Memo / Note

De/from	:	O. PERALDI, ing.	Date : June 9, 2009
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Dossier/File	:	Translator Notice, OPN1-09062009.doc	
Objet / Intent	:	TRANSLATOR NOTICE	
		MDG TELECOMMANDE	

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Object

Technical information concerning the use of the translator telecommande of MDG (P/N: 008035).

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Notes

Common Positive/ Negative

- If the MDG system is in **Common Positive** mode, the ground is positive and a negative signal (Active Low) must be applied to the input.
- If the MDG system is in **Common Negative** mode, the ground is negative and a positive signal (Active High) must be applied to the input.

Mode PLC/ DC-RC

- If the MDG system is in PLC mode, the user can control the interface with its own I/O system (voltage range 15-30 VDC).
- If the MDG system is in DC-RC mode, the user must control the interface with the voltage provided by the generator.

Jumper configuration

Input Control Signal

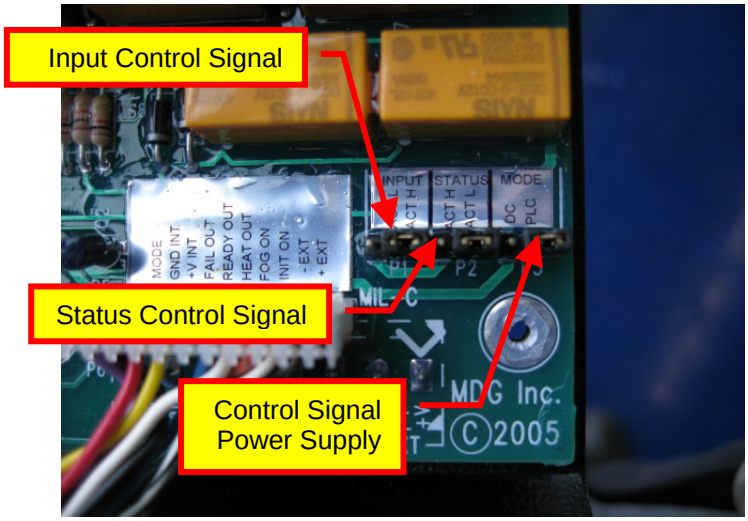
- ACT LCommon Negative mode
- ACT H Common Positive mode

Status Control Signal

- ACT L Common Negative mode
- ACT H Common Positive mode

Control Signal Power Supply

- DC Internal Power Supply
- PLC External Power Supply

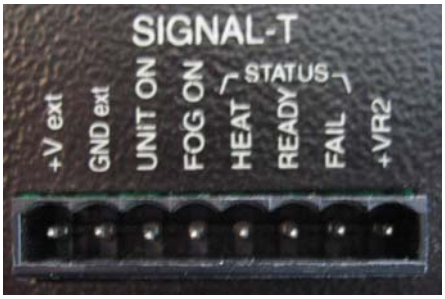


Connector Wiring

SIGNAL-T Connector

- PLUGCON Header, type 220, 8 contacts
- Wiring

1 = External VDC Supply (15 – 30)	INPUT
2 = External Ground Supply	INPUT
3 = Unit ON	INPUT
4 = Fog ON	INPUT
5 = Heat Status	OUTPUT
6 = Ready Status	OUTPUT
7 = Fail Status	OUTPUT
8 = Mode PLC/DC-RC Status	OUTPUT

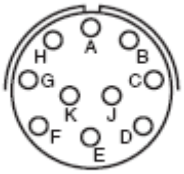


SIGNAL-M Connector

- Amphenol Miltary Connector, 10 pins, 3 points bayonet coupling, Model PT02E12-10P

- Wiring

A = External Ground Supply	INPUT
B = Unit ON	INPUT
C = Fog ON	INPUT
D = External VDC Supply (15 – 30)	INPUT
E = Heat Status	OUTPUT
F = Ready Status	OUTPUT
G = Fail Status	OUTPUT
H = Generator Voltage Supply (+12 VDC)	OUTPUT
J = Generator Ground	OUTPUT
K = Mode PLC/DC-RC	INPUT



LED Description

STATUS

VDC	Green Led	Indicates DC power is available
Ready	Green Led	Indicates that the generator has reached the operating temperature
Heat	Yellow Led	Indicates that the generator is currently heating
Fail	Red Led	Indicates that the generator is in a fail state

Note:

The fail state normally happens if the fog generator detects a temperature problem (overheating, thermocouple shortage, …). At this point, the fail LED will illuminate continously while the heat LED will start blinking.

If the fail state does not recovery rapidly, please contact MDG Staff.

Please note that if the internal power supply is sumitted to a glitch (shortage of the internal voltage supply in DC-RC mode by the user), the generator may also switch to the fail mode.

MODE

PLC	Green Led	Indicates that the control is in PLC mode
DC-RC	Green Led	Indicates that the control is in DC-RC mode

INPUT

ON	Green Led	Indicates that the user has turn on the generator via the control signal
FOG	Green Led	Indicates that the user has turn on the fog generation via the control signal

Operation sequences

Generalities

When the AC power is supplied to the fog generator, the VDC led (STATUS indicator) will illuminate. The fog generator will stay in standby mode, until further notice.

When the UNIT ON signal is applied by the USER I/O SYSTEM, the ON led (INPUT indicator) will illuminate, and the system will start to heat the nozzle block of the fog generator. This should take a maxium of 10 minutes to have the generator ready.

When the nozzle block will have reached its operation temperature range, the READY led (STATUS indicator) will illuminate. At this stage, the fog generator is ready to operate. If a hardware problem occur within the heating system, a security function will activate the fail state (fail led illuminated, heat led flashing). In normal operation, the Heat led (STATUS indicator) will turn on and off, from time to time, to indicate heat on and heat off.

When the FOG ON signal is applied by the USER I/O SYSTEM, the FOG led (INPUT indicator) will illuminate, and the system will start produce fog after approximatively 30 secondes which corresponds to the initial cleaning cycle.

If the FOG ON signal is disabled, the generator will cease to produce fog, and the cleaning cycle is started (30 secondes). If the FOG On is enable during that cycle or after, the production of smoke starts immediately.

Signal-T Control

This operation mode must be configure ONLY in PLC Mode (see **Jumper Configuration** paragraph).

The user controls the fog generator via an external PLC system, plugged into Signal-T connector (see above).

The recommand voltage should be between 15 and 30 VDC.

Signal-M Control

This operation mode can be externally configured in PLC/RC-DC Mode via the K pin or by the internal jumper (see **Jumper Configuration** paragraph).

The user controls the fog generator via an external PLC system, plugged into Signal-M connector (see above).

The recommand voltage for the PLC mode should be between 15 and 30 VDC.

In the RC-DC mode, the user must use the internal power supply (ie, pins H/J) to manage the logic of its external I/O system.