

Vood

IP Residential Gateways

452, 452w, 453w



Quick Guide

tilgin

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Introduction -

This Quick Guide contains start-up instructions for installing and operating Vood IP Residential gateways, models 452, 452w and 453w. These Vood devices connect regular analog touch-tone telephones and your computer to IP-based networks. The **w** models add wireless functionality to the home LAN. The Vood gateways are installed on the customer premises.

Delivered with the Gateway Unit -

Confirm that you have received the following:

- A Vood gateway model 453w_A, 452w_A or 452_A
- W models should be delivered with antennae
- AC/AC Adapter 12VOUT EU 1200 mA
- 1 RJ-11 cable grey 1.8m
- Ethernet cable yellow straight UTP CAT5 1.8m
- 1 Quick Guide (this document)
- Gift Box Vood 4XX

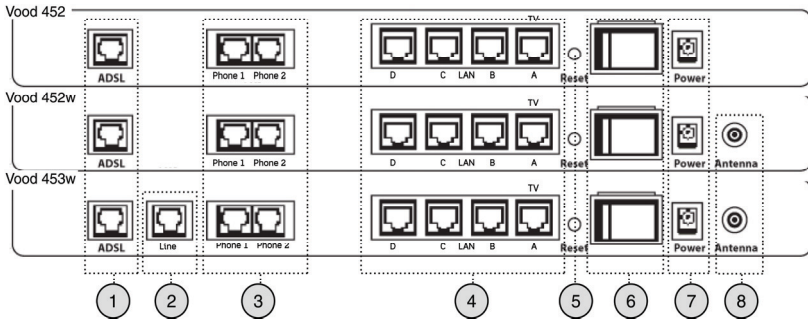
Your DSL service provider **might** also include:

- In-line filter(s)
- Wall-mount wall filter
- Two-to-one adapter
- Country-specific phone plugs.

Installing the Vood IP Residential Gateways -

1. Check your delivery against the list above.
2. Install any necessary filters or adapters.
3. Prepare your PC for connection to the Vood Gateway.
4. Set up the Vood Gateway and its connections.
5. Configure the Vood Gateway.

Vood 400 interfaces



	Interface	Outlet & Cable Color Codes	Function
1	ADSL Port	Gray	Connects to the ADSL Network (RJ-11)
2	Line Port	Orange	Connects to a standard phone line (PSTN) wall jack (RJ-11).
3	Phone 1 & Phone 2	Green (Phone 1) White (phone 2)	Connect to analog phones 1 and 2 (RJ-11)
4	LAN Ports: A,B,C,D	Yellow	Connect to the Local Area Network with Ethernet cables (RJ-45). LAN A is the preferred TV port. Your provider may use additional TV ports.
5	Reset		Reset button for the Vood gateway
6	On / Off		Switch for turning the Vood gateway on or off
7	Power / DC Power Input	Black	Connects to the AC/DC Adapter
8	Antenna		Antenna for 803.11b/g wireless LAN (only with "w" models).

Installing filters and adapters -

All devices (phone, fax machine, caller ID box, etc.) that share the phone line with the Vood require splitters. There are 2 kinds of filters: in-line or wall-mounted. **Do not install** a splitter on the phone line that goes to the Vood.

In-Line Filters.

For each device that shares the phone line with the Vood, you must add a filter between the phone jack and the device. To install an in-line filter:

1. Unplug the device's cord from the phone jack.
2. Plug the in-line filter into the phone jack.
3. Plug the phone cord into the in-line filter.
4. Make sure the phone, fax machine, caller ID box, or other device still works.

Wall-Mounted Line Filters.

In the case of a wall-mount phone, install the wall-mount filter between the wall-mount plate and the phone. To install the wall-mount filter:

1. Remove the phone.
2. Connect the wall-mount filter to the wall plate.
3. Reconnect the phone.
4. Make sure the phone still works.

Two-to-One Adapters.

