

Attachment 1

SECOND AMENDMENT TO AGREEMENT BETWEEN THE CITY OF BEVERLY HILLS AND SENTRY CONTROL SYSTEMS, INC. FOR THE EXPANSION, INCLUDING MAINTENANCE AND OPERATIONS OF THE PARKING ACCESS AND REVENUE CONTROL SYSTEM (PARCS) FOR THE PARKING FACILITIES LOCATED IN CITY

NAME OF CONTRACTOR: SENTRY CONTROL SYSTEMS, INC.

RESPONSIBLE PRINCIPAL OF CONTRACTOR: Tim Flanagan, President

CONTRACTOR'S ADDRESS: 6611 Odessa Avenue
Van Nuys, CA 91406

CITY'S ADDRESS: City of Beverly Hills
455 N. Rexford Drive
Beverly Hills, CA 90210
Attention: Chad Lynn
Director of Parking Operations

COMMENCEMENT DATE: Upon Notice to Proceed

TERMINATION DATE: October 31, 2018

CONSIDERATION: Original Agreement Not to Exceed \$2,130,000 as more fully described in Exhibit B-1 and B-2;
Amendment No. 2 not to exceed \$2,964,075 as more fully described in Exhibit B-1 and Exhibit B-2;
Total of Original Agreement and Amendment No. 2 not to exceed \$5,094,075

SECOND AMENDMENT TO AGREEMENT BETWEEN THE CITY OF
BEVERLY HILLS AND SENTRY CONTROL SYSTEMS, INC. FOR THE
EXPANSION, INCLUDING MAINTENANCE AND OPERATIONS OF THE
PARKING ACCESS AND REVENUE CONTROL SYSTEM (PARCS) FOR
THE PARKING FACILITIES LOCATED IN CITY

THIS AMENDMENT NO. 2 is to the Agreement between the City of Beverly Hills (hereinafter called "City") and Sentry Control Systems, Inc. (hereinafter called "Contractor") dated December 27, 2007 and identified as Contract NO. 489-07 as amended by Amendment No. 1 dated May 30, 2008 and identified as Contract No. 172-08.

RECITALS

- A. City entered into a written agreement with Contractor dated December 27, 2007 for the replacement of existing parking access and revenue control system, including hardware, software, equipment and related work for the setup, customization, installation and implementation of a new turn-key Parking Access and Revenue Control System (the "System"), which was previously amended;
- B. The parties desire to further amend the Agreement to continue to provide for maintenance and repairs of the existing System equipment, and provide, at City's option, for the upgrade or expansion of the Pay on Foot Cashiering Configuration for the following locations: 333 North Crescent Drive/9361 Dayton Way, 221 North Crescent Drive, 9510 Brighton Way, 440 North Camden Drive, 461 North Bedford Drive, 321 South La Cienega Drive, 9333 Third St, 450 North Crescent Drive, 450 North Rexford Drive, 438 North Beverly Drive/439 North Canon Drive, 240 North Beverly Drive/241 North Canon Drive, 345 North Beverly Drive, 216 South Beverly Drive. All upgrades or expansions of the Pay on Foot Cashiering Configuration shall be at the sole discretion of City, at City's written direction;
- C. This Amendment also provides for the potential expansion of the Parking Space Monitoring System currently installed at the South Beverly Drive parking facility to all facilities, including the warranty and pricing for this expansion, and applicable discounts. All upgrades and expansion of the Parking Space Monitoring System shall be at the sole discretion of City, at City's written direction.
- D. Further, this Amendment also provides for updated pricing, including warranty coverage, for the additional services, pricing for preventative maintenance (or "PM")/repair, and any applicable discounts. In addition, the Amendment provides for changes in preventative maintenance/repair service for all existing facilities and associated System equipment, and any applicable discounts.
- E. Section 18 of the original agreement provides that unless otherwise agreed to in writing by the City and Contractor, the terms of the original agreement, including adherence to the specifications set forth in Exhibit A, shall apply to any future installation of equipment by the City or installations under the City's direction. The additional upgrades and installations

contemplated in this Amendment No. 2 are therefore subject to the terms of the original agreement and Amendment No. 1 and the changes set forth in this Amendment No. 2.

NOW, THEREFORE, the parties agree as follows:

Section 1. The Recitals to this Amendment are hereby made part of the Agreement.

Section 2. Section 6 of the Agreement shall be amended to read as follows:

“Section 6. Additional Purchase of Equipment. In addition to the equipment for the System and as set forth in the Equipment List, City has the option to purchase additional equipment from Contractor at any time. If in the year 2008, City determines that additional or new equipment is necessary for the System or to expand the System, the cost of said equipment shall be as set forth in Exhibit G less a 15% discount. If in the year 2008, City desires to upgrade to pay-on-foot or add-on to the System in the manner specified in Exhibit B-2, the cost for such upgrades or add-ons is set forth in Exhibit B-2. For years 2009 through August 2013, the cost of additional or new equipment shall be lowest published manufactured suggested retail price or list price for the year the purchase is made less 15%. For subsequent years, the cost of additional or new equipment shall not exceed the amounts set forth in Attachment 1 to Exhibit B-2, attached hereto and incorporated herein less 21%. This provision (Section 6) shall remain in effect for as long as the City owns the equipment and shall survive the termination of this Agreement.”

Section 3. Exhibit A, Scope of Work, shall be amended to add Attachment 1 to Exhibit A, attached hereto and incorporated herein.

Section 4. Exhibit B-1 Payment Procedures, Terms and Pricing Summary for Existing Equipment shall be amended to add Attachment 1 to Exhibit B-1 as attached hereto and incorporated herein.

Section 5. Exhibit B-2, PARCS System Pricing Summary for Optional Services, shall be amended to add Attachment 1 to Exhibit B-2 as attached hereto and incorporated herein.

Section 6. Exhibit C, Detailed Equipment Specifications, shall be amended to add the Indect Parking Space Monitoring System, Attachment 1 to Exhibit C, attached hereto and incorporated herein.

Section 7. Exhibit E, Equipment List, shall be amended as set forth in Attachment 1 to Exhibit E, attached hereto and incorporated herein.

Section 8. Exhibit H, Proposed Service Agreement, shall be amended to add Attachment 1 to Exhibit H, attached hereto and incorporated herein shall be added to the contract.

Section 9. Except as specifically amended in Amendment No. 1 and this Amendment No. 2, all terms and conditions set forth in the Agreement shall remain in full force and effect.

IN WITNESS WHEREOF, the parties have executed this Agreement as of this
_____ day of _____, 20__.

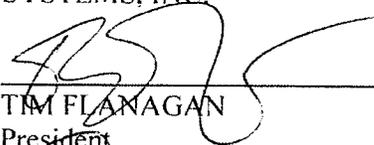
CITY OF BEVERLY HILLS
A Municipal Corporation

JOHN A. MIRISCH
Mayor of the City of Beverly Hills,
California

ATTEST:

_____(SEAL)
BYRON POPE
City Clerk

CONTRACTOR: SENTRY CONTROL
SYSTEMS, INC.



TIM FLANAGAN
President



CELIA FANNING
VP Finance/Controller

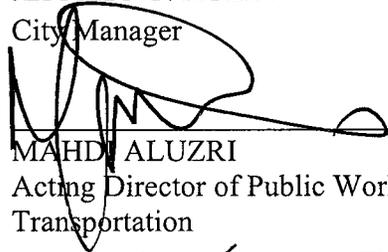
APPROVED AS TO FORM:



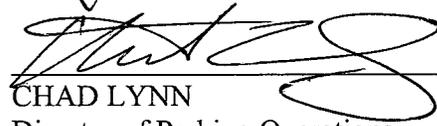
LAURENCE S. WIENER
City Attorney

APPROVED AS TO CONTENT:

JEFFREY C. KOLIN
City Manager



MAHDI ALUZRI
Acting Director of Public Works &
Transportation



CHAD LYNN
Director of Parking Operations



KARL KIRKMAN
Risk Manager

ATTACHMENT 1 TO EXHIBIT A
ADDITIONAL SCOPE OF WORK

SYSTEM UPGRADE AND EXPANSION

Existing Equipment Services:

Contractor shall continue to perform preventative maintenance, and maintenance and repairs on all existing equipment installed pursuant to the Agreement. In addition, Contractor shall perform preventative maintenance, and maintenance and repairs on all equipment that was installed at the parking facilities located at 241 Canon Drive/240 Beverly Drive (Montage), 9333 3rd Street and 450 Crescent Drive (Annenberg). The pricing for such services is set forth in Attachment 1 to Exhibit B-1.

