



Apex Operating Manual (3/8/2020)

For latest version visit: <http://www.innov8gaming.com/manuals/ApexManual.pdf>

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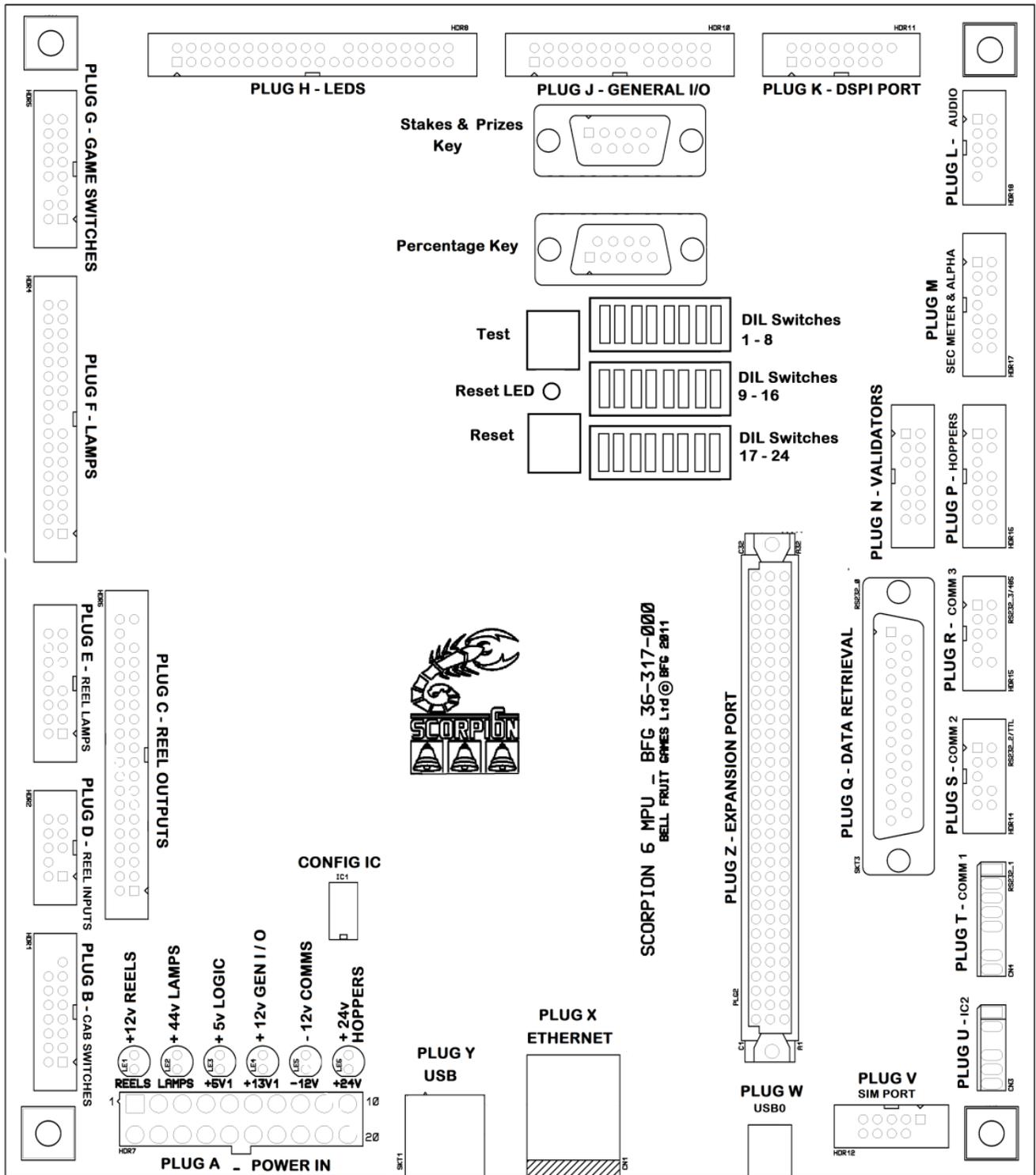
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1.0 General Description

Apex is a dual screen Video Gaming Platform. It uses a PC in conjunction with a Scorpion 6 MPU to deliver a menu of games. The player interacts with the content via the 4 hardware buttons and the lower touch screen.



1.1 Scorpion 6



The Scorpion 6 MPU located in a steel enclosure mounted to the back of the cabinet and the following plugs should be populated: A, B, C, F, G, H, J, K, L, M, N, P, T. If a data pack is present that will be connected to Q.

