

AXEL
ULTRA THIN CLIENT
AX3000 Model 90

Installation Guide

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Model AX3000/M90 Type EA

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The AXEL AX3000 Thin Client is based on a modular concept.



The AX3000 is designed and manufactured by Axel. The thin client's electronics are contained within a slim base unit which provides connections for two monitors, keyboard/mouse, Ethernet network and various USB devices.

1 - NOTICES

1.1 - SAFETY NOTICES

- Do not attempt to fix an AX3000 component failure by opening the thin client case. In case of hardware failure, contact your service representative.
- Check AC voltage from the wall outlet is compatible with the AX3000 external power (100-240 V~, 47-63 Hz).
- The power socket must be within easy reach and as near as possible to the AX3000 thin client.
- Make sure all devices are powered off before connecting or disconnecting.
- In order to ensure compliance with European electromagnetic regulations, shielded cables must be used when interfacing with other devices.
- Refer to the respective supplier's installation manual for instructions on connecting the keyboard and monitor.

1.2 - PHYSICAL SPECIFICATIONS

- Operating temperature: 5 to 35 °C
- Humidity: 80° non condensing
- Consumption: 8-10 W
- Power supply: 5 V (DC), 3 A max.
- Dimensions: 150x166x40 mm
- Weight: 615 g

2 - INSTALLATION

This chapter provides information and instructions to install the Axel Thin Client.

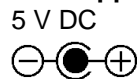
2.1 - DESCRIPTION

There are 2 types of M90:

- M90 produced **before September 2022**, Associated Hardware: **FK60**
- M90 produced **after August 2022**, Associated Hardware: **FK61**

FK60	FK61
<p>Front Panel:</p> <ul style="list-style-type: none"> • 2 x Audio (one in/ one out) • 1 x Power switch (with a blue LED) • 4 x USB 2.0, • 1 x Kensington lock. 	<p>Front Panel:</p> <ul style="list-style-type: none"> • 1 x Audio (in/out) • 1 x Power switch (with a blue LED) • 4 x USB 2.0, • 1 x Kensington lock.
<p>Rear Panel:</p> <ul style="list-style-type: none"> • 1 x 1Gb RJ45 • 1 x DisplayPort • 1 x VGA • 2 x USB 2.0 • 1 x Power connector 5V DC • 2 x Wireless antennas (optional) 	<p>Rear Panel:</p> <ul style="list-style-type: none"> • 1 x 1Gb RJ45 • 2 x DisplayPort • 2 x USB 2 • 1 x Power connector 5V DC • 2 x Wireless antennas (optional)

Power Supply:



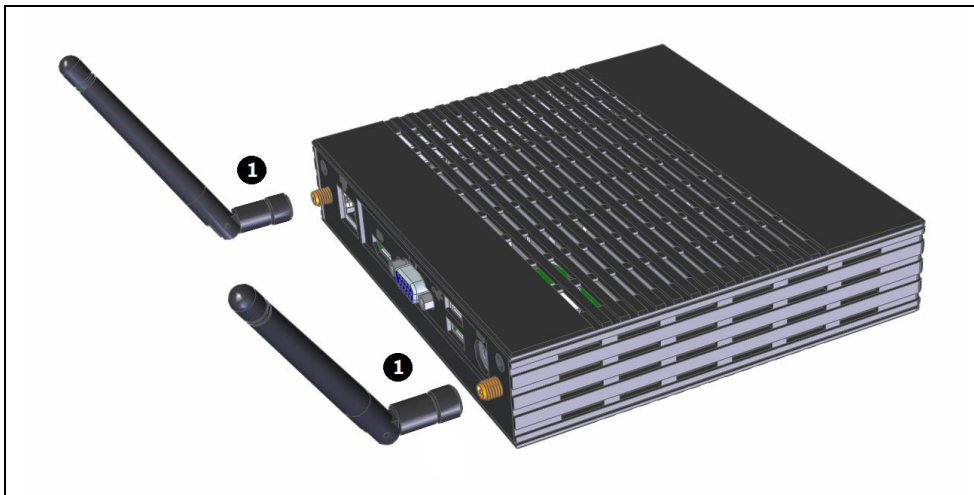
Connectors:

- | | |
|-------------------|----------|
| (1) Network | shielded |
| (2) DisplayPort++ | shielded |
| (3) VGA | shielded |
| (4) USB | shielded |
| (5) Audio | shielded |

2.2 - INSTALLATION

2.2.1 - Installing the two Antennas (optional)

If the 802.11 interface is to be used, screw the two antennas on the rear panel ❶.



2.2.2 - Mounting the Terminal on a Flat Screen (optional)

The terminal has been designed to be mounted on a flat screen: this requires the monitor to have available the 4 VESA mounting screw holes.

a) Attaching the VESA bracket

With the 4 screws provided attach the bracket to the VESA mounting points on the monitor.



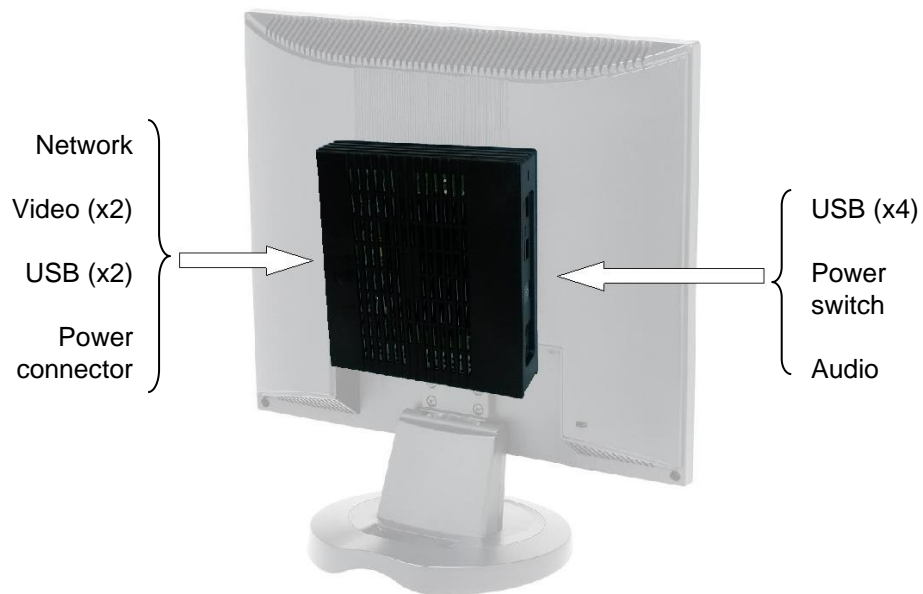
b) Attaching the Terminal

Hook terminal to bracket. Front panel can be to the right or the left. Rubber feet should be pointing inwards. (Against bracket, for proper ventilation.):



c) Using the Terminal

The terminal is now ready to be used. The cables can be connected to the rear panel. And the power switch is on the front panel:



2.2.3 - Connecting Cables



For safety reasons and to prevent component damage please connect all cables before applying the power cord.

Make sure the AX3000 and monitor power switches are in the OFF (0) position before connecting cables to the back panel.


a) The Monitor(s)

Two video ports are available on the rear panel:

FK60 :

- 1 x VGA or SVGA ()
- 1 x DisplayPort++, dual mode ()

FK61 :

- 2 x DisplayPort++, dual mode ()

Single or dual monitor is supported - any combination of VGA and Displayport.

DisplayPort can easily be converted to DVI or HDMI.

Note 1: only the DisplayPort/VGA adaptor should be an 'active' adaptor. Displayport to DVI or HDMI should be 'passive'.

Note 2: when the thin client is installed in a cabinet or rack, it is essential to maintain air circulation around both the thin client and the monitor(s).

b) The Keyboard and Mouse

Connect the USB keyboard and mouse via any two of the USB ports.