Optional Equipment Services:

Contractor shall perform the following additional services at the option of City:

Upgrade and expand the System including converting Exit Cashiering to Pay on Foot Cashiering, and expand the parking space monitoring system in accordance with the terms and conditions set forth in Exhibit A of the Agreement and the terms of the Agreement. In addition, Contractor shall perform preventative maintenance, and maintenance and repairs on such additional equipment. In addition, City may elect to require Contractor to perform the following services including, without limitation, relocate the Operations Center, add/remove entry columns and grill gate integrations. The pricing for such services are set forth in Attachment 1 to Exhibit B-2.

Upon City's request, Contractor shall provide a written proposal for optional services which shall include the scope of work, performance schedule and compensation for such work in accordance with the terms set forth in the Agreement. Any additional work shall be executed at the discretion of City upon City giving Contractor a written Notice to Proceed.

Contractor shall provide a warranty for all upgrades and new installations it performs under this Agreement as described in the Agreement. All warranties and preventive maintenance services required under this Agreement shall survive termination of the Agreement.

At City's option, City may require Contractor to perform the Pay on Foot upgrade and expansion services including, without limitation, the following:

461 N. Bedford

Island and booth removal

- Night work
- Remove the existing booth and demo the islands, main island approx 40' and 2 small islands located near the exit
- Rent Fork Lift to remove the booth from the property

- Reroute conduit and cable to Mount existing nema box on unistrut
- Pour 2 new islands and reconfigure the lanes to accommodate 1 exit, 1 exit and 1 reversible entry exit in the center lane
- Add and install 2 new Exit columns 1 Entry column, 2 barrier gates 2 red/green lights
- Saw cut 8 new loops

Install Pay On Foot Machines (4 Easy.Cash & 4 Credit.Cash)

- Conduit and cable 400' total 200' for power and 200' for data
- Install pay on foot machines near the elevator/stair lobbies on each deck throughout the garage
- Exact location and quantities per floor to be determined
- Xray and core the deck for conduit work

438 N. Beverly/439 N. Canon Drive

Island and booth removal

- Remove 2 existing booths
- Back fill and curb 1 concrete island
- Add 2 new Exit Columns
- Trench for power and data 25' and refill with concrete
- Saw cut and remove concrete to mount gutter can in island to accommodate the power and data disbursement

Install Pay on Foot machines at N. Canon Drive (3 Credit.Cash and 1 Easy.Cash)

- Core, Xray and seal the deck
- Install 2 Credit.Cash machines on street level near the staircase
- Install 1 Easy.Cash and 1 Credit.Cash machine near the elevator lobby on P1
- Conduit and cable 200' total 100' for power and 100' for data

Install pay on Foot machines at N. Beverly Drive (3 Credit.Cash and 1 Easy.Cash)

- Core, Xray and seal the deck
- Install 2 Credit.Cash machines on street level near the staircase
- Install 1 Easy.Cash and 1 Credit. Cash machine near the elevator lobby on P1
- Run new conduit and cable 200' total 100' for power and 100' for data

345 N. Beverly Drive

Island and booth removal Upper

- Remove the existing booth
- Back fill and curb 1 concrete island
- Install a 4 x 4 custom pole for conduit
- Saw cut and remove concrete to mount gutter can in island to accommodate the power and data disbursement
- Air Ducts to be removed and capped off
- Trench for power and data 10' and refill with concrete
- Install 2 new Exit Columns side by side in the lane, the second column will only be active if the primary column becomes inoperable
- Install 2 new Entry Columns side by side in the lane, the second column will only be active if the primary column becomes inoperable

Island and booth removal lower level

- Remove the existing booth
- Back fill and curb 1 concrete island
- Install a 4 x 4 custom pole for conduit
- Saw cut and remove concrete to mount gutter can in island to accommodate the power and data disbursement
- Trench for power and data 10' and refill with concrete
- Install 2 new Exit Columns side by side in the lane, the second column will only be active if the primary column becomes inoperable
- Install 2 new Entry Columns side by side in the lane, the second column will only be active if the primary column becomes inoperable
- Re-pull data cable to the switch in the electrical room
- Relocate process PC to electrical room

Install Pay on foot machines ground level (1 Easy.Cash & 2 Credit.Cash)

- Run new conduit and cable 320' total 160' power and 160' data
- Core and xray and seal the deck
- Install 1 Easy.Cash and 2 Credit.Cash in the elevator/staircase lobby on ground level

216 S. Beverly Drive

Island and booth removal Upper

- Remove the existing booth
- Back fill and curb 1 concrete island
- Install a 4 x 4 custom pole for conduit
- Saw cut and remove concrete to mount gutter can in island to accommodate the power and data disbursement
- Trench for power and data 10' and refill with concrete
- Install 2 new Exit Columns side by side in the lane, the second column will only be active if the primary column becomes inoperable
- Install 2 new Entry Columns side by side in the lane, the second column will only be active if the primary column becomes inoperable

Install Pay on Foot machines ground level (2 Easy.Cash & 1 Credit.Cash)

North Pay on Foot Machines

- Run new conduit and cable 50' total 25' power and 25' data
- Core wall to accommodate the conduit path to the machine
- Install 5 new Protection Post around the Pay on Foot machine
- Install 2 Easy.Cash and 1 Credit.Cash near the elevator/staircase lobby on ground level

9510 Brighton Way

Island and booth removal Upper

- N i g h t
- Saw cut and remove concrete to mount gutter can in island
- Remove the existing booth and demo the island, main island approx 40'
- Rent Fork Lift to remove the booth from the property
- Reroute conduit and cable to Mount a new nema box on unistrut
- Pour 2 new islands and reconfigure the lanes to accommodate 1 exit, 1 exit and 1 reversible entry exit in the center lane
- Add and install 2 new Exit columns 1 Entry column, 2 barrier gates 2 red/green lights
- Saw cut 8 new loops

Install Pay on Foot machines on ground floor lobby (1 Easy.Cash & 2 Credit.Cash)

- Conduit and cable 200' total 100' for power and 100' for data
- Install 1 Easy. Cash and 2 Credit.Cash Pay on Foot machines in the elevator lobby
- Core through the ceiling and run conduit to the machine locations

- The lobby has marble tiles and a jewelry store right behind the wall when the machines are to be mounted. Surface mount conduit may be needed if accessibility is not possible.

440 N. Camden Drive

Island and booth removal Upper

- Remove the existing booth
- Saw cut and remove concrete to mount gutter can in island to accommodate the power and data disbursement
- Trench for power and data 20' and refill with concrete
- Install 2 new Exit Columns side by side in the lane, the second column will only be active if the primary column becomes inoperable
- Install 2 new Entry Columns side by side in the lane, the second column will only be active if the primary column becomes inoperable

Install pay on Foot machines on ground floor lobby (1 Easy.Cash & 2 Credit.Cash)

- Conduit and cable 50' total 25' for power and 25' for data
- Install 1 Easy. Cash and 2 Credit.Cash Pay on Foot machines in the elevator lobby
- Core through the block wall electrical closet
- Trench for power and data 20' and refill with concrete

333 N. Crescent/9361 Dayton Way

Island and booth removal N. Crescent

- Night work
- Remove the existing booth
- Saw cut and remove concrete to mount gutter can in island to accommodate the power and data disbursement
- Trench for power and data 20' and refill with concrete
- Install 2 new Exit Columns side by side in the lane, the second column will only be active if the primary column becomes inoperable
- Install 2 new Entry Columns side by side in the lane, the second column will only be active if the primary column becomes inoperable

Install Pay on Foot machines on N. Crescent (1 Easy.Cash)

- Run new conduit and cable 100' total 50' power and 50' data
- Core and xray and seal the deck
- Install 1 Easy.Cash near the elevator/staircase lobby on ground level

Island and booth removal Dayton

- Night work
- Remove the existing booth
- Saw cut and remove concrete to mount gutter can in island to accommodate the power and data disbursement
- Trench for power and data 20' and refill with concrete
- Install 2 new Exit Columns side by side in the lane, the second column will only be active if the primary column becomes inoperable
- Install 2 new Entry Columns side by side in the lane, the second column will only be active if the primary column becomes inoperable

