



# BOREAL

## ALIGNMENT KIT

- Used as a commissioning tool
- Useful for maintenance personnel
- All-in-one weather tight carrying case



SET

FORGET

DETECT

# BOREAL

## ALIGNMENT KIT



## WHAT IT IS

- The Alignment Kit is used for the **installation, commissioning, and alignment** of primarily the **OPX and SDX Measurement Heads**
- The Alignment Kit is a useful accessory for OPX and SDX heads but it is **strongly encouraged for OPX Head applications path lengths beyond 100m**

## ALIGNMENT ORDER

Below is the suggested order to use the alignment tools:

- Scope:** Rough Alignment Tool
- Visible Laser:** Rough Alignment Tool
- Remote Light Meter:** Fine Alignment Tool
- Once the Measurement Head has been aligned, the scope can be adjusted to provide quick visual alignment.

## INCLUDED COMPONENTS



RLM



Visible Laser



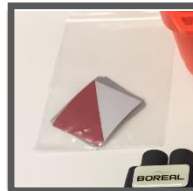
Fibre Tape



CAT6 Patch



Fibre Patch



Grey Tape



IR Card



Caps & Couplings



Attenuator

## VISIBLE LASER/ POWER METER

- The hand-held unit is used to inject a beam of light along a fiberoptic cable **and emits a red (625nm) visible laser beam at 20mW** through an FC/APC receptacle
- The visible laser and the optical power meter is used to **check for damage/continuity, trace individual fibres, and aid in the alignment of the Measurement Heads**

**Note:** Avoid looking directly into the output connector or fibres when the visible laser is energized

## REMOTE LIGHT METER (RLM)

- The Remote Light Meter (RLM) is a battery powered (9V) unit **which measures the strength of the returning electrical signal** in the CAT6 cable (RJ45 connector)
- The **display is a relative indication of signal strength** and will not match the returned laser light (Rx) value on the GasFinder
- The RLM is used along with the X-Y Aiming Mount **to find the highest Rx value on both the X and Y axis.**
- The RLM can also be used at the GasFinder3 unit to verify the **CAT6 cable integrity**

## FIBRE CLEANING TAPE

- Cleanliness is of paramount importance** when dealing with fiberoptic cables
- The Fibre Cleaning Tape enables the technician to **clean the FC/APC connector face** before inserting it into the bulkhead

## IR CARD

- Because the infrared (IR) laser light is not visible, **a special card (5x8cm) can be used to detect the presence of IR light** having a wavelength of 1200 to 1600 nm
- To use the card, **hold it where the IR beam is expected to be**
- When the IR beam hits the card, **a blurry red spot will appear**
- To increase the intensity of the spot, **expose the card to a bright spot for a few seconds.**

## FIBRE ATTENUATOR

- The fibre attenuator is **used in scenarios where there is too much laser light** being returned by the retro-reflector
- Rather than bending the fibre** to lessen the intensity of returned laser light a Variable Fibre Attenuator can be used
- The Variable Fibre Attenuator operates by bending the fibre optic cable and **there is a loss of signal as the beam tries to negotiate the two bends**
- The attenuation level can vary **from zero to total**