

Quick Installation Guide

- UC350
- UC350 Pro

THANKS FOR CHOOSING DINSTAR'S PRODUCTS!

Please read this guide carefully before installing the device. If you need any technical support, Please contact us.

Tel: +86 755 61919966

Email: support@dinstar.com

Web: www.dinstar.com

1 Models and Interfaces

	MCU Board	User board (FXO, FXS, FXU, DTU)
UC350	2*Network Ports 1*USB 2.0 Port 1*Console Port	FXS Board: 2*RJ45 with 8 FXS FXO Board: 2*RJ45 with 8 FXO FXU Board: 2*RJ45 with 4 FXS and 4 FXO DTU Board: 4*RJ45 with 4 E1/T1 Ports
UC350 Pro	4*Network Ports 2*USB 2.0 Ports 1*USB 3.0 Port 1*Console Port 1*HDMI Port	

2 Description of Indicators

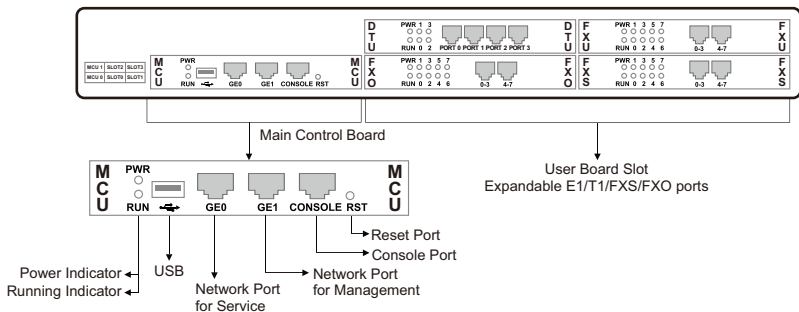
Type	Indicators	Definition	Status	Description
MCU board	PWR	Power Indicator	OFF	There is no power supply or the power supply is abnormal
			ON	The device is powered on
	RUN	Running Indicator	Flashing	The device is initialized successfully and running normally
			ON	The system is initializing
			OFF	The device is not running normally
FXS/FXO/ FXU User Board	PWR	Power Indicator	ON	The power supply is normal
			OFF	The power supply is not normal
	RUN	Running Indicator	Fast Flashing	The system is starting up
			Slow Flashing	Part of the port registered successfully
	FXS/FXO	FXS/FXO Indicator	ON	The FXS port is in off-hook (in-use) status
			OFF	The FXS port is in on-hook status
DTU User Board	PWR	Power Indicator	OFF	There is no power supply or the power supply is abnormal
			ON	The device is powered on
	RUN	Running Indicator	Slow Flashing	The device is initialized successfully and running normally
			ON	The system is initializing
			OFF	The device is not running normally

	E1/T1	E1/T1 Indicator	ON	E1/T1 line is connected
			OFF	E1/T1 line is disconnected

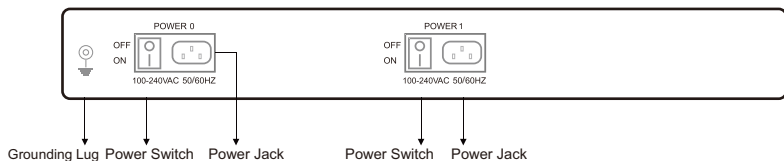
3 Indicators and Ports

► UC350

Front View:

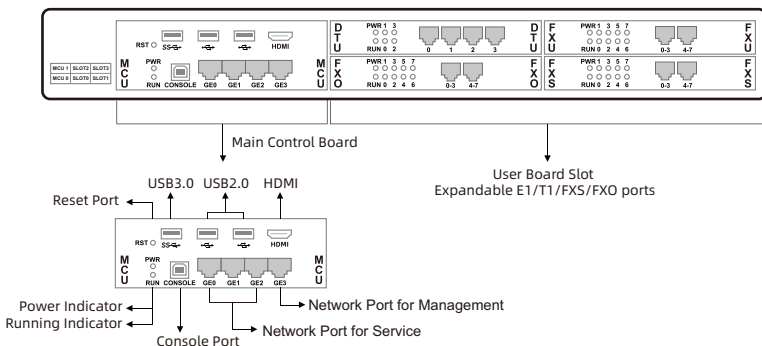


Back View:

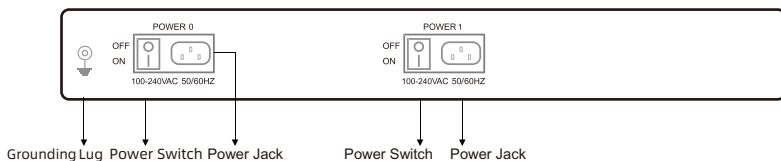


► UC350 Pro

Front View:



Back View:

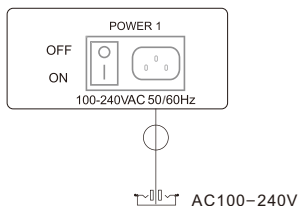


4 Installation Attentions

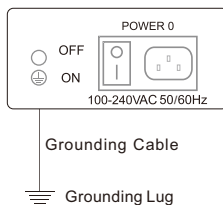
- ◆ The adapter of the gateway accepts DC220V 10A dual power input. Please ensure it is workable and safe.
- ◆ To reduce the interference to telephone calls, please separate power supply cables from telephone lines.
- ◆ To guarantee running of the gateway as usual, please make sure that there is sufficient network bandwidth.
- ◆ For better heat dissipation, please place the gateway on a level surface and ensure space for other devices.

5 Installation Instructions

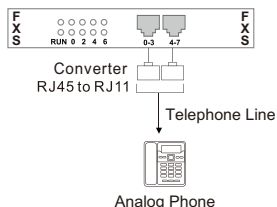
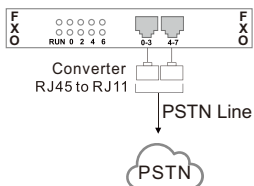
- Connect with Power Input



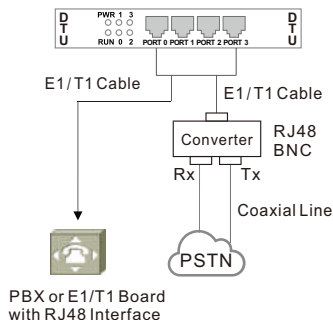
- Connect with Grounding Lug



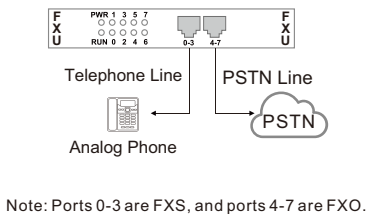
- Connect telephone line to the FXS port and connect PSTN line to the FXO port



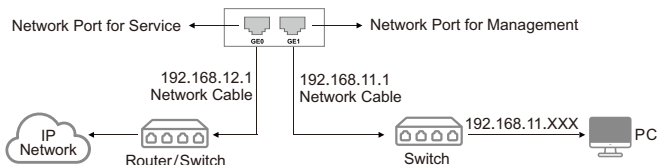
- Connect to E1/T1 Ports



- Connect to FXS ports and FXO ports



- Connect with Ethernet



Note: The UC350's default network port for management is the GE1 port, and the UC350 Pro's default network port for management is the GE3 port.