The Scorpion 6 and is used to interface with the lower level hardware peripherals:

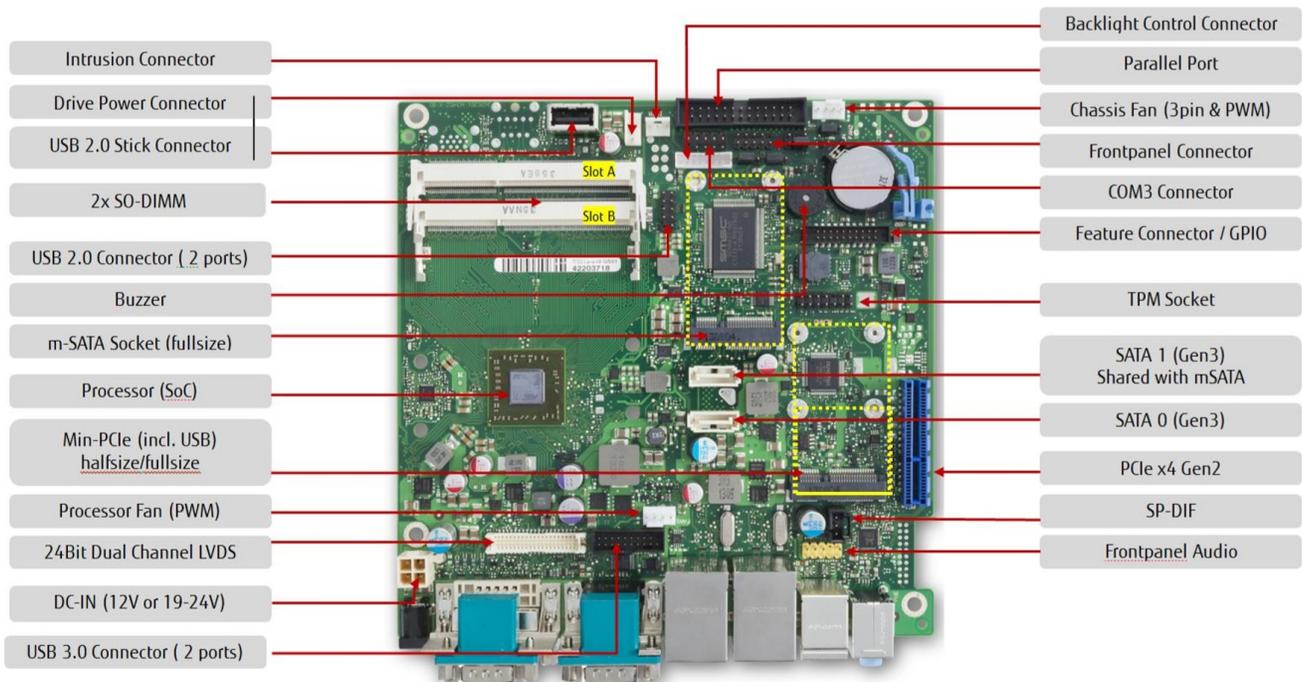
- Coin Validator
- Note Validator
- Coin Hopper
- Serial Meter
- Lamps and Leds
- Hardware Buttons
- Cabinet Switches

The system requires DES validators and hoppers to operate for maximum security.

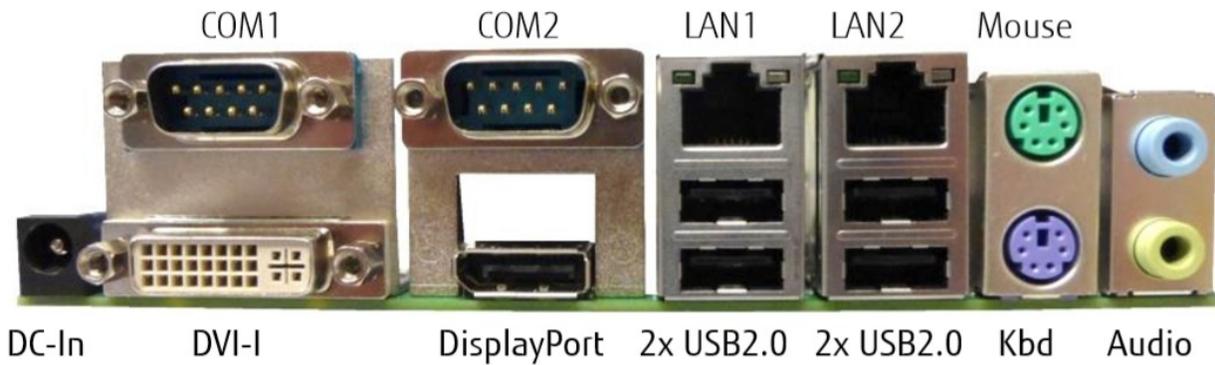
A security PIC is fitted to the Scorpion 6 MPU in the factory and must be retained if the MPU is changed and fitted to the new unit.

