

COMMANDER UNIT

The Commander Unit is designed to control and monitor multiple SwiftGates and SwiftSigns and offers various communication ports to interface with existing ITS infrastructures.



The commander unit is equipped with a sequencer, an Ethernet port, 8 digital inputs, 8 outputs, an SD card slot and a SwiftGate/SwiftSign communication port.

• SEQUENCER

The commander unit can control a total of 31 SwiftGates/SwiftSigns which can be separated in 3 groups.

The sequencer controls and monitors these groups. The sequencer utilizes the communication port to control and monitor the SwiftGates/SwiftSigns.

The sequencer can Deploy/Retract a group of SwiftGates/SwiftSigns simultaneously or progressively. Each group can be configured independently.

Typically, a lane closure configuration consists of a series of advanced warning signs (group 1), followed by a series of variable length gates to create the lane closure taper (group 2), followed by a series of full-length gates to maintain the closure over the desired distance (group 3).

• ETHERNET PORT

The Ethernet port is an interface port for software applications. The commander unit provides 2 protocols:

- HTTP protocol for Web user interface
- SNMPv1 protocol for NTCIP interface

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• 8 DIGITAL INPUTS

The 8 inputs are used to connect different devices such as a PLC to the commander unit.

Typically, inputs are used as follows:

- 3 inputs to deploy each of the 3 groups of SwiftGates/SwiftSigns
- 3 inputs to retract each of the 3 groups of SwiftGates/SwiftSigns
- 2 inputs for special functions such as emergency stop and refresh status

• 8 OUTPUTS

The 8 outputs are used for feedback to other devices such as a PLC.

In general, outputs are matched with the corresponding input. For example, if input 1 is used to deploy a series of gates, output 1 will activate when this specific group is confirmed as deployed.

• SD CARD

The SD card has 2 functions:

- Logging of events
- Firmware and/or Configuration update

• COMMUNICATION PORT

The communication port is used to send commands to the SwiftGates and SwiftSigns. This communication port is an RS-232 interface and can be interfaced with:

- Versilis Modem-Antenna to provide an RF Solution
- RS-485 converter to provide a wired solution
- Fiber optic converter to provide a wired solution

The above solutions can be mixed if needed.

