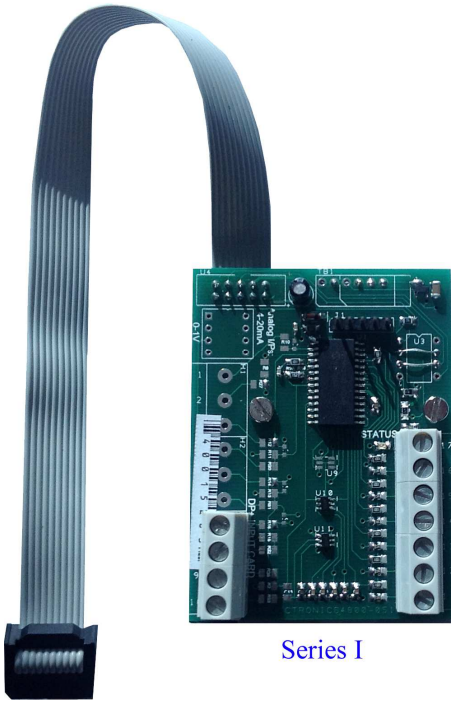
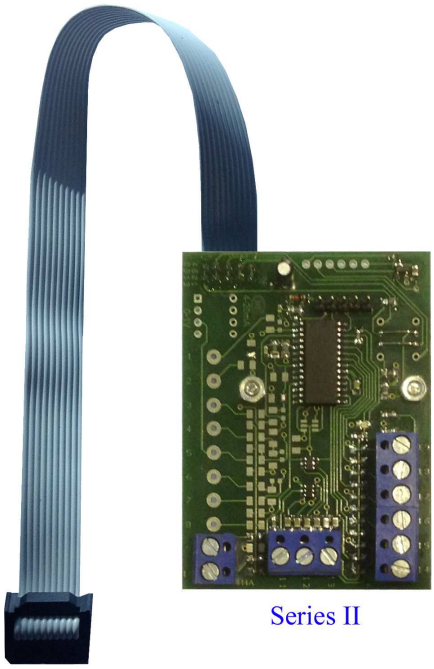
INPUT CARD
Model: DP-OPT-CARD-IP

- **Retrofit to (or supplied with) DIGICHEM® Plus+ Controllers**
- **Accepts up to 6 Tank Levels**



Series I



Series II

Supplied by:

Convergent Water Controls Pty Ltd
2/4 Huntley St
Alexandria NSW 2015
Tel: (02) 9698 3131
Fax: (02) 9698 3210
www.cwc.com.au
info@cwc.com.au

Manufacturer: Convergent Water Controls Pty Ltd, Sydney Australia.

Note: On-going product development at Convergent Water Controls may lead to changes in the specifications of this product.

Warranty: This product is guaranteed for a period of 12 months from installation date or 18 months from Invoice date (whichever occurs first). The warranty applies to manufacturing or component defects which may cause the unit to malfunction under specified conditions. The guarantee does not cover damage due to abuse, tampering or improper installation.

Disclaimer: Convergent Water Controls will not be held liable for any consequential damage or loss arising resulting from product malfunction.

Table of Contents

1. Introduction

The DP-OPT-CARD-IP Input card can be fitted to any CWC DIGICHEM-Plus+ controller to remotely monitor up to 6 Low Level Tank switches for monitoring of low chemicals

1.1 Features

- Easy retrofit to controllers installed in the field.
- Accepts up to 6 Tank Levels
- Notification of Low Tank Level Alarm Raised and Alarm Cancelled
- Alarm Notification via SMS and/or e-mail

NOTE: DP-OPT-CARD-GPRS required for the Low Level Tank Card to Work

2. Installation & Wiring

The DIGICHEM Plus+ fitted with the DP-OPT-CARD-IP card provides 6 x Low level tank switch input signals for being alerted when chemical drums empty.
The interface card is an ordering option and can be retro-fitted to the DIGICHEM Plus+, or can be supplied factory fitted. However, an optional GSM/GPRS modem needs to be fitted to in order to receive low level tank alarms via SMS and/or e-mail.

The DP-OPT-CARD-IP optional kit consists of the Input card with ribbon cable mounted to a DIN connector to be clipped on the DIN Rail inside the DIGICHEM Plus+ Controller.

