



Information Technology Business Group

Vellayambalam Jn

Trivandrum

WORK INSTRUCTION MANUAL WORK INSTRUCTION MANUAL

ISO 9001:2008

Quality Management System

Web: www.Keltron.org

Tel: 0471-2724444

Email: itbg@keltron.org

Fax: 0471-2724545

Issue 2 Revision 1

06.09.2010



Table of Contents

Section	Title of Section						
No		No					
1	Work Instruction for Installation of Computers and Peripherals						
2	Work Instruction for Servicing	5					
3	Work Instruction regarding the attribute of service personnel towards customer	6					
4	Work Instruction for Inspection and Testing of Computers	7					
5	Work Instruction for Inspection and Testing of Printers	8					
6	Work Instruction for Inspection and Testing of Projectors	9					
7	Work Instruction for Inspection and Testing of UPS	10					
8	Work Instruction for Inspection and Testing of Scanners	11					
9	Work Instruction for Inspection and Testing of Hub or Switches	12					
10	Work Instruction for Handling, Storage, Package, Preservation and Delivery	13					
11	Work Instruction for Software	14					
12	Work Instruction for Crimping and Tool Validation	18					
13	Dos and Donts-Best practices to be followed in ITBG	19					



CONTROLLED COPY DISTRIBUTION REGISTER

Docu ment Code	Document	No of pages	Contr olled Copy No	Issue No	Revi sion No	Issued By	Date	Rece ived By	Date
M-3	Work Instruction Manual	18	01	1	0	CGM (ITBG)	02.11.09	MR	02.11.09
M-3	Work Instruction Manual	18	01	2	0	CGM (ITBG)	08.06.10	MR	08.06.10
M-3	Work Instruction Manual-Pages 16,17,18,19,20	5	01	2	1	ED (ITBG)	06.09.10	MR	06.09.10



WORK INSTRUCTION FOR INSTALLATION OF COMPUTERS AND PERIPHERALS

- 1. Verify the quantity and specification of Systems with Delivery Challan / Invoice.
- 2. Check whether the site conditions are OK. (Power conditions, Cleanliness, Earthing, Ventilation etc).
- 3. Switch on the system one by one. Check for the basic functionality.
- 4. Install the Drivers of the Printer, Scanner, Projectors etc.
- 5. Demonstrate the usage of the systems to the end user.
- 6. If any parts are found faulty or the quality standards are not satisfied by the customer, arrange for free replacement.
- 7. Get the Installation report duly signed and sealed by the concerned authority.



WORK INSTRUCTION FOR SERVICING

- 1. Attend the call, the same day if customer site is in the city limits
- 2. Meet the customer who had logged the call and check the system if the complaint as per the call report is genuine or not.
- 3. Check whether the site conditions are OK. (Power conditions, Cleanliness, Earthing, Light, Ventilation etc.)
- 4. Clean the system by brush or with vacuum cleaner.
- 5. Switch on the system. Check the power supply output, Motherboard, RAM and Processor functions.
- 6. Diagnose the fault either by replacing the suspected part or by diagnosis software.
- 7. If the system is under warranty, Log the call with OEM toll free number and get the case ID.
- 8. If any parts are found faulty, raise the part request.
- 9. Follow-up with the OEM, for immediate part replacement
- 10.Get the Customer service Report duly signed and sealed by the concerned authority.
- 11.If there is no Warranty / AMC with the customer, send the estimate for the repair/replacement and after receiving the work order, repair/replacement is to be done. Get the Service report duly signed and sealed. Billing is done to the customer.



WORK INSTRUCTION REGARDING THE ATTRIBUTE OF SERVICE PERSONNEL TOWARDS CUSTOMER

- 1. Always be polite and pleasing while dealing with the customers.
- 2. Never get angry/ panic with a customer even if he misbehaves with you.
- 3. Greet a customer with a smile and say good morning/ good evening when you see him first.
- 4. Enquire about the complaint and hear it patiently without losing temper even if it is not a genuine complaint of the system.
- 5. Attend the complaint, analyze it and try to solve it immediately.
- 6. If spare part is required and you are not having it with you, inform the customer and then only leave the place.
- 7. Try to get the spare at the earliest and complete the servicing.
- 8. If there is a delay in getting spare, politely inform the customer about your difficulty.
- 9. If the customer is not convinced, inform your Head and ask him to contact the customer.
- 10.If you are unable to identify the problem, don't leave the customer premises without informing him. Also make alternative arrangements through Head & inform the status to the customer.
- 11.Once the complaint is redressed, convince the customer and ensure that he is satisfied.
- 12. Request the customer politely to sign the service report.