Information from the Scorp6 is displayed on an Alphanumeric display mounted inside the cabinet.

1.2 PC



The PC is located on the lower shelf inside a black steel case. Internal connections are required to COM3, FRONT PANEL, SATA1, DRIVE POWER and DC_IN.



External connections required are DVI-I, DisplayPort, Green Audio, 1xUSB with cable to TouchScreen, 1xUSB with Security Dongle. Models with port shielding also have a usb lead which is used as an update port.

1.3 Operating Modes

The Apex has 2 distinct operating modes:

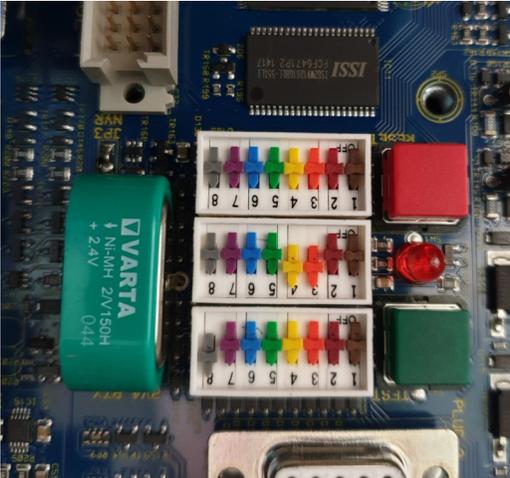
1. Maintenance Mode: Triggered when the machine has either door open. Used for diagnostics, setup, testing, demo play and data gathering. Note that some operations within the maintenance mode require a specific door or both doors to be open.
2. Live Mode: All doors closed and locked – play with real money or refill coins and notes are the only options.

Transiting from Maintenance Mode to Live Mode will reset the system and it will reboot in Live Mode. Transiting from Live Mode to Maintenance Mode will be immediate.

2.0 Machine Configuration

In all cases the hopper will fill to £600 before it diverts to the cash box. Default coin float is £350. By default no notes are required for float.

2.1 Scorpion 6 Dil Switches



The following dil switches located on the Scorpion 6 MPU are available for configuration – all other dils should be OFF at all times. OFF is DOWN, ON is UP.

- S5: Dont lock out notes on low coin float: Under normal circumstances notes will be locked out if the coin float drops below £20. If this dil is turned ON then the system will NEVER lock out notes.
- S8: Enable note validator: Turn ON if note validator fitted else set OFF.
- S11: Enable Note Float: Require an additional £100 note float to be fully floated state.
- S12: Enable Large Coin Float: Coin float extended to £500.
- S13: (Added) Enable Maximum Coin Float: Coin float extended to £600.
- S22: (Added) Turn ON to reinstate money to bank\credit that was in IOU when machine is rebooted.

2.2 Stakes, Jackpot Levels and Payout Percentage

Stakes, Jackpot Levels and Payout Percentages for games are not configurable and are integrated into the games and menu.

3.0 Preparing For Use

The majority of the following tasks will have been completed at the factory but some of them may be required to rectify faults or change behaviors during deployment.

3.1 Pairing Coin and Note Hardware

1. Begin with machine powered off and both doors open on the cabinet.
2. Observe which coin and note validator models are fitted and understand how to put them into trusted mode.
3. Turn the machine on and watch the alpha. Error A1 indicates coin validator not paired, A2 note validator not paired, A3 hopper not paired.
4. For each device that is not paired follow the manufacturers instructions to put the device in trusted mode.
5. Once each device is in trusted mode reboot the Scorpion 6 and verify the error has gone.

3.2 Pairing Scorpion 6 and PC

1. Ensure the Scorpion 6 board initializes fully without errors.
2. Ensure both doors are open.
3. When the PC boots up it will display "Waiting for Hardware".
4. When the Scorp6 boots up it will display "Waiting For PC".
5. Once PC and Scorp6 have both reached the waiting state they will pair with each other (BOTH DOORS MUST BE OPEN).
6. Once paired there will be the opportunity to Read Meters, press Menu to exit this and you will Enter Maintenance Mode.

3.3 Scorpion 6 Test Mode

The Scorpion6 has an in built test mode to activate it the following process is required.

1. Boot Scorp6 with both doors open.
2. Press the green test button on the MPU and immediately afterwards (less than 1 second) press the hopper top up switch.
3. The test mode options and information are displayed on the Alphanumeric display inside the machine.
4. Navigate around the menu using the 4 hardware buttons.

