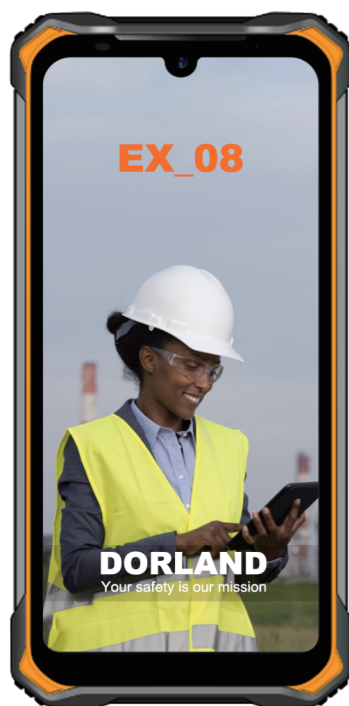4G Full Frequency

Thanks for Using Dorland Industrial Intrinsically Safe Smartphone.

Safety Instructions

Ordinary mobile phones are forbidden in explosion hazardous areas where explosions may happen. Such areas include: fuel areas (such as below deck of a ship, fuel or chemical products transportation and storage facilities), locations where the air containing chemicals or particles (such as granule, dust or metal powders) such as gas stations, oil storage tanks. Developed by Beijing Dorland System Control Technology Co., LTD., the industrial explosion-proof smart phone EX_08 adopts advanced technology of Germany with intrinsically safe circuit, has been tested and certified by China explosion-proof certification body and can meet the requirement of GB3836.1-2010 "explosive atmospheres - Part 1: Equipment-General requirements" and GB3836.4-2010 "explosive atmospheres - Part 4: equipment protection by intrinsic safety 'I' ". It is suitable for Zone 1 and Zone 2 explosion hazardous areas.

Basic parameters

Explosion-proof grade: Ex ib IIC T4 Gb / Ex ibD 21 T130℃
Certification No.: CCRI 21.2840
Protection grade: IP68

Safety Warning

Safety performance of industrial safety explosion-proof phone EX_08 can be guaranteed only in strict accordance with the instructions in this section. Please read the instruction carefully before using. If you have any questions, please contact the manufacturer immediately.

Safety Rules

Safety performance of industrial safety explosion-proof phones EX_08 base the users obey the following rules.
a) The battery for EX_08 is made by the manufacturer specializing in the production of batteries. Only the original battery meets the intrinsically safe requirements. Any other non-original batteries will result in the loss of phone explosion-proof performance. Please make sure to use the original battery. For battery replacement, please contact Beijing Dorland System Control Technology Co., LTD.. The battery for EX_08 is Ex Battery 035 4600mAh explosion-proof polymer battery.
b) Please use the original charger when recharge battery, and make sure in the safe areas. The maximum charge voltage is 4.4V.

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c) Don't replace battery for EX_08 in explosion hazardous areas.
d) EX_08 can not be used in explosion danger zone 0.
e) Do not use headset, data cable plug devices in the explosion hazardous areas.
f) Do not use the flash function in explosion hazardous areas.
g) Do not use the vibration function of the phone in explosion hazard areas.
h) Please keep away the high-temperature region when using EX_08.

Failure and damage processing

If EX_08 has lost its safety performance, please stop using in explosion hazardous areas, and ship the failure phones back to the manufacturer for testing.
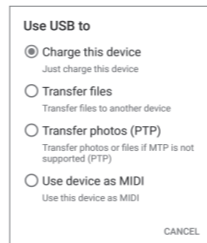Situations that may cause failure of EX_08 explosion-proof performance include the following ones:
The phone shell is damaged;
Storage place does not meet the storage conditions;
Damaged during transport;
Explosion-Proof mark is unrecognized;
Other functions fail.

File transfer

Computer ---- mobile file transfer
The mobile phone is connected to the computer via USB, and it will start charging automatically.
1. Drag down the notice panel and click "USB charges this device";
2. Select "transfer file";
3. The computer identifies the device as a removable disk. Open the folder displayed on your computer and transfer the files from your phone to your computer.