If your gateway and a telephone device are going to share the same phone jack, use a two-to-one adapter. In-line filters should only be connected to two-to-one adapters after the two-to-one adapters have been installed. To install the two-to-one adapter:

1. Unplug the telephone device (phone, fax machine, caller ID box, etc.) from the phone jack.
2. Plug the adapter into the phone jack.
3. Plug the in-line filter into one of the two sockets of the two-to-one adapter. The other socket will be used for the DSL cable.
4. Plug the telephone cord into the in-line filter.
5. Make sure the phone, fax machine, caller ID box and other devices work.

Prepare Your Computer -

Your PC must be configured properly to be able to surf the Internet. The PC's network card and network properties must be configured to obtain an IP address from the unit's built-in DHCP server.

Configuring the PC -

Before connecting your computers to the Vood, make sure that the network configuration is set to TCP/IP protocol and that the IP address is obtained automatically.

Depending on the operating system, you might have to reboot the computer after changing the network configuration. Consult the documentation provided with the computer if a problem arises.

Ethernet Installation -

You should make sure your computer supports an Ethernet adapter. If your computer does not already have one installed, you may want to install an adapter or use the wireless LAN installation method.

To connect the Vood to the PC's Ethernet port:

1. Connect the Ethernet cable to one of the Ethernet ports on the Vood.
2. Connect the other end of the Ethernet cable to the Ethernet port on your computer.
3. Plug the DSL cable (phone line) into the DSL port on the Vood. If you are using a two-to-one adapter, plug the DSL cable into the unused socket.
4. Plug the power adapter into the power outlet and the Vood.
5. If the Power LED does not come on, make sure the Vood is turned on.
6. Power on the PC. Your Vood's Ethernet light will come on if everything is connected correctly.

Wireless LAN (WLAN) Installation (w models only) -

Make sure your computer supports a WLAN adapter. If your computer does not already have one installed, you may choose to install one or you may choose to use a cabled Ethernet connection.

To connect the Vood to the PC's WLAN port:

1. Install the Vood antenna if it's not already installed.
2. Plug the DSL cable (phone line) into the DSL port on the Vood. If you are using a two-to-one adapter, plug the DSL cable into the unused socket.
3. Plug the power adapter into the power outlet and Vood.
4. If the Power LED does not come on, make sure the Vood is turned on.
5. Power on the PC - Your Vood WLAN light will flash if everything is functioning correctly.

Configuring WLAN Cards for Windows Machines

Your wireless LAN card should be packaged with a profile configuration utility. Install and run this utility. It will guide you through configuring your WLAN card and connecting to the Vood gateway.

If you have received instructions from your service provider regarding WLAN security level settings, you should follow these instructions when running the profile configuration utility.

WLAN cards currently available have numerous options; if the instructions provided with the WLAN card fail, and/or your service provider does not recommend specific WLAN settings, use the default Vood WLAN port settings below. They will determine the configuration.

Enter these values if you are prompted to do so by the profile configuration utility:

- SSID for 453w = Tilgin-IAD453W
- SSID for 452w = Tilgin-IAD452W
- Beacon Period = 200

- DTIM Period = 2
- RTS Threshold = 2347
- Frag Threshold = 2346
- Power Level = Full
- B/G mode = Mixed
- Wireless Security level = None

After you have saved the new WLAN profile you should make sure your PC's network settings are configured properly. See below for more details.