Install Pay on Foot machines on Dayton (1 Easy.Cash)

- Run new conduit and cable 100' total 50' power and 50' data
- Core and xray and seal the deck
- Install 1 Easy.Cash near the elevator/staircase lobby on ground level

221 N. Crescent Drive

Island and booth removal Upper level

- Remove the existing booth
- Back fill and curb 1 concrete island
- Install a 4 x 4 custom pole for conduit
- Saw cut and remove concrete to mount gutter can in island to accommodate the power and data disbursement
- Trench for power and data 10' and refill with concrete
- Install 1 new exit column in the lane where the booth will be removed
- Add a new Commend GEZ and 2 GeGET4b cards to the intercom system

Install Pay on Foot machines main Elevator (1 Easy.Cash & 1 Credit.Cash)

- Run new surface mounted conduit and cable 300' total 150' power and 150' data as coring the deck is not possible
- Saw cut and trench 20' to POF and refill with concrete
- Install 5 Protection post's to protect the machine

Pay on Foot machines Whole Foods Entrance (No Pay on Foot)

Install Pay on Foot machines North Elevator (2 Credit.Cash)

- Install 2 Credit.Cash near the elevator/staircase lobby on ground level
- Run new conduit and cable 600' total 300' power and 300' data Fiber
- Add new Gbits switch to convert to fiber
- Add new Nema can to house the fiber switch
- Core through wall into the lobby from the stair case for data and power to the machine

450 Rexford Drive

Island and booth removal Upper level Rexford

- Remove the existing booth
- Fork lift rental needed
- Back fill and curb 1 concrete island
- Pull 3 new circuits for power and pull back data cable
- Relocate the intercom system to the lower comm. Room
- Saw cut and remove concrete to mount gutter can in island to accommodate the power and data disbursement
- Trench for power and data 10' and refill with concrete
- Install 2 new Exit Columns side by side in the lane, the second column will only be active if the primary column becomes inoperable

Install Pay on Foot machines elevator lobby Upper level Rexford (1 Easy.Cash and 1 Credit.Cash)

- Install 1 Easy. Cash and 2 Credit.Cash Pay on Foot machines in the elevator lobby
- Run new conduit and cable 300' total 150' power and 150' data
- Core through wall into the garage for data and power to the machine

Island and booth removal Upper level Civic center

- Remove the existing booth
- Fork lift rental needed
- Back fill and curb 1 concrete island
- Saw cut and remove concrete to mount gutter can in island to accommodate the power and data disbursement
- Install an additional Exit Column side by side in the lane, the second column will only be active if the primary column becomes inoperable
- Pull new circuit for power and pull back data cable and re-run

- Relocate the exit column up toward the gate about 7' to allow a better turning radius
- Install 1 additional off-set protection post

321 S,. La Cienega Blvd.

Island and booth removal

- Remove the existing booth
- Relocate the load center to the wall
- Back fill and curb 1 concrete island
- Trench for power and data 20' and refill with concrete
- Install 1 new exit column in the lane where the booth will be removed
- Saw cut and remove concrete to mount gutter can in island to accommodate the power and data disbursement

Install Pay on Foot machines near main walkway (1 Easy.Cash)

- Install 1 Easy.Cash pay on Foot machine in the walkway to the main entry of tennis center
- Run new conduit and cable 200' total 100' power and 100' data
- Core through the wall to get data and power to the location

Install Pay on Foot machines near main walkway (1 credit .cash)

- Install 1 Credit.Cash pay on Foot machine in the walkway to the main entry of tennis center
- Run new conduit and cable 600' total 300' power and 300' data Fiber
- Add new Gbits switch to convert to fiber
- Add new Nema can to house the fiber switch

The scope of services shall include obtaining all required permits.

ATTACHMENT 1 TO EXHIBIT B-1

PAYMENT PROCEDURES, TERMS AND PRICING
FOR EXISTING PARCS PAY ON FOOT
(PREVENTATIVE MAINTENANCE/REPAIRS) SYSTEM

In addition to the Payment Procedures and Terms set forth in Exhibit B-1, the following rates apply to this Amendment No. 2:

Fee for Preventative Maintenance for all existing facilities and equipment shall not exceed One Hundred Seventy Five Thousand Dollars (\$175,000) per year payable on a monthly basis, and not to exceed Eight Hundred Seventy Five Thousand Dollars (\$875,000) for the term of the Agreement. This fee shall be reduced by 3% to Not to Exceed One Hundred Sixty Nine Thousand Seven Hundred Fifty Dollars (\$169,750) per year if paid upon commencement of the Agreement and on the same date on an annual basis for the term of the Agreement.

Fee for Repairs, Expansion and Upgrade of Existing Equipment shall not exceed One Hundred Thousand Dollars (\$100,000) per year at the rates set forth in this Exhibit.

HOURLY RATES

Regular Working Hours Service (as defined in Exhibit H)	\$124.00 first half-hour; \$124.00 per hour thereafter billed in half hour increments of \$62.00
Systems Engineer Service:	\$174.000 for the first hour; \$174.00 per hour thereafter billed in half hour increments of \$87.00
Emergency Service: (as defined in Exhibit H)	Monday – Saturday @ 2 times regular service or systems engineer rates (2 hour minimum charge); Sunday & holidays @ 2.0 times regular service or systems engineer rates (two hour minimum charge)

ATTACHMENT 1 TO EXHIBIT B-2
COMPENSATION & HOURLY RATES
FOR OPTIONAL UPGRADES

I. Fees

A. Fee for Upgrade from Exit Cashiering to Pay on Foot Cashiering

Upgrade from Exit Cashiering to Pay on Foot Cashiering shall not exceed the following amounts \$2,308,037 for installation; \$350,000 for Contingency (for unanticipated services not included in Contractor's written proposals); and \$40,000 per year for Preventative Maintenance; Total for all upgrades not to exceed \$2,858,037. Contractor shall, upon City's request, submit a written proposal which shall include the scope of work, performance schedule and the costs which are subject to the prior written approval of City.

- a. Such pricing shall include 3 years of warranty coverage (no additional cost)
- b. Such pricing shall include 2 years of preventative maintenance services as described in Exhibit H
- c. Pricing for Preventative Maintenance services for years 3-5 of the Agreement is not to exceed \$40,000 per year, payable on a monthly basis and based on the pricing summary set forth in Attachment 1 to Exhibit B-2, paragraph II. This fee shall be reduced by 3% to \$38,800 per year if paid upon commencement of the Agreement and on the same date on an annual basis for the duration of the Agreement.
- d. Warranty coverage and preventative maintenance shall survive term of Agreement.

B. Fee for Expansion of the Indect Parking Space Monitoring System (or "Indect")

Expansion of the Indect System currently in use at the South Beverly Parking Facility shall not exceed \$3,029,875 plus Contingency not to exceed \$450,000 for a Total Not to Exceed amount of \$3,479,075 at the rate of approximately \$450 (clear ceiling), \$475 (contoured) per space (to be negotiated by the parties), which shall include, without limitation, all hardware and software for guidance signage in parking structures and communication to all parking space monitoring signage.

C. In no event shall the total not to exceed amount for Optional Services performed pursuant to this Amendment No. 2 for upgrades and/or expansion of the System (PARCS/Pay on Foot) and the Parking Space Monitoring System exceed \$6,337,112, unless the Agreement is amended in writing by the parties. If insufficient funds remain in either the PARCS/Pay on Foot or the Parking Space Monitoring budget, either of these budgets may be utilized for any Service required to be performed under this Amendment No. 2.

