



*Fabricant de
systèmes d'affichage électronique*

*Electronic Display Systems
Manufacturer*

SCROLL GAS PRICE DISPLAY SYSTEM

ROS SERIES

INSTALLATION MANUAL

REV 3.0



*Fabricant de
systèmes d'affichage électronique*

*Electronic Display Systems
Manufacturer*

WARNING

The ROS Scroll Display System must be installed as per Novyc International's recommendations.

The electrical installation must conform to applicable local regulations.

The ROS Scroll Display System must only be serviced and repaired by qualified and trained personnel.

Installation:

- **Do not install a damaged unit.**
- **Any modification to the product will automatically void the warranty.**
- **Do not drill holes or screw components to the enclosures.**
- **Use only the provided mounting brackets to secure the units in the sign cabinet.**

Power must be turned off before servicing.

FCC and IC NOTICE

**EPC-RFM3-S4, RF Module contains radio transmitter
EPC-DI3, Display Interface contains radio transmitter
FCC ID: RG5 NOVYC1 IC: 10781A-NOVYC1**

This device complies with Part 15 of the FCC rules and Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) This device may not cause harmful interference and; (2) This device must accept any interference received, including interference that may cause undesired operation.



*Fabricant de
systèmes d'affichage électronique*

*Electronic Display Systems
Manufacturer*

CONTENT

1. Input Controller unit (EPC-S4) - Installation	4
2. Display Interface unit (EPC-DI3) - Installation	6
3. Scroll Display unit (ROS-Dxxx) - Installation	8
4. Verification	11

DOCUMENTS

ROS2-D309UI	ROS2-D309UI - Dimensions, Scroll Display 9-in Digit
ROS2-D312UI	ROS2-D312UI - Dimensions, Scroll Display 12-in Digit
ROS2-D315UI	ROS2-D315UI - Dimensions, Scroll Display 15-in Digit
EPC-S4-Operating Instructions	Input Controller (EPC-S4), Operating Instructions
EPC-S4-Setting Instructions	Input Controller (EPC-S4), Setting Instructions
EPC-S4-EPC-DI3 Pairing Procedure	Pairing Procedure

1. Input Controller Unit (EPC-S4) Installation



EPC-S4 – Input Controller



RF Module (EPC-RFM3-S4) – Wall Mount Power Supply

1.1. Power

- The Input Controller (EPC-S4) is permanently connected.
- A 115 VAC outlet is required.

1.2. Setting

- o Refer to the EPC-S4 Setting Instructions manual.
- o The following parameters must be set:
 - o Number of digits (3 or 4)
 - o Number of levels (Type 1 to 6)
 - o Number of signs (1 or 2)
 - o Pairing

1.3. Pairing Procedure

- o The Input Controller unit (EPC-S4) and the Display Interface unit (EPC-DI3) need to be paired in order to recognize each other. Only paired units can communicate together and data from any other unit will be ignored.
- o Refer to the EPC-S4 Setting Instructions manual.

1.4. RF Module (EPC-RFM3-S4)

- RF Communication between the Input Controller (EPC-S4) and the display Interface (EPC-DI3) at the sign.



EPC-RFM3-S4 – RF Module



EPC-RFM3-S4 to EPC-S4

- The RF Module (EPC-RFM3-S4) is connected to the DB9 (pin) connector of the Input Controller (EPC-S4).
- **For optimal communication performances the antenna must be positioned vertically and should not be obstructed by any metallic object. Install the antenna at the highest possible point.**
- Use the mounting bracket to secure the RF Module.

1.5. P.O.S. Interface available with EPC-S4 Input Controller

- o The price at the sign is set from a serial port.
- o The P.O.S. System is connected to the DB9 (socket) connector.
- o Contact service department for available communication protocols.