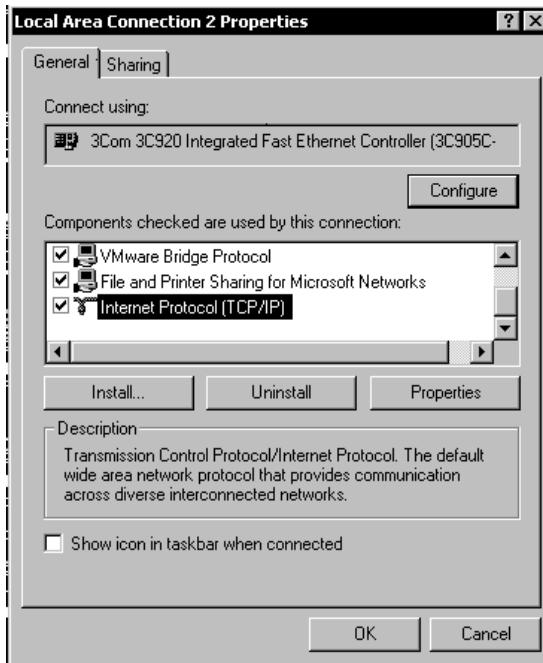
Network Settings for MAC 7.6 and Above

- Locate the Control Panel menu and select **TCP/IP**.
- Locate the Connect menu and select **Ethernet**.
- Locate the Configure menu and select **Fixed IP address**.
- Enter an address within the 192.168.1.2 to 192.168.1.255 range (i.e. 192.168.1.100). All other fields should be blank.
- Close the TCP/IP Control Panel.
- Click **Save** to save the current configuration.

Network Settings for Windows-based Machines-

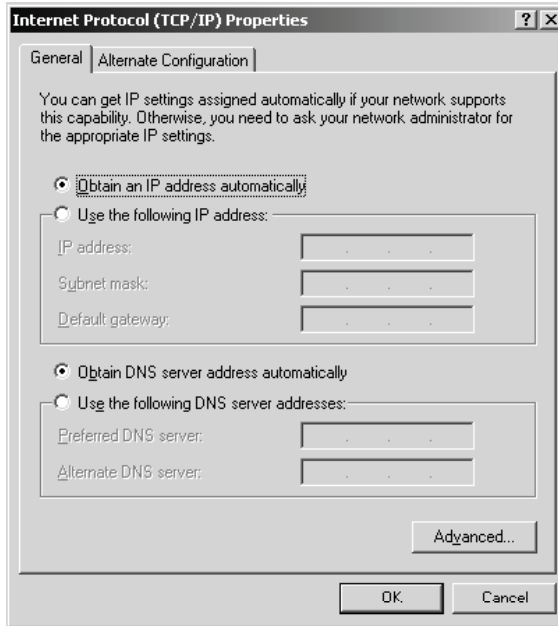
For Windows-based machines, follow the procedure below. This procedure applies to both cabled Ethernet and WLAN installations.

1. Right click on the **Network Neighborhood** or My Network Places icon on the desktop.
2. Select **Properties** from the menu.



3. If multiple network connections are available on the PC, right click on the **Local Area Connection** (for a cabled Ethernet installation) or **Wireless Network Connection** (for a WLAN installation) and select **Properties**.
4. Select the **General** tab.
5. Identify the TCP/IP -> network card entry. If there is no entry, then something has not been installed properly.

6. Highlight the TCP/IP -> network card entry.



7. Click **Properties**.
8. Click **Obtain an IP address automatically**.
9. Click the **OK** button and close the dialog box. Then click the **OK** button again to save the changes and exit Network Properties.
10. Restart your PC.

Install the Vood 452, 452w or 453w and its Connections

When the computer is properly configured it can be connected to the Vood by means of either an Ethernet cable with an RJ-45 connector or a WLAN link. The Ethernet cable should be connected to a port marked LAN A, LAN B, LAN C or LAN D [#4 on the **Interfaces** page].

The other end of the cable should be connected to the Ethernet network interface of the PC.

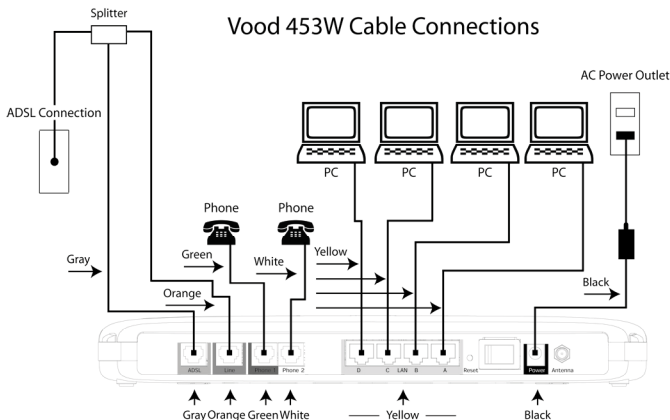
Note: Connect your PC to only one interface of the Vood (cabled Ethernet or WLAN).

