Omneon VDCP & Omneon Native API Network Control

INTRODUCTION

Omneon can be controlled by Fastrack using VDCP protocol with RS-422 communication, or over a network using its Native Network API. Set-up instructions for both modes are covered in this document. Software versions installed at the time this document was created were Omneon V4.0 and Fastrack V4.3.

USING THE OMNEON NATIVE API NETWORK PROTOCOL

Before you start …

Each channel in the Omneon system is associated with a "Player" which is set up on the Omneon system using the Omneon's setup application running on the "Manager PC". The player name is used in the Fastrack assignment page to associate a Track with an Omneon channel. You can find the player name on the Omneon by searching the configuration application on the Manager PC. Find and retain this information for later use. These assigned names are **case sensitive**. In our example below we are using Players named **DvcPro1** and **DvcPro2**.

DvcPro1	**Active** (Play and Record)	Properties Open Deactivate	☐
DvcPro2	**Active** (Play and Record)	Properties Open Deactivate	☐

STEP 1 - Connecting the MANAGER PC to your network

1. When the Omneon is configured to work as a stand-alone device, a crossover cable is connected between the Manager PC and the Omneon Director. *If this cable is connected, remove it at this time.*

2. Connect the **Manager PC** to your network by an Ethernet cable attached to your network switch.

3. On the computer Task Bar, go to **Start / Settings / Network and Dial-up Connections / Make a New Connection**. This will create a **Local Area Connection**.

4. Right-click on **Local Area Connection**.

5. Left-click on **Properties**.

6. Highlight **Internet Protocol (TCP/IP)**.

7. Left-click on **Properties**.

8. Left-click the Radio button **Use the following IP address**.

9. Enter an address that is within range for your DHCP server. For example 192-168-1-**101**. Assure that the last number (101 in our example above) is beyond the range that your DHCP server may automatically assign. The Subnet Mask will likely assign itself automatically as 255-255-255-0. If not, enter these numbers manually.

10. Left-click on **OK**. Close all open Windows and dialogs.

STEP 2 - Connecting the DIRECTOR to your network

11. Connect the Omneon **Director** to your network by an Ethernet cable attached to your network switch.

12. On the Manager PC start **Windows Explorer**.

13. On the **D:** drive, expand the **Omneon** folder, and right-click on the **bin** folder.

14. Double click on **monitor.exe** to start the monitor application.

15. Under the **View** drop-down menu, left-click on **Serial Number List**.

16. In the **Omneon Director List**, right-click on the serial number of the Manager that you just connected to your network.

17. Left-click on **set IP address**.

18. Uncheck ☐ **Use DHCP**.

19. Enter an **IP address** that corresponds to your DHCP server. For example 192-168-1-102. The Subnet Mask will likely assign itself automatically as 255-255-255-0. If not then enter these numbers manually.

20. Left-click on **OK**. Close all open Windows and dialogs.

STEP 3 - Setting the Fastrack IP Address

21. On the computer Task Bar, go to **Start** / **Settings** / **Network and Dial-up Connections / Make a New Connection**. This will create a **Local Area Connection**. Unless there is a need to change the IP address or services, this will connect the Fastrack computer to the network.

STEP 4 – Modifying the FTconfig.ini file in Fastrack

22. On the Fastrack computer start **Windows Explorer**.

23. Expand **My Computer**

24. Expand **Local Disk (C:)**

25. Expand the **fastrack** folder

26. Left-click on **Ftruntime**

27. In the adjacent panel, double-click on **FTConfig.ini**. The Ftconfig.ini file will open in Notepad.

28. In the file, locate the following: **[1]**

29. Insert the following text immediately **preceding** (before, earlier than, above) the "[1]" exactly as it appears below:

> **[Om-NetDirs]**
> **EW**

30. Assure that the file is not "Read Only", and **SAVE** the modified file.

STEP 5 - Assigning the Omneon in Fastrack

31. Start the Fastrack application.

32. Press **[Shift] [ASGN]** to open the Fastrack **Assignment Dialog**.

Track	On	Device Name	Class	Device	Auto	Port	Pool
1	☒	Omneon1	OMNET	auto	☐	192.168.1.102:DvcPro1	
2	☒	Omneon2	OMNET	auto	☐	192.168.1.102:DvcPr	OM
3	☒	VTR	SONY	AJ-D750	☒	P2	

32a. Under **Device Name** enter a reel ID or name to identify the Omneon channel you will be working with. In our example above we used **Omneon1**.

