

Using the CVP-booster.

http://www.cvpusa.com/easydcc_booster_zmaster.php

The CVP ZoneMaster is the default booster used by the Dutch US-group. These boosters have proven to react quickly to shorts and be able to reliably restart with sound decoders.

These boosters are essential "plug and play". Connect a good laptop power supply capable of 6A at 15V. We use a Velleman model like the one that CVP is offering (120W, 6A at 15V, <https://www.velleman.eu/products/view/?id=408908>).

By default the trip current should be set at 3.5A, but it is always good to check it before first use (see the manual for the details). Only for yards a higher trip current can be needed, but be careful because high currents can easily melt the thin wires in the engines!

The next task is to connect the booster to the loconet. This has to be done using the OPTO-input jack. Do NOT use the DCC-databus jacks. They are for CVP's own system only!

Although the connectors used by CVP and Loconet are the same (Western 6P6C) the layout of the wires isn't. The booster expects to receive the DCC signals on pin 3 and 4 and Loconet provides these signals on pin 1 and 6. The quick route is to make a special cable where wire 1 and 6 are connected to pin 3 and 4 at one end. This is shown in the manual of CVP. We have chosen an other route. We modified the commercial available Western 6P6C pass through connector.

<https://www.reichelt.de/modular-adapter-mit-zwei-modularbuchsen-6-6-wb-2x6-6-sw-p166234.html?>
<https://www.conrad.nl/p/goobay-telefoon-adapter-1x-rj12-bus-6p6c-1x-rj12-bus-6p6c-zwart-1489292>

By using an adapter we can use our standard LN-cables to connect the boosters to the Loconet. We made them so that the short wire for the CVP is permanent connected to the adapter and it is also very short (~10 cm).

The steps to modify the connector block:

- Break open the connector block (the two halves are clicked together)
- Pull out the two wire blocks
- Pull out the wires 2, 3, 4 and 5 from both wire blocks. They are not needed.
- Switch on one wire block the wires 1 and 3 and 6 and 4
- You should have just two wires remaining.
- Mark the CVP end and attach the short LN-cable to that side.
- Test the conversion. If oké, fix the short cable with some sticky glue.

A lot of the steps above are only needed to be done once.

When the booster is set up correctly and a connector box is attached, you just hook them up to the power and loconet and the leads to the track and that is all. As soon as there is a valid DCC signal present the booster will go online.