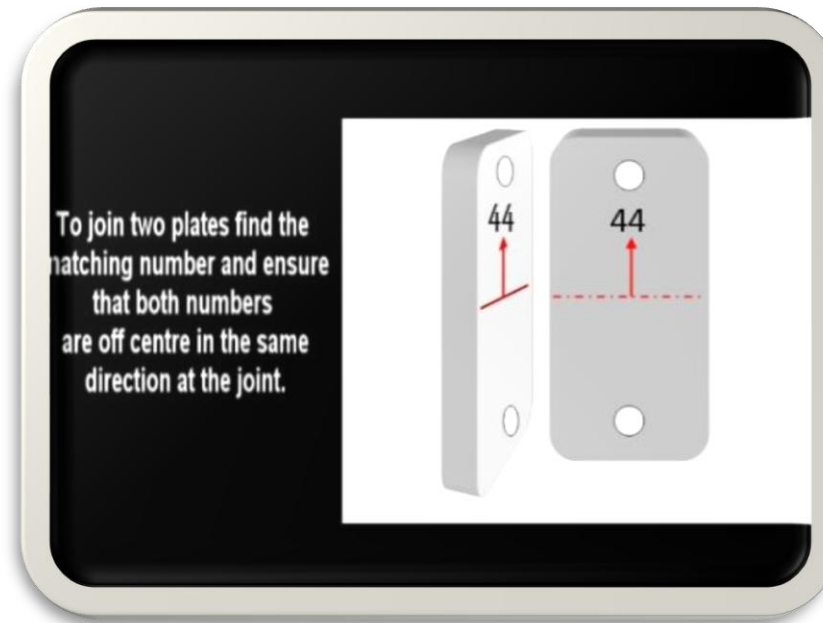


# How to Assemble the FT700 Power Cage.

The following is a guide on how to assemble the FT700 Power Cage. The unit has a number system to aid in assembly. Each joining plate has a number printed on it that is positioned slightly off centre. For each joining plate there is a matching numbered plate. To join the two pieces in the correct manner it is simply a case of positioning each matching plate so that the numbers are off centre in the same direction of the joint as shown below.



Once you understand this system it is simply a matter of following the assembly process shown in the rest of this document.

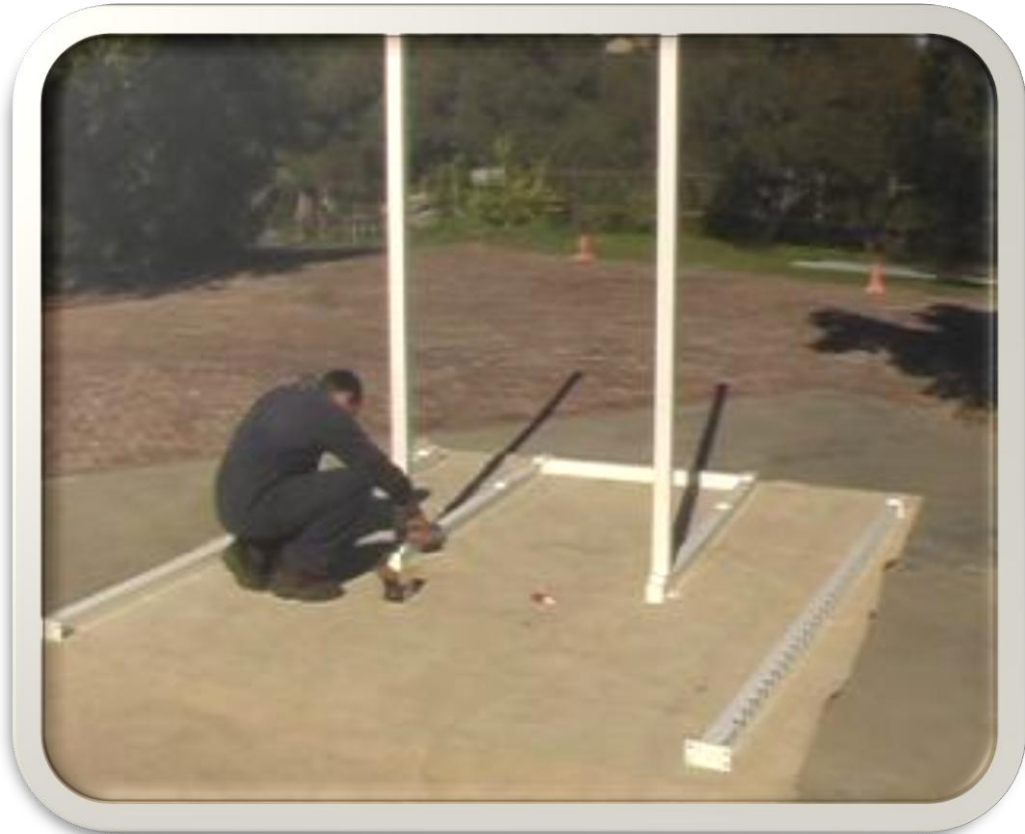
The FT700 is assembled using M10 x 20 Cap Screws. It is necessary to apply a drop of Loctite 243 to each of the screws before they are installed. **Each screw should only be installed loosely until the unit is completely assembled.**



