

**Frontier 1478i System Service Manual**

<b>Frontier 1478i Service Manual</b>	Date	2009.03.13
	Version	A

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## 1. Foreword

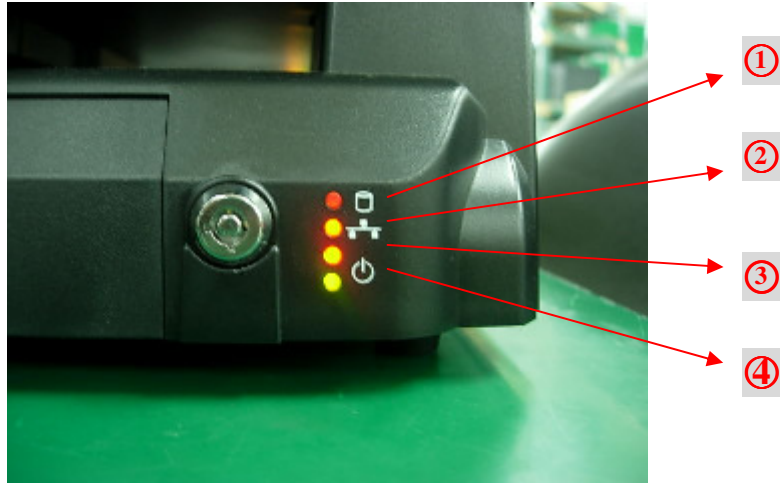
- 1-1 This manual provides reference information for servicing Frontier 1478i series. The manual is designed as a self-paced guide that will train you to install, configure, and repair these POS units.
- 1-2 Cautions:
  - 1-2-1 Prior to system disassembly, please wear anti-static wrist strap or clothing.
  - 1-2-2 For the safety concerns, please wear working gloves to prevent cutting injuries.
  - 1-2-3 Ensure that AC power cord is unplugged from the wall outlet for any part change.
  - 1-2-4 Cable hot-swapping / hot-plugging action is prohibited during system testing and maintenance.
  - 1-2-5 To prevent circuit shorting, please place the dismantled parts (screws, metal plate or cables) to a well-sorted location.
  - 1-2-6 If the problem still persists after carrying out the maintenance procedures, please send the failure machine back to Datavan service center for further diagnosis. Do not force to operate machines under different hardware setting or using destructive testing. Any damage caused by actions disobeying the maintenance procedures will be accounted as human operational failure.



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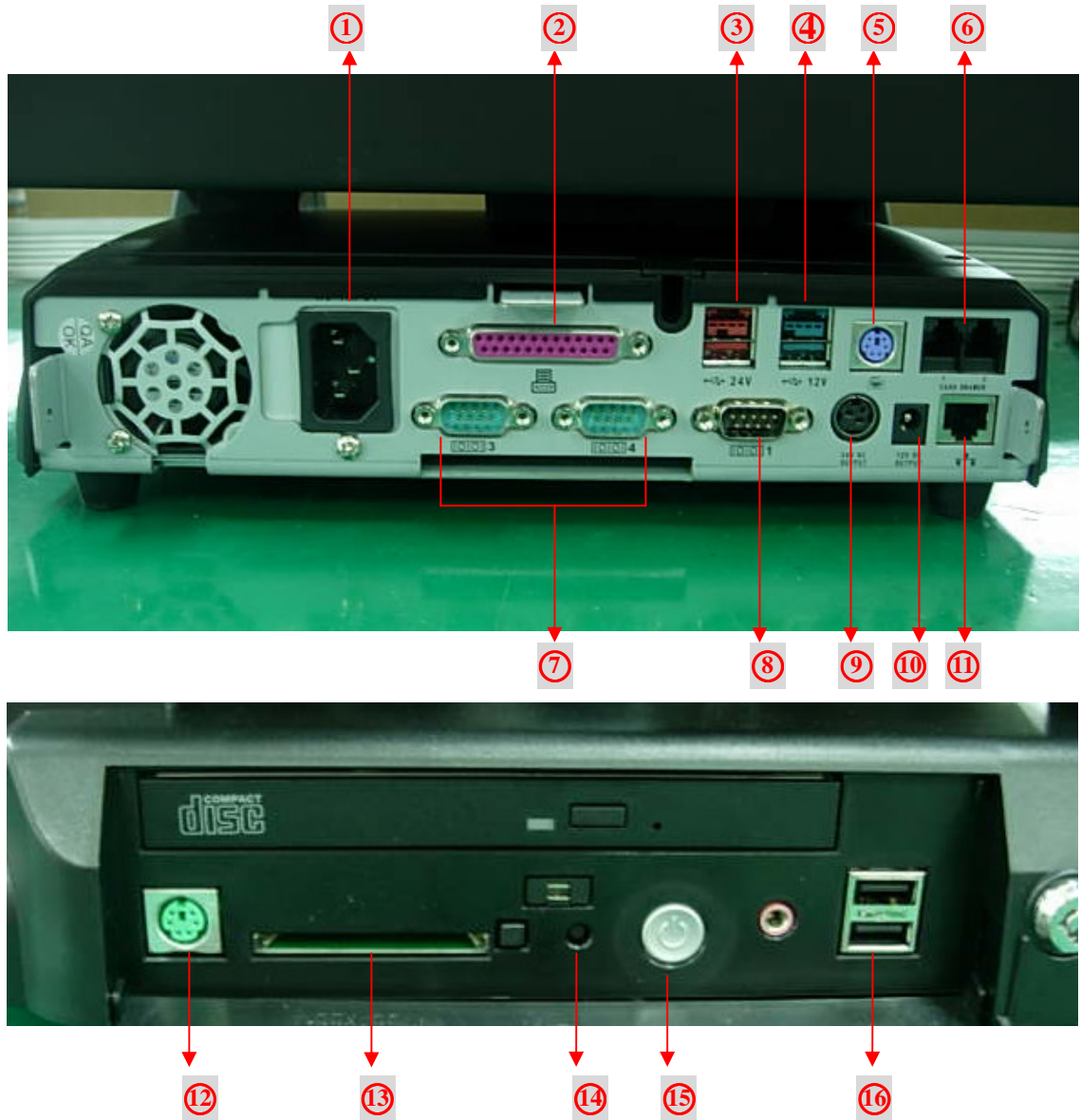
### 2. Front Panel LED Diagram



