

Wireless Single Lane Signal Control

MR4 Control System Features:

This simplified time control is made to synchronize control of 2 directions of traffic over a single traffic lane. The unit is simple to use and extremely versatile while not requiring any specialized programming, equipment or training to configure and operate. The MR4 system works with temporary or permanent installed Red/ Green or Red/ Yellow/ Green Signal Systems with a range of well over 1 mile.

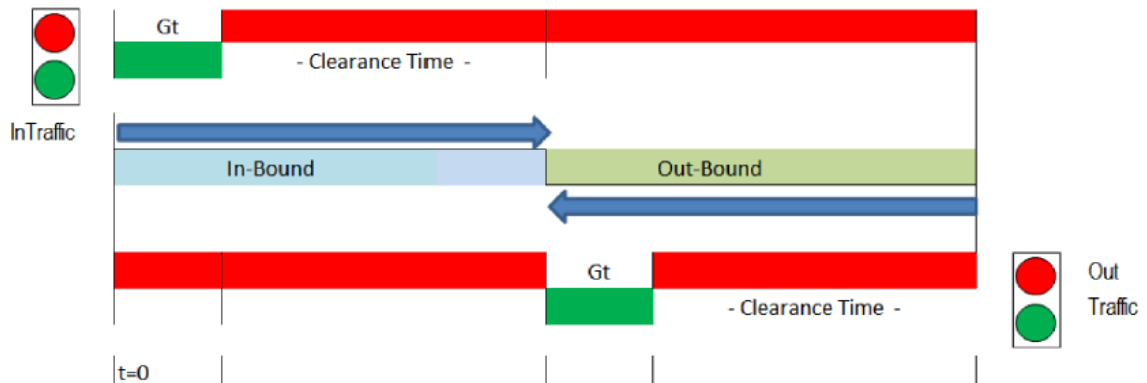
This type control is widely used during construction operations to allow bidirectional traffic in a defined single lane zone. This system can replace flagman for work zones, temporary bridge lane closures. It has been applied to blind driveways and limited visibility, narrow roadways as well as tight access parking garages.



For temporary lane closures

In single lane control mode one direction of vehicle traffic is allowed to enter the traffic way during the Green light period. After the Green light has expired a preset clearance time (Red Light) must expire before traffic is allowed to enter in the opposite direction controlled by the second signal (Green Light). This allows time for traffic to transit and exit the work zone. The wireless control system is 2 way link so there is no concern about the signals losing synchronization. This means a Green light will not energize until the opposite Red light has acknowledged that it is on.

Single Lane Access Systems
Timed Control Cycle



Dip Swches				Grn	*Yel	Clr t	Total time
1	2	3	4				
1	1	1	1	10s	4	20	60
0	1	1	1	15	4	30	90
1	0	1	1	20	4	45	130
0	0	1	1	30	4	60	180
1	1	0	1	45	5	90	270
0	1	0	1	60	5	120	360
1	0	0	1	90	5	180	540
0	0	0	1	120	5	240	720
1	1	1	0	10s	4	05	30
0	1	1	0	20	4	10	60
1	0	1	0	30	4	15	90
0	0	1	0	45	4	20	130
1	1	0	0	60	5	30	180
0	1	0	0	90	5	40	260
1	0	0	0	120	5	50	340
0	0	0	0	180	5	60	480



Digital Cycle Time Selection - Table 1

Directional Priority

Most commonly both directions of traffic have equal priority and take turns evenly based on the same Green Light duration. In some instances based on time of day or special events the majority of traffic may be in one direction while minimal in the other. An example would be vehicles entering a parking garage in the morning. In the afternoon the direction priority may be reversed to allow faster egress.

Triggered Access cycle modes

If triggered access mode is used. One direction will remain green until a vehicle presence (waiting) signal is received from the other side. This may be from a loop detector or similar type of sensor switch input. At this point the clearance Red time expires and a Green light cycle is initiated. This triggered access can also be commanded via remote control from a traffic monitor such as a security officer, attendant or road worker / flagman. The control system is bidirectional so the traffic signals will always stay in synchronization.

Signal Options

The MR4 will operate all standard Traffic Signals. We will work with you to select just what you need in the way of signals for your custom application. We offer both AC and DC LED Systems with 200 or 300mm LEDs units in both Red/ Green and RYG Signal head models. We stock Red / Green full ball signals as well as Red X, Green Arrows. We also have additional customization options including stenciled messages and custom colors



Custom timing sets and configuration options are also available.



Please call us for more details and custom requirements

Technical Specifications

MR4- LR4 Wireless Link Control System	
MR4- Master	Custom Signal Control w/ timing logic R/Y/G or RED/GRN Signals
LR4 - Receiver	Receiver Signal Control w/ relay logic R/Y/G or RED/GRN Signals
Voltage	12VDC (24VDC or 120VAC options)
	Incandescent or LED signals
Power Max	>300W Max load per output
	10A output relay contacts
Inputs	Priority inputs for detection loops
Timing	16 Selectable Time Sets
Sequences	Limited visibility roadway /drives
	Temporary Lane Closures
	Parking Garage / Narrow bridge signal
Temp Rating	-40F to 150Deg F (-40C to +60C)
Format	Supplied in fiberglass flasher cabinet, (typically 10x12x8 in) w/ wo signals
Timing Accuracy	Internal clock <2%
Wireless Link	Lora spread spectrum tranceiever
Digital interface	Bidirectional link w/ comand ronse
High sensitivity	High anti-interference performance
No infrastructure	No GSM or cell data service required
Range	>1 miles, (2Km) [Line of sight]