6 RJ45 Wire Sequence

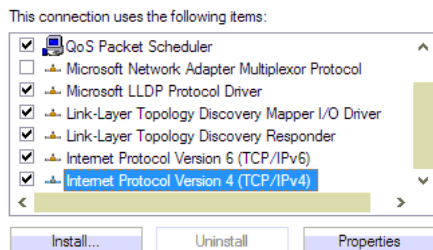
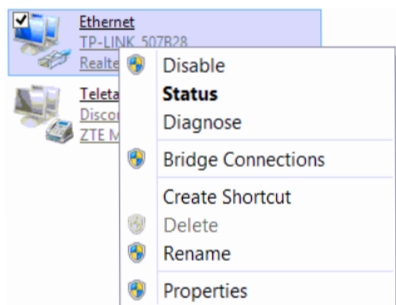
UC350 series products support RJ45 Interfaces for FXS/FXO connections. One RJ45 cable can be split into four pairs of RJ11 interfaces. The outlook wire sequence of RJ45 cable is shown as follows:



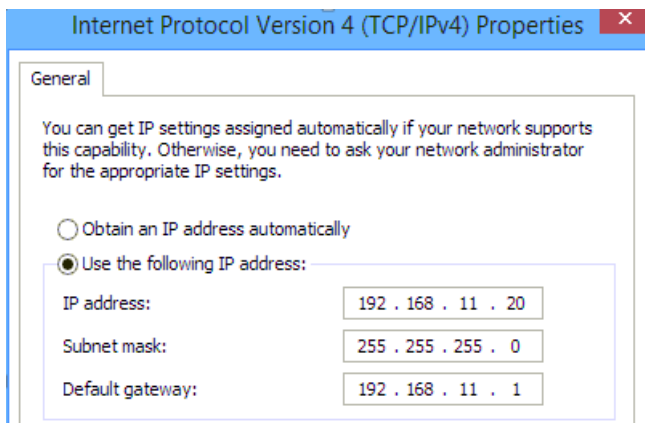
7 Modify PC's IP Address

To log in to the Web Management System of the device, firstly, you need to modify the IP address of the PC that is used to access the device and to make it at the same network segment as the device's network port of management.

- 1 On the PC, click '**Network (or Ethernet)**' → '**Properties**'.
- 2 Double-click '**Internet Protocol Version 4 (TCP/IPv4)**'.



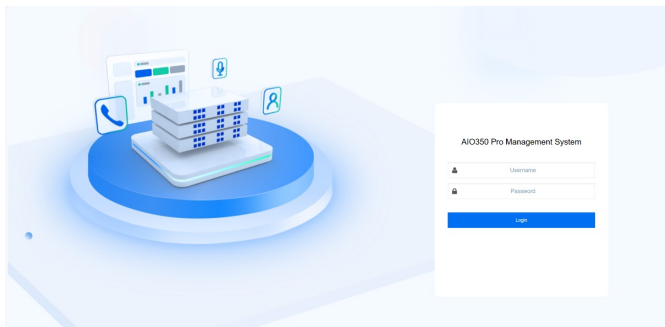
- 3 Select '**Use the following IP address**', and then enter an available IP address '192.168.11.XXX' which is at the same network segment with '192.168.11.1'.



8 Login Web GUI

Open a browser and enter the default IP address of the network port for management: <https://192.168.11.1>. Enter the username and password to log into the system. The username and password are admin/admin@123#.

Note: The UC350's default network port for management is the GE1 port, and the UC350 Pro's default network port for management is the GE3 port. New devices can only modify the IP address through the management port. The UC350 Pro login interface is shown below:



9 Check Network Status

Check the network status on the "**System->Network**" page.

Network




Setting	VLAN Sub Interface	Static Route	Hosts	DDNS	Service & Port	Firewall
GE0 Edit						
IPv4	Enabled				IPv6	Enabled
Type	Static				Type	Static
IP Address	172.28.21.21				IP Address	2020:2121:fe80::2c47:f2ff:fe35:b100
Netmask	255.255.0.0				Prefix Length	64
Gateway	172.28.1.1				Gateway	2020:1
Preferred DNS	8.8.8.8				Preferred DNS	2020:1
Alternate DNS	114.114.114.114				Alternate DNS	
Mac Address	2e:47:f2:35:b1:00					
RX / TX (Per Second)	11.79 KB (96 Pkts.) / 1.74 KB (6 Pkts.)					
RX / TX (Total)	1.70 GB (22150403 Pkts.) / 344.55 MB (667056 Pkts.)					
GE1 Edit						
IPv4	Not Config				IPv6	Not Config
Type	Static				Type	Static
IP Address					IP Address	
Netmask	0.0.0.0				Prefix Length	
Gateway					Gateway	
Preferred DNS					Preferred DNS	
Alternate DNS					Alternate DNS	
Mac Address	2e:47:f2:35:b1:01					
RX / TX (Per Second)	5.01 KB (84 Pkts.) / 0 Bytes (0 Pkts.)					
RX / TX (Total)	1.28 GB (21045799 Pkts.) / 360.00 B (4 Pkts.)					