Functionality available in Scorp6 test mode:

- Test Coin and Note Hardware
- Test Lamps, Leds and Switches
- Test Serial Meter and Comm Port
- Display basic global information about game play
- With Single denomination recycling set the recycled denomination
- Clear the NVR on the Scorp6

3.4 Calibrate the Touch Screen

Calibration is done by selecting the option in maintenance mode settings on the touch screen or triggered by closing the top door on some models depending on hardware.

4.0 Refill Key Operations

The Refill key is inserted to the right of the cabinet between the payout tray and the upper door. When in Live Mode only refilling coins (or notes if a note float is enabled) is allowed. When in Maintenance Mode extended options are available which are viewed on the alphanumeric display and mirrored on the screen. Navigation is done via the hardware buttons.

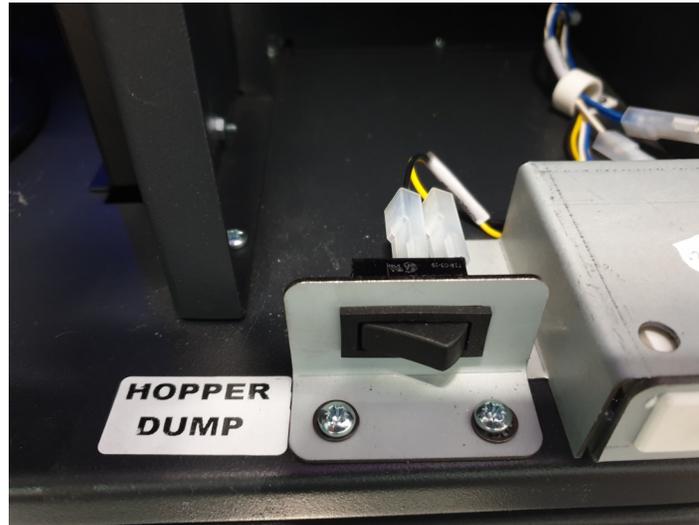


4.1 Refill Coins and Notes

Turn the refill key and add coins and notes as required to bring the machine to a fully floated level as indicated on the video screen.

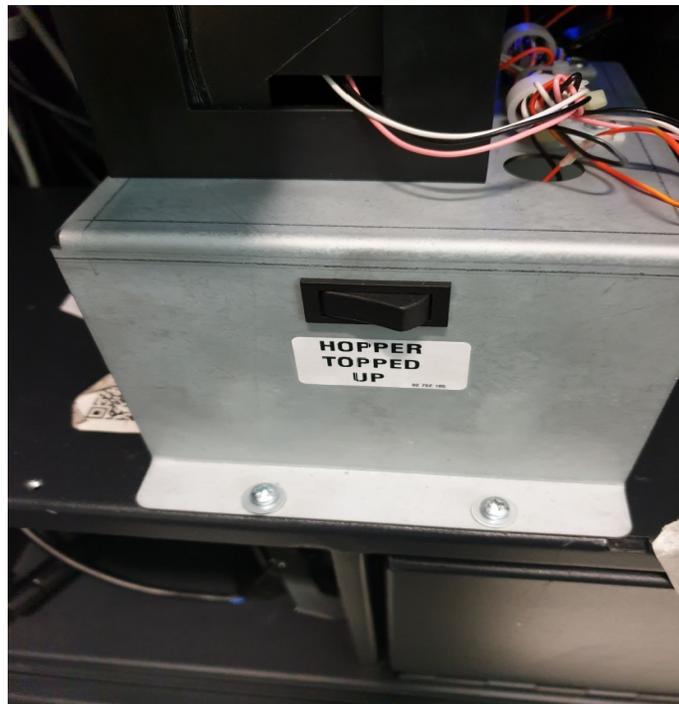
4.2 Dumping Hopper

Bottom door must be open. Turn the refill key and press the 'Hopper Dump' switch. This will allow you to transfer any notes you have stored in the recycler unit into the notes cash box and dump the contents of the £1 hopper into the pay tray. The alphanumeric display will inform the amount of additional coins required to make up the float amount. Note the coin float amount will not be set to zero by dumping the coins but the note float amount will.



4.3 Topping Up Hopper

Bottom door must be open. Turn the refill key and press the 'Hopper Top Up' switch. This will inform the machine that you have fully floated the coin hopper. Please note the level of the note float will not be modified and will always reflect the actual number of notes in the recycler unit.



