

DCIU-CA-R-6 and APC-D8 Installation and Termination Instructions



GENERAL

This instruction sheet contains all necessary information required to assist in the correct installation of the ARGUS DCIU-CA-R-6 6 Way AISG Rack Mounted Breakout Panel into a standard 19" rack or onto a wall or other surface using the supplied wall mounting bracket. This document also covers termination of APC-D8 type cables to the DCIU-CA-R-6 and general APC-D8 pin allocations.

The following symbols can be found next to text outlining important information.



Please follow the procedure marked with this symbol precisely. Non-compliance may lead to damage or failure of the product.



Handy tips when installing product.

The DCIU-CA-R-6 (See Figure 1) is a 6 Way AISG 19" rack-mounted breakout panel. Located on the rear of the panel are 7 pairs of Krone press in wire terminating blocks. These are arranged to create one AISG connection per pair. 6 of these pairs are used for terminating antennas.



The Krone connectors labelled AISG I/O are for interconnecting other AISG control equipment. This connection point should not be attached to any cable external to the communications equipment shelter.



The DCIU-CA-R-6 can only be used with cable runs of up to a maximum of 100 meters from each output of the breakout panel.



Figure 1. Rack Mounted DCIU-CA-R-6

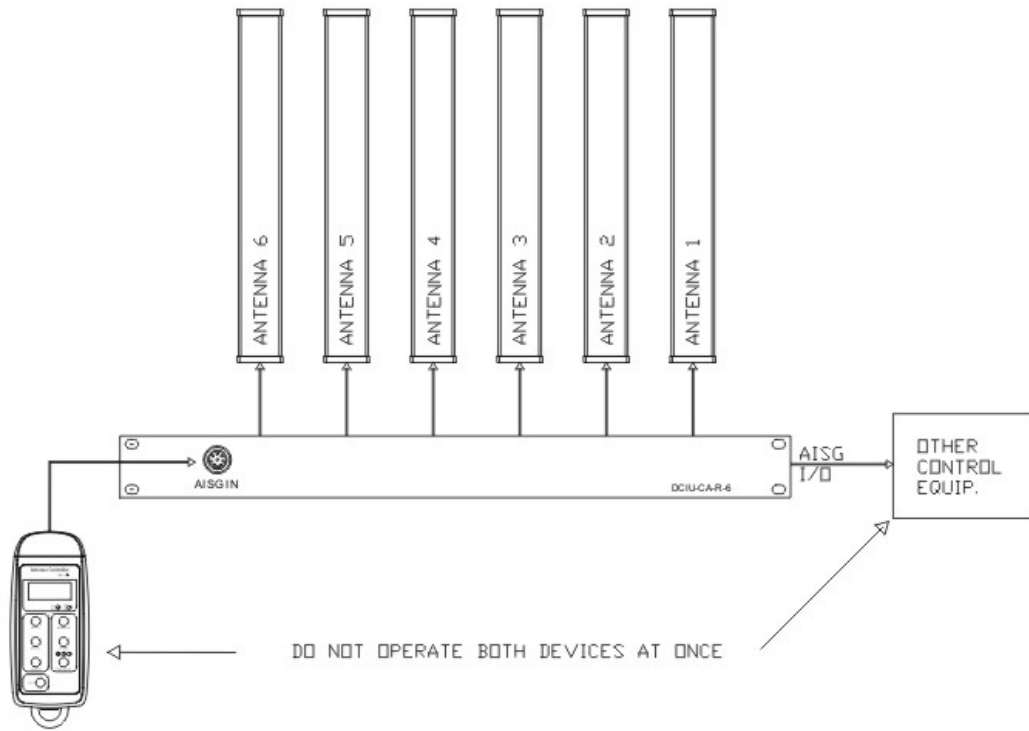



Figure 2. Interconnecting Diagram.

DCIU-CA-R-6 6 WAY AISG RACK MOUNTED BREAKOUT PANEL SUPPLIED PARTS	
Part Description	Qty
DCIU-CA-R-6 19" Rack Mounted Breakout Panel	1
DCIU-CA-R-6 Wall Mounting Bracket	1
M6 Phillips Head Screws	4
M6 Cage Nuts	4
M6 Black Nylon Washers	4
 Hardware for fixing the wall-mount bracket to a wall is not supplied.	