Use USB to
◉ Charge this device
  Just charge this device
○ Transfer files
  Transfer files to another device
○ Transfer photos (PTP)
  Transfer photos or files if MTP is not supported (PTP)
○ Use device as MIDI
  Use this device as MIDI

CANCEL

Keys and interfaces

The mobile phone includes many parts, such as camera, flash, receiver, USB jack, volume key, power button, etc.

Keys	Directions
1. Volume Up/Down Key	Press the upper key to raise the volume and press the lower key to reduce the volume.
2. Power Key	Press: lock or wake up the screen. Press and hold for 2s: turn on/off the phone.
3. Receiver	To hear the sound of the other side when calling.
4.Front Camera	To take selfie or object facing to the phone screen.
5. Headset Interface	To connect an earphone to listen to music or radio, etc.
6. Return Key	Return to the previous page.
7. Menu Key	Switch to recently used applications.
8. Home Key	Press: return to the home screen from any other interface.
9. USB Interface	To connect charger or USB cable to transfer data.
10. Rear Camera	To take photo.
11. Flash Light	Assistant the camera to take photo in low light condition.
12. Speaker	Work when the phone rings, plays music or hands-free call.
13. Microphone	To make sounds louder or record them.

Lock and Unlock the Screen

· Lock the Screen
Press the "Power" key to lock the screen. The screen shall be automatically locked after it's not used for a while.

· Unlock the Screen
1. Press the "Power" key to light up the screen
2. Swipe up from the bottom of the screen to unlock the screen

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· Change Screen Lock
1. On the home screen, select "Settings"> "Security" > "Screen lock".
2. Choose the screen lock method.

Security
Device security
Screen lock
Pattern

Notification Panel

Notification icons on the status bar report the new arrival of messages, calendar events, alarm etc. You can switch on Data connection, WLAN, Bluetooth and so on.

Icons	Descriptions	Icons	Descriptions
	Battery		Mobile Data
	Wi-Fi		Bluetooth
	Airplane Mode		Flashlight
	Location		Auto-rotate
	Do not Disturb		Eye Protection

Change Wallpaper

Three ways to set up personalized wallpaper:

1. Press and hold any empty space on the screen, select "Wallpaper".

2. Click "Settings" > "Display" > "Wallpaper" > select a picture > "Apply".

3. "Gallery" > choose a photo > "Set picture as " > "Wallpaper".

Make a Call

· Make a Call Directly
1. On the home screen, touch the icon "Phone" to displa the dialing keypad.
2. Touch the numeric buttons to input the telephone number and click the icon 📞 to make a call.

· Make a Call From Contacts
On the home screen, touch "Contacts" to select the one you want to call, and then tap the phone number to make a call.

· Make a Call From Call Logs
On the home screen, touch "Phone" > " 🕐 ", select a call from call logs and click it to make a call.

Note:
If you have inserted two SIM cards to the phone, there will be two call icons on the dialing interface. Choose SIM 1 or SIM 2 to make a call.

Reject a Call by Sending a Busy Message
When you are inconvenient to answer an incoming call, you can send a busy message for rejecting it.
1. On the incoming call interface, drag the message icon up to show the obtained system busy messages.
2. Tap one of them to send out and then the call will be rejected.

Add a Contact
1. Enter "Contacts" on the desktop, touch the " 👤 ", select the storage location.
2. Fill the new contact information and save.

Messaging
· Send a New Message
Enter "Messaging" > click the icon "+" > type the text and phone number of the receiver > send it.

· Receive a New Message
When there is a new message comes, an icon will appear in the notification bar to notify you. Slide the status bar down to click the notification and read it. Or go to "Messaging", read the new message directly.

EX_ 08 itself does not support hard intercom, but only soft intercom.