2. Display Interface Unit (EPC-DI3) Installation



EPC-DI3 - Display Interface Unit

2.1. WARNING - IMPORTANT NOTES

- When installed outdoor, a proper overall weatherproof sign enclosure (NEMA 3) is required.
- The Display Interface unit shall be installed in a RESTRICTED ACCESS LOCATION.
- Any modification to the enclosure will automatically void the warranty.
- Do not drill holes or screw components to the enclosure.

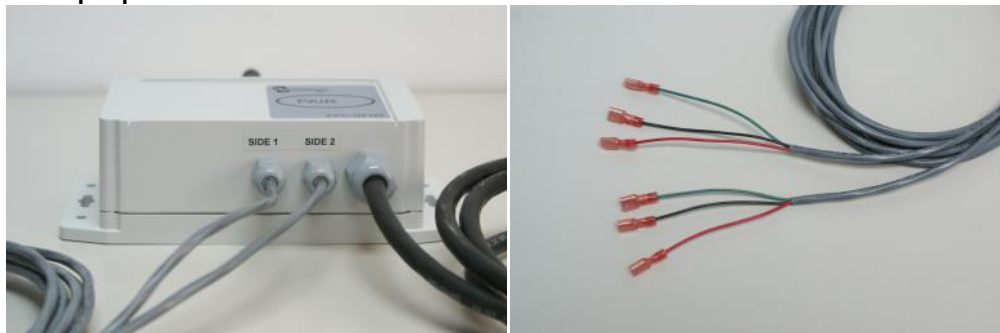
2.2. Mounting

- For optimal communication performances the antenna must be positioned vertically and should not be obstructed by any metallic object (sign face, Display unit, etc). Install the antenna at the highest possible point.
- Use the lateral mounting bracket to secure the Display Interface.

2.3. Power

- A 115 VAC outlet is required in the sign.
- The AC outlet shall be installed near the equipment and shall be easily accessible.
- **Important notes (grounding pin):**
This product is equipped with a 3-wire grounding-type plug, a plug having a third (grounding) pin. This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact a qualified electrician to replace your obsolete outlet. Do not defeat the purpose of the grounding-type plug.

2.4. Input / Output ports



EPC-DI3 - Input / Output Ports

End of Cables

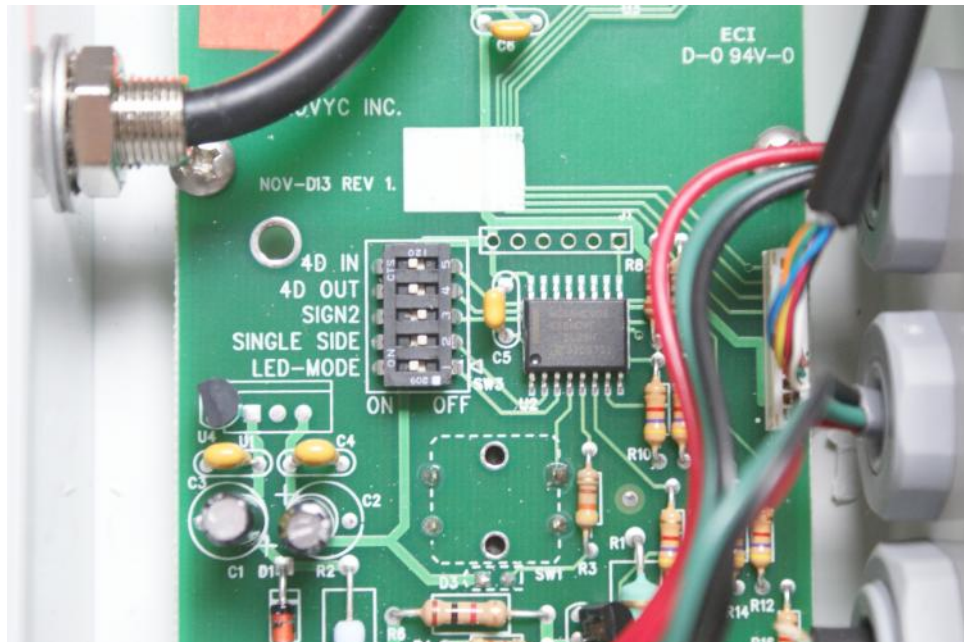
- Two cables are provided for the connection to the LED Display units.
 - o Output to the LED Display units (Side 1)
 - o Output to the LED Display units (Side 2)
 - o The end of each cable has 3 wires (Black, Red and Green) terminated with female quick disconnect terminals.