10 Modify Network Configuration

You need to modify the IP address of the network ports for service so that the ports and the upstream network are in the same network segment.

Firstly, you need to physically connect the device's network port for management. Then log into the device by entering the IP address of the network port for management in the web browser and click "System->Network" to configure the IP address of the network ports for service. Click "Save" and "Reset" to make the settings take effect.

Edit Network

Interface	GE0 
MTU	1500
Metric	
IPv4	
IP Address	172.28.21.21
Netmask	255.255.0.0 
Default Gateway	172.28.1.1
Preferred DNS server	8.8.8.8
Alternate DNS server	114.114.114.114
IPv6	
Mode	Static address 
IP Address	2020::2121/64
Default Gateway	2020::1
Preferred DNS server	2020::1
Alternate DNS server	2020::1

11 Create SIP Extensions

Click "Extension & Call Group->SIP Extension" to create the SIP extension: add/delete/disable/enable, etc. UC350 Pro supports batch add or import account files.

Note: when add the extension, the profile should be chosen as the corresponding one.

New SIP Extension

SIP Extension SIP Phone

Basic Settings

Status	<input checked="" type="checkbox"/>
Index	1
Name	<input type="text"/>
Extension	<input type="text"/>
Password	<input type="password"/>
Classification Tag	<input type="text"/>
DID	<input type="text"/>
Outbound CID	<input type="text"/>
SIP Profile	1-< GE3_default >

After setting, you need to click "apply" to make the settings take effect.

The registration status of SIP extension can be checked on the "Extension & Call Group->SIP Extension->Status" page.

If the status of a newly added SIP account is "registered", it means that the device accepts the registration of the extension.

If the status of the SIP account is "unregistered", it means that the device rejects to register the extension.

12 Add Trunk

- SIP Trunk

SIP trunks are used to connect other SIP terminals or service providers. When adding a SIP trunk, you should choose corresponding SIP profile based on your current network. The SIP trunk supports UDP/TCP/TLS.

You can create a new SIP trunk on the "Trunk & Route->SIP Trunk->Setting" interface, and SIP trunk status can be checked under "Trunk & Route->SIP Trunk->Status" interface.

New SIP Trunk

Status	<input checked="" type="checkbox"/>
Index	5
Name	
Address	
Port	
Outbound Proxy	
Port	
Transport	UDP
Register	<input checked="" type="checkbox"/>
From Header User Part	Caller's Number
From Header Display Name	Caller's Number
From Header Host	Local Address
Heartbeat	<input checked="" type="checkbox"/>
AutoCLIP Profile	Off
DNIS	<input checked="" type="checkbox"/>
SIP Profile	1-< GE3_default >
Outbound Codec Profile	1-< default >
Extra Param	
Inbound Concurrency	9999
Outbound Concurrency	9999
Total Concurrency	9999

- FXO

You can also create Trunk/FXO. It is an alternative to support calls go through or from PSTN.

New FXO Trunk

Basic Settings	
Status	<input checked="" type="checkbox"/>
Slot	0
Port	0
Number	
Autodial Number	

- E1/T1

You can set up ISDN PRI/SS7 connections via digital E1/T1 ports. Please be sure that the E1/T1 physical connection is well connected, and PRI status is in up and active status before configuring the call routing.