Note: Wireless Keyboard/Mouse are supported.

c) The Network

Plug the network cable into the network socket () on the rear panel.

The network operating mode is indicated by two LEDs located on each side of the network socket:

- **The green LED on the left** indicates a good connection to the Ethernet network (good link). The LED blinks to indicate a network traffic. If the LED does not light, check that the Ethernet connector and cable.
Note: this LED blinks also when the thin client is powered off and the 'Wake On Lan' capability is enabled.
- **The LED on the right** indicates the actual network speed:
 - 10Mb when the light is off.
 - 100Mb when the light is green.
 - 1Gb when the light is orange.

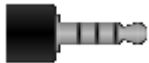
d) Audio Support

One audio ports ('jack' connectors) allow headset to be connected.

On M90 (**FK60**) models, the speaker (or headphones) must be plugged in to the dedicated socket (🎧) and the microphone to its socket (🎤). The jack's connectors must be 3-point type:



On the M90 (**FK61**) models, the headphones and the microphone are connected to the same 4-point type connector:



😊 : USB ports can also be used for handling audio devices (such as USB headsets).

e) Other USB Devices

AX3000 Model 90 has six USB ports. These ports are located on the front and rear of the thin client case.

The USB cables must be shielded and cable length must not exceed 5 meters.

IMPORTANT:

- Maximal consumption for the *combined* four USB ports on the front: 500 mA.
- Maximal consumption for the *combined* two USB ports on the rear: 500 mA.


f) External Power Supply

Power is provided by the external power supply supplied with the Axel thin client.

IMPORTANT: Only use the Axel external power supply provided with your AX3000 Model 90. Use of any other external power supply may cause permanent damage to the AX3000.

Attached the PSU to the terminal (==) before plugging into main power.

2.2.4 - Power On

The power switch () is located on the front panel.

The blue LED on the front of the thin client should light, and a single audible beep will be heard indicating that the AX3000 thin client operating correctly.

To indicate correct keyboard initialization after power-up, the keyboard indicator lights 'Num lock', 'Caps lock' and 'Scroll lock' should flash twice.

The green LED on the left side of the RJ45 connector on the back panel indicates a satisfactory Ethernet connection.

If the thin client does not function as described above (for example if it emits a continuous tone sound, or two beeps, or if an error message is displayed on the screen) refer to chapter 4. If the thin client still does not operate properly, call your service representative.

3 - INITIAL POWER-ON

This chapter describes the initial power-on procedure for the M90 thin client.

When the thin client is switched on up for the very first time two configuration methods are available:

- **Quick Set-Up:** a wizard allows the thin client to be set-up in few seconds for typical use.
- **Auto-Configuration:** used in conjunction with the AxRM software, this function allows the thin client to automatically receive new firmware and/or a configuration

At any time pressing **<Ctrl><Alt><Esc>** will enter Thin Client Set-Up.

For more information about set-up, please read the AX3000 User's Manual.

