



## Technical Tip

### COM51 Settings for Blonder Tongue Clearview NTSC16

#### Overview:

This document contains instructions to set up the COM51 for use with a Blonder-Tongue Clearview NTSC16. Detailed instructions for setup of the Blonder-Tounge unit are provided by Blonder-Tounge.

Configurations in this document are based on the default settings in the Blonder-Tounge NTSC16

#### COM3000 Setup

The COM51 card should be limited to 16 active tuners.

If no QAM is being used, the COM51 Cards require an IP license to operate the NTSC16.

IP and tuner count information are input to the COM51 advanced edit > User Config screen. The COM51 must utilize a negative number in the NTSC-8\_TunerCount field as shown below.

Navigate to the advanced edit > User config and enter the IP and tuner count information as shown below.

#### User Config

**WARNING: Changing the settings in this section may cause the card to be unable to communicate. Please record all settings for future reference.**

IP_Config:	0 = Default	
Base_IP:		
Subnet:		Recommended: 255.255.0.0. Warning: You may lose communication with the card.
Gateway:		
DNS_IP:		
Time_To_Live:	3	
Log_IP:	192.168.40.70	
Log_Level:		a# (a# : guide; hw; publish; verifier; 0 - debug; 1- verbose; 2 - info; 3 - warn; 4 - error)
NTSC8_IP:	192.168.11.1	
NTSC8_TunerCount:	-16	← -TunerCount
UtilConfig:		
<input type="button" value="Submit"/>		

Click submit

*Do not set the NTSC16 destination IP in the Overview /Discover pages of the COM51*



Use the TuneAll tab to retune all tuners on the COM51s being used with NTSC16. The diagram below shows tuner 1-16 on card one being retuned.

### Tune All

```
Chassis-Slot-Tuner, IP_Dest:Port, MajorNum-MinorNum-Mode;
5-2-1, 192.168.100.4:1234, 287-65535-1;
0-0-0, 192.168.100.4:1235, 284-65535-1; //use any tuner
287sd -> 50-1 //QAM24 mode
284hd -> 50-2 //QAM24 mode
```

```
4-1-1, 192.168.6.5:17, 4-65535-1;
4-1-2, 192.168.6.5:18, 6-65535-1;
4-1-3, 192.168.6.5:19, 13-65535-1;
4-1-4, 192.168.6.5:33, 504-65535-1;
4-1-5, 192.168.6.5:34, 20-65535-1;
4-1-6, 192.168.6.5:35, 501-65535-1;
4-1-7, 192.168.6.5:49, 502-65535-1;
4-1-9, 192.168.6.5:51, 59-65535-1;
4-1-10, 192.168.6.5:65, 63-65535-1;
4-1-11, 192.168.6.5:66, 202-65535-1;
4-1-12, 192.168.6.5:67, 204-65535-1;
4-1-13, 192.168.6.5:81, 206-65535-1;
4-1-14, 192.168.6.5:82, 207-65535-1;
4-1-15, 192.168.6.5:83, 208-65535-1;
4-1-16, 192.168.6.5:97, 209-65535-1;
```

Submit CloseAll Troute TranscodeHD

Once the COM51 retunes the Blonder Tongue NTSC16 should display green status lights.

## Destination IP and Port Assignments

The Blonder-Toungue unit processes the IP streams differently than the Technicolor NTSC-8. In addition to each stream having a unique IP address the NTSC16 requires a unique port assignment per NTSC16 decoder. The ports are sequential and start at 1235. The IP address needs to be set for each unit, but the port assignments repeat with each NTSC16 unit added to the system. Inputting a negative number in the COM51 User Config TunerCount instructs the COM51 to assign these ports accordingly. The table below shows an example of IP and port assignments for two NTSC16s.

<b>NTSC16 encoder</b>	<b>IP address CARD ONE NTSC IP in advanced edit &gt; UserConfig 192.168.11.1</b>	<b>Port</b>
1	192.168.11.1	1235
2	192.168.11.2	1236
3	192.168.11.3	1237
4	192.168.11.4	1238
5	192.168.11.5	1239
6	192.168.11.6	1240
7	192.168.11.7	1241
8	192.168.11.8	1242
9	192.168.11.9	1243
10	192.168.11.10	1244
11	192.168.11.11	1245
12	192.168.11.12	1246
13	192.168.11.13	1247
14	192.168.11.14	1248
15	192.168.11.15	1249
16	192.168.11.16	1250
<b>IP address CARD TWO. NTSC IP 192.168.11.17</b>		
1	192.168.11.17	1235
2	192.168.11.18	1236
3	192.168.11.19	1237
4	192.168.11.20	1238
5	192.168.11.21	1239
6	192.168.11.22	1240
7	192.168.11.23	1241
8	192.168.11.24	1242
9	192.168.11.25	1243
10	192.168.11.25	1244
11	192.168.11.26	1245
12	192.168.11.27	1246
13	192.168.11.28	1247
14	192.168.11.29	1248
15	192.168.11.30	1249
16	192.168.11.31	1250

IP and Port assignments can also be found in the Blonder-Toungue NTSC16 Status page as shown below:

TECHNICOLOR  
 9045 River Road, Suite 400  
 Indianapolis, IN 46240 - USA  
 Phone (317) 587-4633  
[www.technicolor.com](http://www.technicolor.com)



The example below is the 16<sup>th</sup> decoder on the 1<sup>st</sup> NTSC16.

