Frequently asked questions:

1. Why DC transformer can handle long wires/track without power loss / voltage drop on the halogen lamp at the end of 20 meters wire/track?

ANSWER: Ordinary high frequency AC electronic transformer creates big inductance on the long wire, this big inductance not only consumes a lot of energy, but also makes the phasic excursion to the current, and causes high temperature inside the transformer. This is the well-known “skin effect”.

HYTRONIK DC transformer generate pulsating DC output instead, which has virtually eliminated the “skin effect”, and can therefore handle up to 20 meters long wire and track for halogen lamps.

2. Why Hytronik transformer can pass EMC test with 20 meters long wire?

ANSWER: Thanks to the pulsating DC output, and the elimination of the “ skin effect”, 20 meters wire becomes a small resistance load to the electronic transformer; and hence there is no inductance and distributing capacitance reflecting in the switching circuit , which may causes the switching circuit to operate abnormally and generate big electromagnetism disturbance. We use two levels of wide frequency filters in the EMI filtering circuitry, as a result, the transformer can pass the EMC test.

3. In the user instruction we do recommend that the contractor should make sure not to cross 12V and 230V cables. How important is this and what should the safe distance be?

ANSWER: It might create EMC problem. we recommend >200mm distance.

4. Is it just the fuse that determines how many transformers you could connect parallel to one another?

ANSWER: The amount of transformers in terms of parallel connection is determined by the ampere rating of the terminals and the wires on PCB. Our terminal it is rated 10A, meaning the maximum parallel load can reach 2300w. In other words--

for ht4105, ht5105, max. 21 units can be connected in parallel.

for ht4150 ht5150, max. 15 units can be connected in parallel.

for ht4210, ht5210, max. 10 units can be connected in parallel.

for ht4300, ht5300, max. 7 units can be connected in parallel.

And so on...

5. How important is it not to lay cables along the transformer?

ANSWER: It might create EMC problem.

6. Could one use for example an aluminium shield when there is no other way to lay the cables than along the transformer?

Answer: Yes! the aluminum sheet will do the job, and seal the possible interference out of the cable.