2.5. Configuration

- To provide the appropriate feedback to the Input Controller unit, the Display Interface unit needs to be properly configured for the following operating condition:
 - o LED or Scroll Display unit
 - o Single or double side Display unit
 - o Sign 1 or Sign 2 when installed in the Pylon 2 of a 2-pylon site
 - o Output Format (**Must be set to 4 digits**)
 - o Input Format (**Must be set to 4 digits**)
- Refer to the table below for the setting of SW3:

SW3	ON	OFF
1	LED Mode	Scroll Mode
2	Single Side	Double Side
3	Sign 2	Sign 1
4	4-Digit Output Format	6-Digit Output Format
5	4-Digit Input Format	6-Digit Input Format

Note: The Input Controller unit (EPC-S4) needs to be set for one or two pylon operation. Refer to the Input Controller setting instructions.



2.6. Pairing Procedure

- o The Input Controller unit (EPC-S4) and the Display Interface unit (EPC-DI3) need to be paired in order to recognize each other. Only paired units can communicate together and data from any other unit will be ignored.
- o Refer to the EPC-S4 Setting Instructions manual.

3. Scroll Display Unit (ROS2-Dxxx) Installation

3.1. WARNING - IMPORTANT NOTES

- The Scroll Display unit shall be installed in a RESTRICTED ACCESS LOCATION.
- Do not install a damaged Scroll Display unit.
- Any modification to the enclosure will automatically void the warranty.
- Do not drill holes or screw components to the enclosure.

3.2. Mounting

- Use the lateral mounting bracket to secure the Led Display units in the sign cabinet.
- For mechanical details, refer to "ROS2-Dxxx - Enclosure Specification" document.



Scroll Display Unit



Lateral Mounting Bracket

3.3. Service Access

- Front access to the sign is required for service.
- For simple easy access, and one man operation, we highly recommend that the sign face be hinged.

3.4. Sign Face Position and Window

- The Scroll Display unit enclosure must be installed right up against the sign face for best visibility.
- Recommended window opening and position:
 - Refer to the following Enclosure Specification document:
 - ROS2-D412CI
 - ROS2-D415CI

3.5. Scroll Display Unit (ROS2-Dxxx) Configuration

- The Scroll Display unit must be configured for the appropriate product type (Type 1 to Type 6).
- Remove the side cover located on the left side of the unit (6 screws).
- Set the configuration jumper as follows:
 - Type 1 Jump pin 1 and pin 2
 - Type 2 Jump pin 2 and pin 3
 - Type 3 Jump pin 3 and pin 4
 - Type 4 Jump pin 4 and pin 5
 - Type 5 Jump pin 5 and pin 6
 - Type 6 Jump pin 6 and pin 7