- 1. HDD LED (Red)
- 2. LAN LED (Red)
- 3. POWER LED (Red)
- 4. 5V STANDBY LED (Green)

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**3. I/O Port Diagram**





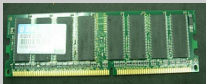


1	AC Power Cord	9	24V DC Out
2	Print Port	10	12V DC Out
3	24V USB	11	Keyboard PS2 Port
4	12V USB	12	Mouse PS2 Port
5	VGA	13	CF Card Slot
6	LAN	14	Reset
7	COM3~COM4 (No Voltage)	15	Power Switch
8	COM1 (5V Out)	16	Dual USB Port








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#### 4. Trouble-shooting









Note: Please review the defect symptom every time when part is replaced.

Item	Failure Symptom	Trouble-shooting	Remark
1	System does not boot: - No beep sound - Power LED is off	<ol style="list-style-type: none"> <li>1. Ensure that the <b>AC Power Cord</b> and the <b>Power Supply cable</b> are connected</li> <li>2. Replace <b>Power Supply</b>.</li> <li>3. Replace <b>Motherboard</b> when above methods can not work.</li> <li>4. If the problem still persists, please return the failure machine back to Datavan for repairing.</li> </ol>	 Power Supply   Motherboard
2	System does not boot: - No beep sound - Power LED only flashes once	<ol style="list-style-type: none"> <li>1. Verify the connection status of <b>power supply cable</b>.</li> <li>2. Ensure that the <b>ATX cable</b> is connected between motherboard and Front I/O Board</li> <li>3. Replace <b>Power Supply</b>.</li> <li>4. Replace <b>Motherboard</b>.</li> <li>5. Send the failure machine back to Datavan for repairing.</li> </ol>	 ATX Cable   Front I/O board
3	System does not boot: - Long and continuous beep sound	<ol style="list-style-type: none"> <li>1. Remove and reinsert <b>RAM</b> to ensure proper connection.</li> <li>2. Replace <b>Motherboard</b>.</li> <li>3. Send the failure machine back to Datavan for repairing.</li> </ol>	 RAM