4.4 Additional Tools and Information In Extended Refill

Using the hardware buttons and the alphanumeric display the following additional features may be accessed:

- Last Game Recall
- Last Bank Recall
- Config Log
- Software Verify
- Last Note Recall
- Hopper Level
- Error Log
- Read Meters

5.0 Maintenance Mode

When either of the doors are open the system will enter maintenance mode. This will allow various administration, diagnostic and configuration functions to be performed. It is also possible to launch the menu and play the games in demo mode. From this you can return to the maintenance

5.1 Information Available

The following information is available from the maintenance menu.

- Machine Meters: Meters for all the games on the machine
- Game Meters: Individual Game Meters
- Logs: Event logs for machine system
- Game Recall: Recall previous games to verify previous play
- User Info: A cut down version of this manual detailing some operating procedures.
- Retrieve Data: Insert a USB key to retrieve detailed information about the machine, some of this will only be readable by the manufacturers. The USB must have a folder (directory) in the root of the drive named 'innov8' and inside the innov8 folder must be a further folder named 'retrieve'.

5.2 Setup

Various options to test hardware elements including calibrating the touch screen and validation of the software installed.

5.3 Updating PC

The package required is stored in innov8.zip located on the innov8 ftp server. Please unzip and copy the contents into the root directory of a USB stick. The system must be in Maintenance Mode. Insert the USB stick into the update port on the PC. Select the Check Updates menu option within Maintenance Mode. Follow any on screen instructions.

It is also possible to apply an Automatic Update which is sometimes required if error conditions are present. In this case power the machine off and insert the USB update key into the update port on the PC. Power the machine on and the system will automatically

apply the required updates. It may require multiple reboots so please wait until the system re-loads the control panel.

5.4 Updating Scorp6

- Power off the machine
- Insert a USB stick with the new software into Plug Y on the scorp6 board and power on the machine.
- Use Autoplay to select the correct software followed by Start to confirm the selection.
- When the alpha numeric displays reports 'Programming Complete' remove the USB stick and turn the power off.
- The next time the machine is turned on it will use the new software.

5.5 Disabling a Game

To disable a game select the Game Options menu option and touch the game is question each press toggles the game between enabled and disabled.

5.6 Password

The password is used to protect some functionality within the maintenance menu such as clearing meters. On delivery the machine comes set with a password which is every other digit of the machine ID. For example the machine below has an initial pin of 15758. The password can be changed for a user defined value within the system.

```
Machine Id : 2125178588
Machine Name : ohio-content-alabama
Current Date : Sat, 10 August 2019
Current Time : 13:34:00
Configuration : Development
                Doors : BottomDoorOpen
Hub Version : 0.0.0
Menu Version : 0.0.0
```

6.0 Metering Systems

6.1 Serial Metering

When the machine is first booted in Maintenance Mode and in extended refill there is an option to read the serial meters. When "Read Meters ?" is displayed press START to read meters or MENU to continue. The meter values are in 10p increments, the following meters are available:

- Refill
- Cash In
- Cash Out
- Change
- VTP
- Notes In
- Notes Out

6.2 Data Pack

Dataport data is output from Plug Q on the scorpion 6 board and is fully compatible with industry standards.

7.0 Live Mode

Once the machine is configured as required and has been floated it can be deployed in Live Mode. With both doors locked shut it will boot straight into the games menu after checking all game integrity. The machine can still be refilled in Live Mode if required.

8.0 Spares and Maintenance

Please be aware that the following parts must be replaced with approved spares from Innov8 in order to achieve the correct operation.

- Rabbit PC and all internal PC components.
- SSD Hard Drive
- NV200
- Monitors
- Scorpion 6 main board

Please note the USB dongle and Scorp6 security pic must remain with the machine should the PC or Scorpion6 mainboard need to be changed.

9.0 Software

The latest software is available on the Innov8 ftp site for both the Scorp6 board and a the PC. The PC software is available in 2 formats a hard drive image that requires programming and a USB update that can be copied onto a usb key and used in the maintenance menu.

9.1 Downloading via FTP

The recommended ftp client is FileZilla (<https://filezilla-project.org/>).

- Protocol: SFTP
- Host: ftp1.namesco.net
- Port: Not required
- Logon Type: Normal
- User: innov8gaming.com_innov8_support
- Password: Contact technical support.

There are 3 directories, Scorp6, PCUsbUpdates, PCHardDriveImages. Inside these directories are cabinet specific directories which contain the software required.

9.2 PC Drive Image

The hard drive image is stored in a format compatible with the 'R-Drive Image': <https://www.drive-image.com> . When a new hard drive is put in a machine it configures itself to that machine. For this reason swapping drives between machines and cloning used drives is strongly discouraged. We also only support using SSD supplied by our official spares program as these have been tested and certified compatible.

10.0 Technical Support

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