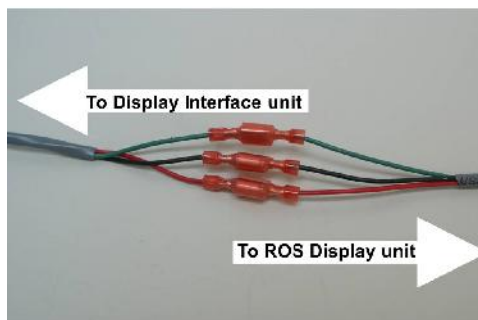
Side Cover



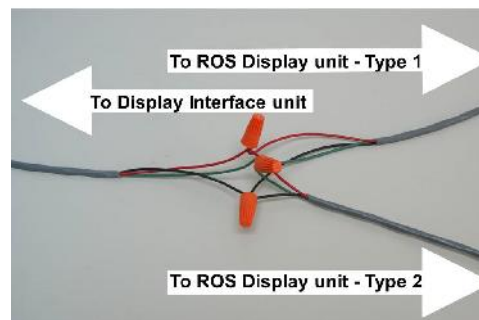
Configuration Jumpers – pin 1 and 2

3.6. Interconnection

- **IMPORTANT NOTE: It is highly recommended that the Scroll Display unit facing the kiosk be connected to side 1 output. The side 1 is always scrolling first, providing immediate feedback to the operator.**
- Interconnections between the Display Interface (EPC-DI3) and the Scroll Display units (ROS2-Dxxx).
- All connections are made color to color:
 - Red to Red DC +
 - Black to Black DC -
 - Green to Green Control Signal
- **Interconnection**
 - Side 1
 - Connect all Scroll Display units of side 1 together.
 - Connections to the output port 1 of the Scroll Display Interface unit:
 - Black to Black
 - Red to Red
 - Green to Green
 - Side 2
 - Connect all Scroll Display units of side 2 together;
 - Connections to the output port 2 of the Scroll Display Interface unit:
 - Black to Black
 - Red to Red
 - Green to Green



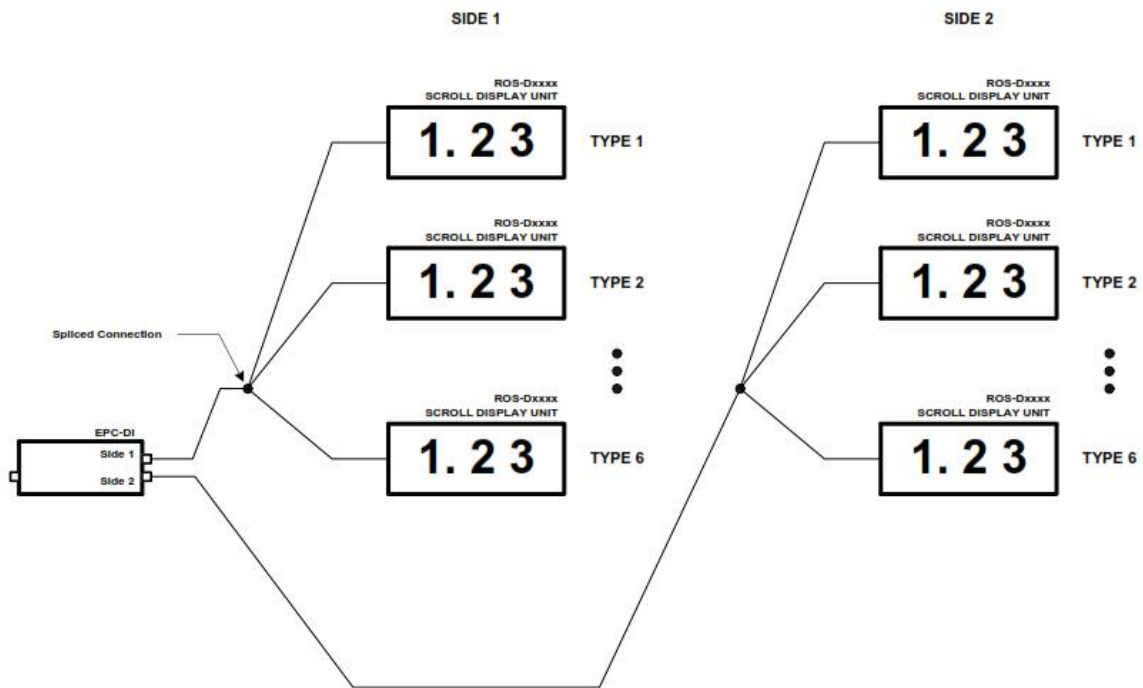
Standard Connection for 1 Level



Marette Connections for multiple levels

- For the interconnection of a multiple level system, replace the Quick Disconnect connectors by Marette connectors;