New E1/T1

PRI Trunk	
Protocol	ISDN
Switch Side	User Side
Alerting Indication	ALERTING
PRI Parameter	
Calling Party Numbering Plan	ISDN/Telephony numbering plan
Calling Party Number Type	Unknown
Screening Indicator for Displaying Caller Number	User-provided, not screened
Screening Indicator for No Displaying Caller Number	User-provided, not screened
Called Party Numbering Plan	ISDN/Telephony numbering plan
Called Party Number Type	Unknown
Information Transfer Capability	Speech

13 Configure Inbound / Outbound Route

On the "Trunk & Route->Route" interface, you can configure routes for incoming calls and outgoing calls, and select the call Source and Destination addresses for the route. When the configured route is activated, the system will match the route based on the priority index. The key configuration of route is at "condition" part. Here, you can configure the route based on the Caller/Called Number prefix and time.

New Route

Priority	<input type="text" value="299"/>
Name	<input type="text"/>

Condition	
Source	<input type="checkbox"/> Select All Source list 0/4015 <input type="checkbox"/> Any <input type="checkbox"/> Local Extension <input type="checkbox"/> SIP Trunk / 21.111 <input type="checkbox"/> SIP Trunk / TG-47 <input type="checkbox"/> SIP Trunk / TG-1.42 <input type="checkbox"/> SIP Trunk / 172.28.66.79
	<input type="checkbox"/> Select All Target list 0/0
Number Profile	<input type="text" value="Off"/>
Caller Number Prefix	<input type="text"/>
Called Number Prefix	<input type="text"/>
Time Profile	<input type="text" value="Any"/>

Action	
Callback	<input checked="" type="checkbox"/>
Distinctive Ringtone(Alert-Info)	<input type="text" value="None"/>
Manipulation	<input type="text" value="Off"/>
Destination	<input type="text" value="SIP Trunk / 21.111"/>
Password Type	<input type="text" value="Off"/>
Recording Profile	<input type="text" value="Off"/>
Failover Action	<input checked="" type="checkbox"/>

14 Regular Expression

- Caller/Called number prefix supports regular expression
Regular Expression Syntax

^	Matches the starting position in a number string. For example, ^134 matches the numbers starting with 134.
\$	Matches the ending position of a string. For example, 2\$ matches the numbers ending with 2.
	Separates alternate possibilities. For example, 2 3 4 means 2,3 or 4.
\	Marks the next character as a special character, a literal, a back reference, or an octal escape.
[]	Matches a single character that is contained within the bracket. For example, [123] matches 1, 2, or 3. [0-9] matches any digit from "0" to "9".
[^]	Matches any one character except those enclosed in []. For example, [^9] matches any character except 9.
.	Matches any single character except the newline character. For example, 3.4 matches 314, 324, 334, 344.
?	Indicates there is zero or one of the preceding element. For example, colour matches both color and colour.
*	Indicates there is zero or more of the preceding element. For example, ab*c matches ac, abc, abbc, abbbc, and so on.
+	Indicates there is one or more of the preceding element. For example, ab+c matches abc, abbc, abbbc, and so on, but not ac.
\d	Marks any digit, equal to [0-9].
/D	Marks any character that is not a digit, equal to [^0-9].
/s	Marks any blank character such as a space or a tab.
/S	Marks any character that is not a blank character.

- Examples of Regex Syntax:

^0755	Matches the phone numbers with starting digits of 0755.
^0755 ^8899 ^0110	Matches the phone numbers with starting digits of 0755, 8899 or 0110.
^1 [358][0-9]{9}\$	Matches the phone numbers with the first digit as 1, the second digit as 3, 5 or 8, the left nine digits as any of 0 to 9.

15 Basic Operation

Dial *114# to query the telephone number of a FXS port;
Restart the device:

- ① Dial *111# to restart the device;
- ② Click "system->Reboot" menu to perform reboot.

16 More Details

This document only provides instructions for quick installation and basic configuration. For detailed configuration and parameter explanations, Please refer to User Manual or ask for technical support.

IP COMMUNICATION SOLUTIONS

Shenzhen Dinstar Co., Ltd.
Web: www.dinstar.com

