ACE Vision Series:
X3H410TS

User Manual

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Preface

About this Manual

This manual is written for professional system integrators and PC technicians. It provides information pertaining to EPEAT for the ACE Computers EPEAT registered Desktops.

Notes

If you have any questions regarding this manual or computer system, please contact our support team through Ace Computers Support page https://acecomputers.com/support/. This manual may be periodically updated without notice.

Please check the Ace Computers website for possible updates to the manual revision level.
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Chapter 1 - Illustrated System Disassembly Instructions

Chapter 8 is intended to provide guidance to recyclers on the presence of materials and components at the product/family level, per Article 15 of the EU WEEE Directive 2012/19/EU. The provided information should also help direct recyclers to proper methods for removing parts and general product disassembly instructions. This Chapter also outlines specific substances, mixtures, and components that must be removed from any separately collected electronic waste component and shall be disposed or recovered in compliance with Directive 2008/98/EC.

Please note: All the illustrations in the below disassembly instructions are for demonstration only. The system and components shown in this section are a representative sample.

**CAUTION:** Always power off the system and unplug the power cord(s) first before disassembling the system!

**Representative Desktop Component Layout**
1. Data Storage Devices

Location: Desktops utilize interchangeable storage. These storage hard drives are located as indicated in the photos below. Some desktops also have SSD storage, this type of storage can be found on the motherboard. It generally lays flat, parallel to the board, rather than at a right angle. Most common applications insert one end of the SSD into a slot on the motherboard while the alternate end is held in place with a small screw.

**Type and number of fastenings:** HDD = One (1) latch and four (6) Phillips screws, SSD = (1) Phillips screw.

**Tools required:** Screwdriver with PH2 bit.

**Procedure:**

Step 1: Lift chassis carriage into the upright position.

Step 2: HDD (3.5") = Push the release button on the carrier. Swing the handle fully. Grasp the handle and pull the drive carrier out of its bay, once the drive carrier is out of the bay, the Phillips screws can be removed.

Step 3: SSD (2.5") = Identify the SSD on the motherboard, remove the screw, and pull straight back in a parallel position to remove the SSD from the slot on the motherboard.

**Selective Treatment/Special Handling Per Annex VII, Directive 2012/19/EU:** There are two printed circuit board present that are greater than 10 square centimeters, one within the HDD and one within SSD that must be removed separately from the data storage device and shall be disposed or recovered in compliance with Directive 2008/98/EC.
2. Memory

**Location:** Memory modules are found on the motherboard of the desktop, the number of memory modules may vary by unit configuration but are generally found in pairs of 2.

**Type and number of fastenings:** Two (2) latches per memory module.

**Tools required:** None.

**Procedure:** Press both release tabs on the ends of the memory module to unlock it. Once the module is loosened, remove it from the memory slot.

**Selective Treatment/Special Handling Per Annex VII, Directive 2012/19/EU:** The memory stick is a printed circuit board greater than 10 sq. cm and shall be disposed or recovered in compliance with EU Directive 2008/98/EC.
3. Processor

Location: The processor is found on the motherboard of the desktop. As shown in the photo below, the processor is located under the heat sink. There can only be one processor on the motherboard for this model. The processor could consist of a push-pin based Intel heatsink.

**Type and number of fastenings:** Push-Pin

**Tools required:** NA

**Procedure:** Intel Processor: Remove the push-pin from the base of the heatsink and lift the processor heatsink module off of the processor socket.

**Selective Treatment/Special Handling Per Annex VII, Directive 2012/19/EU:** The CPU does not contain any WEEE Directive Annex VII materials.

Any plastic components within the heatsink fan must be removed separately due to the presence of brominated flame retardants and shall be disposed or recovered in compliance with Directive 2008/98/EC.
4. Optical Drive

Location: The optical drive is located in the front top portion of the system.

Type and number of fastenings: 8 Phillips screws.

Tools required: Screwdriver with PH2 bit.

Procedure: Remove all 8 Phillips screws. Remove the optical drive from the casing by sliding upright.

Selective Treatment/Special Handling Per Annex VII, Directive 2012/19/EU: The optical drive contains a circuit board that is greater than 10 sq. cm and should be disposed or recovered in compliance with Directive 2008/98/EC.
5. Motherboard

Location: The motherboard is generally centrally located within the unit. Standard practice would be to remove all the components, peripherals, and add-ons from the motherboard before removal of the motherboard for processing.

Type and number of fastenings: 8 Phillips screws.

Tools required: Screwdriver with PH2 bit.

Procedure: Remove all 8 Phillips screws. Lift the motherboard from its base.

Selective Treatment/Special Handling Per Annex VII, Directive 2012/19/EU: The motherboard is a circuit board that is greater than 10 sq. cm and should be disposed or recovered in compliance with Directive 2008/98/EC.

A lithium battery resides on the motherboard. The battery must be removed separately from the motherboard and shall be disposed or recovered in compliance with Directive 2008/98/EC. Refer to section 9 for specific instructions on remove and disposal of LiON batteries.