Start the assembly process by building the base. The base is made up of three parts. The completed assembly is shown below.



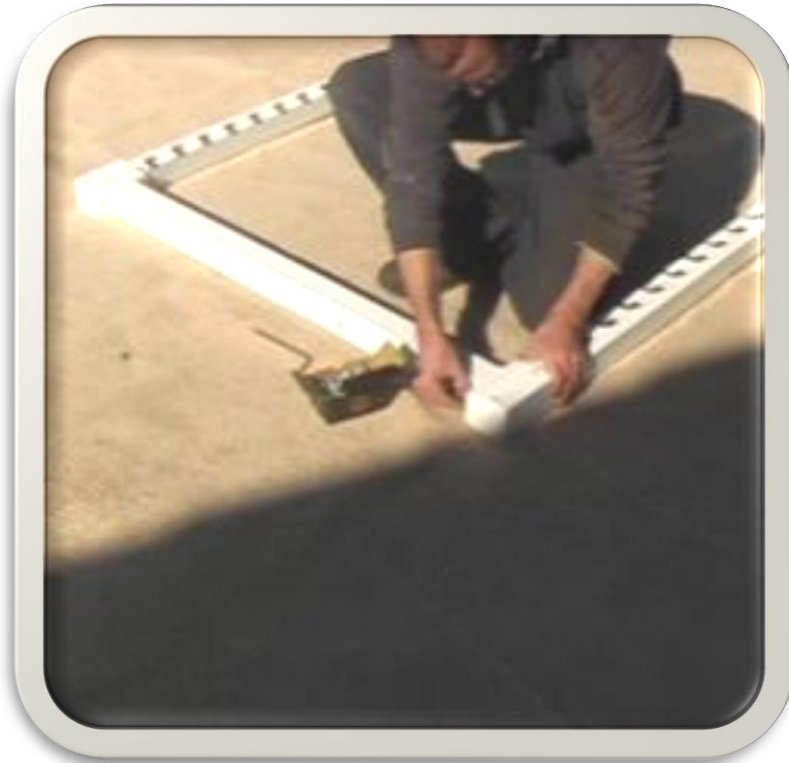
Now join the first of the uprights to the open end of the base assembly.