Check that the LAN connector green light on the Vood is lit [it is # 4 on the **Interfaces** page].

Proper Placement of the Vood Unit

Gateways should always be installed away from heat sources and direct sunlight. Gateways and power supplies are electrical devices that can overheat without ventilation. Do not cover or crowd them with objects or clothing that prevents good ventilation.

Vood cable attachments



Each outlet and its connected cable will be color coded as indicated above. Either of the two telephones displayed above may be replaced by a fax machine.

Connecting Voice Over IP Telephones

If you have a subscription for IP telephony with your service provider, you can connect touch-tone telephones to the two phone ports [# 3 on the **Interfaces** page]. Each port can handle up to five telephones in cascade. Use telephone cables with RJ-11 connectors.

Note: Do not connect either of the two Vood 453W phone ports to a telephone wall jack; this might damage the device or other telephone network equipment.

Standard Telephone Service Using the Vood Line Port

The Line Port connection [# 2 on the **Interfaces** page] on the back of the Vood unit uses a standard telephone cord to link to a standard (PSTN) telephone line. It is designed to provide backup standard service for the telephone lines connected to Phone 1 and Phone 2 ports [# 3 on the **Interfaces** page] in the event that the unit's IP connection fails. The extent to which this backup service is available has been determined by your provider.

Once this connection has been properly installed you do not need to do anything different for this feature to be in effect.

Front Panel LEDs

The LED lights on the front panel indicate the status of power and connections to the Vood gateway. Please see the following table for an explanation of what the LEDs indicate.

LED	Off	Solid Green	Blinking Green
Power	<i>Power not applied</i>	<i>Normal operation</i>	<i>N/A</i>
Status	<i>No WAN address obtained</i>	<i>The 453W has received a WAN address and successfully contacted a managing server, the Vood Centre Manager (VCM)</i>	<i>Slow flash: the 453W is attempting to contact the VCM Quick flash: the 453W is interacting with the VCM (loading software, etc.)</i>
Wireless LAN <i>not 452</i>	<i>No link established</i>	<i>Link established</i>	<i>N/A</i>
LAN = 4 LEDs	<i>No link established</i>	<i>Link established</i>	<i>N/A</i>
Line <i>only 453w</i>	<i>Line port not connected to Phone 1</i>	<i>Line port active: either connected to Phone 1 and/or off hook</i>	<i>Quick flash: incoming call on PSTN line</i>
Phone 1 Status	<i>Phone 1 failed to register with a managing server</i>	<i>Phone 1 is registered or configured not to register</i>	<i>Quick flash: message waiting</i>
Phone 1 Hook	<i>Hook on</i>	<i>Hook off</i>	<i>Quick flash: incoming call</i>
Phone 2 Status	<i>Phone 2 failed to register with a managing server</i>	<i>Phone 2 is registered or configured not to register</i>	<i>Quick flash: message waiting</i>
Phone 2 Hook	<i>Hook on</i>	<i>Hook off</i>	<i>Quick flash: incoming call</i>
ADSL	<i>No link established</i>	<i>Link established</i>	<i>Slow and regular: training. Fast and irregular: activity</i>

Configure the Vood IP Residential Gateway

The Vood is designed to be a plug & play device when pre-configured and managed by your service provider. However, the level of configuration needed can vary from completely plug & play to full manual configuration, depending on what your service provider offers. Follow any specific configuration instructions you may have received from your service provider.

Connecting to the Network

There are several options available for configuring the Vood. The method that has been chosen depends on the network layout and the IP telephony service providers' network. Different methods involve different levels of user interaction. The method described in this guide is the automatic provisioning method.