DC2:8	
Status	AFD not detected on input...
In - Stream	UDP://192.168.11.16:1250
In - Vid./Aud.	720p59.94 AVC / AC3
In - AFD Present	False
Out - RF	18



### Electronic Program Guide on NTSC16

If you are planning on using the COM51 scrolling guide as a channel in your system you will need to determine what IP and port assignment need to be entered into the EPG information.

The COM51 EPG must be sent to an unused encoder IP and port on the NTSC16. The recommended practice is to set the tuner count on the last COM51 being used to -15 and use the 16<sup>th</sup> decoder for EPG. Referencing the chart above the settings below would send EPG to the 16<sup>th</sup> encoder on the second NTSC16.

#### Electronic Program Guide Display

DestIP:	192.168.11.31
DestPort:	1250
TimezoneOffset:	5
TimezonePsip:	5
Mode:	0
LogoTftpServerIP:	
LogoFilename:	

Refer to the Blonder-Tongue NTSC16 Manual to assign and/or change the output channels of each decoder.



## Close COM51 Primary Destination Address

There may be situations where it is desirable to close all outputs from the COM51, other than the feed for the NTSC16. This requires COM51\_ST04.01.87 for newer and can be accomplished via the TuneAll tab by entering a customized TuneAll file.

Create a TuneAll file by setting the port number for each tuner to 0. The third and fourth IP octets must be non-zero in the tuneAll but will show as zero once processed.

The example below would close the primary tuner outputs on COM51 card one, tuners 1-16.

The COM51 would continue to stream channels to the NTSC16 but would not stream out Multicast IP or QAM carriers via the COM400 chassis.

```
1-1-1, 192.168.1.1:0, 4-65535-1;
1-1-2, 192.168.1.1:0, 6-65535-1;
1-1-3, 192.168.1.1:0, 13-65535-1;
1-1-4, 192.168.1.1:0, 504-65535-1;
1-1-5, 192.168.1.1:0, 20-65535-1;
1-1-6, 192.168.1.1:0, 501-65535-1;
1-1-7, 192.168.1.1:0, 502-65535-1;
1-1-9, 192.168.1.1:0, 59-65535-1;
1-1-10, 192.168.1.1:0, 63-65535-1;
1-1-11, 192.168.1.1:0, 202-65535-1;
1-1-12, 192.168.1.1:0, 204-65535-1;
1-1-13, 192.168.1.1:0, 206-65535-1;
1-1-14, 192.168.1.1:0, 207-65535-1;
1-1-15, 192.168.1.1:0, 208-65535-1;
1-1-16, 192.168.1.1:0, 209-65535-1;
```

*Note: If using EPG create the EPG file before proceeding. The EPG will not load information once this procedure is completed.*

Once completed the COM51 Discover and Overview tabs will display information as shown below:

Discover Tab						Overview Tab												
Tuner	QAM	Bitrate	Channel	SNR	Strength	Tuner	Security	Channel	Mode	Major.Minor / IP:Port								
1	192.168.0.0	0	4 WTTV	15	-28	1	ProIdiom	4 WTTV	IP	192	.	168	.	0	.	0	:	0
2	192.168.0.0	0	6 WRTV	15	-27	2	ProIdiom	6 WRTV	IP	192	.	168	.	0	.	0	:	0
3	192.168.0.0	0	13 WTHR	15	-28	3	ProIdiom	13 WTHR	IP	192	.	168	.	0	.	0	:	0
4	192.168.0.0	0	504 HBOwHD	11	-27	4	ProIdiom	504 HBOwHD	IP	192	.	168	.	0	.	0	:	0
5	192.168.0.0	0	20 WFYI	15	-28	5	ProIdiom	20 WFYI	IP	192	.	168	.	0	.	0	:	0
6	192.168.0.0	0	501 HBOeHD	10	-27	6	ProIdiom	501 HBOeHD	IP	192	.	168	.	0	.	0	:	0
7	192.168.0.0	0	502 HB2eHD	11	-28	7	ProIdiom	502 HB2eHD	IP	192	.	168	.	0	.	0	:	0