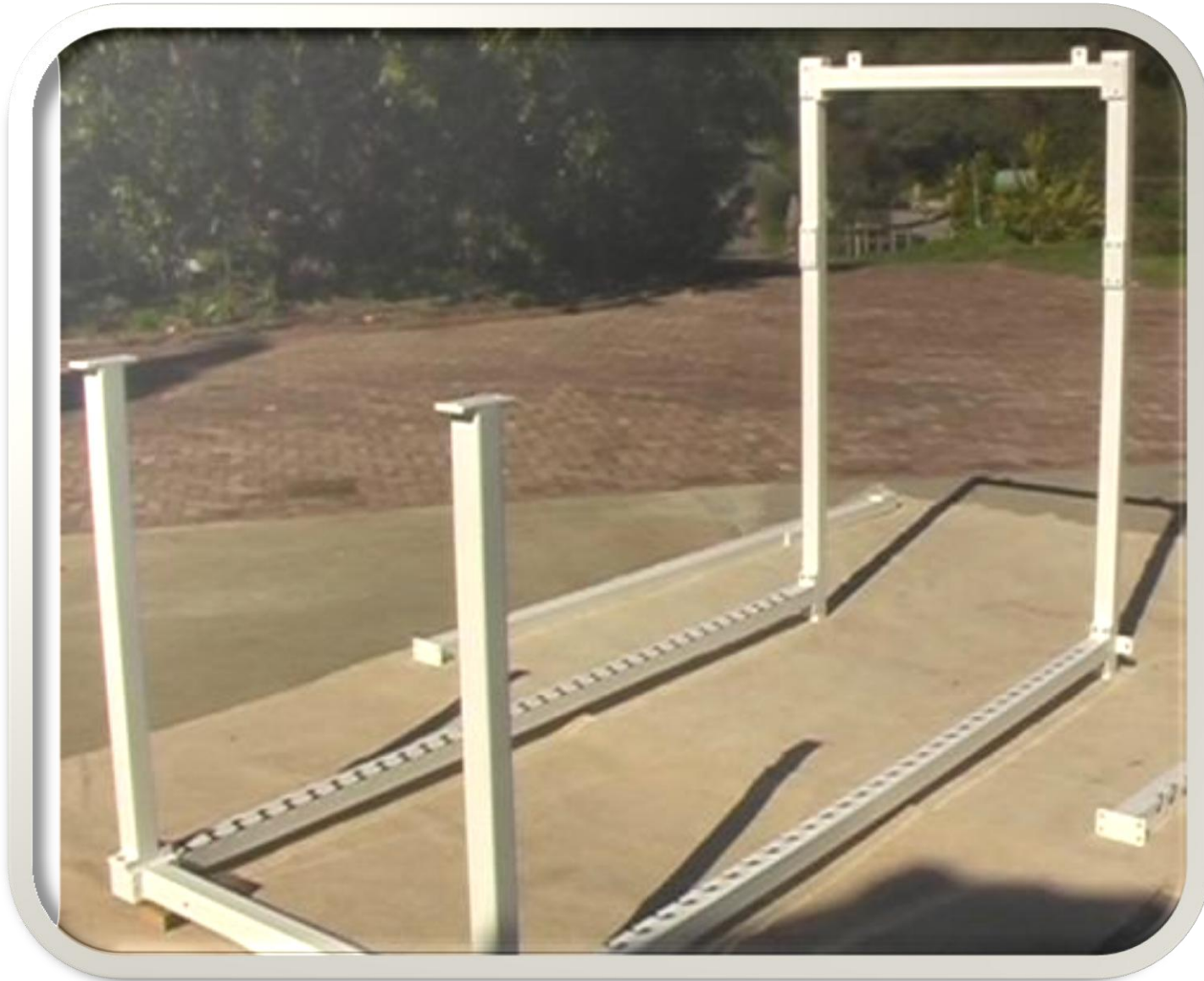
Once the two uprights are installed the unit can be laid down to allow access to the top for further assembly.



You can now install the first of the top braces of the unit. It is also a good idea to chock the unit at this time to allow easier access for lifting and to aid in the installation of the magnetic braking unit cradle.



You can now install two more of the top braces as shown bellow.



The last two uprights and final top brace can now be installed.



You can now install the two L shaped upright braces. Each of these braces has three joining plates that go to the outside of the machine and two to the inside.



The next step is to install the round cross brace.



You can attach the weight horns at this time. There are three horns on each side of the machine attached to the L shaped upright braces.



The PC table can now be attached to the unit.



**At this point all cap screws should be completely tightened using the 6mm Allen key (wrench).**

## Attaching the Magnetic Braking Unit Cradle.

We will now go through the method for attaching the Magnetic Braking Unit (MBU) Cradle. The cradle is attached using 4 x M10 X 90mm Bolts with Nylocks locking nuts. They also have two washers per bolt. It is a good idea to chock the MBU to take the weight of the cradle. This will make it easier to position the cradle.