Note: If your service provider has chosen some other configuration method, they will have provided specific instructions regarding the configuration procedures and settings.

Automatic Provisioning

The Vood 400 series will automatically attempt to establish a connection to your service provider. If the device has been properly connected, an automatic configuration will begin.

The Vood is pre-loaded with software but at this stage a check is performed to determine if there is newer software available. If there is, it will perform a software upgrade procedure. The software upgrade procedure may take a couple of minutes.

- Connect the power cable to the power connector [# 7 on the **Interfaces** page] on the back of the unit. Plug the power supply adapter into a power source.
- Check that the power LED on the front panel is lit.

The software upgrade procedure may take a couple of minutes and during this time the status LED on the front panel will either be out or flashing. When the status LED is steady, the unit is operational.

If the status LED on the device never stops flashing, contact your service provider.

Troubleshooting Tips

- When no green light is seen on the WAN connector after connecting to the ADSL port [# 1 on the **Interfaces** page], check that the power cord is properly connected.
- If you do not hear a dial tone after hook off on the telephone handset, check that the telephone line cord from the telephone is connected to the unit.

If these actions do not solve the problem, contact the service provider or vendor that supplied your Vood Gateway.

Safety Information

Tilgin products are designed and tested to meet the international Safety of Information Technology Equipment standard. This standard provides general safety design requirements that reduce the risk of both personal injury and product injury, protecting against the following hazards:

- Electric shock (hazardous voltage levels)
- Fire (overload, temperature, material flammability)
- Energy (high energy circuits or potential burn hazards)
- Heat (accessible parts of the product at high temperatures)
- Radiation (noise, etc.)

Safety Recommendations

When using the product and to ensure general safety, you are instructed to follow these guidelines:

- Use only the power supply adapter that comes with the package. Replacement power supply adapters can be obtained from an authorized Tilgin distributor.
- Do not open or disassemble this product.
- Gateways and power supplies are electrical devices that can overheat without ventilation. Do not cover or crowd them with objects or clothing that prevents good ventilation.
- Do not expose the product to liquid or moisture.
- Do not expose the product to lit candles, cigarettes, open flames, etc.
- Do not drop, throw or try to bend the product.
- Do not allow children to play with the product; it contains small parts that could be a choking hazard.
- Use only original Tilgin components and replacements parts. Failure to do so may result in performance loss, damage to the product, fire, electric shock or injury. It will also invalidate the warranty.
- Avoid using the unit during an electrical storm. There may be a remote risk of electric shock from lightning.
- Treat the product with care, keep it in a clean and dust free place. Use only a soft, damp cloth to clean the product.

All use of the product is subject to the Safety Recommendations above. Tilgin waives all and any liability for damages caused to i) the product or any other property or ii) yourself or any other individual as a consequence of using the product in ways that deviate from the safety recommendations set out above.


Power Supply


Do not use any other power supply than the one delivered by Tilgin. Using the wrong power supply could be hazardous to you or the product. The power supply is approved by one or more of the following safety organizations:



Approvals and Conformity

Tilgin products are designed and tested according to FCC and CE rules.

Declaration of Conformity (United States Only)	
<p>This device complies with Part 15 of the FCC Rules. Operation is subject to the following 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.</p>	

Declaration of Conformity (Europe Only)	
<p>This product is in conformity with the Council Directives:</p> <ul style="list-style-type: none">● EMC Directive 89/336/EEC● Low Voltage Directive 73/23/EEC	

Notice:

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the Federal Communications Commission (FCC) Rules and the immunity and emission requirements of the CE rules. These are designed to provide reasonable protection against harmful interference in a residential installation. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Declaration of Conformity

in accordance with EN 45014:1998



Tilgin ab
Finlandsgatan 62
164 74 Kista
Sweden

Declares that

Equipment: IP Residential Gateways
Brand name: Vood (Voice Options On Demand)
Products: Vood 453, Vood 452w, Vood 453w

Product versions:

Vood 452_A, Vood 452_B, Vood 452w_A, Vood 452w_B, Vood 453w_A, Vood 453w_B

Fulfills the essential requirements in accordance with the following Directives:

- 95/5/EEC The R&TTE Compatibility Directive
- 89/336/EEC The Electromagnetic Compatibility Directive
- 73/23/EEC The Low Voltage Drive Directive

(and their amending Directives)

The following standards were applied:

- EMC - Emission EN 55022:1998,-A1:2000,-A2:2003 (Class B)
- EMC - Immunity EN 55024:1998,-A1:2001,-A2:2003
- EMC - Radio EN 300 328
- EMC - WLAN EN 301 489-1, EN 301 489-17
- Safety EN 60950:2000

I hereby declare that the equipment named above has been designed to comply with the relevant sections of the above referenced specifications.
The unit complies with all essential requirements of the Directives.

Stockholm

March 28 - 2006

Date

Jan Werne, President

Technical Specifications

How to Wall-Mount the Vood 400 Series

If you want to mount your product on a wall, you can use the drill guide in this manual for drilling correctly spaced holes. The template shows an outline view of the product with two indicated drill locations.

1. **Please note** that because reproduction methods vary, the drill guide may not be true to scale. It is recommended to measure the distances indicated on the guide to be sure they agree with the measurements on the drawing before drilling any holes.
2. When you have measured the correct distances onto your wall, drill two holes and insert two suitable screws.
3. Place the unit securely on the screws.

Environmental Information

The equipment you purchased has required the extraction and use of natural resources for its production. It may contain substances that are hazardous to your health and to the environment. To avoid putting such substances into our environment and to reduce pressure on our natural resources, we ask that you reuse or recycle your end-life equipment by using an accredited electronics take-back system.

The symbols below indicate that this product should be reused or recycled and not simply discarded. Please locate and use an appropriate reuse and recycling site. If you need more information on collection, reuse and recycling systems, contact your local or regional waste administration. You may also contact your equipment provider for more information on the environmental performances of these products.



Customer Information Statement

This is information for the user regarding his/her and the telephone company's rights and obligations.

1. This equipment complies with Part 68 of the FCC Rules. On the bottom of this equipment is a label that contains, among other information, the FCC registration number and Ringer Equivalence Number (REN) for this equipment. If requested, provide this information to your telephone company.
2. The registration jack USOC for the equipment is (RJ-11).
3. The REN is useful to determine the quantity of devices that may be connected to the telephone line. Excessive RENs on the telephone line may result in the devices not ringing in response to an incoming call. In most, but not all areas, the sum of RENs of all devices should not exceed five (5). To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact the local telephone company.
4. An FCC-compliant telephone cord and modular plug is provided with this equipment. This equipment is designed to be connected to the telephone network or premises wiring using a compatible modular jack which is Part 68 compliant. See installation instructions for details.
5. If this equipment — the Vood 400 series gateway— causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice isn't practical, the telephone company will notify the customer as soon as possible. You will be advised of your right to file a complaint with the FCC if you believe it is necessary.
6. Your telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of your equipment. If they do, you will be given advance notice so as to give you an opportunity to maintain uninterrupted service.
7. If you experience trouble with this equipment — the Vood 400 series gateway — please contact your service provider for repair/ warranty information. If your equipment is causing harm to the telephone network, the telephone

company may request that you disconnect the equipment until the problem is resolved.

8. Connection to party line service is subject to state tariffs. Contact the state public utility commission, public service commission or corporation commission for information.
9. If your home has specially wired alarm equipment connected to the telephone line, ensure the installation of this equipment does not disable the alarm equipment. Consult your telephone company or a qualified installer.