Intercom Interface
1. Voice recording button, the same function as the side PTT key.
2. Channel name and frequency settings.
3. Intercom power, edited in the Channel.
4. Intercom volume, modified through the volume key. (There is about 1s delay since serial port communication module is used.)
5. Intercom animation, different indications for incoming and outgoing calls. (A red dot will appear at its right bottom corner when an incoming call is received successfully.)
6. Channel settings, a buffer interface will appear on the screen for about 2s.

Chat Interface
1. Add button, press to enter the Channel and select one to send messages.
2. Chat record, click to enter the chat interface of designated contact which channel will be displayed to the intercom module meanwhile.
For example:
when the intercom interface is "Channel 3" but user switches it to "Channel 4" chat interface. At this time, the intercom module will default to "Channel 4" that calls and messages of this channel will be received.
3. Slide to the left to delete the corresponding chat record.

Auto Power Saver Mode
User can open the Power Saver in "Me" to reduce power consumption. When the mode is turned on, the module will enter low power consumption status in 30s.

Intercom Parameters

· Analog Channel:
1. Continuous Tone Controlled Squelch System
· 4types:
① Carrier ② CTCSS ③ Forward CDCSS ④ Reverse CDCSS Carrier
2. Receiving Power
CTCSS : 0-50   CDCSS : 0-82
3. Transmitting Power
CTCSS : 0-50   CDCSS : 0-82

Digital Channel
1. Color Code
Both the same frequency and color code are required to intercommunicate.
2. Encry
When "open" is selected in Encry, the default secret key is 12345678. Only with the same secret key, frequency and color code, users can make intercommunication.
3. Message Type
When choose group message, the sender will set up the " Call number" in the form of group number. And only the receiver sets up the " Message Type" as " Group" and the same group number in Receiver Group List, can they chat in message successfully.
4. Receive Group List
There is a built-in group number that will only work if the Message Type or Call Type is a group call.

· Editing SMS and MMS
1. You can compose a new SMS by cutting or copying text.
Step:
Press and hold a text field > select copy or cut > press and hold the empty space of new message typing area > choose paste.

Note:
The selected content is highlighted in Green.
2. A MMS may contain video, picture, audio etc.

Step:
Enter the new message typing interface > tap "Attach" > select Pictures, Videos, Audio, or Slideshow > choose corresponding file > type the text and phone number of the receiver > send it.

Browser
· Open Browser
1. On the home screen, touch "Browser".
2. Touch the input field at the top of the screen to input a website address.
3. Tap the icon " 🌐 "

· Browser Options
When browsing a web page, you can slide to scroll the screen to view other parts of the web page.

– Touch the icon (⋮), select "Save to bookmarks" to add the current web page as a bookmark.
– Touch the icon (⋮), select "Bookmarks/History" to open the saved bookmarks or pages you've browsed.
– Touch the icon (⋮), select "Share page" to share the website with others.

· Browser Settings
On the browser interface, touch the icon (⋮), select "Settings" to operate setting according to the indication.
Note:
You must have a mobile data or Wi-Fi connection to access the Internet.

Enjoy Music

You can listen to the music saved in your phone through a music player.
When you copy music files to your phone, the music player searches the device for the files and builds a catalog of your music.

Download Applications From Play Store

Steps to down an APP from the Play Store:
Enter the "Play Store" > login a Google account > search for the APP and download.

Manage Applications

Enter "Settings" > "Apps". Tap any application to view the information, and also you can force the app to stop working or uninstall it.

Maintenance and Safety

Please read this safety information carefully so that you can use your phone in safe condition:

1. ☺ Around children

Please be very careful with children and your phone. A mobile phone contains a number of detachable parts, while swallowing these little parts may cause asphyxiation.

2. ᕼᐧᐧ Hearing damage

Prolonged listening at very high volume may damage your hearing. Please reduce the volume to the lowest possible level when listening to music or having a call.

3. ⚠ Fire hazard

Do not leave your phone near heat sources such as radiators or cookers. Do not leave your phone charging near flammable materials as there is a risk of fire.