TOOLS AND OTHER HARDWARE REQUIRED FOR FITTING A DCIU-CA-R-6
Tool
Krone Insertion Tool
Phillips Head Screw Driver
Stanley Knife or Insulation Removal Tool
5mm Spanner (Tube, open or ring)
5.5mm Spanner (Tube, open or ring)
10mm Spanner (Tube, open or ring)
6 x Cable ties approx. 2 - 2½mm wide



CONNECTING APC-D8 CABLES TO THE DCIU-CA-R-6 FOR RACK MOUNTING

1. If the DCIU-CA-R-6 is to be installed in a 19" rack, cables should be run from the left, when facing the rear of the panel, to the PCB and secured in place using the vertically oriented holes with an appropriate cable tie (2 – 2 ½ mm thick).



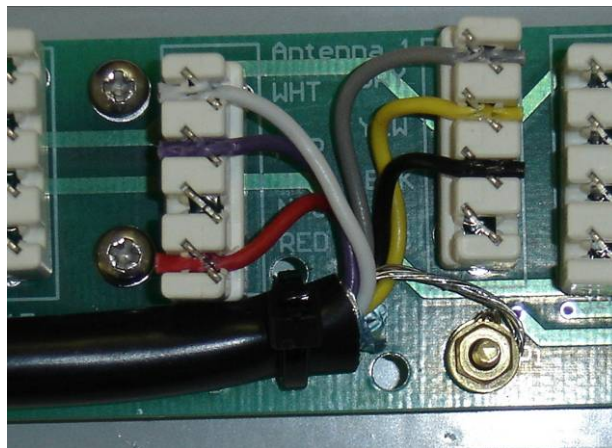
Connecting cables to the DCIU-CA-R-6 should be performed in numerical order starting with Antenna 1.

Figure 3. Properly Run Cable for Rack Mounting.



2. Each of the coloured wires from the cable are then run to the corresponding terminal on either of the terminal blocks for that antenna connector pair and inserted using the Krone tool. The colour coding is specified on the PCB and in Figure 9.

Figure 4. Connection of wires to terminal blocks.



3. The drain wire of the cable is then wrapped around the nearest earth post between the two flat washers and the top nut.

4. There are two separate earthing points on the DCIU-CA-R-6. There is a main earthing point on the rear of the panel to the left of the PCB. This earthing point is used for earthing the front panel to the 19" rack. The other is situated in the bottom right corner of the PCB when viewed from the rear of the unit. This earthing point is connected by PCB track to each antenna drain wire and is used for separate earth of the antenna runs.



CONNECTING APC-D8 CABLES TO THE DCIU-CA-R-6 FOR WALL MOUNTING

1. The DCIU-CA-R-6 is supplied with a wall mounting bracket. This bracket can be secured to a wall or other vertical surface. Cables should be run from beneath the panel to the PCB and secured in place using the horizontally oriented holes with an appropriate cable tie (2 – 2 ½ mm thick).



Figure 5. Sample of Wall Mounted DCIU-CA-R-6.



The cables should enter the space at the rear of the panel from the bottom only, and should be satisfactorily secured to the wall so as to reduce the weight of the cables on the cable tie point on the PCB.



Connecting cables to the DCIU-CA-R-6 should be performed in numerical order starting with Antenna 1.

2. Each of the coloured wires from the cable are then run to the corresponding terminal on either of the terminal blocks for that antenna connector pair and inserted using the Krone tool. The colour coding is specified on the PCB and in Figure 9.

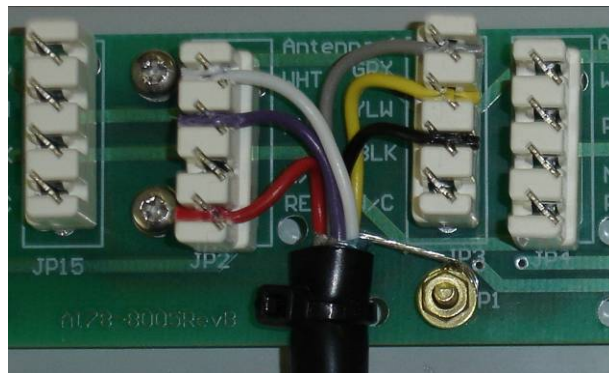


Figure 6. Cable Secured Using Horizontal Holes.

