

System Components

X16^{plus} Server



Standard Digital Telephone



EKT8 Card



CO2 Card



VOIP Card



WIFI Dongle



Bluetooth Dongle



IP8g IP Telephone



IP9g IP Telephone



Tel Lines Cords



Ethernet Data Cable

DECT Cordless IP Phone & DECT Base



Add-on DECT Cordless IP Phones



Add-on DECT Cordless IP Speakerphone



Items vary depending on bundle purchased. Expansion cards are installed before shipment on some bundles.

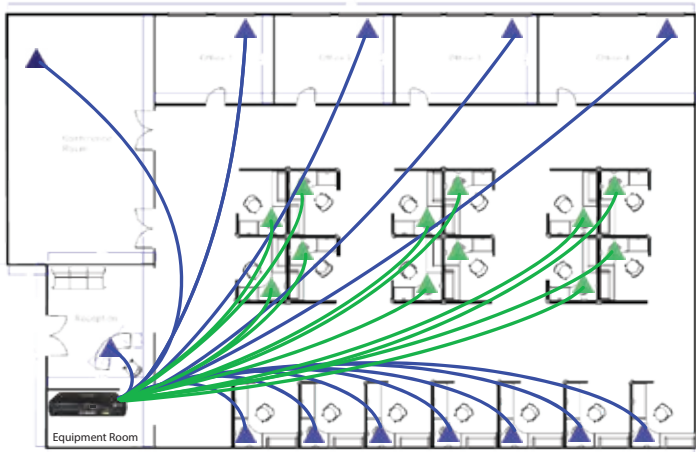
Wiring

Telephone System Wiring/Cabling must be “Home-Runs”. This means that each telephone location must have a cable from that location to where the server is located (equipment room).

X16^{plus} base configuration has 8 ports for Standard Digital Telephones and allows for expansion to 16 Standard Digital Ports with the optional EKT8 Card.

When the optional VOIP Card is equipped X16^{plus} supports up to 16 IP devices. When both digital and VOIP phones are used the X16^{plus} maximum configuration is 32 phones.

- Standard Digital Telephones (16 max) must be cabled using Cat3,4,5 or 6.
- IP Phones must be cabled using Cat5e, 6 or greater. IP Phones can be installed on existing computer (Ethernet Cat5e or greater) cabling!
- IP Phones can be connected to the server wirelessly using the WIFI Dongle (optional). WIFI should only be used when necessary. **WIFI is often NOT RELIABLE and is NOT RECOMMENDED** as a total system installation solution.
- Bluetooth for headset use is built into IP8g and available on the IP9g using an optional BT Dongle.

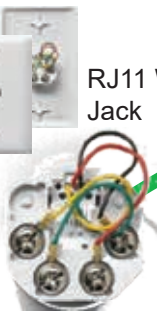


Connect XD10 (Standard Digital) Telephones

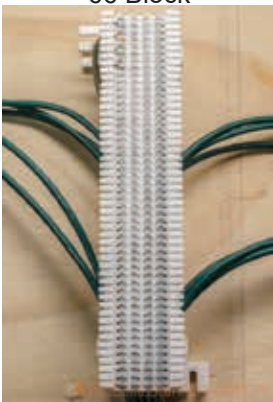
X16^{plus} Server



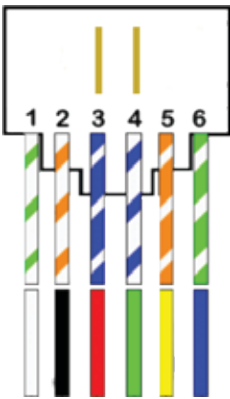
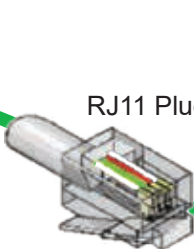
RJ11 Wall Jack



66 Block



RJ11 Plug



There are 6 pin positions in a RJ11. Only the two in the center are used for XD10 Telephones.

Use UTP (Unshielded Twisted Pair) cable. The center two pins of the RJ11 wall jack and plug are used. Connect one “PAIR” to the center two pins at the wall jack. Use the **White/Blue-Blue/White** pair.