The overhang of the cradle goes to the top of the machine. If you put the bolts through the cradle, with one of the washers on each, it will help to align the cradle. Once the cradle is in position all bolts can be inserted, with a washer on top and bottom, and the Nylocks nuts can be tightened.



The cable connections for the MBU and PT5A position transducer can now be attached. The PT5A has a 1.7m long 4pin to 6pin cable that can be found in the electronics box. Connect the 6pin connector to the PT5A and the 4pin connector to the frame of the FT700.



Then connect the MBU cable which has a 2pin connector to the other socket on the FT700 frame.



You can now stand the FT700 upright.

**We recommend that you use at least 4 people to do this as the unit is quite top heavy.**



## Connecting the attachments to the FT700

The dips bar is attached to the machine as shown below. It can be moved to the appropriate height.



The Chinning bar is connected in a similar manner.



The external work area safety bars.



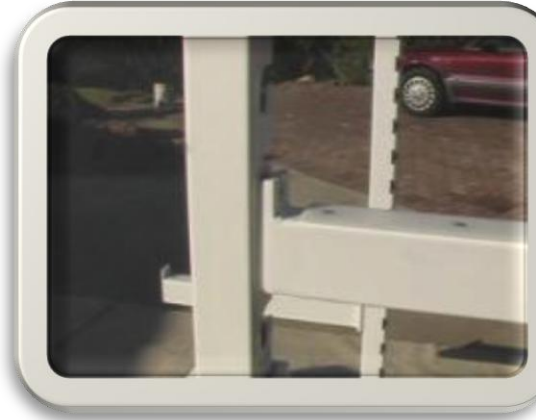
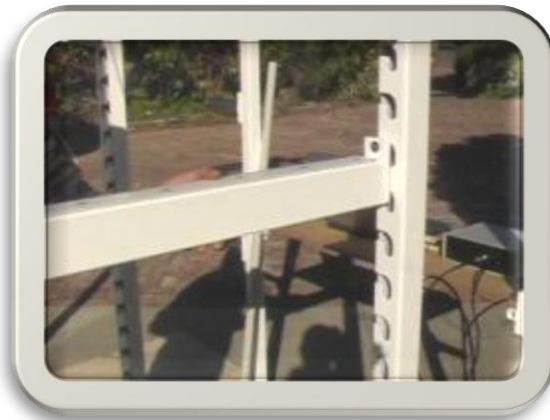
The external weight bar hooks.



The internal weight hooks.



The internal work area safety bars.



The completed FT700 Power Cage.



## Connecting the Brake Controller and PC Using an XPV6+ Interface.

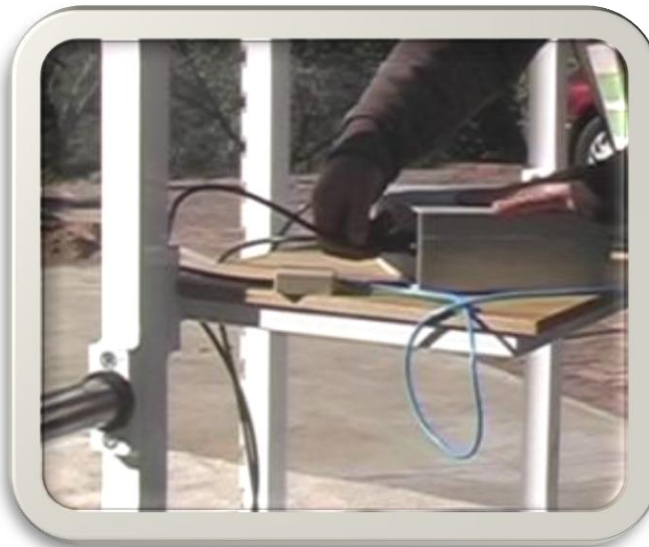
The PT5A Position Transducer, Brake Controller and XPV6+ are connected in the following manner. The two supplied cables (4pin to RJ45 and 2pin to 2pin) are connected to the sockets on the frame of the FT700.