- Handle used batteries carefully. Do not damage the battery in any way; a damaged battery may release hazardous materials into the environment. Do not discard a used battery in the garbage or a public landfill. Please comply with the regulations set up by your local hazardous waste management agency to dispose of your used battery properly.
6. Expansion Card/Graphics Card

Location: Certain configurations of desktops may include expansion and/or graphics cards. These will be found in the lower right-hand corner of the motherboard. They’re electrically connected to the motherboard and physically connected to the case.

Type and number of fastenings: Two (2) Phillips screws.

Tools required: Screwdriver with PH2 bit.

Procedure: Remove the Phillips screws from the rear of the case. Ensure the case cover is removed. Then you can disconnect the components from the motherboard.

Selective Treatment/Special Handling Per Annex VII, Directive 2012/19/EU: The expansion/graphics card is a circuit board greater than 10 sq.cm and shall be disposed or recovered in compliance with EU Directive 2008/98/EC.
7. Power Supply Module

**Location:** The power supply module is located in the back left hand corner.

**Type and number of fastenings:** Three (3) Phillips Screws per module.

**Tools required:** Screw Driver.

**Procedure:** Unplug the power cord from the power supply. To remove the power supply, remove the three exterior Phillips screws and all electrical connections and slide the unit out of the case.

**Selective Treatment/Special Handling Per Annex VII, Directive 2012/19/EU:** There is one printed circuit board present that is greater than 10 square centimeters within the power supply module that must be removed separately and shall be disposed or recovered in compliance with EU Directive 2008/98/EC.
8. Chassis Cover

**Location**: The chassis cover is located on the top of the case and is held in place with two Phillips screws.

**Type and number of fastenings**: Two (2) screws.

**Tools required**: Phillips screwdriver.

**Procedure**: Remove two screws and gently pull the handle backwards.

**Selective Treatment/Special Handling Per Annex VII, Directive 2012/19/EU**: None
9. Batteries

Location: The battery is located on the motherboard, see illustration below.

Type and number of fastenings: One (1) latch.

Tools required: None.

Procedure: Push aside the small clamp that covers the edge of the battery. When the battery is released, lift it out of the holder.

Selective Treatment/Special Handling Per Annex VII, Directive 2012/19/EU: A lithium battery resides on the motherboard. The battery must be removed from separately from the motherboard and shall be disposed or recovered in compliance with Directive 2008/98/EC. Removal instructions for the motherboard lithium battery are outlined below.

- Handle used batteries carefully. Do not damage the battery in any way; a damaged battery may release hazardous materials into the environment. Do not discard a used battery in the garbage or a public landfill. Please comply with the regulations set up by your local hazardous waste management agency to dispose of your used battery properly.
10. Fans

Location: The chassis fan is located underneath the hard drive/optical drive mounting bracket, in the top right hand corner, as noted in the photo below.

Type and number of fastenings: Four (4) Phillips Screws.

Tools required: Phillips Screwdriver.

Procedure: Release hard drive/optical drive mounting bracket and move into the upright position. This will allow access to the fan. Disconnect the fan wiring from the fan header on the motherboard. Then remove the four Phillips screws to remove the fan from the chassis.

Selective Treatment/Special Handling Per Annex VII, Directive 2012/19/EU: Any plastic components within the fan must be removed separately due to the presence of brominated flame retardants and shall be disposed or recovered in compliance with Directive 2008/98/EC.
11. **External Power Cable**

*Location:* To power the desktop a power cable is required. The inlet to the power cable is located on the power supply.

*Type and number of fastenings:* None, direct pressure connection method.

*Tools required:* None.

*Procedure:* Disconnect the external power cable from the main desktop assembly.

*Selective Treatment/Special Handling Per Annex VII, Directive 2012/19/EU:* Any external electrical cables must be removed separately and shall be disposed or recovered in compliance with Directive 2008/98/EC.
Chapter 2 – Product Take-Back, End-Of-Life Processing, and E-Waste Program

Ace Computers offers a nationwide take-back service for proper end-of-life management of EPEAT-registered and Non-EPEAT registered products via Ace Computers and partnered with an R2-certified recycling facility.

For additional information and steps to take regarding our Product Take-Back, End-of-Life Processing, and E-Waste Program, please visit our website at https://acecomputers.com/company/sustainability/under the EPEAT Take-Back/EOL/E-Waste Program Tab.

Chapter 3 – Product Services

3.1 Where to Get Replacement Components/Product Services

If you need replacement parts or product service for your system, for self-replacement or for on-site replacement, please visit https://acecomputers.com/support/ and fill out the Ace Computers Support Request form. If phone assistance is needed please call our Support Line 847-952-6999.

Note: Most parts/product services are available for at least 5 years after the date of sale. Replacement components at a minimum cover the following: power supply, fans, hard drives, memory, CPU, PCB assemblies, memory and all hardware.

3.2 Returning Merchandise for Service

Upon completion of the Ace Computers Support Request Form, indicated in Section 1.5, an Ace Computers Team Member will reach out to further assist with your technical questions. If it is determined that the best course of action is an inhouse repair at Ace Computers, the service technician will help facilitate the process of returning the server for repair.