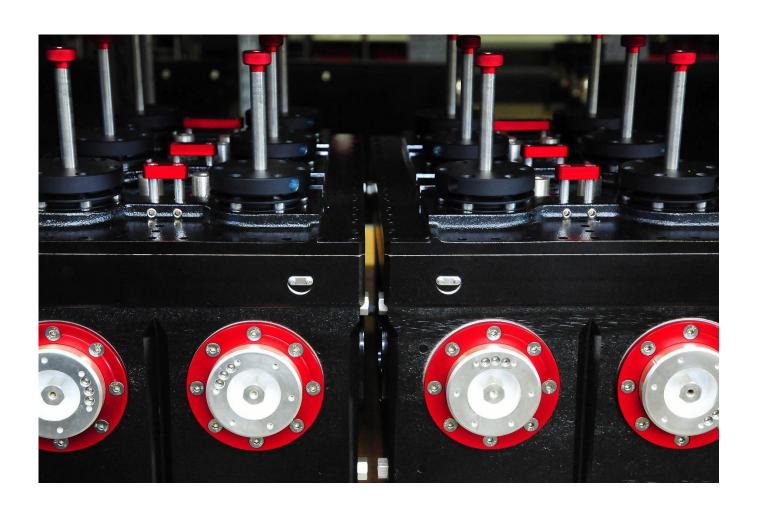


# SAFETY AND OPERATION

Passive Components

TN.01 Rev. 1.1



TN.01 Rev. 1.1 21/12/2017



#### 1. General Safety and Warranty Information

- This Component is intended for professional use only: it must be handled, installed, maintained and disposed of by professional
  personnel only
- · Risk of personal injury if dropped: always use safety shoes and appropriate security devices when handling it
- Do not open, disassemble, modify, expose to water or other liquids, exceed maximum operating power: risk of damage to Component and connected devices, personal injury, fire hazard (warranty will be voided)
- This Component may contain PTFE (E.g. Teflon™). A toxic gas is released when PTFE reaches temperatures above 300°C (572°F). Extreme care must be taken when working with products containing PTFE that has been exposed to high temperatures (such as during fire or burning from lightning strike)
- Please refer to COM-TECH Website (www.com-tech.it) for complete Warranty Conditions

## 2. Unpacking, Storage and Handling

- Check the crate/box for damages, and inspect all visible components. If any damage is evident, notify Carrier and COM-TECH immediately
- Store the product according to the specified storing conditions (Please refer to Product Datasheet)
- Do not remove COM-TECH Serial No. Label (warranty will be voided)
- Handle the Component with care, <u>carefully avoiding any shock to the Trim Points</u> (Tunings, Couplings etc.), as this may cause
  the Component to lose or deteriorate its tuning

# 3. Installation and Operation

- Install according to the specified working conditions (Please refer to Product Datasheet)
- Allow an installation which guarantees a free air flow around the Component. <u>Do not install in an enclosed boxing, rack or housing</u> (unless factory provided)
- The component can be installed in any working position. Install and fix avoiding mechanical stress to the Component or its fixing brackets, avoiding tension while blocking the fixing screws
- Do not hang on the ceiling or wall: the provided racks, frames, brackets are not approved for suspended installations
- To ensure a safe and correct operation to the Component and connected devices (Transmitters, etc.), all the transmitting
  system must be checked before applying power. Test the RF lines and other parts connected to the Component with a Network
  Analyzer; it is advisable to test the Component itself to ensure that the values match the specifications in the Test Report and
  Product Datasheet
- Start the power-up by applying low power to the Component. Terminate the Component with a 50 Ohm load and progressively
  increase the power, continuously monitoring forward and reflected power up to the operating power. Immediately dismiss
  power if any abnormal conditions are detected
- Make sure to connect the Components in accordance with their tuned channels. <u>Most problems occur because of wrong connections between devices</u>. Eg. Ch. 30 Transmitter connected to Ch. 40 Filter
- Some parts may get hot when in operation. If you experience unexpectedly high temperatures, please immediately report to COM-TECH
- Never exceed maximum operating power: risk of permanent damage to the Component and connected devices (Transmitters etc.)

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# 4. Tuning (Filters and Combiners)

- Do not attempt to act on the Trim Points to tune or re-tune a Filter unless you are familiar with Broadcast filters tuning.
   A tuned Filter can be easily mistuned, with no easy possibility to roll-back, with few and limited movements on the Trim Points
- Do not start tuning or re-tuning a Filter prior to carefully reading the "Tuning Guide" together with both its "User Manual" and "Tuning Instructions". Permanent damage may occur
- A mistuned Filter can cause severe damage to Transmitters and other connected devices.
- · Make sure that the Filter reaches the tuning specifications before connecting it to the system and turning on RF power
- · Never attempt to tune a Filter when attached and connected to RF power. Risk of permanent damage and personal injury

#### 5. Maintenance

- Under normal circumstances no specific maintenance is required, and tuning adjustments should not be necessary
- External silvered parts may become tarnished (stained, darkened and yellowish) with time and exposure to environment. This
  is caused by the oxidation of silver, which is a natural process, and does not deteriorate the product performances.
   Should the oxidation of external parts be removed, please use a Silver-specific cleaning product with clean cloth. Never attempt
  to clean internal parts
- In the event of physical damage, it is recommended to return the Component COM-TECH for repair and retuning

## 6. Disposal

- This Component is manufactured with materials that may be recycled at the end of its product life (E.g. copper and copper alloys, aluminum and aluminum alloys, galvanized and stainless steel).
   Please dispose of according to local regulations
- COM-TECH products are RoHS compliant and BeO Free:
  - COM-TECH supports the European Union's efforts to remove harmful chemicals from consumer electronics.
  - COM-TECH products are compliant with Directive 2011/65/EC and Directive 2015/863/EC of the European Parliament and the Council of the European Union regarding the restriction of the use of lead, cadmium, mercury, hexavalent chromium, polybrominated biphenyl (PBB), polybrominated biphenyl ether (PBDE) flame retardants, bis(2-ethylhexyl) phthalate (DEHP), butyl benzyl phthalate (BBP), dibutyl phthalate (DBP), and diisobutyl phthalate (DIBP).
  - COM-TECH is taking an extra step by making all its products Beryllium Oxide free, in accordance with the directive 2003/36/EC, which has classified Beryllium Oxide as "Carcinogenic", and has thereof restricted its use and imposed safety rules in processing it.