WORK INSTRUCTION FOR INSPECTION AND TESTING OF COMPUTERS

- 1. Carry out physical inspection for damages by transportation and contents verification as per manual.
- 2. Switch on the computer after connecting all the accessories.
- 3. Check for any failure in the POST.
- 4. Load the required software as specified in DBA.
- 5. Check the PS2 ports by connecting the Mouse & Keyboard.
- 6. Check the USB port by connecting USB Device.
- 7. Check the LAN port by connecting to the Network.
- 8. Check the parallel port by connecting a parallel printer.
- 9. Check the memory for capacity.
- 10. Check the Display card & Monitor for maximum resolution by changing the display.
- 11. Check the Modem card by connecting to the Telephone line.
- 12. Check the Multimedia by connecting Speakers & Mic.
- 13. Check the HDD for capacity.
- 14. Check the DVDR/DVDR/W by writing/ reading.



WORK INSTRUCTION FOR INSPECTION AND TESTING OF PRINTERS

- Carry out physical inspection for damages by transportation and contents verification as per manual.
- 2. Load the printer with the printer ribbon/Cartridge.
- 3. Connect the printer to the computer using the USB/Parallel cable.
- 4. Switch on the PC & Printer.
- 5. Self-test of the printer is done if applicable.
- 6. Load the driver software in the PC.
- 7. Print the test page and check for clarity.
- 8. Check if all the switches and functions are working by referring to the manual.



WORK INSTRUCTION FOR INSPECTION AND TESTING OF PROJECTORS

- 1. Carry out physical inspection for damages by transportation and contents verification as per manual.
- 2. Connect the projector to the mains and VGA & USB cable to the computer.
- 3. Switch on the PC & Projector.
- 4. Connect the monitor if VGA out is available.
- 5. Check the parameters like zoom, contrast, brightness, resolution, remote functions etc.
- 6. Check the picture clarity.
- 7. Check if all the switches and function are working by referring to the manual.



WORK INSTRUCTION FOR INSPECTION AND TESTING OF UPS

- 1. Carry out physical inspection for damages by transportation and contents verification as per manual.
- 2. Switch on the UPS.
- 3. Charge the battery for 6-8 hours.
- 4. Connect the required load as per the specification.
- 5. Check the back up time by connecting the required load.
- 6. Check if all the outputs and indications are working.
- 7. Check the shutdown software by connecting the cable to PC, if available.



WORK INSTRUCTION FOR INSPECTION AND TESTING OF SCANNERS

- 1. Carry out physical inspection for damages by transportation and contents verification as per manual.
- 2. Unlock the lock on the bottom side of the scanner, if available.
- 3. Connect the scanner to the computer using the USB cable.
- 4. Check whether the software is required to install before switching on the scanner.
- 5. Switch on the PC & Scanner.
- 6. Load the driver software in the PC.
- 7. Scan documents, pictures, photos (+ ves & -ves with respect to model)
- 8. Check if all the switches and functions are working by referring to the manual.



WORK INSTRUCTION FOR INSPECTION AND TESTING OF HUB/ SWITCH

- 1. Connect the network equipment to the LAN.
- 2. Check for functionality.



KITBG/STR/W-10

WORK INSTRUCTION FOR HANDLING, STORAGE, PACKAGING, PRESERVATION AND DELIVERY

- 1. Take care while carrying / moving products / materials so that they do not fall down.
- 2. Identify and store the products / materials in specified locations.
- 3. Store products/ materials such that issue of one item does not disturb the adjacent items.
- 4. Store products/ materials in such a way that easy movement of men and products is possible.
- 5. Ensure proper packing of products/ materials before despatch.



WORK INSTRUCTION FOR SOFTWARE

Pre- execution of project

1. Customer Requirement study

- a. Identify the modules for the project.
- b. Identify functionality.
- c. Finalize input/output interface for automation for the modules.