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Item	Failure Symptom	Trouble-shooting	Remark
4	System always restart	<ol style="list-style-type: none"> <li>1. Check <b>CPU fan speed in BIOS</b> for abnormality.</li> <li>2. Replace <b>Motherboard</b>.</li> <li>3. Replace <b>Power Supply</b>.</li> <li>4. Send the failure machine back to Datavan for repairing.</li> </ol>	 Power Supply
5	System power LED is normal but no beeping sound	<ol style="list-style-type: none"> <li>1. Replace <b>Motherboard</b>.</li> <li>2. Send the failure machine back to Datavan for repairing.</li> </ol>	
6	System can boot with initial beep sound but no display image.	<ol style="list-style-type: none"> <li>1. Replace <b>Inverter cable</b>.</li> <li>2. Replace <b>Inverter board</b>.</li> <li>3. Replace <b>LVDS cable</b>.</li> <li>4. Replace <b>LCD Panel</b>.</li> <li>5. Replace <b>Motherboard</b>.</li> <li>6. Send the failure machine back to Datavan for repairing.</li> </ol>	 LVDS cable  Inverter cable  Inverter
7	LAN is not working	<ol style="list-style-type: none"> <li>1. Verify <b>server end connection</b>.</li> <li>2. Verify if <b>LAN cable</b> works.</li> <li>3. Replace <b>Frontier back top board</b></li> <li>4. Replace <b>Motherboard</b>.</li> <li>5. Return unit back to DataVan.</li> </ol>	 VGA/LAN Cable  Frontier Back Top Board  Motherboard

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Item	Failure Symptom	Trouble-shooting	Remark
8	Touch is not functioning	<p>ELO</p> <ol style="list-style-type: none"> <li>If red LED is not shown on the control board, replace <b>Touch cable</b>.</li> <li>Replace <b>Control Board</b>.</li> <li>Replace <b>Touch panel</b>.</li> <li>Send the failure machine back to Datavan for repairing.</li> </ol> <p>Fuji or H ( Abon ) Touch</p> <ol style="list-style-type: none"> <li>Replace <b>Touch cable</b>.</li> <li>Replace <b>Control Board</b>.</li> <li>Replace <b>Touch panel</b>.</li> <li>Send the failure machine back to Datavan for repairing.</li> </ol>	 ELO control BD   ELO Touch cable   Fuji control BD   Fuji Touch cable   H Touch control BD   H Touch Cable
9	No recognition on CF card	<ol style="list-style-type: none"> <li>Verify <b>CF card cable</b> connection status.</li> <li>Replace <b>Front I/O board</b>.</li> <li>Replace <b>Motherboard</b>.</li> <li>Send the failure machine back to Datavan for repairing.</li> </ol>	 CF card cable   Front I/O board



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10	Cash Drawer not working	<ol style="list-style-type: none"> <li>1. Ensure the <b>Back I/O jumper</b> setting is correct (please refer to user manual).</li> <li>2. Verify <b>COM and USB cable</b> connection status.</li> <li>3. Replace <b>Back I/O board</b>.</li> <li>4. Replace <b>Motherboard</b>.</li> <li>5. Send the failure machine back to Datavan for repairing.</li> </ol>	 COM and USB Cable  Back I/O Board
11	Front USB does not respond	<ol style="list-style-type: none"> <li>1. Verify that <b>LED/USB Combo Cable</b> is inserted properly.</li> <li>2. Replace <b>Front I/O board</b>.</li> <li>3. Replace <b>Motherboard</b></li> <li>4. Send the failure machine back to Datavan for repairing.</li> </ol>	 USB cable  Front I/O board
12	Keyboard does not respond	<ol style="list-style-type: none"> <li>1. Verify <b>COM and USB cable</b> connection status.</li> <li>2. Replace <b>Back I/O board</b>.</li> <li>3. Replace <b>Motherboard</b></li> <li>4. Send the failure machine back to Datavan for repairing.</li> </ol>	
13	HDD no detection	<ol style="list-style-type: none"> <li>1. Enter <b>BIOS for optimum setting</b>.</li> <li>2. Ensure the <b>HDD jumper</b> does not conflict with other device.</li> <li>3. Replace <b>HDD and cable</b>,</li> <li>4. Replace <b>Motherboard</b>.</li> <li>5. Send the failure machine back to Datavan for repairing.</li> </ol>	



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14	No Audio sound	<ol style="list-style-type: none"> <li>1. Check if OSD volume is adjusted to minimum.</li> <li>2. Verify the <a href="#">speaker cable connection</a> status.</li> <li>3. <a href="#">Clear CMOS</a>.</li> <li>4. Replace <a href="#">Speaker</a></li> <li>5. Replace <a href="#">Motherboard</a>.</li> <li>6. Send the failure machine back to Datavan for repairing.</li> </ol>	 Speaker   MB