3.1 - QUICK SET-UP

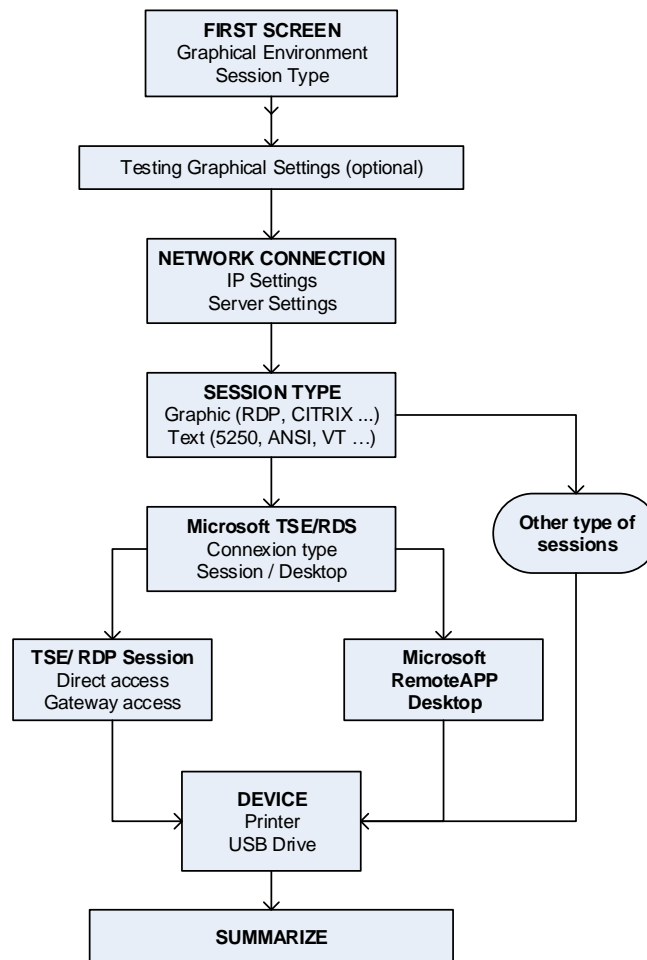
The quick set-up is designed for a typical simple environment of:

- One server
- An optional router
- All sessions set identically
- An optional printer.

☺ : This typical configuration may be modified at the end of the Quick Set-Up procedure.

The 'quick set-up' wizard guides the user through a setup menu in an intuitive manner.

The dialog box structure (referred to as a Wizard) is shown below:



After exiting the set-up, the thin client is automatically restarted and ready to be used.

3.2 - AUTO-CONFIGURATION

The Auto-Configuration feature allows a brand new 'out of the box' thin client to be sent a specific firmware and/or configuration file without any human intervention. There are also options to specify various thin client specific parameters, for example an IP address and thin client name etc.

For more information on AxRM's action in the auto-configuration process, see the manual "Axel Remote Management".

The auto-configuration process is automatically initiated when power is applied to a new thin client or if the thin client is reset to factory defaults. This process may be aborted by pressing any key.

Note: the auto-configuration may also be started at each thin client boot time.

The stages are:

- Checking the network (link),
- DHCP request sent to obtain an IP address and other parameters (optional),
- Thin client contacts the AxRM server,
- Firmware file sent (if required), followed by a reboot,
- Configuration file sent, followed by a reboot.

4 - PROBLEM SOLVING

✓ - **BLUE FRONT INDICATOR DOESN'T LIGHT, OR NO BEEP WHEN YOU PRESS POWER SWITCH**

Check there is power at the wall outlet and power cord connections. Try a different mains cable and PSU if possible. If the problem remains, report it to your service representative

✓ - **CONTINUOUS TONE SOUNDS AFTER THE THIN CLIENT HAS BEEN SWITCHED ON**

This alarm indicates a hardware failure. Report the problem to your service representative.

✓ - **THE THIN CLIENT REMAINS FROZEN AFTER THE AXEL LOGO IS DISPLAYED**

This indicates a hardware failure. Report the problem to your service representative.

✓ - **NO DISPLAY ON THE MONITORS**

Monitors must be connected before the thin client is powered on.

Check monitor power cables and video cables are correctly connected. Power cycle M90 by holding the power button in for 6 seconds.

Then turn on terminal

If the problem remains, report it to your service representative

✓ - ETHERNET CONNECTION GREEN INDICATOR DOES NOT LIGHT

This indicator is the green LED located on the left side of the network connector on the thin client back panel.

Failure to light when the thin client is switched on may be due to any of the following:

- The Ethernet cable is disconnected at the far end,
- The device (host, hub, switch...), to which the network cable is connected, is not switched on,
- There is a fault on the Ethernet cable or the cable is wired with incorrect pin assignments.

If the problem remains, report it to your service representative

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