The 2pin cable is connected to the rear of the Brake Controller Unit.



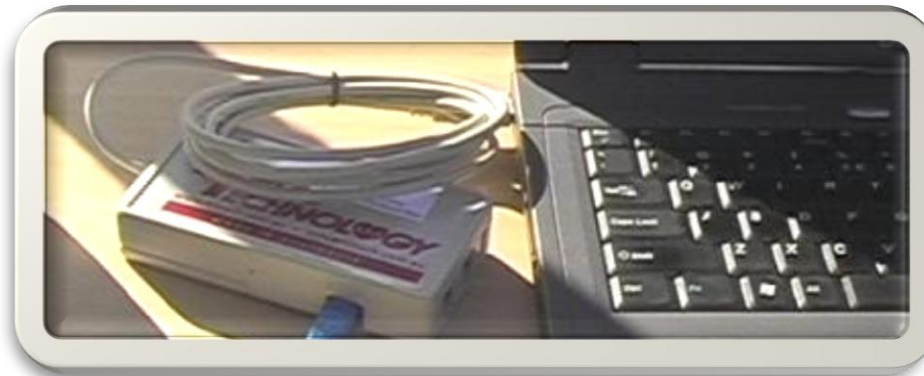
The supplied IEC power lead is plugged into the rear of the Brake Controller Unit.



The RJ45 double adapter is connected to the front panel of the Brake Controller Unit with one of the CAT5 cables going to the RJ45 connector. The other CAT5 cable goes to the BMS input of the XPV6+.



The XPV6+ is then connected via its USB cable to an available USB port on your PC.



The FT700 Power Cage is now ready to operate.

## Connecting the Brake Controller, 400 Series Force Plate and PT5A Position Transducer to the FT700 Power Cage.



Top of the  
FT700 Frame  
Connect the  
Brake and the  
Position  
Transducer.



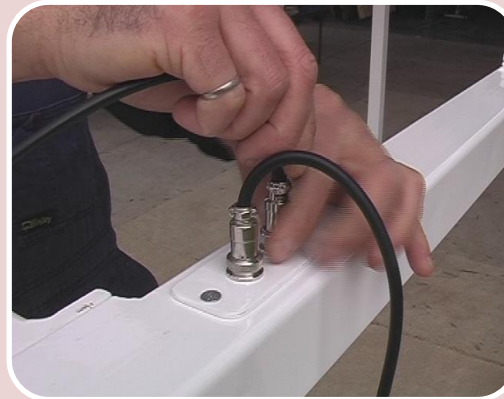
Connect the  
above cable  
(4 pin to 6 pin)  
4 pin  
connector to  
the frame.



The 6 pin  
connector is  
attached to  
the PT5A  
Position  
transducer (as  
shown above).



Connect the cable from the Braking unit to the frame.



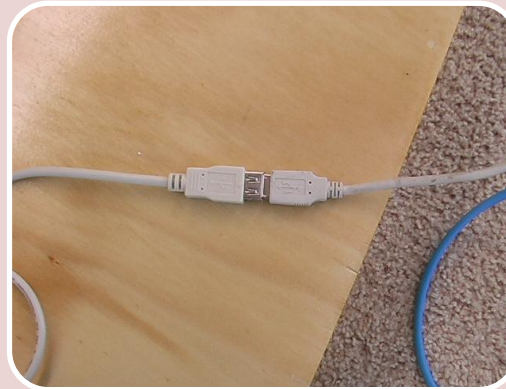
This is the two pin cable.



Once the FT700 is upright position the first half of the internal work area platform (IWAP) in place.



Connect the 2m cat5E cable (Red) to the force plate.



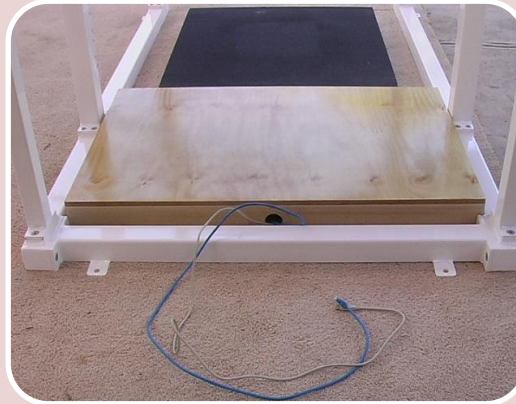
Connect the USB extension lead to the Force plate.