II. Pricing Summaries

In no event shall Contractor charge City more than the following amounts:

A. PRICING SUMMARY FOR OPTIONAL PAY ON FOOT UPGRADE SERVICES

Garage	Equipment Not to Exceed	Labor Not to Exceed	Preventative Maintenance Not to Exceed
461 N. Bedford, B.H.	\$ 198,515.00	\$ 56,000.00	\$ 4,720.00
439 N. Beverly Drive and 438 N Canon Drive	\$ 395,295.00	\$ 23,000.00	\$ 9,400.00
345 N. Beverly Blvd, BH	\$ 133,971.00	\$ 54,000.00	\$ 3,185.00
216 S. Beverly Blvd. B.H.	\$ 111,126.00	\$ 20,000.00	\$ 2,641.00
9510 Brighton	\$ 146,334.00	\$ 42,000.00	\$ 3,478.00
440 N. Camden	\$ 143,601.00	\$ 54,000.00	\$ 3,413.00
221 N. Crescent	\$ 191,940.00	\$ 23,000.00	\$ 4,563.00
333 N. Crescent Drive and 9363 Dayton Way	\$ 132,094.00	\$ 46,000.00	\$ 3,140.00
450 N. Rexford, and 370 Civic Center Drive	\$ 154,958.00	\$ 59,000.00	\$ 3,683.00
321 S. La Cienega Blvd, B.H.	\$ 74,751.00	\$ 23,000.00	\$ 1,777.00
Cashiering Phase 1	\$ (46,701.00)*		
Phase 2	\$ 117,305.00		
Phase 3	\$ 102,040.00		
Spare Parts	\$ (1,605.00)		
Demo equipment	\$ 54,413.00		
Not to Exceed:	\$1,908,037.00	\$400,000.00	\$40,000.00
	\$2,308,037.00	(Equipment & Labor)	

*Credit if exit cashiering (including spare parts) is expected and equipment is returned.

**B. PRICING SUMMARY FOR OPTIONAL PARKING SPACE
MONITORING SYSTEM (“INDECT”) SERVICES**

Carpark	# of Spaces	Per Space for Contoured		Per Space Price for Clear Ceiling	Total Price for Facility
North Beverly	287	\$ 475.00	\$ 136,325.00	\$ 450.00	\$ 129,150.00
South Beverly	233	\$ 475.00	\$ 110,675.00	\$ 450.00	\$ 104,850.00
Beverly-Canon	408	\$ 475.00	\$ 193,800.00	\$ 450.00	\$ 183,600.00
Brighton	249	\$ 475.00	\$ 118,275.00	\$ 450.00	\$ 112,050.00
Camden	364	\$ 475.00	\$ 172,900.00	\$ 450.00	\$ 163,800.00
Bedford	471	\$ 475.00	\$ 223,725.00	\$ 450.00	\$ 211,950.00
Rexford	530	\$ 475.00	\$ 251,750.00	\$ 450.00	\$ 238,500.00
Public Gardens	640	\$ 475.00	\$ 304,000.00	\$ 450.00	\$ 288,000.00
Third Street	549	\$ 475.00	\$ 260,775.00	\$ 450.00	\$ 247,050.00
La Cienega	319	\$ 475.00	\$ 151,525.00	\$ 450.00	\$ 143,550.00
Crescent North	515	\$ 475.00	\$ 244,625.00	\$ 450.00	\$ 231,750.00
Crescent South	713	\$ 475.00	\$ 338,675.00	\$ 450.00	\$ 320,850.00
Annenberg	481	\$ 475.00	\$ 228,475.00	\$ 450.00	\$ 216,450.00
Dayton	221	\$ 475.00	\$ 104,975.00	\$ 450.00	\$ 99,450.00
485 North Beverly SM-1	72	\$ 475.00	\$ 34,200.00	\$ 450.00	\$ 32,400.00
485 North Rodeo SM-2	69	\$ 475.00	\$ 32,775.00	\$ 450.00	\$ 31,050.00
485 North Camden SM-3	72	\$ 475.00	\$ 34,200.00	\$ 450.00	\$ 32,400.00
485 North Bedford SM-4	71	\$ 475.00	\$ 33,725.00	\$ 450.00	\$ 31,950.00
485 North Roxbury SM-5	113	\$ 475.00	\$ 53,675.00	\$ 450.00	\$ 50,850.00
Total for all facilities			\$ 3,029,075.00		\$2,869,650.00

Per Space includes: Hardware, Software, Installation, Training, 5 years of warranty and Preventative Maintenance and Full System Commissioning.

ATTACHMENT 1 TO EXHIBIT C
INDECT EQUIPMENT SPECIFICATIONS

BUCO - Bus Converter

Article number: 100912

Picture: BUCO PCI interface card
(actual item may differ from photo)



Description

The bus converter is an 8-port RS-422 Universal PCI communication card with surge protection and isolation for both 3.3 V and 5 V PCI bus systems.

It is designed for communications through harsh environments, and has full driver support for Windows and Linux operating systems.

Advantages

- PCI Specification 2.2 compliant
- Speeds up to 921.6 kbps
- 8-port RS-422
- 16PC1954 UARTs with 128-byte FIFOs standard
- I/O address automatically assigned by PCI Plug & Play
- OS Supported: Windows® 98/ME/2000/XP/7, Linux
- Interrupt status register for increased performance
- Space reserved for termination resistor
- Automatic RS-485 data flow control
- Powerful and easy to use utility (ICOM Tools)
- Universal PCI
- 2500 VDC Surge Protection
- 2500 VDC Isolation Protection

Commercial Data

Article name	Article number	Customs tariff number	Weight per unit
BUCO PCI Bus converter to be installed in ICOM, to control up to 8 COMO	100912	8471800000	

Installation

The BUCO is installed in a PCI slot of the ICOM computer. ICOM computers ordered with BUCOs come already preinstalled.

On each ICOM, 2 BUCO can be installed, connecting to max. 16 COMO.

Cabling

Connection to COMO:

- Predefined cable BUCO-DSUB (DB-9 male), 8 ports, delivered with BUCO by INDECT.
- Recommended cable for connection DSUB-COMO: F-YAY 2x2x0.8 mm² / AWG18 (twisted pair, shielded)

INDECT Electronics & Distribution GmbH

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www.indect.com



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COMO - Communication Module

Picture: COMO Communication Module without cover
(actual item may differ from photo)



Description

The COMO supplies INDECT sensors, Multifunction Modules, Master Modules, Distribution Modules, LED Modules and all other components of the bus with power and controls data bus communication.

The COMO is CE and EMC certified, developed and produced in compliance with ISO 9001.

Advantages

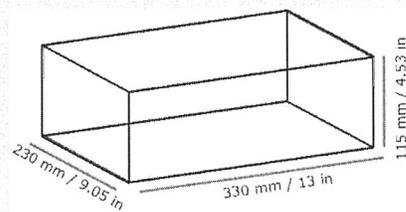
- Up to 90 sensors (and other bus components, such as LED symbols etc.) can be controlled and supplied with power
- Up to max. 180 sensors can be controlled when an additional power supply (POSU) is connected
- Conversion from data bus (RS485, 2-wire, unscreened) to RS485 (4-wire, screened), or to Ethernet (COMO IP)
- Sensor setup on site with laptop connected via USB or serial interface

Commercial Data

Article name	Article number	Customs tariff number	Weight per unit
Project Articles			
COMO Communication module incl. power supply to control and power up to 90 UMS (180 UMS with additional POSU); IP65	100804	8504408190	5.4 kg (11.9 lbs)
COMO PS Communication module incl. power supply to control and power up to 90 UMS (180 UMS with additional POSU); IP65; WITH POWER SOCKET AT/DE	1008041		5.5 kg (12.1 lbs)
COMO IP Communication module incl. RS485-IP converter and power supply to control and power up to 90 UMS (180 UMS with additional POSU); IP65	1008042		5.8 kg (11.9 lbs)
Replacement Articles			
COMO-Print Control print for COMO	100832		
Power Supply Power supply unit to be installed in COMO or POSU.	100831		

Technical Data

Dimensions:



Input power:	100 - 120 VAC/5 A 200 - 240 VAC/2.5 A
Output power:	24 VDC / 10 A
Casing colour:	Grey
Ingress Protection:	IP65
Ambient conditions:	-25 to 60 °C (-13 to 140 °F) 10 to 90% RH (non-condensing)
Storage temperature:	-40 to 70 °C (-40 to 158 °F)

Mounting

The COMO can be mounted on walls or put in cabinets etc.

