## Adding Signaling to your Turnouts - 2 Scenarios:

Dwarvin provides it's signaling in 5 different packages -

- ✓ The Kit which includes the Controller & 3 Sets of Signal lights & Power Supply\*,
- √ The Kit which includes just the Controller & 3 Sets of Signal lights
- √ The Controller & Power Supply\*,
- √ The Controller on it's own, and
- ✓ Signals on their own.
- \* Note that the Stall systems don't need the Power Supply as it takes its power from the connections to the Stall motor.

So let's look at some scenarios to minimize costs and installation time.

## Scenario 1:

You have a yard ladder with 6 turnouts that only can only be seen from the entrance direction, hence you will only need 6 dwarf signals, and 6 controllers and 1 power supply (to supply all 6 controllers). So what do you need?

- √ 1 Kit which includes the Controller & 3 Sets of Signal lights & Power Supply\*,
- √ 1 Kit which includes just the Controller & 3 Sets of Signal lights, and
- ✓ 4 Controllers on their own.

## Scenario 2:

Let's turn scenario 1 around so that you are looking from the end of the yard. You will want to add 2 signals per turnout, in other words 12 Signal lights in total. This becomes 4 sets of 3, so you will need:

- √ 1 Kit which includes the Controller & 3 Sets of Signal lights & Power Supply\*,
- √ 3 Kits which include just the Controller & 3 Sets of Signal lights, and
- ✓ 2 Controllers on their own.

In each of the above scenarios the full capacity of each Controller will not be used, leaving space to run 2 fibers from each to a Display / dispatchers panel for only the cost of a short run of fiber.

## Scenario 3:

Add to scenario 1 or 2 a turnout facing the other way, this will require the addition of:

- ✓ Controller, and
- √ 1 or 2 individual Dwarf Signals