Your controller may also require a software upgrade if it does not recognise the card on power-up. The card is recognised if the LED on the card pulses after power up. If you are unsure, please provide your supplier with the serial number of the controller to determine if the software needs upgrading. A software upgrade entails power up the unit with a Dongle with the latest software version.

2.1 Installation of Input Card into DIGICHEM Plus+ Controller

Series I

Series II

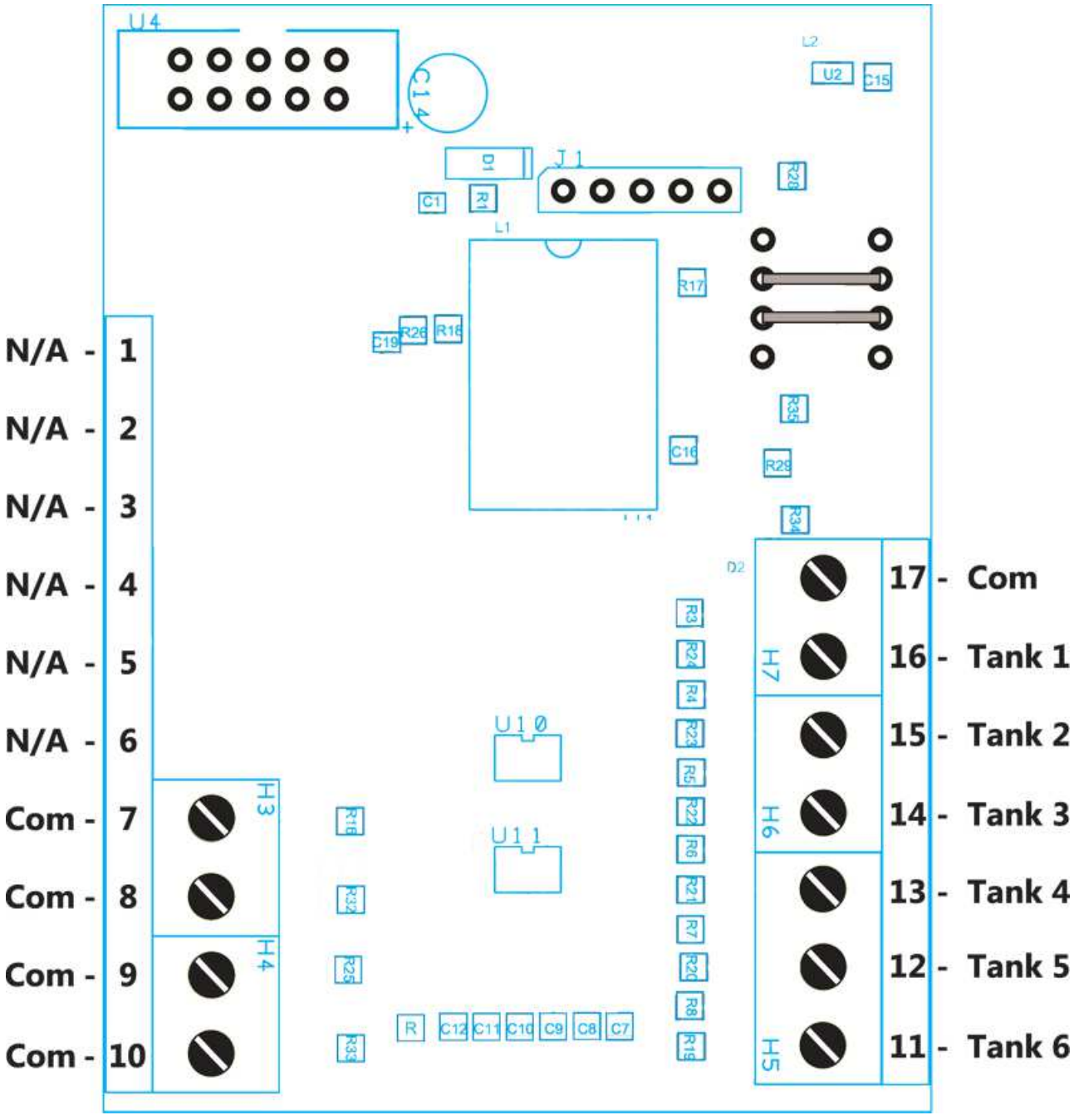
DIGICHEM Plus+ MOTHER BOARD WITH INPUT CARD INSTALLED

Please see the diagram above, and follow the instructions below:

1. Make sure that the power is switched off and the controller is unplugged from mains power.
2. Remove cover of enclosure.
3. Before clipping the card onto the DIN rail, make sure the position of the card is on the Right hand side of the square, grey transformer for Series I Input cards and on the Far Left hand side of the DIN Rail for Series II Input cards, with the white spring clip of the card facing the bottom of the controller towards the black cable glands.
4. Clip the card onto the DIN rail by first tilting it upward aligning the top section on the DIN rail, then pressing down, until the white clip catches onto the other side of the DIN rail.
5. Plug the new interconnecting cable from the Input card into either one of the I/O ports on the mother board of the DIGICHEM Plus+ Controller.
6. Replace cover of enclosure, ensuring that the seal is in place and no wires are trapped between the lid and the base.
7. Plug into mains and switch on.

2.2 Wiring Diagram of Input cards

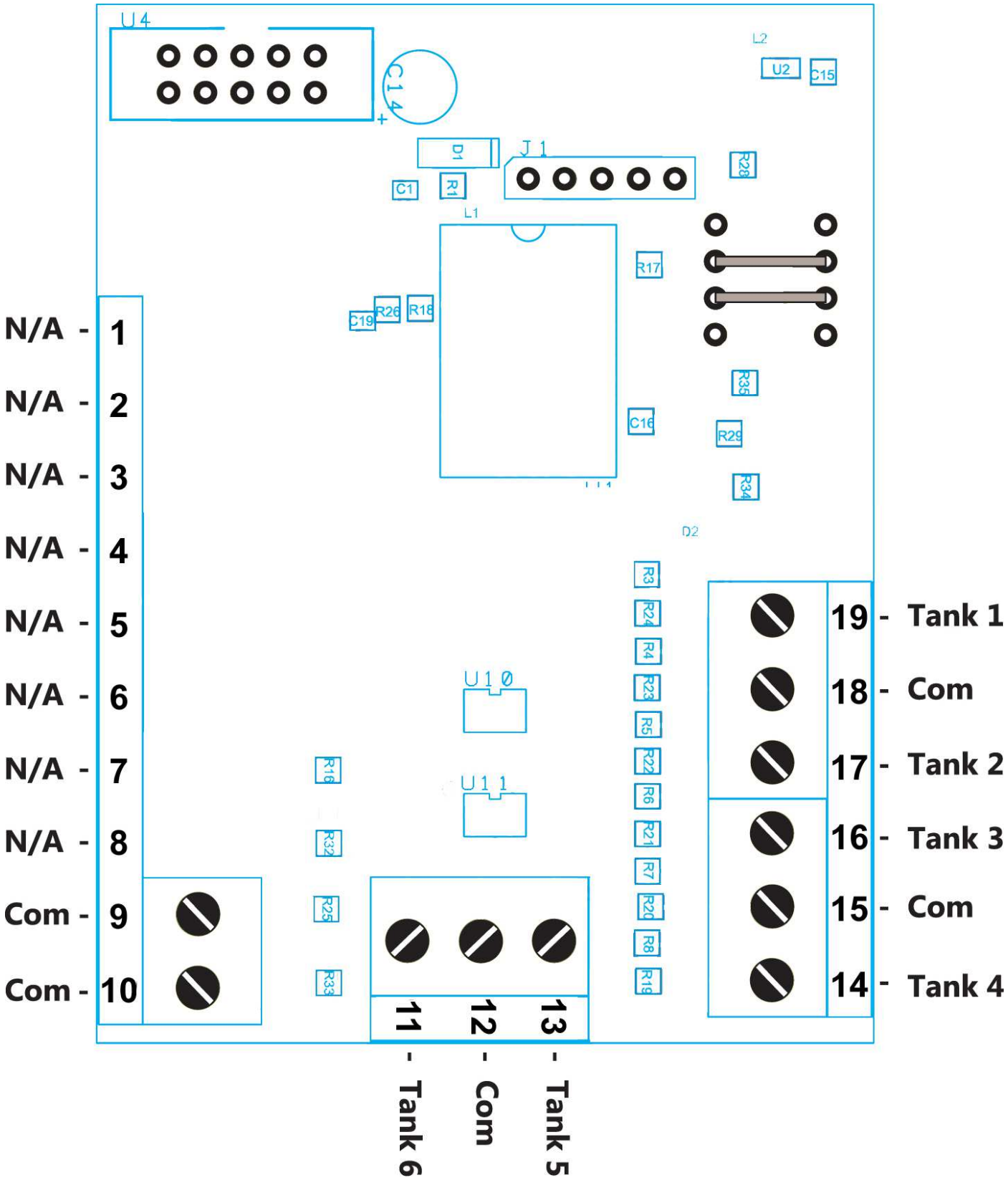
2.2.1 Wiring Diagram of Series I Input card