- Recommended anchors/screws for wall mounting: at least 6 mm (1/4") anchors/screws

Cabling

- Connection COMO-ICOM computer (to D-SUB DB-9 female connected to BUCO): F-YAY 2x2x0.8 mm² / AWG18 (twisted pair, shielded)
- Connection COMO-RS485-IP Converter: precabled
- Connection D-SUB to ICOM computer: via cable delivered with BUCO
- Recommended cable for bus connection: NYM-J 4x1.5 mm² / AWG15 (A05VV-U 4x1.5 mm² / AWG15)
- Recommended cable for USB connection to setup laptop: standard USB cable
- Recommended cable for serial connection to setup laptop: flat ribbon cable, provided by INDECT.

Note: Other cable types can be tested for suitability by INDECT upon request.

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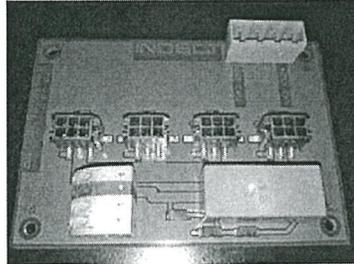
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DIMO2.0 - Distribution Module

Article number: 200802

Picture: Distribution Module without cover
(actual item may differ from photo)



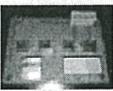
Description

The DIMO2.0 is connected to the data bus and serves for the connection of max. 4 LED symbols (LESY2.0—each of which can also be equipped with a max. of 5 digits—LEDI2.0) in a sign. All connected LESY2.0 are individually addressable, the DIMO2.0 acts only as a hub.

Advantages

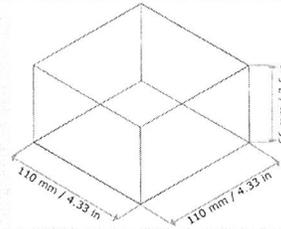
- Data bus connection
- Flexible installation (inside or outside the sign)
- 4 sockets to connect up to 4 LED symbols (LESY2.0), each with a 6-ph flexible cable (1 or 3 m / 3.3 or 9.8 ft) provided by INDECT

Commercial Data

Article name	Article number	Customs tariff number	Weight per unit
DIMO2.0 Distribution Module2.0: to control up to 4 LESY2.0; IP66; IP66 	200802	8536908599	0.2 kg (0.44 lbs)
CLESY2.01M Cable 6-ph, 1 m, to connect LESY2.0-DIMO2.0	200805		
CLESY2.03M Cable 6-ph, 3 m, to connect LESY2.0-DIMO2.0	200806		

Technical Data

Dimensions:



Outputs:	4 x 24 V + RS485 for LESY2.0 connection
Casing colour:	Grey
Ingress Protection:	IP66
Supply voltage range:	15 to 24 V DC
Ambient conditions:	-25 to 60 °C (-13 to 140 °F) 10 to 90% RH (non-condensing)
Storage temperature:	-40 to 70 °C (-40 to 158 °F)

Mounting

- Inside or outside the sign
- Usually preinstalled in delivered signs

Cabling

- Recommended cable for bus connection: NYM-J 4x1.5 mm² / AWG15 (A05VV-U 4x1.5 mm² / AWG15)
- Recommended cable for connection to LESY2.0: CLESY2.01M (200805) or CLESY2.03M (200806); provided by INDECT

Note: Other cable types can be tested for suitability by INDECT upon request.

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ICOM Database

Description

This document describes INDECT's ICOM database functionality and data migration options and shall help you to understand its advantages and opportunities.

Database Architecture

INDECT's ICOM database is SQLite-based. Our system differentiates between the configuration database and the statistics database.

The configuration database ...

... contains

- the complete site structure
- the assignment of all modules (sensors, signs, other devices)
- any configured settings, such as alarms, reservations, scheduled events etc.

The configuration database's filename is **nodes.db**. This file can be found in the ICOM root. While the atserver Windows service is running to safeguard ICOM and IVIS operation, a file called **nodes.db-journal** is created, acting as a temporary database buffer to protect the original configuration database from damage cause by ICOM PC outages (caused by power failure, for example). Despite this protection, the database might become harmed when unwanted PC shutdowns happen too frequently. INDECT therefore recommends to connect the PC to a reliable UPS.

The statistics database ...

... contains all recorded parking events, consisting of

- values and
- durations

... with which reports can be made.

Statistical data are captured and stored in data records.

When a data record exceeds a predefined size limit (which can be changed), old data is chopped off the active database, zipped and automatically swapped out to a swapout folder. The current swapout strategy is 1 GB maximum data record size.

Old data records that had been swapped out can also be swapped back in (in IVIS) to generate reports on dates that are no longer part of the active database. To keep the active database small and fast, it is recommendable to swap out old data records once they are no longer needed in the active database after these reports had been generated.

Swapped out data records can also be taken from the ICOM root folder and backed up somewhere else. The swapout folder is called /swapout in can be found in the ICOM root.

What Statistical Data Is Captured

INDECT records any parking events linked to a sensor, logging any status change. In addition, the durations are captured. A car must have stayed for at least 5 minutes (default value, can be modified) to be recorded in the database.

Also inputs from system-integrated vehicle-counting devices, such as loops or barriers, or inputs from the CMPS are recorded.

Report Formats

In IVIS, the following formats can be generated:

1. **PDF** – tables and graphs according to the defined report contents.
Please note: not all report types can be generated as a graph *and* a table.
2. **CSV** – data is extracted in Comma Separated Values, which can be imported, opened and edited in many software applications, such as Microsoft™ Excel.
3. **Copy/Paste (Export)** – report data can also be displayed in IVIS in a table for a quick glance. Data can be copied and pasted to other applications.
4. Another option is the **sensor history report**, which is not part of the IVIS statistics module, but can be found in Module > Action after having selected one or several sensors. This report lists all status changes of a sensor in the selected time period.
5. The **sensor occupation intensity** give a "thermal" overview of the selected level drawing about how long all sensor-equipped spaces were occupied within the selected period of time. Green indicates that a space was not occupied at all, dark red indicates that it had been occupied all the time. Steps in-between range from green over yellow over orange to red. The colour code can be seen in the IVIS Help.
6. **Long-term parkers** exceeding a definable period of time can be listed, in addition to the alarms that are generated as soon as a car overstays the preset period of time.

Report Generation and Automatic Reports

Reports can be defined in the report tool in IVIS.

- In order to make generation easier, defined reports can be saved. If they are to be generated at a later point of time, they can be opened, modified (for example, date, time, sections etc.) and generated.
- Defined reports can also be generated automatically – to this end, the optional software module **Automatic Reports** is required. A defined and saved report is added in the Schedule in IVIS, and generated and saved automatically in a folder on the ICOM PC (called \report_data) in the ICOM root.
- Automatic reports can also be automatically sent via email to defined email addresses.

Quickreports

Quickreports operate like automatic reports: predefined reports are automatically generated. In contrast to automatic reports, quickreports can be opened directly in IVIS, where they are listed. For each quickreport it can be specified how many of them shall be kept. Older quickreports are automatically deleted.

Examples:

- current day report (generated every hour with the data of the current day)
- previous day
- previous week
- previous month

Quickreports are saved in the folder \quick_report in the ICOM root.

They can be generated in PDF (table or graph).

Quickreports can also be accessed via the **Dashboard** (optional software module for overview of all registered sites via the Internet).



Web Services

Current occupancy data can be retrieved via the optional software module **Web Interface**.

This is done via a http GET request. Data of any section (car park, level, zone etc.) can be retrieved from the site in real time.

This data is delivered in JSON format, and can be processed in many programming or script languages, and, for example, be displayed on a website.

ODCB

It is possible to access statistical data via ODBC (Open Database Connectivity), though at present only data in the **datavalues** can be accessed.

ODCB has the advantage that all data records are reached directly (as raw data), which allows users to created their own reports directly with their own tools.

In case this feature is to be implemented completely, allowing access to all statistical data via ODBC, INDECT will have to update the respective drivers and registry.

If you require this feature, please contact INDECT for further details.

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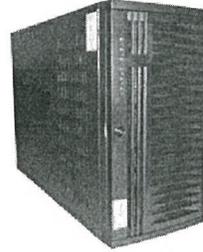
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ICOM Computer

Article number: 100914

Picture: sample ICOM computer
(actual items may differ from photos)



Description

The ICOM computer serves for data communication with and concentration of Communication Modules (COMO). The COMO can either be connected to bus converters (BUCCO) installed in the ICOM computer (max. 16 COMO per ICOM) or COMO IP are used, which are connected via an RS485 converter to a switch on the same network as the ICOM.