- **White/Blue to GREEN**
- **Blue/White to RED**

At the RJ11 plug insert the White/Blue, Blue/White pair into the center two pins and crimp the connector. (Connectors and crimping tool can be purchased at Home Depot.) Then insert the RJ11 into X16^{plus} XBLUE Digital Phone Ports 1-8. Each port operates one XD10. Ports 9-16 are optional.

You may be able to use cables that are already in place. Usually telephone cables are terminated on 66 Blocks (see pic). Determine if the complexity of using existing cables is more than you want to do. If so, you can find telephone cable installers who can help.

To determine if the person is up to the task ask them to describe the “66 Block” to you. If they cannot, pick someone else.

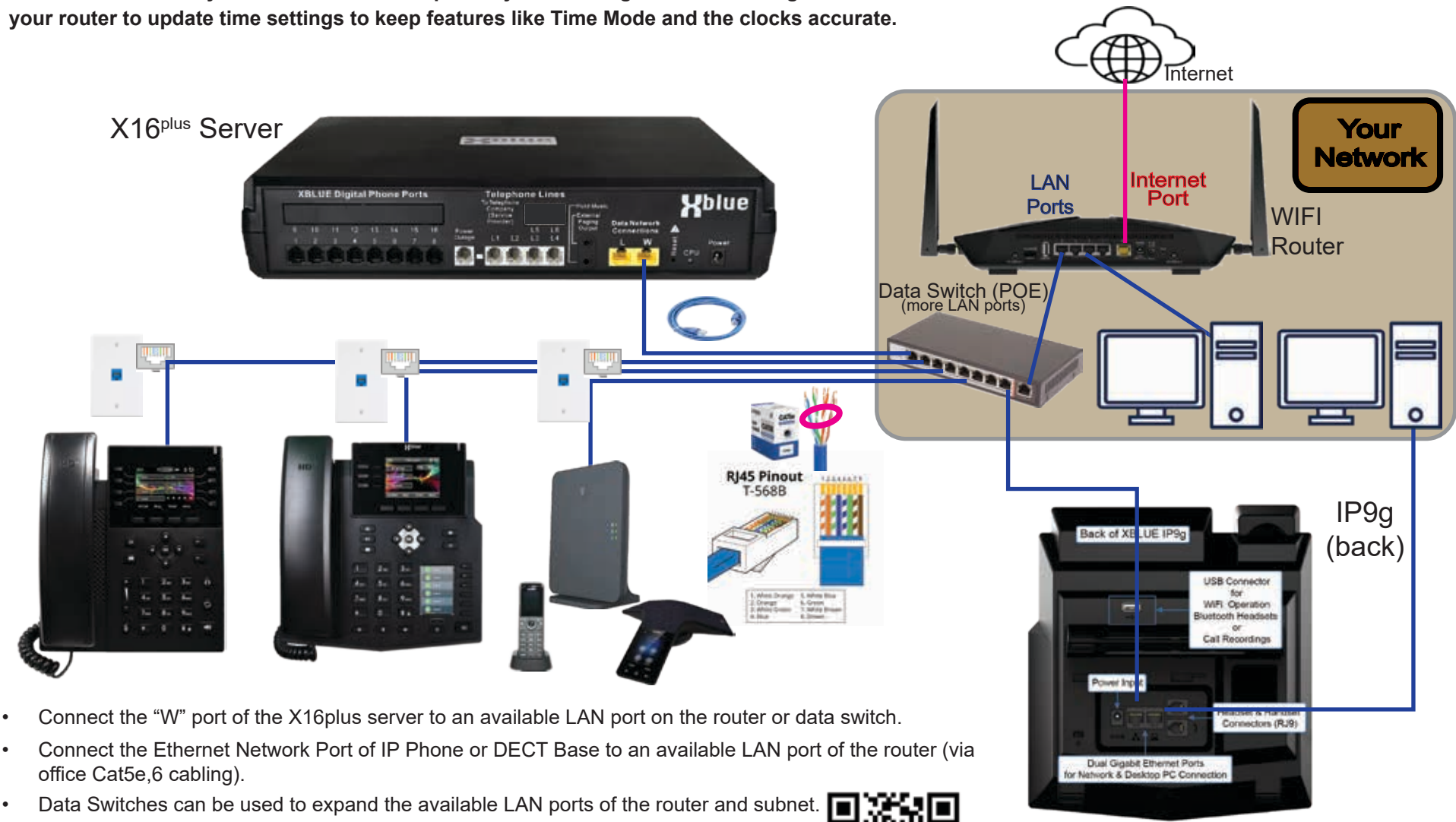
Make sure there are **NO OTHER devices or terminals on the wires that go from the Digital Port to the XD10 telephone!**