3. The drain wire of the cable is then wrapped around the nearest earth post between the two flat washers and the top nut tightened.

4. There are two separate earthing points on the DCIU-CA-R-6. There is a main earthing point on the rear of the panel to the left of the PCB. This earthing point is used for earthing the front panel to the 19" rack. The other is situated in the bottom right corner of the PCB when viewed from the rear of the unit. This earthing point is connected by PCB track to each antenna drain wire and is used for separate earth of the antenna runs.

APC-D8-xx-CA



APC-D8-xx-CA type AISG cables are a series of cables with a female AISG connector fitted to one end and the other end left unterminated. The xx specifies the length of the cable.

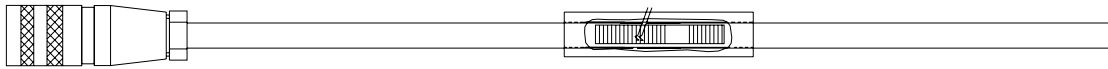


Figure 7. CA type Cable Drawing.



It is recommended that the cable is run from the antenna down.

The unterminated end of the cable is prepared in accordance with Figure 8. The cable is connected to the DCIU-CA-R-6 in accordance with the above instructions, depending on the type of mounting required.

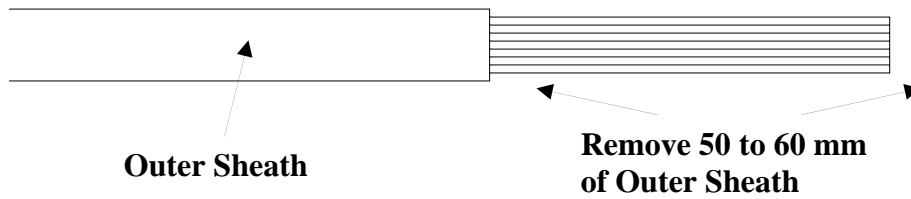


Figure 8. Cable preparation.

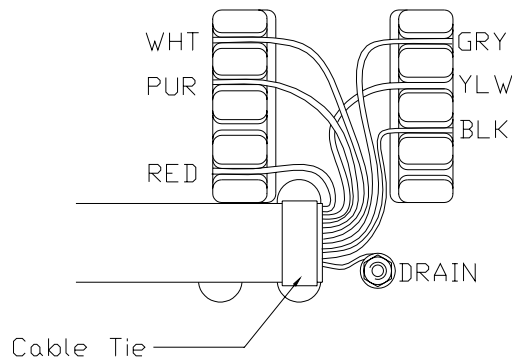
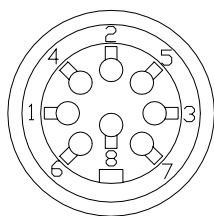
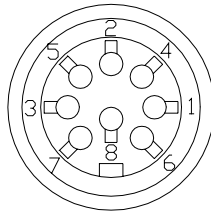


Figure 9. Antenna Cable Connection Pair Colour Coding



Male Pin Side



Female Socket Side

Signal	Male	Female	Colour
+12V	1	1	Red
-48V	2	2	N/C
485-A	3	3	Violet
485- GND	4	4	White
485 - B	5	5	Grey
+24V	6	6	Yellow
DC RTN	7	7	Black
N/C	8	8	N/C

Figure 10. Connector Pinout Details.

CONNECTING CONTROL EQUIPMENT



AISG Control Equipment may be connected to the DCIU-CA-R-6 by either the AISG IN Connector situated on the front panel using AISG Cable, or alternatively, a permanent connection may be made on the cable connector pair labeled “AISG I/O” on the PCB at the rear of the panel.

Figure 11. AISG IN Connector.



The AISG I/O cable connector pair is NOT to be used for connecting an Antenna or other tower run cables. It does not have the separate drain wire earthing facility that the antenna cable connector pairs have.

The AISG I/O pair of terminals is connected to fitted control equipment in the same manner as antennas are fitted with the exception that the drain wire is not connected.



No two AISG control devices should be operating whilst attached to the DCIU-CA-R-6, i.e. control equipment such as a CTXD-30-H connected to the AISG IN port should not be used simultaneously with other control equipment connected to the AISG I/O port on the PCB