Making sure that the front of the force platform is facing the open end of the FT700.



Feed the  
Cat5E and  
USB leads  
through the  
holes in the  
first section  
of IWAP.



Position the  
first section  
of IWAP and  
forceplate as  
shown.



Level the  
force plate by  
adjusting the  
screw in legs.



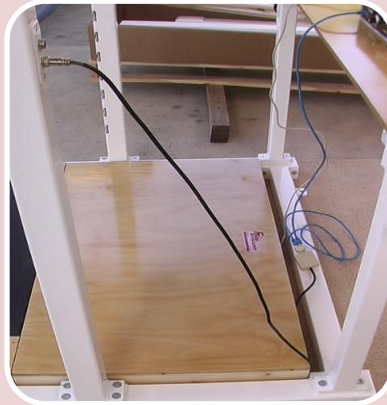
Once the force plate is level position the second half of the IWAP.



Screw the two halves together.



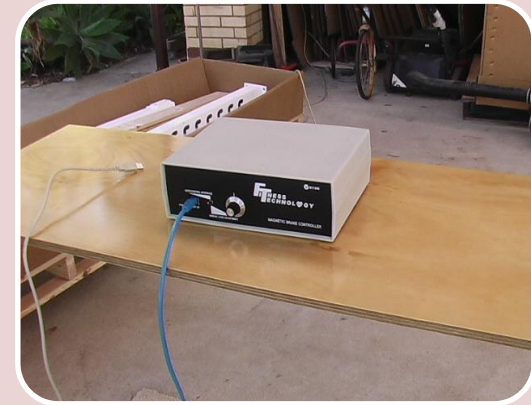
Connect the 4pin to RJ45 socket cable to the lower FT700 frame connector.



As shown  
above.



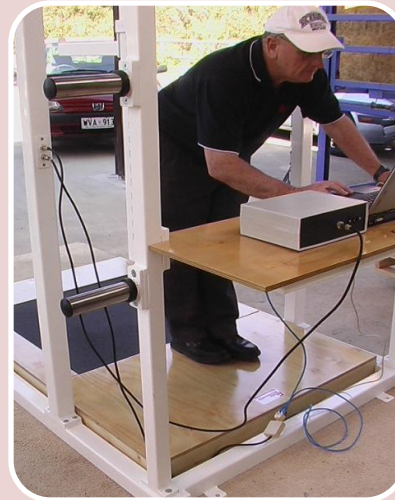
Insert the RJ45  
double adaptor  
into the RJ45  
connector and  
connect the  
Cat5e cable from  
the Force plate  
and the second  
Cat5E cable.



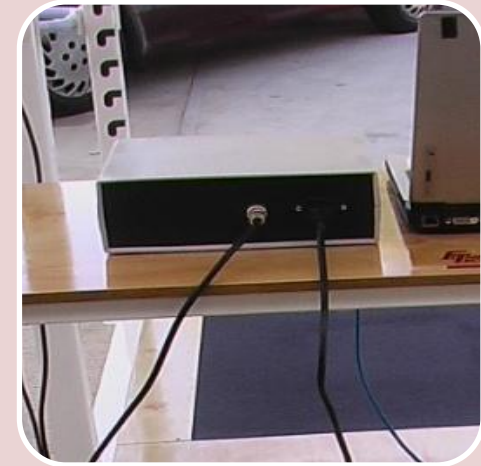
The second  
Cat5E cable is the  
connected to the  
front panel of  
the brake  
controller unit.



Connect the 2 pin to 2 pin cable to the lower connection on the FT700 frame.



and connect the other end to the rear panel of the brake controller unit.



As shown above.  
Connect the IEC lead as shown above.



Connect the  
USB lead to  
an available  
port on your  
PC or laptop.