Connect IP Phones (IP8g, IP9g, DECT Cordless Base)

Installation of IP Phones and other IP devices is done using your existing LAN (Local Area Network). These devices use your network. IP Phones are not connected to the Internet. All IP devices are connected to your router as any other IP device (computers, security systems, cameras, etc.) The optional VOIP Card is required for VOIP devices.

Your router isolates your LAN from the Internet. It's very important that all XBLUE voice devices are connected to the same LAN. **If you are using more than one router on your network you have more than one LAN.**

You should connect your X16^{plus} server "W" port to your LAN regardless of having IP Phones or not. The X16^{plus} utilizes services on the Internet via your router to update time settings to keep features like Time Mode and the clocks accurate.



- Connect the "W" port of the X16plus server to an available LAN port on the router or data switch.
- Connect the Ethernet Network Port of IP Phone or DECT Base to an available LAN port of the router (via office Cat5e,6 cabling).
- Data Switches can be used to expand the available LAN ports of the router and subnet.
- POE data switches can be used to power the IP Phone and eliminate the power adapter at the phone.

<https://xblue.com/product/8-port-poe-switch/>

Connect Telephone Lines



Use the telephone line cords provided in your bundle to connect your telephone lines to the X16^{plus} server. Only the number of lines you have subscribed to will be functional. On the Service Provider modem there will be *analog* line ports. The labeling on the Arris modem shown is Tel 1, Tel 2... ect. From the Service Provider modem connect from Tel 1 to L1 on the X16^{plus} and so on for Tel 2-L2, Tel 3-L3 and Tel 4-L4. **Use only the cords provided in the bundle to ensure that there are NO OTHER devices or terminals on the wires connecting the lines to the X16^{plus} server..**

An optional analog line expansion card is available with 2 additional telephone line ports. The maximum analog lines capacity of the X16^{plus} is 6.

Note: it is estimated that 90% of *analog* lines are now provided via VOIP from your service provider. If you have good internet service you can alternately use competitive XBLUE Telephone Lines service and eliminate the psuedo *analog* lines. XBLUE Telephone Lines are provided over the "W" port connected to your router. You can use both analog and VOIP telephone lines. 8 VOIP Lines are possible however if the analog 2-Line Expansion is installed the maximum VOIP Lines is 6.

<https://xblue.com/telephone-line-services/>

Power Up

1. Connect the X16^{plus} server power adapter to an isolated AC power outlet. (Nothing else connected to that same electrical circuit.) Then connect the power adapter to the X16^{plus} server and use the switch on the adapter power cord to turn on the server. It takes approximately 3 minutes for the system to boot up. When boot up is complete the CPU lamp on the server will flash at approximately 1sec ON/1 sec OFF.
2. Now connect telephones. As telephones are connected they will take on the extension number of the port they are connected to (Digital Phones) or the first available extension number as they are connected to your network (IP Phones).

Setup

The default (factory settings) for phone operation is: all phones ring when a telephone line is ringing. If no one answers the call it will be routed to voicemail box of extension 101 to leave a message. Many features are available for custom settings. Please refer to the information at the links (QR Code) to learn about:

- Access to the X16plus Administration (PC required)
- Admin settings that can be done at the XD10 phone
- Administrator Guide
- Auto Attendant (IVR) Setup
- Recording Greetings (Auto Attendant / IVR)
- Recording Greeting (Voicemail - each extension)
- Conference Calling

Administrator Guide Support Page (all docs)



https://xbluephonesystems.com/support/documentation/x16plus/x16plus_admin_manual.pdf



<https://xblue.com/customer-support-service/x16plus-support/>