Adrienne Electronics Corporation

"MINI-XLR CONNECTOR TYPES"

FIELD APPLICATION NOTE

Introduction:
We have used two slightly different styles of Mini-XLR connectors on our PC plug-in board products, including our PCI-TC, PCIe-TC, and PCIeSDV boards. This application note describes the differences so that you (the customer) can select the connector type (in advance) which best suits your needs.

Terminology and History:
1) A "front-mount" Mini-XLR connector is inserted through the <u>front</u> of the bracket. A large hex nut is on the back side of the bracket. This is the original design from about year 2000. It is guaranteed to fit properly in all PC chassis, but makes it difficult (for customers) to change the bracket height if needed.
2) A "rear-mount" Mini-XLR connector is inserted through the <u>rear</u> of the bracket. A knurled nut is on the front side of the bracket. This is the alternate design from about year 2011. Persons who no longer work for AEC made this change to make it easier for our production line and for customers to change the PC bracket height if needed. Unfortunately, the knurled nut is too wide to fit properly in some PC chassis. The knurled nut is about 0.506" outside diameter. The PC chassis opening must be at least 0.475" wide. You can see the potential for fit problems here.
3) We do not have any PC chassis which do not accept the knurled nuts, nor do most of our customers. However, some customers have managed to find PC chassis which do have a fit problem, hence the need for this application note.

Mini-XLR Connector Type Policies:
1) Our diverse and flexible ordering guide is complicated enough already without having to explain and specify the Mini-XLR connector type. If you know exactly what you want, then go ahead and prominently specify it with your order. Otherwise we will guess what is best for you, and ship that to you, depending on who you are and what you are ordering.
2) In general, if we are shipping you two(2) brackets (one of each size), we will include <u>rear-mount</u> Mini-XLR connectors, to make it easy for you to change the bracket size if needed.
3) In general, if we are shipping you one(1) bracket, we will include <u>front-mount</u> Mini-XLR connectors, to guarantee a proper fit in all PC chassis.
4) We reserve the right to deviate from the above general rules due to part availability and other practical production and stocking issues.
5) Customer instructions always have priority over the above defaults.

<u>In Case of Trouble:</u>
If you have an AEC board with rear-mount Mini-XLR connectors which will not
fit properly in a PC chassis due to the knurled nut width, then here are some
ideas for temporarily "working around" (circumventing) the problem...

<u>Workaround #1:</u>
Remove the knurled nut, install the board in the PC, then reinstall the
knurled nut. This will "permanently" install the board in the PC (difficult
to remove the board without removing the knurled nut again).

<u>Workaround #2:</u>
Narrow the width of the knurled nut as follows. First use a permanent black
ink marking pen (or equivalent) to mark the two sides of the knurled nut which
are next to the bracket edges. Then remove the knurled nut. Then use a small
metal file to shave down the two marked sides of the knurled nut. Then
replace the knurled nut. Repeat as needed until the altered nut is narrow
enough to fit into the connector opening on your PC chassis.

<u>Workaround #3:</u>
Use a small metal file or nibbler tool to enlarge the connector slot width on
the PC chassis. Be sure not to get any metal filings into the electronics!!
Aside from the risk of short circuits or other damage to the motherboard
and/or chassis, this quick fix ensures that the AEC board will only fit inside
one slot inside the modified PC.

<u>Workaround #4:</u>
Contact <orders@adrielec.com> to discuss a board swap. Be sure to specify
exactly what bracket height you need ("low profile" versus "full height"). In
general, we do not consider this to be a warranty issue, so you are
responsible for shipping in both directions, which can be very expensive and
time consuming for international shipments. It is best to order in advance
exactly what you need.

<u>Recommended Knurled Nut Tools:</u>
If you find it necessary to remove the knurled nut from a rear-mount Mini-XLR
connector, we can recommend the following tools:

1) GC/Waldom #9358 1/2" Knurled Nut Wrench (about $40 plus S/H).

2) Tessco #477526 (same as above).

CAUTION – Most knurled nut wrenches are designed for small toggle switch
applications, and will not work properly here, so be careful what you order.