In case of large sites, two or more ICOM computers can be connected via IP.

Furthermore, the ICOM computer can be used to operate INDECT's Internet browser-based car park administration software IVIS.

Alternatively, the ICOM is also available as ICOM Premium for harder environments (see below).

Advantages

- Preinstalled configuration tools for commissioning the system by the trained system partner
- User interface Microsoft Windows™-like; handling with mouse and keyboard
- Car park operation and component control via Internet-browser-based user interface IVIS
- Connection of the COMO via bus converter (max. 16 Communication Modules)
- Connection of COMO IP via switch and Ethernet
- RAID 1 data security
- Connection to other ICOMs (in case of large sites) via IP

Commercial Data

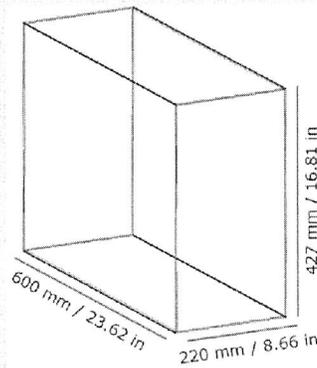
Article name	Article number	Customs tariff number	Weight per unit
ICOM ICOM Computer, to control up to 2500 bus components, 2x500 GB hard disk, RAID 1, 4 GB DDR3 RAM, incl. keyboard, mouse and power cord (AT/DE, UK)	100914	8471500090	16 kg (35.2 lbs)

ICOM Premium	1009141	16 kg (35.2 lbs)
ICOM Computer with premium configuration: 2x120 GB SSD Intel hard disks, RAID 1, 8 GB DDR3 RAM, 2xEthernet, incl. keyboard, mouse and power chord (AT/DE or UK); for Windows Server Operating System		
Acronis Backup & Recovery Windows 7	1009142	
License for Windows 7		
Acronis Backup & Recovery Windows Server 2008	1009143	
License for Windows Server 2008		

Technical Data

ICOM

Dimensions: (19"5U)

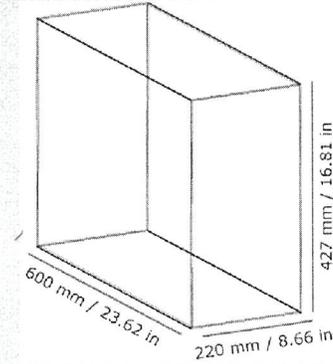


Computer:	Intel i650 3.2 GHz 4 GB DDR3 RAM RAID 1 (2 x 500 GB SATA for 24/7 performance) Multiformat DVD-R 550W
Interfaces:	VGA/DVI/HDMI Serial USB (10) Ethernet LAN 10/100/1000 2 PCI/1 PCIe x16/1 PCI x1
Bus card:	RS485 PCI bus card complying with configuration requirements (BUCO - to be ordered separately)
Operating system:	Windows 7 Ultimate 32 Bit™
Software:	<ul style="list-style-type: none"> • INDECT Setup & ICOM Configuration Software (separate license required) • INDECT IVIS Car Park Administration Software (separate license required) • Kaspersky Anti-Virus 2011 (1 year license)

Design: Recyclable materials, flame retardant plastic parts and front bezel (HB), t1.0 SECC Steel chassis

ICOM Premium

Dimensions: (19" 5U)



Computer: Intel i650 3.2 GHz
8 GB DDR3 RAM
RAID 1 (2 x 120 GB SSD Intel for 24/7 operation)
Multiformat DVD-R
500W

Interfaces: VGA/DVI/HDMI
Serial
USB (10)
2 x Ethernet LAN 10/100/1000
2 x PCI/1 PCIe x16/1 PCI x1

Bus card: RS485 PCI bus card complying with configuration requirements (BUCO - to be ordered separately)

Operating system: Windows Server™ 2008 R2 64 Bit EN

Software:

- INDECT Setup & ICOM Configuration Software (separate license required)
- INDECT IVIS Car Park Administration Software (separate license required)
- McAfee SaaS Endpoint Protection (1-year license)

Design: Recyclable materials, flame retardant plastic parts and front bezel (HB), t1.0 SECC Steel chassis

Mounting

The ICOM computer can be mounted in (lockable) 19" cabinets in the parking facility or in control rooms, or used as a tower desktop PC in the office.

Note: Make sure that sufficient ventilation is provided! The dust filter must be cleaned regularly! INDECT highly recommends to connect the ICOM computer to a UPS!

Cabling

Connection to COMO:

- Via BUCO (see BUCO for more information), recommended
- Via USB cable (only over short distances, for small sites)
- Via serial cable (delivered by INDECT, only over short distances, for small sites)
- Via serial cable (RS485-RS232 converter required, long distances possible)
- Via Ethernet cable (RS485-Ethernet converter or COMO IP required)

Note: Other cable or connection types can be tested for suitability by INDECT upon request.

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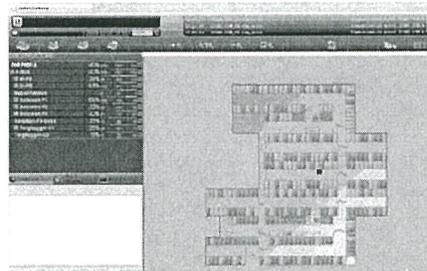
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IVIS

Picture: IVIS User Interface
(actual items may differ from photos).



Description

IVIS is an Internet browser-based application for monitoring your parking facility (INDECT recommends Mozilla Firefox™). IVIS can be operated on the ICOM computer or any computer connected to the network of the main ICOM computer.

IVIS provides you with a great variety of information on your parking facility. The IVIS GUI shows level floor plans, allowing you to control virtually any aspect dealing with signage, single space administration, statistics, and many other features. At a glance, you are always informed about the occupancy of the entire car park, a level or other section, and see the current status of each sign and parking space equipped with INDECT sensors. Or create a statistical report—custom-tailored to your requirements.

Commercial Data

Article name	Article number	Customs tariff number	Weight per unit
IVIS Single License 1000 Single license for visualisation software IVIS INDECT SSA for sites with more than 1000 sensor-monitored spaces	101005		
IVIS Single License 900 Single license for visualisation software IVIS INDECT SSA for sites with up to 900 sensor-monitored spaces	1010059		
IVIS Single License 800 Single license for visualisation software IVIS INDECT SSA for sites with up to 800 sensor-monitored spaces	1010058		
IVIS Single License 700 Single license for visualisation software IVIS INDECT SSA for sites with up to 700 sensor-monitored spaces	1010057		
IVIS Single License 600 Single license for visualisation software IVIS INDECT SSA for sites with up to 600 sensor-monitored spaces	1010056		
IVIS Single License 500 Single license for visualisation software IVIS INDECT SSA for sites with up to 500 sensor-monitored spaces	1010055		

IVIS Single License 400 Single license for visualisation software IVIS INDECT SSA for sites with up to 400 sensor-monitored spaces	1010054
IVIS Single License 300 Single license for visualisation software IVIS INDECT SSA for sites with up to 300 sensor-monitored spaces	1010053
IVIS Single License 200 Single license for visualisation software IVIS INDECT SSA for sites with up to 200 sensor-monitored spaces	1010052
IVIS Single License 100 Single license for visualisation software IVIS INDECT SSA for sites with up to 100 sensor-monitored spaces	1010051

For upgrade or update licensing, please contact INDECT.

Advantages

- No separate workstation required to run IVIS—you can manage your parking facility directly on the ICOM or from any computer that is on the same network as the system server (ICOM).
- Easy operation via an Internet browser (Mozilla Firefox™ recommended)
- Performance controlled by ATSERVER Windows Service for uninterrupted operation
- Integrated online help¹
- Alarm in case of hardware or connection failure²

In addition, IVIS contains powerful tools which enable you to adapt your parking facility to your requirements, for example:

- Adjust LED brightness to fit ambient conditions
- Adjust the settings of all available components
- Find individual parking spaces
- Reserve individual parking spaces
- Playback and visualize a definable period of time
- Navigate the floor plans
- Schedule events (LED dimming, sign operation etc.)
- Set alarms for individual bays (alarm on entry to/exit from bay, maximum parking duration)
- Set alarms for the entire car park (maximum parking duration)
- Show sensor history
- Create statistical reports on car parks, levels, zones, individual bays
- Show bay occupation intensity
- Optional fire alarm feature, automatic report feature, quickreport feature, barrier control
- ... and many more

1. Currently available in English, German and Italian
2. Audio alarm availability subject to connected speakers

Installation

Since IVIS runs on an Internet browser, there is no need to install IVIS.