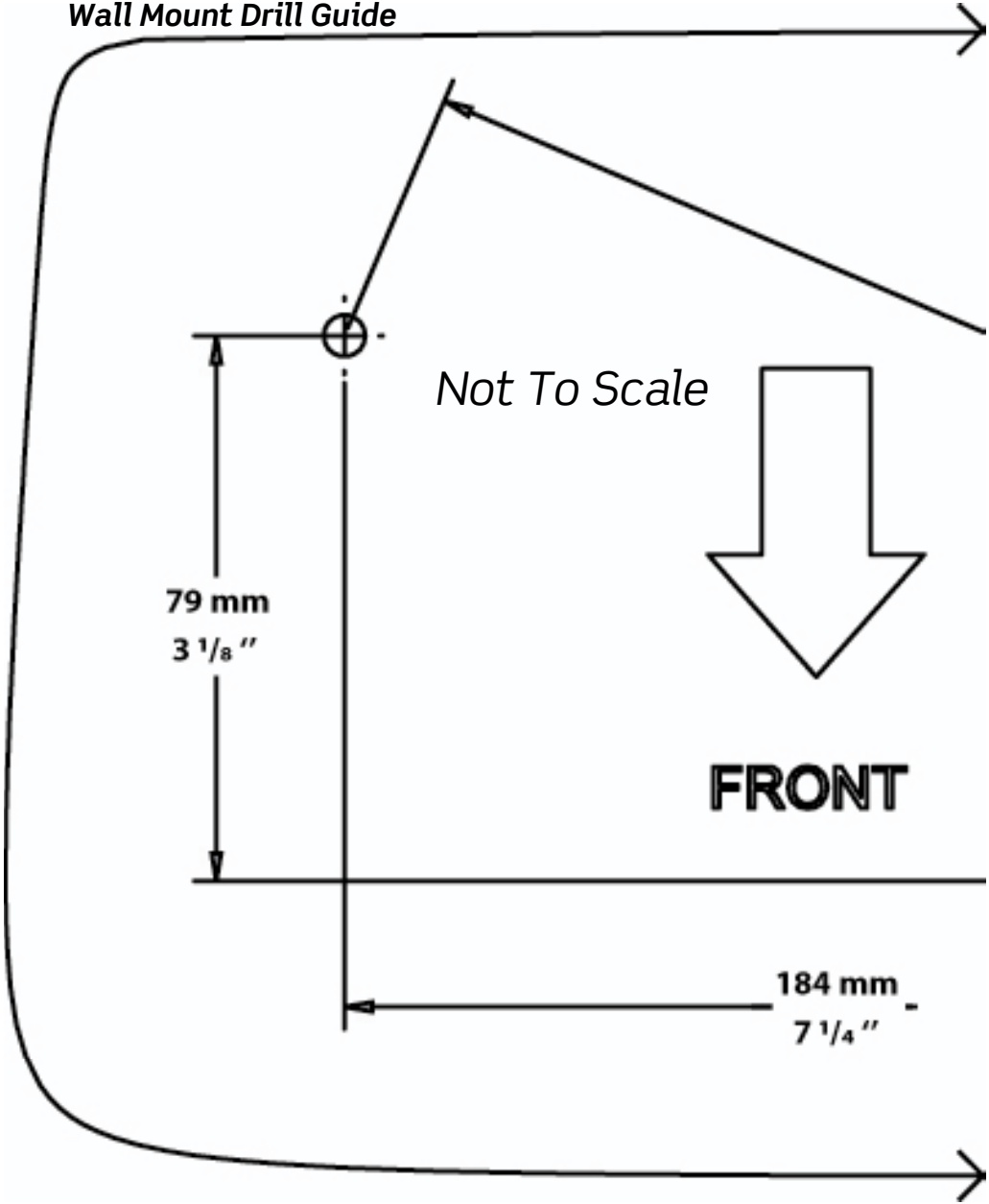
Warranty

No warranty, express or implied, with respect to the product is extended directly to you from or on behalf of Tilgin. Limited warranties may be granted to you by the equipment provider in its capacity as reseller of the product. Please contact your equipment provider for information regarding warranties for the product.

