

# Why Do I Need to Add Light to My MRI ?



# 11 Considerations When Adding Fiber Optic Lighting in Your MRI Machines

Adding interior lighting will contribute to a patients' ease and relaxation as they enter and remain in the MRI chamber. It also helps the medical clinicians properly position a patient for their scan.

## Things to Consider When Including Light in Your MRI System

### **1 Does it interfere with the scanning process?**

Lighting system cannot introduce magnetic or electronic interference during the scanning process.

### **2 Does it create heat or noise?**

Lighting must not contribute noise or heat.

### **3 How will you mount it?**

Thin flat panels enclosed in a plastic conduit can be mounted inside each MRI bore tube.

#### **4 Can it be affixed with adhesive?**

You can permanently affix the flat panels with double-sided adhesive foam tape.

#### **5 Does it contain only nonferrous material?**

The fiber optics system must be constructed of all-plastic, all nonferrous materials.

#### **6 How many layers do you need?**

Depending on the application, the panels are constructed of 1 to 6 woven layers.

#### **7 Are clear laminates acceptable?**

The panels are assembled using clear laminates.

#### **8 Do you need high intensity light?**

A reflective layer is attached to one side of the panel to provide single sided light emissions and higher intensity.

9

## What will be the source of the light?

Your light source should travel from a remote light source to the mounted strips.

10

## How will you deliver the light?

To deliver lighting extremely thin acrylic (PMMA) fibers should be bundled together into a round cable.

11

## How will you attach the cable to the source?

The fixed end of the cable will be attached to the light source.

# Conclusion

Creating a comforting environment is the goal of any MRI suite. Lighting can become a challenge because of the scanning equipments sensitivity to electromagnetic interference.

MRI scans can reveal life-saving information that other tests cannot. Today's technology can greatly increase patient comfort at a relatively low cost.

MRI machines that have comfort lighting can reduce the anxiety of long MRI exams and provide a benefit for the clinician and patient. Advances continue to be made as lighting choices and illumination become smarter.

**Start Your Lighting Solution**