PHAROS REPEAT

PHAROS REPEAT INSTALLATION

The 1+4 port DMX512 Pharos Repeat is designed to be permanently installed in a central control room/cupboard or DIN consumer unit for remote deployment.

The unit is 100% solid state and has been qualified to operate in a dry environment:

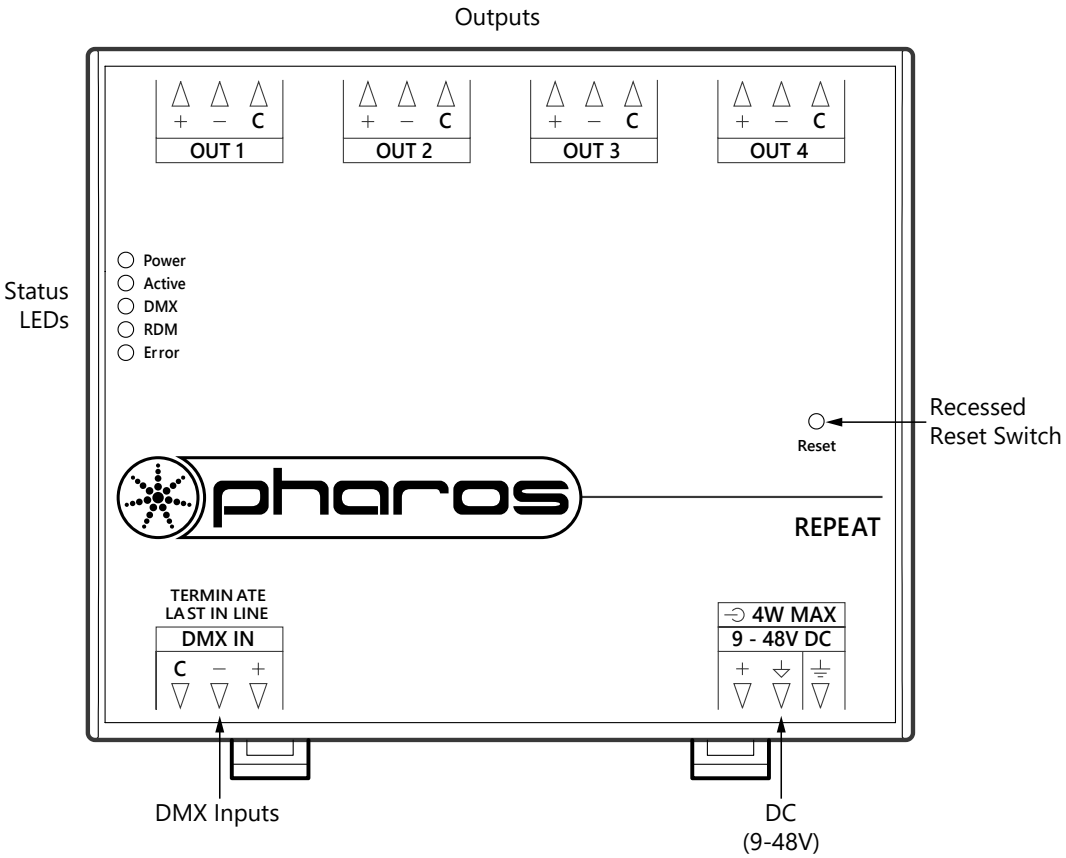
- Temperature range 0°C to 50°C (32°F to 122°F)
- Humidity 10-90% relative, non-condensing
- Ingress IP40

Sealed IP65 rated consumer units are available for outdoor use, please consult your Pharos distributor or representative.

NOTE: This equipment is not suitable for use in locations where children are likely to be present.

PHAROS REPEAT LAYOUT

The following drawing illustrates the layout of the repeater, refer to the following sections for details:



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POWER SUPPLY

- DC power (9 to 48V)

  A limited power source approved to UL60950-1 2 Edition, CAN/CSA C22.2 No. 60950nd1.07 2 Edition MUST be used, with an output voltage of 9 to 48V DC.

  Such a power supply can be connected directly to the Pharos Repeat using the DC Input connector. The pins on this connector are marked:

  \+ Positive input (9 to 48V DC)

  ⏚ Signal ground (0V)

  ⏚ Chassis ground (earth)

  The power supply should be connected to the Positive and Signal ground inputs, ensuring the polarity is correct.

  The Pharos Repeat will typically consume 4W with all ports fully loaded.

GROUNDING

A dedicated earth terminal is provided which should be connected to a suitable earth.

STATUS LEDS

The red LEDs on the top of the Pharos Repeat indicate the unit's status:

Power:	Indicates that power has been applied.
Active:	Indicates that the unit is functional.
DMX data:	Illuminates when DMX data is being routed (input to all ports).
RDM data:	Illuminates when RDM data is being routed (a port to input).
Error:	Flashes to indicate an error condition.

PORTS

- DMX Input

  One DMX In port is provided for the universe that is to be repeated.

  The pins on these connectors are marked:

  C Data common

  \- Data - (‘Cold’ or ‘Complement’)

  \+ Data + (‘Hot’ or ‘True’)

- DMX Outputs

  Four DMX output ports are provided.

  The pins on these connectors are marked:

  \+ Data + ('Hot' or 'True')
  \- Data - ('Cold' or 'Complement')
  ⏚ Chassis ground (shield)

  To make up a cable to a 5 pin XLR the following connections should be made:

	LPC:	5 pin XLR:
Data +	+	3
Data -	-	2
Shield	⏚	1

  The DMX ports are by default not isolated from the Repeat's ground connection which is the recommended configuration for driving isolated inputs - the majority of DMX receivers.

DMX & PHAROS REPEAT GUIDELINES

Pharos Repeat is compatible with the DMX512, DMX512(1990), DMX512-A and RDM 1.0 standards and care should be taken to ensure that your cabling, wiring topology and termination also complies with these standards.

Such compliance is beyond the scope of this document but a good resource is "Recommended Practice in DMX 512" by Adam Bennette which is available through PLASA and USITT.

WARRANTY

Pharos Architectural Controls Limited (Pharos) products are warranted for a period of five (5) years from the original date of purchase against defective materials and workmanship.

This warranty is subject to the terms, conditions and exclusions available at www.pharoscontrols.com/legal