Notice of Copyright and Patent Protection-

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Wall Mount Drill Guide

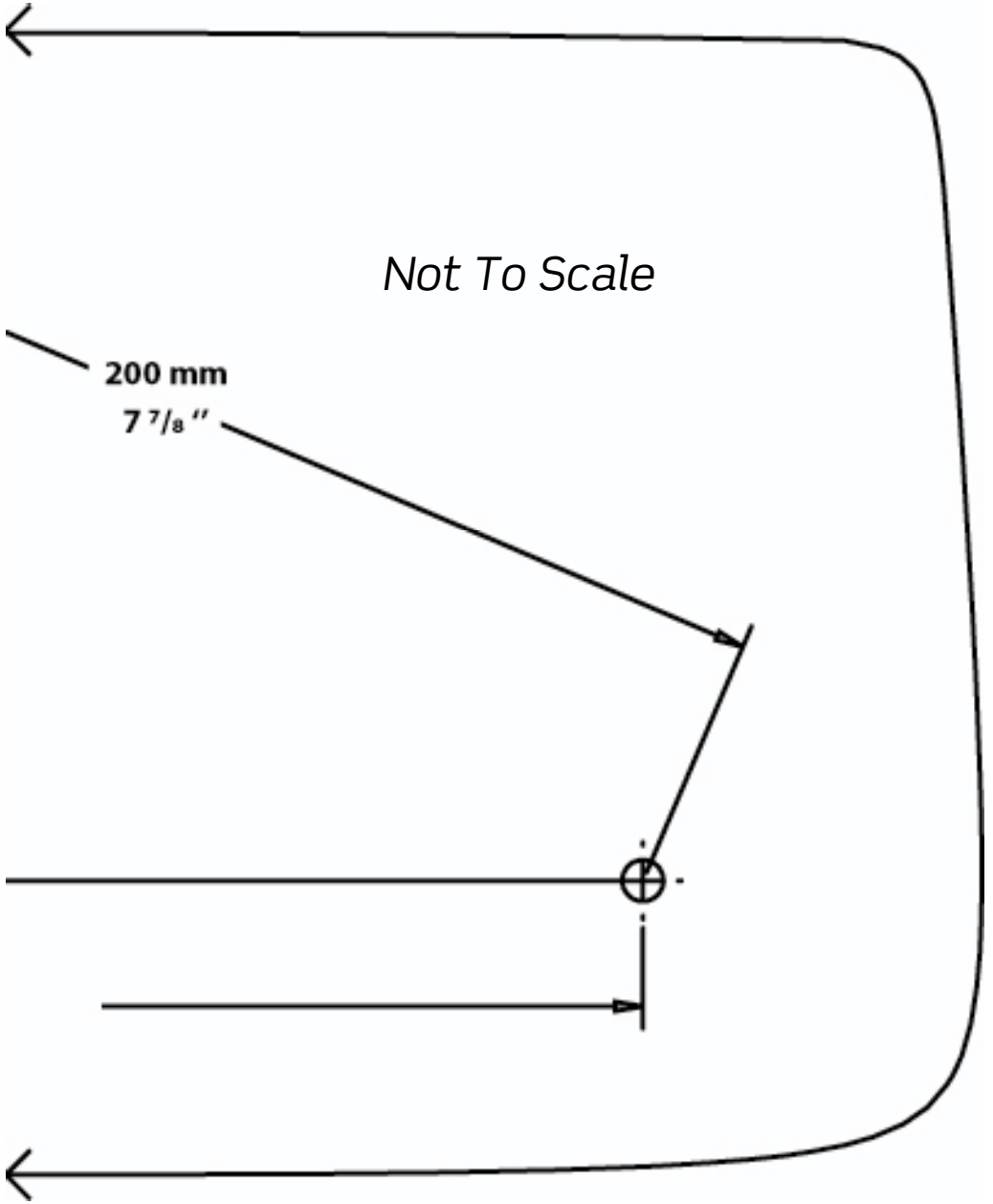


Not To Scale

79 mm
3 1/8"

FRONT

184 mm -
7 1/4"



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tilgin

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