

## PARTS LIST AND TUNE-UP PROCEEDURE

### NV8600E/V OFDM (MEDIAFLO)

NV8602E/V 1.4-KILOWATT TRANSMITTER  
NV8603E/V 2.0-KILOWATT TRANSMITTER  
NV8604E/V 2.7-KILOWATT TRANSMITTER  
NV8605E/V 3.3-KILOWATT TRANSMITTER  
NV8606E/V 3.9-KILOWATT TRANSMITTER  
NV8608E/V 5.2-KILOWATT TRANSMITTER  
NV8610E/V 6.4-KILOWATT TRANSMITTER



# NV8600 series Transmitter FCC Certification Application

## Parts List for NV8600 series (Rohde & Schwarz, unless otherwise noted)

| Quantity | Part Number: | Description:                                                                                                                            |
|----------|--------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| 1        |              | Cabinet Rack                                                                                                                            |
| 1        | 2098.5209.xx | High Power AC Distribution System                                                                                                       |
| 1        | 2095.8007.02 | Transmitter Control Unit, NETCCU® 800                                                                                                   |
| 1 - 2    | 2095.1502.81 | SV800 Digital TV Exciter – OFDM (MediaFLO)<br><br>Transmitter type:<br>NV86xxE includes single exciter<br>NV86xxV includes two exciters |
| 1        |              | Exciter Switcher (only used in V version with dual exciters)                                                                            |
|          | 2095.3257.xx | Transmitters without automatic adaptive correction                                                                                      |
|          | 2095.3305.xx | Transmitters with automatic adaptive correction                                                                                         |
| 1        | 2096.4505.02 | Rack Controller                                                                                                                         |
| 1        | 2103.1001.24 | ZK810K1 Coolant Pump Unit                                                                                                               |
| 1        | 2103.0728.26 | KL862 Liquid-to-Air Heat Exchanger<br>(Sizing dependent on transmitter power output rating)                                             |
| 4        | 2080.9048.00 | Temperature Monitor                                                                                                                     |
| 2-10     | 2100.6002.02 | VH8600A1 UHF Power Amplifier, 640-watts output for OFDM<br>Quantity dependent on transmitter rated output power                         |
| 1        |              | Harmonics Filter                                                                                                                        |
| 1        | 2501.9753.xx | Final Amplifier Input Splitter                                                                                                          |
|          | 2501.2500.xx | Final Amplifier Output Combiner Unit<br>Part number varies depending on the number of amplifiers in transmitter cabinet.                |
| 1        | 2101.0508.10 | Absorber Unit (reject load)                                                                                                             |
| 1        | 2102.6000.44 | GD858 Directional Coupler with Lightning Protection                                                                                     |
| 1        |              | Channel Bandpass “Mask” Filter                                                                                                          |
|          | R0090124520  | Channel "Mask" Filter, supplied by Dielectric<br>(as tested, complies with specified channel “mask” )                                   |
| or       |              | Alternate “Mask” Filter #1, supplied by Myat<br>(may be used in place of R009012452)                                                    |
| or       |              | Alternate “Mask” Filter #1, supplied by ERI<br>(may be used in place of R009012452)                                                     |



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## Tune-Up Information:

The NV8600 family of transmitters is broadband in design and therefore requires no tuning as such. Each individual transmitter is put through extensive testing at the factory on the customer's designated operating frequency to insure proper operation. The transmitter commissioning process calls for the verification of the factory set-ups. Following is an outline of the requirements:

### COMMISSIONING OF THE TRANSMITTER

- 1) Requirements For Putting Into Operation
  - a) Verify Rack Wiring Interconnect
  - b) Checks Response Settings (programmable circuit protectors) of Power Distribution And Pump Unit
  - c) Verify Transmitter Rack/Cabinet Internal Wiring Connections
  - d) Rack Controllers Configuration
- 2) Switching On The Transmitter
  - a) Exciter Turn On
  - b) Settings In The Exciter Menu Of The CCU800 (Synthesizer, Modulator/Precorrector, Encoder)
  - c) Settings In The Amplifier Submenu
  - d) Settings In the Cooling System Menu
- 3) Checking The Exciter Output Power
- 4) Putting The Cooling System Into Operation
  - a) Filling The Cooling Systems With Coolant
  - b) Adjustments Of Cooling System
  - c) Pump Stand Controller Configuration
- 5) Putting The Amplifiers Into Operation
  - a) Switching On The Amplifiers
  - b) Amplifier Adjustment
- 6) Setting RF Displays And Thresholds
  - a) Setting Forward And Reflected Power Monitoring
  - b) Setting The Forward Power Threshold
  - c) Verify Band Occupancy (Mask Filter Response)
- 7) Emergency Operation, Verification and Adjustment
- 8) Remote Control Function Verification

A complete step-by-step discussion of the start-up procedure and adjustments needed to put the transmitter into operation, as outlined above, can be found in the appropriate sections of Exhibits: SV800 Exciter Instrument Manual, NV8610 System Manual, and ZK810K1 Pump Unit Instrument Manual that accompanies this filing.