In case there is an updated version of the online help, INDECT will update the online help via remote login (to be provided by the customer) or send you the current version with a quickguide for updating.

Operation on Non-INDECT PCs

For operation on non-INDECT PCs it is required to install either Mozilla Firefox or Internet Explorer 9 on the machine.

To start IVIS in the browser

1. Open the browser.
2. Type in the IP address of the main ICOM PC in the browser address bar.
3. The browser connects to the main ICOM and show IVIS.

To start IVIS via a Desktop shortcut

1. Create a shortcut of the browser on the Desktop.
2. Right-click on the shortcut and select **Properties**.
3. In the tab **Shortcut**, add the IP address of the main ICOM after the browser path and a blank space, e.g.
`... \firefox.exe" http://192.168.0.1`
4. Click on **OK**.
5. When you open the shortcut, the browser will connect to the main ICOM and show IVIS.
6. Adjust the IVIS window in size and position.



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LEDI2.0 - LED Digit 2.0

Description

INDECT's LED Digits 2.0 are used for informing drivers of space availability. They consist of a 7-segment LED print which can be put together with other 7-segment LED prints to form a unit of up to 5 digits.

The first LEDI2.0 in the unit of digits is connected to a Master Module (MAMO2.0) or a LED symbol (LESY2.0).

LED Digits can be installed in INDECT signs or 3rd party signs.

LEDI2.0 are available in 2 sizes (see below).

LEDI2.0 are equipped with SMD LED on a black PCB. Together with INDECT's new LED symbols (LESY2.0) and IP65 sign racks they make the perfect choice for flexible, durable and high-quality signage.

Standard Size LEDI2.0

Standard LEDI2.0

The standard and most often used LEDI2.0 consists of a green digit that can be combined with a red cross to be shown when no more spaces are available in the respective section of the car park.



Coloured LEDI2.0

Coloured LEDI2.0 are used to match the colour of special LESY2.0 symbols (wheelchair, parents-with-prams, woman) or if the customer simply requires a LED colour other than green. Also these digits can come with an integrated red cross.



Bicolour LEDI2.0

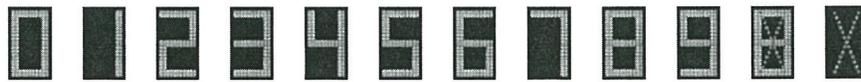
LEDI2.0 are also available in many colours (green, blue, white, amber) with a second, red layer of LEDs that can show a red "0" or "FULL" (4 digits required) when no more spaces are free.



Large LEDI2.0

Standard LEDI2.0

See above. The only difference to the standard size LEDI2.0 is their digit dimension (see technical data below).



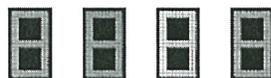
Coloured LEDI2.0

See above.



Bicolour LEDI2.0

See above.



Advantages

- 1-digit to 5-digits combinable
- 2 sizes available (130 and 190 mm digit height)
- Various colours available
- Available also with red X
- Available also in bicolour design, e.g. to show red "0" or "FULL"
- Control via Master Module (MAMO2.0) or LED symbol (LESY2.0)
- LED brightness adjustable for optimal visibility via INDECT's car park administration Software IVIS
- Automatic brightness control according to the ambient light via photosensor connected to MAMO2.0 or via LESY2.0

Commercial Data

Article name	Article number	Customs tariff number	Weight per unit
LEDI2.0 130 mm			
LEDI2.0 Digit 130 mm green LED Digit 7-segment green, 130 mm digit height	 200700		
LEDI2.0 Digit 130 mm green/red X LED Digit 7-segment green with red X, 130 mm digit height	 200701		

LEDI2.0 Digit 130 mm green/red LED Digit 7-segment green / red, 130 mm digit height		200708
LEDI2.0 Digit 130 mm blue LED Digit 7-segment blue, 130 mm digit height		200702
LEDI2.0 Digit 130 mm blue/red X LED Digit 7-segment blue with red X, 130 mm digit height		200703
LEDI2.0 Digit 130 mm blue/red LED Digit 7-segment blue / red, 130 mm digit height		200709
LEDI2.0 Digit 130 mm white LED Digit 7-segment white, 130 mm digit height		200704
LEDI2.0 Digit 130 mm white /red X LED Digit 7-segment white with red X, 130 mm digit height		200705
LEDI2.0 Digit 130 mm white/red LED Digit 7-segment white / red, 130 mm digit height		200710
LEDI2.0 Digit 130 mm amber LED Digit 7-segment amber, 130 mm digit height		200706
LEDI2.0 Digit 130 mm red LED Digit 7-segment red, 130 mm digit height		200707
LEDI2.0 190 mm		
LEDI2.0 Digit 190 mm green LED Digit 7-segment green, 190 mm digit height		200720
LEDI2.0 Digit 190 mm green/ red X LED Digit 7-segment green with red X, 190 mm digit height		200721
LEDI2.0 Digit 190 mm green/red LED Digit 7-segment green / red, 190 mm digit height		200728
LEDI2.0 Digit 190 mm blue LED Digit 7-segment blue, 190 mm digit height		200722
LEDI2.0 Digit 190 mm blue/red X LED Digit 7-segment blue with red X, 190 mm digit height		200723

LEDI2.0 Digit 190 mm blue/red LED Digit 7-segment blue / red, 190 mm digit height		200729
LEDI2.0 Digit 190 mm white LED Digit 7-segment white, 190 mm digit height		200724
LEDI2.0 Digit 190 mm white / red X LED Digit 7-segment white with red X, 190 mm digit height		200725
LEDI2.0 Digit 190 mm white/red LED Digit 7-segment white / red, 190 mm digit height		200730
LEDI2.0 Digit 190 mm amber LED Digit 7-segment amber, 190 mm digit height		200726
LEDI2.0 Digit 190 mm red LED Digit 7-segment red, 190 mm digit height		200727
Cables		
CLEDI2.01M Cable 6-ph, 1 m, to connect LESY2.0-LEDI2.0 or MAMO2.0-LEDI2.0		200807

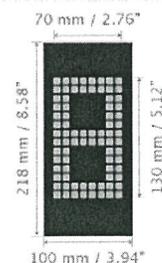


Technical Data

Dimensions (HxW)

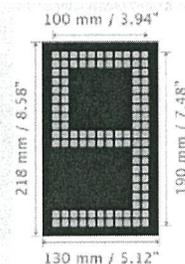
Standard digits:

PCB: 218 x 100 mm
Digit: 130 x 70 mm



Large digits:

PCB: 218 x 130 mm
Digit: 190 x 100 mm



Supply voltage range:

20 to 24 V DC

Ambient conditions:

-25 to 60 °C (-13 to 140 °F)
10 to 90% RH (non-condensing)

Storage temperature:

-40 to 70 °C (-40 to 158 °F)

Mounting

LEDI2.0 are installed in signs. 3rd party installation kits for integration in 3rd party signs are available. See the integration standards specification for more details.

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LESY2.0 - LED Symbol

Description

LED symbols are used for directing drivers to free spaces. They are installed in INDECT signs or 3rd party signs, and are connected to the INDECT bus via a Distribution Module (DIMO2.0), Master Module (MAMO2.0) or Multifunction Module (MUMO).

LED Digits (LEDI2.0) can be connected directly to a LESY2.0.

LED Symbols 2.0 can also be used without bus control via a relay and/or 24 V DC supply.

LESY2.0 are equipped with SMD LED on a black PCB. Together with INDECT's new LED digits (LEDI2.0) and sign racks (for example, the Profile Sign IP65) they make the perfect choice for flexible, durable and high-quality signage.

3-way Arrow and Arrow/Cross

New to INDECT's sign module portfolio is the 3-way arrow or arrow/cross, which is capable of handling 3 directions with just one LED module. On either side (left and right) digits (LEDI2.0) can be connected to show the number of available spaces in either direction.