⑨

4. ⊕ Contact with liquid

Do not expose the phone to liquid or touch it with wet hands, since damage caused by water may be irreparable.

5. 🔋 Do not destroy the battery and charger

Never use a battery or charger that has been damaged. Keep the battery away from magnetic objects as the latter might cause short–circuit of your battery and destroy it permanently. As a general rule, you should not expose the battery to very high or low temperature (below 0℃or above 45℃). Differences in temperature may reduce service life.

6. 📳 Shock and impact

Protect your phone from shock and impact. Some parts of the phone are made from glass and might break if the phone is dropped or is subject to severe impact. Avoid dropping the phone and touching the screen with sharp objects.
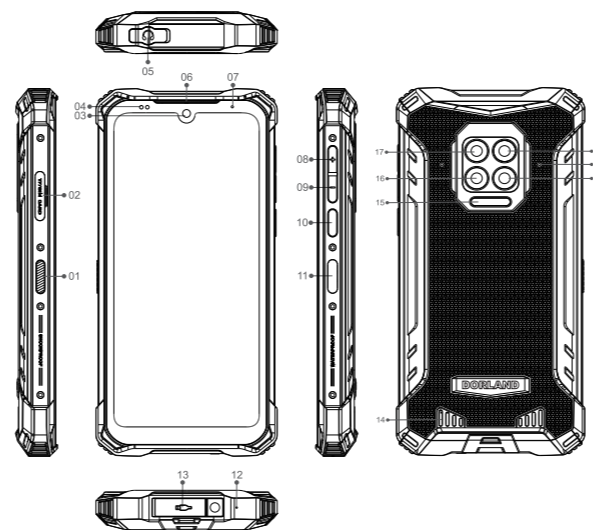
7. 🛠 Maintenance

Do not try to disassemble your phone as there is a risk of electric shock. If you want to clean your handset, please use a dry cloth (do not use a solvent, such as benzene or alcohol).

8. 🌡 Temperature

Do not use the phone in the environment at too high or too low temperature, never expose the mobile phone to burning sun or totally wet surrounding. The suitable temperature for the phone is 0℃ to 45℃.

⑩

Device Layout

01: Custom Button
02: TF/SIM Card
03: Front Camera
04: Sensor
05: Headset Interface
06: Receiver
07: Indicator Lamp
08: Volume+
09: Volume-
10: Power Button
11: Fingerprint Recognition
12: Microphone
13: Type-C Interface
14: Horn
15: Flash Lamp
16: Portrait Camera
17: Wide Angle Camera
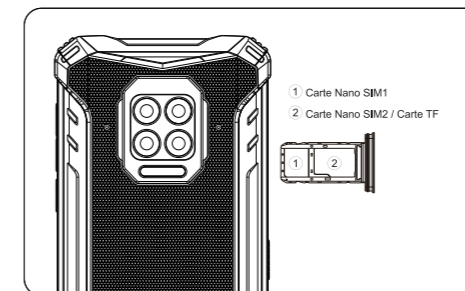18: Infrared Forehead Thermometer
19: Air Hole
20: Main Camera

⑪

Correct Card Installation

You can install two Nano-SIM cards or a Nano-SIM and a Micro SD card.

How to insert SIM card:

1. Ensure the device is power off.
2. Open the waterproof plug.
3. Unlock the card tray with a card pin and load the SIM card as below shown.
4. Lock it back and close the waterproof plug.

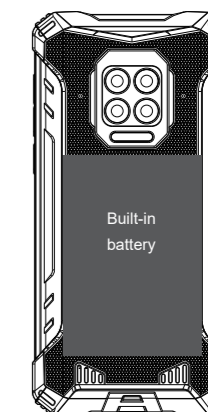1 Carte Nano SIM1
2 Carte Nano SIM2 / Carte TF

Caution
Only Nano SIM card or MicroSD card is supported by this device. Don't modify or alter your SIM card.
Do not splash water to the phone when SIM card slot, headphone jack or USB slot is open.

