

Commander Transmitter Upgrade Package

A trusted partner

We are at the forefront of radar technology, delivering sensor systems that give commanders superior situational awareness and targeting solutions.

The Commander radar has proved its surveillance and battlespace management capability in service across the world for over ten years. BAE Systems has developed a package of upgrades to extend the life of this world-leading radar, protect customers' investment and further enhance reliability and maintainability of the system.

Two Transmitter upgrade packages are available to provide maximum flexibility to meet customers requirements.

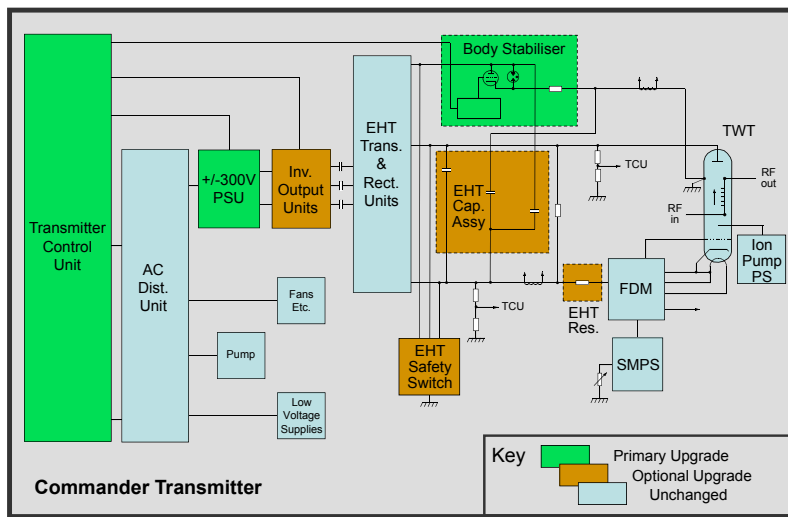
The Primary Upgrade Package provides:

- Improved fault reporting
- Improved diagnostics - more information provided to the operator
- Greater resistance to voltage and current spikes
- Reduced obsolescence
- Enhanced Transmitter reliability.

A further Optional Upgrade Package supplements the Primary Upgrade Package and delivers greater fault reporting and reliability.

Both upgrade packages have been implemented and proven in service.





PRIMARY UPGRADE PACKAGE

The enhanced Transmitter Control Unit, along with the associated upgraded units, offers the following benefits:

- Improved protection against transient voltage and current spikes through improved signal filtering. This leads to reduced stressing of electronic components during fault conditions and hence improved reliability.
- Additional fault and status display indicators provide more in-depth information to the Operators and Maintainers, particularly during fault conditions.
- The first occurring failure within a chain will lock out subsequent failure reports to aid fault diagnosis, should a single fault give rise to multiple fault indications.
- Transient fault conditions are latched and displayed. Only a manual reset can clear these fault indications.
- Improved clarity of status / fault indicators as a result of front panel layout changes and tri-state LED's.
- Addition of a control timer to prevent frequent operation of the EHT Safety Switch (dump switch) which can cause excessive stress to the EHT resistor dump chain leading to their premature failure.
- Improved protection against the resetting of the 10 minute TWT heater timer as a result of temporary loss of coolant flow.
- Reduce the obsolescence threat through the use of modern components.

The Primary Upgrade Package affects the following sub-assemblies within the Transmitter:

- Transmitter Control Unit
- +/-300V Power Supply
- Body Stabiliser.

All three items within the Primary Upgrade Package must be implemented together to achieve the upgrade.

OPTIONAL UPGRADE PACKAGE

The Optional Upgrade Package offers the following benefits:

- EHT capacitor modification provides the following improvements:
 - Earth points separated – reduces risk of “domino” effect during fault conditions
 - Diode up rated – protects against failure due to high transient fault spikes
 - Protective shield added – components protected during transit and handling.
- The EHT resistor modification provides the following improvements:
 - A corona shield is added to reduce the possibility of arcing
 - Dump Resistor chain relocated in a position that benefits from forced-air cooling.
- The ability to monitor the Inverter Output currents during normal operation. This can provide advance warning of performance drop-off and possible impending Transmitter failure
- EHT Safety Switch has improved operational reliability as a result of its revised construction.

The Optional Upgrade Package affects the following sub-assemblies within the Transmitter:

- EHT Capacitor Assembly
- EHT Resistor Assembly
- Inverter Output Unit
- EHT Safety Switch.

It is recommended that all four items within the Optional Upgrade Package are implemented together.

FOR MORE INFORMATION CONTACT:

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