WIRING DIAGRAM OF Series I Input CARD

Please see the diagram above and follow the instructions in section 2.2.3 below.

2.2.2 Wiring Diagram of Series II Input card



WIRING DIAGRAM OF Series II Input CARD

Please see the diagram above and follow the instructions in section 2.2.4 below.

2.2.3 Wiring of Tank level switches to Series I Input card

The LED on the Input card should pulse if it is working correctly.

The common terminals are terminals 7 through to 10 and terminal 17, Wire one wire from your low level tank switch to one of these common terminals. Low level tank switches should always be dry contact type so polarity will not matter however it is good practice to wire your black or light blue wire to the common terminals for easy identification.

Wire the other wire from each low level tank switch to its corresponding terminal as per the input listing below:

Tank 1 – Inhibitor	: Terminal 16 & Common (7,8,9,10 or 17)
Tank 2 – Biocide A	: Terminal 15 & Common (7,8,9,10 or 17)
Tank 3 – Biocide B or Chlorine	: Terminal 14 & Common (7,8,9,10 or 17)
Tank 4 – Bromine	: Terminal 13 & Common (7,8,9,10 or 17)
Tank 5 – pH	: Terminal 12 & Common (7,8,9,10 or 17)
Tank 6 – Dispersant	: Terminal 11 & Common (7,8,9,10 or 17)

2.2.4 Wiring of Tank level switches to Series II Input card

The LED on the Input card should pulse if it is working correctly.

The common terminals are terminals 9, 10, 12, 15 and18, Wire one wire from your low level tank switch to one of these common terminals. Low level tank switches should always be dry contact type so polarity will not matter however it is good practice to wire your black or light blue wire to the common terminals for easy identification.

Wire the other wire from each low level tank switch to its corresponding terminal as per the input listing below:

Tank 1 – Inhibitor	: Terminal 19 & Common (9, 10, 12, 15 or 18)
Tank 2 – Biocide A	: Terminal 17 & Common (9, 10, 12, 15 or 18)
Tank 3 – Biocide B or Chlorine	: Terminal 16 & Common (9, 10, 12, 15 or 18)
Tank 4 – Bromine	: Terminal 14 & Common (9, 10, 12, 15 or 18)
Tank 5 – pH	: Terminal 13 & Common (9, 10, 12, 15 or 18)
Tank 6 – Dispersant	: Terminal 11 & Common (9, 10, 12, 15 or 18)

3. Specifications

Power Supply:	Ribbon Cable Plugging into O/P Connector on DP+
Input:	Volt Free Contact. • Closed = Tank Low Level Alarm Activated • Open = Tank Level Normal
LED Indication:	Pulsing indicates correct operation

4. Optional Low Level Tank Switches

Part Number	Length	Description
EMEC LANCIA-S-60-5m	60 cm	Rigid level assembly with single PVDF float, 60cm long, 1-1/4" pipe fitting. Does not include foot valve assembly or tube connections. Includes 5m cable with stripped ends
EMEC LANCIA-S-115-5m	115 cm	Rigid level assembly with single PVDF float, 115cm long, 1-1/4" pipe fitting. Does not include foot valve assembly or tube connections. Includes 5m cable with stripped ends