⑫

Battery

- Before using the device for the first time,you must charge the battery
- You can track your battery status with the icon showed on the top right of the screen.

Built-in battery

Safety Instructions

- Use only DORLAND-approved batteries specifically designed for your phone. Incompatible batteries can cause serious injury or damage to your phone.
- Never place batteries or phones on or in heating devices, such as microwave ovens, stoves, or radiators. Batteries may explode when overheated.
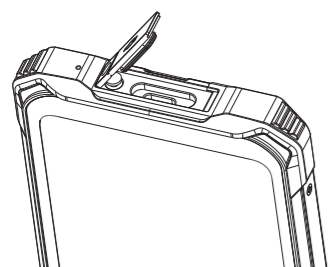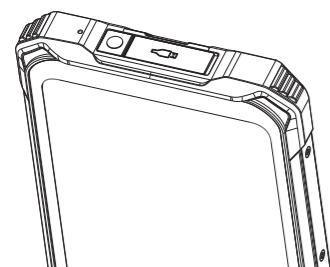
⑬

Attention

In order to ensure your smartphone can survive after soaking in water, please make sure the following thing:
- Plug the USB Rubber

①

②

⑭

Package Content

Charger
data line
Mobile phone pin
User manual
Explosion proof certificate
Headphone jack adapter
Optional modules, etc

The items supplied with the device and their images may vary by region.

⑮

Precautions

- Keep the phone far away from magnetic equipment, its radiation may erase the information stored on magnetic devices.
- Do not place this phone, battery and charger in containers with strong magnetic field, such as induction cooker and microwave oven, which may cause circuit failure, fire, or explosion.
- Do not place this phone, battery and charger in too high or too low temperature zone, which may cause the product, battery and charger failure, fire or explosion.
- When charging, the battery should be maintained at an ambient temperature between 0 ℃ and 45 ℃. The temperature of battery storage environment should be maintained between -20 ℃ and 60 ℃. If the battery is in hot or cold areas, the battery capacity and life may be reduced. When the temperature is below 0 ℃, battery performance is particularly limited.
- When the phone is close to ears, do not turn it on or off, that is bad to your health.
- To comply with the provisions of RF leakage, when you wear the phone or use its data function, please keep its antenna away from your body at least 1 inch (2.5cm).
- The phone's signal interference may influence the adjacent TV, radio or computer.
- Please comply with RF radiation international norms, please use the designated product accessories.
- When using this phone, please comply with the relevant laws and regulations, and respect others' privacy and legal rights.
- Before cleaning and maintenance, please turn it off. If it is still connected to the charger, you should unplug the charger from the power outlet, and disconnect charger and phone to avoid electric shock, short-circuit of battery or charger.
- Do not disassemble the phone. Only authorized institutions are allowed to repair this product.

⑯

Safety warning

- Please turn it off before the phone is close high-precision control electronic equipment, or it may cause electronic equipment failure.
- Equipments will be influenced by the phone include: audiphones, pacemakers, fire alarms, automatic doors and other automatic control equipments. Users who are using electronic medical auxiliary equipment should confirm whether the radio wave will influence it or not with service center of the equipment.
- Pacemaker manufacturers recommend that the distance between the phone and a pacemaker should be kept at least 15 cm to avoid potential interference. Please do not carry the phone in your breast pocket; Please use the different side ear with pacemaker to anwser calls to minimize the potential interference.
- Please do not bring the phone into the operating room, intensive care unit (ICU) or coronary care unit (CCU).
- In medical facilities where using mobile phones is prohibitive, please follow their instructions and regulations.
- Please pay attention to tone, volume, vibrate settings of the phone, so as not to influence heart disease patients.
- In inflammable and explosive areas, do not remove, install or charge the battery, so as not to cause explosion or fire.

⑰

Enterprise Website

⑱