2. Project proposal

The following guidelines are to be followed while preparing a proposal:

- a. Front page with project name, client name, date of submission, Version of the document, Proprietary note, contact address of KELTRON
- b. Cover letter duly signed by concerned authority
- c. Proposal should have specific modules: Executive summary of project proposal, Activities of automation, List of functions for automating the client's operations, General features, Implementation plan, Project cost outlay, Terms & Conditions, List of projects implemented and the details of contact personnel.

3. Tender Submission Standards

• The tender must be submitted in the following way, consisting of Technical bid, and financial bid.



 Separate covering letters must be there for both the Technical bid and financial bid.

Execution of project

- Do work at specified seats in the workplace during normal working hours
- Use php wherever possible.
- Use functions to achieve programming objective.
- Use Simplified design.
- Use PDF for small, medium and final report generation.
- Document the programming code wherever required.
- Use common server and common space for a project.
- Use daily backup for preventing loss of data and safety.
- Testing must be done by another person.
- Give priority to projects than other works.

Post execution of project

- 1. Maximum preference to calls from finished projects than the calls from undergoing project and those which are going to be executed.
- 2. Finish service calls as early as possible.



Internal Maintenance

System

- Installation of OS and software in new systems
- Repair/update OS once in a month
- Hardware Maintenance, every month
- Defragment the System periodically (every month)
- Run check-disk periodically to keep system free from errors.
- Keeping Anti-virus software up to date.
- Scanning the system periodically for virus.

Server

- Server space allocation
- Database creation
- Database management
- Backup
- Security management- Change password frequently as possible

Printer

• Open the Tray by pulling down.



- Remove any paper from this area by pulling it outward from the printer at a slight upward angle. Carefully check to be sure that you have removed all pieces of torn paper.
- Make sure the tray is loaded with the right size of paper.
- Turn off the printer power after the use.



WORK INSTRUCTION FOR CRIMPING AND TOOL VALIDATION

- 1. Strip off about 2 inches of the cable sheath.
- 2. Untwist the pairs don't untwist them beyond what you have exposed, the more untwisted cable you have the worse the problems you can run into.
- 3. Align the colored wires.
- 4. Trim all the wires to the same length, about 1/2" to 3/4" left exposed from the sheath.
- 5. Insert the wires into the RJ45 plug make sure each wire is fully inserted to the front of the RJ45 plug and in the correct order. The sheath of the cable should extend into the RJ45 plug by about 1/2" and will be held in place by the crimp.
- 6. Crimp the RJ45 plug with the crimping tool.
- 7. Verify the wires ended up the right order and that the wires extend to the front of the RJ45 plug and make good contact with the metal contacts in the RJ45 plug.
- 8. Cut the cable to length make sure it is more than long enough to meet the requirements.

The crimping operation carried out is verified by a person with minimum 2 year experience in Keltron Customer Support Group, by conducting pull out test manually.



KITBG/W-13

Dos and Don'ts - Best practices to be followed in ITBG

Dos

- 1. Switch off light, fan, computer system etc while leaving work place.
- 2. Always use one-sided used papers for rough work or letter drafting.
- 3. Keep files / documents which are not needed immediately inside cupboard/shelf
- 4. Remove the main switch immediately if any sort of sparking or short circuit is observed in the electric line.
- 5. Cover all computers and printers when not in use.
- 6. Be polite & friendly with colleagues and Senior Officers
- 7. Always speak politely to the visitors in the office.
- 8. Keep the office premises clean and tidy.
- 9. Throw wastes only in the baskets provided.
- 10. Keep your work place clean and neat.
- 11. Minimize the use of photocopier.
- 12. Always use flush in the toilet after use.

Don'ts

1. Don't smoke near work place.



- 2. Don't talk loudly in workplace and create disturbance to others.
- 3. Don't throw waste here and there. Use waste basket provided for this purpose.
- 4. Don't use mobile phones in such a manner that it affects your work.
- 5. Don't use pan in the office.
- 6. Don't spit in the office premises.
- 7. Don't pluck off the garden flower from the office premises garden.
- 8. Don't misuse printers.