3-Way Arrow with Green LED Arrow and optional Red Cross

This LED symbol is equipped with green LEDs for the arrow and optionally red LEDs for the cross. See below for possible layouts according to space availability.



3-Way Arrow with Red/Green LEDs

This LED symbol is equipped with red/green LEDs. Driving directions with free spaces are shown in green, those with none in red. See below for possible layouts according to space availability.



Arrow/Cross and Arrow/Arrow

Also INDECT's standard arrow/cross or arrow/arrow symbol comes in a new layout.

Arrow/Cross

The classic arrow/cross symbol is still available in straight or diagonal format:



Arrow/Arrow

The arrow/arrow symbol is available in straight or diagonal format and comes with red/green LEDs that change their colour to green when there are free spaces in the driving direction and to red if there are none:



Special Symbols

INDECT's special LED symbols—wheelchair, woman and parent-with-pram—have also been adapted to our new LED symbol standard. What is also new is that the integrated arrow can point in any direction (set by software), which allows for easy changes in the location of special bays.



Advantages

- Control of up to 4 LED symbols per Distribution Module (DIMO2.0)
- Each LESY2.0 is equipped with a photosensor for automatic brightness control
- LED-brightness adjustable for optimal visibility via INDECT Car Park Administration Software IVIS, or manually on the LED Symbol PCB¹
- Combinable with LED Digits (LEDI2.0)
- Remote updateable firmware for future updates
- Can be supplied with 24 V DC without being connected to the INDECT bus; brightness adjustment can then be carried out via a potentiometer on the backside of the LESY2.0

Commercial Data

Article name	Article number	Customs tariff number	Weight per unit
3-Way Arrow			
LESY2.0 3-way A green 3-way LED arrow green	200620		0.130 kg (0.286 lbs)
			
LESY2.0 3-way A/C green/red cross 3-way LED arrow green with integrated red cross	200622		0.130 kg (0.286 lbs)
			
LESY2.0 3-way A green/red 3-way LED arrow green / red	200621		0.130 kg (0.286 lbs)
			
Arrow (Arrow/Cross) Symbol			

¹ Depending on connection type.

LESY2.0 A straight LED arrow symbol straight, green arrow		200604		
LESY2.0 A diagonal LED arrow symbol diagonal, green arrow		200605		
LESY2.0 A/C straight green LED arrow/cross symbol straight, green arrow, red cross		200600		
LESY2.0 A/C diagonal green LED arrow/cross symbol diagonal, green arrow, red cross		200601		
LESY2.0 A/A straight LED arrow/arrow symbol straight, green arrow / red arrow		200602		
LESY2.0 A/A diagonal LED arrow/arrow symbol diagonal, green arrow / red arrow		200603		
LESY2.0 A/C straight blue LED arrow/cross symbol straight, blue arrow, red cross (delivery time on request)		200606		
LESY2.0 A/C diagonal blue LED arrow/cross symbol diagonal, blue arrow, red cross (delivery time on request)		200607		
LESY2.0 A/C straight white LED arrow/cross symbol straight, white arrow, red cross (delivery time on request)		200608		
LESY2.0 A/C diagonal white LED arrow/cross symbol diagonal, white arrow, red cross (delivery time on request)		200609		
Special Symbols				
LESY2.0 wheelchair blue LED disabled symbol 160x180 mm blue, direction arrow turnable via software		200630		
LESY2.0 wheelchair green LED disabled symbol 160x180 mm green, direction arrow turnable via software. Delivery time on request.		200631		
LESY2.0 wheelchair red LED disabled symbol 160x180 mm red, direction arrow turnable via software. Delivery time on request.		200632		
LESY2.0 Woman white LED woman symbol 160x180 mm white, direction arrow turnable via software		200633		0.123 kg (0.271 lbs)

LESY2.0 Pram white LED pram symbol 160x180 mm white, direction arrow turnable via software		200634	0.140 kg (0.308 lbs)
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Cables for LESY2.0

CEXT2.01M Cable 3-ph, 1 m, to connect LESY2.0- MAMO, LESY2.0-MAMO/MAMO2.0 or 24 V free/occupied		200808	
CLEDI2.01M Cable 6-ph, 1 m, to connect LESY2.0- LEDI2.0 or MAMO2.0-LEDI2.0		200807	
CLESY2.01M Cable 6-ph, 1 m, to connect LESY2.0- DIMO2.0		200805	
CLESY2.03M Cable 6-ph, 3 m, to connect LESY2.0- DIMO2.0		200806	

LESY2.0 Control Modules

DIMO2.0 Distribution Module2.0: to control up to 4 LESY2.0; IP66		200802	
MAMO2.0 Master Module 2.0 to control LED digits LEDI2.0		200800	
MUMO Multifunction Module, can be used as input module (for example to integrate counting devices) or output module (for example, to control other devices via a 24 V DC relay or simple 3rd party signs). 2 inputs or outputs; IP66		100803	

Large LESY

(Dibond cover required, control via DIMO 1st
generation, to combine with LEDI2.0 an
additional MAMO2.0 is required)

LESY 11 A/C straight large LED Symbol with straight arrow green 241x161 mm / red cross 250x250 mm		100614	0.280 kg (0.617 lbs)
LESY 10 A/C diagonal large LED Symbol with diagonal arrow green 241x161 mm / red cross 250x250 mm		100613	0.280 kg (0.617 lbs)

Cables for Large LESY

CABL 01 Cable 4-ph, 1 m (3.28 ft), to connect LESY- DIMO		100807	0.050 kg (0.11 lbs)
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CABL 02 Cable 4-ph, 3.2 m (10.5 ft), to connect LESY-DIMO	100808	
CABL 03 Cable, 3-ph, 1 m (3.28 ft), to connect LESY-MUMO, LESY-MAMO or 3rd party signs/traffic lights (24 V) usw.-MUMO)	100809	0.015 kg (0.033 lbs)
CABL 04 Cable 8-ph, 1 m, to connect LEDI-LESY or LEDI-MAMO	100810	

Technical Data

Dimensions (HxW)	
3-way Arrow:	PCB: 218 x 218 mm LED-symbol: 180 x 170 mm
3-way Arrow/Cross:	PCB: 218 x 218 mm LED-Symbol: 180 x 180 mm
Arrow/Cross:	PCB: 218 x 218 mm LED-Symbol: 200 x 200 mm
Special Symbols:	PCB: 218 x 218 mm LED-Symbol: 200 x 200 mm
Supply voltage range:	20 to 24 V DC
Ambient conditions:	-25 to 60 °C (-13 to 140 °F) 10 to 90% RH (non-condensing)
Storage temperature:	-40 to 70 °C (-40 to 158 °F)

Mounting

LESY2.0 are installed in signs or LED boxes. 3rd party installation kits for integration in 3rd party signs are available. See the integration standards specification for more details.

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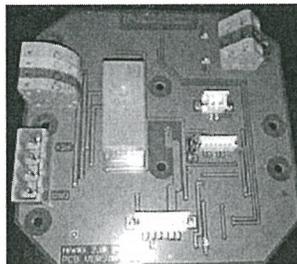
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MAMO2.0 - Master Module

Article number: 200800

Picture: Master Module without cover
(actual item may differ from photo)



Description

The MAMO2.0 is connected to the INDECT bus and controls LED Digits (LEDI2.0), LED Text Modules (TEMO) or LED Symbols (LESY2.0¹) installed in INDECT signs or 3rd party sign racks.

The MAMO2.0 is CE and EMC certified and has been developed and produced in compliance with ISO 9001.

Advantages

- Control of LED Digits without long cable ducts
- 24 V supply via the INDECT bus or additional power supplies
- Output for the control of further components (e.g. LED symbols, traffic lights) via 24 V output or relay
- Remote updateable firmware for future updates
- Control also possible without the INDECT bus by other systems; included RS485 protocols (on request)
- Optional photosensor for automatic brightness control according to the ambient light

Commercial Data

Article name	Article number	Customs tariff number	Weight per unit
MAMO2.0 Master Module 2.0 to control LED digits LEDI2.0; IP66	200800	8536908599	0.215 kg (0.47 lbs)
CLDR2.01M LDR-cable incl. photo resistor, 1 m, to be connected to MAMO2.0 and installed in a sign	200801		

¹ Only manual brightness control. For full software brightness control use the DIMO2.0 to control (LESY2.0)