32b. In the **Class** pull-down menu choose **OMNET**.

32c. In the **Device** pull-down menu, your only choice is **auto**.

32d. For the **Port**, enter the **IP address** that you gave the Omneon Manager, followed by a colon "**:**", then the name given to the Omneon Player; in our case it was **DvcPro1** (See **Before you start…**). As a result your Port assignment should look like **192.168.1.28:DvcPro1**.

32e. Under **Pool** enter the same Pool name for all OMNET Tracks. In our example we used **OM**.

32f. Click **On** ☒ and the Fastrack will now be communicating with the Omneon over the network. Press **[Esc]** to exit.

USING THE OMNEON VDCP PROTOCOL

STEP 1 – Configuring the Omneon for VDCP control

It is assumed that the connections between the Omneon units are as recommended by Omneon, including the Crossover cable between the Omneon Director and the Manager PC.

It is also assumed that the Omneon has its Players configured as per the Omneon documentation.

For the Omneon VDCP configuration set-up, we will begin in the **Player List for MediaDirector:MediaDirectorName.** Your Omneon screen should look similar to the graphic below:

Click on **Properties** of the first Player. In our example above it is **DvcPro1.** The Properties Dialog should look similar to the graphic below:

The following fields must be set as follows for Omneon VDCP configuration:

Name: This name must be unique for each player, and it is best if it ends with the numeric character reflecting the Player number.

Mode: Play, Record or Play and Record, depending on your choice.

Control: Set VDCP (Signal Port 1) for the first Player, VDCP (Signal Port 2) for the second, etc.

Default Clip Directory: This is the directory where Omneon will store its data, and the directory that will be accessed by the Fastrack.

If any of these are not correct, **Deactivate** the Player, say **OK** to the warning, and make the necessary changes before re-activating the Player. Repeat with all necessary Players.

STEP 2 – Configuring the Fastrack for Omneon VDCP control

Before you start …

Assure that the RS422 serial connections between the Fastrack Serial Break-out Panel (shown below) and each individual Omneon Player are correct.

At the Fastrack …

1. Start the Fastrack application.

2. Press **[Shift] [ASGN]** to open the Fastrack **Assignment Dialog**.

Track	On	Name	Class	Device	Auto	Port	Pool
1	☒	Omneon1	VDCP	Omneon	☒	P4	Omn
2	☒	Omneon2	VDCP	Omneon	☒	P5	Omn
3	☒	Omneon3	VDCP	Omneon	☒	P6	Omn

3. In the **Class** pull-down menu, choose **VDCP**.

4. In the **Device** pull-down menu, choose **Omneon**.

5. For the **Port**, select the appropriate serial port corresponding to the physical cable connected to the Omneon numbered "Signal Port".

In our case we have used Fastrack Ports **P4, P5 and P6**

6. Assign the Omneon a **Pool** name. In our example above we have used **Omn**. Remember that all similar devices must have the same pool name

7. Lastly enter the Omneon **Name**. Like most VDCP devices, the name, and especially the number that follows, is very important. For 3 channels of Omneon which are controlled via RS-422 cables and connected to Omneon signal Ports 1, 2 and 3, use names like **Omneon1... Omneon2... and Omneon3.** There must be NO space between the word Omneon and the number, and using only one numeric character is recommended.

8. Finally turn the Track on by clicking the **On** checkbox.