SCROLL DISPLAY INTERCONNECTIONS





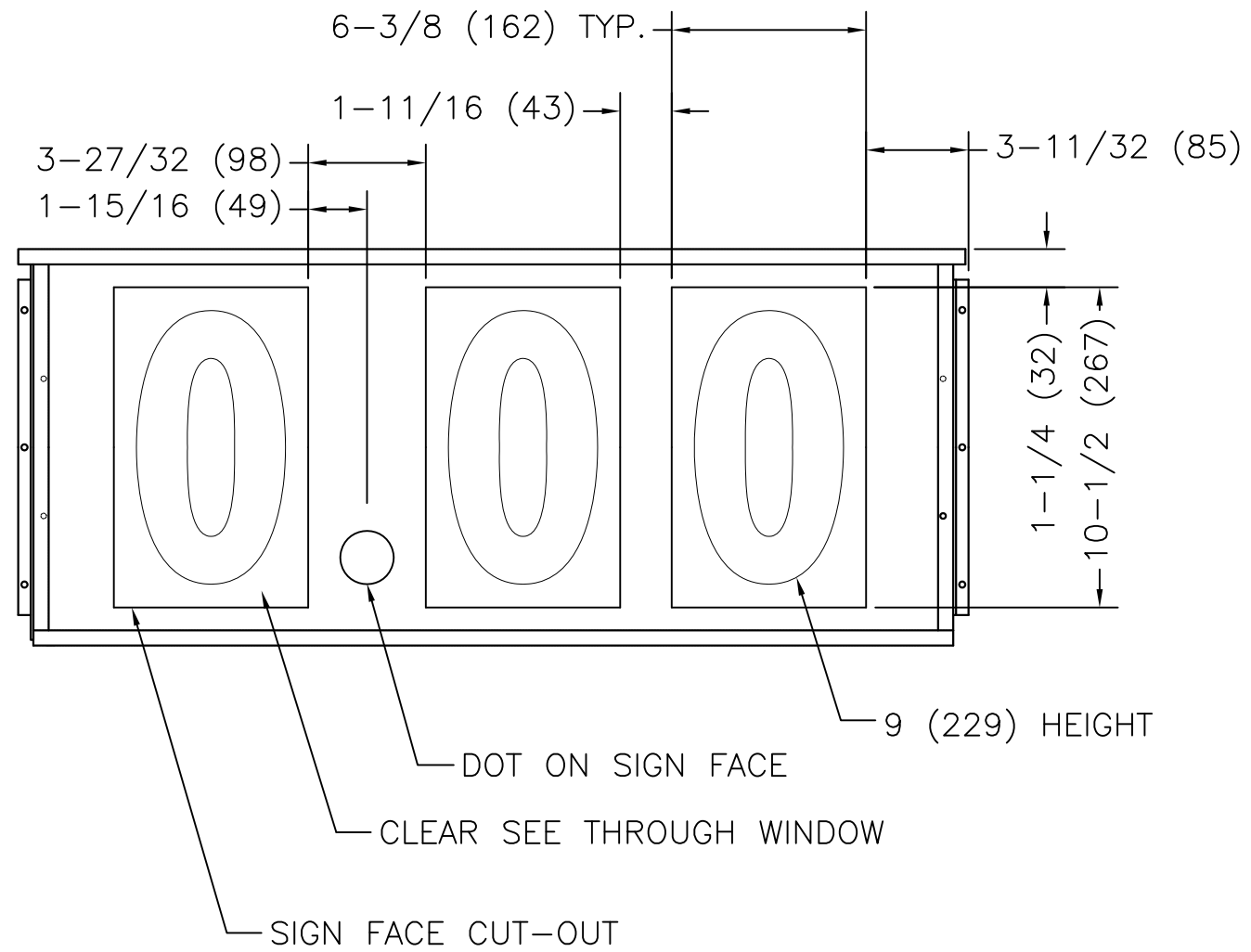
*Fabricant de
systèmes d'affichage électronique*

*Electronic Display Systems
Manufacturer*

4. VERIFICATIONS

Selected Price

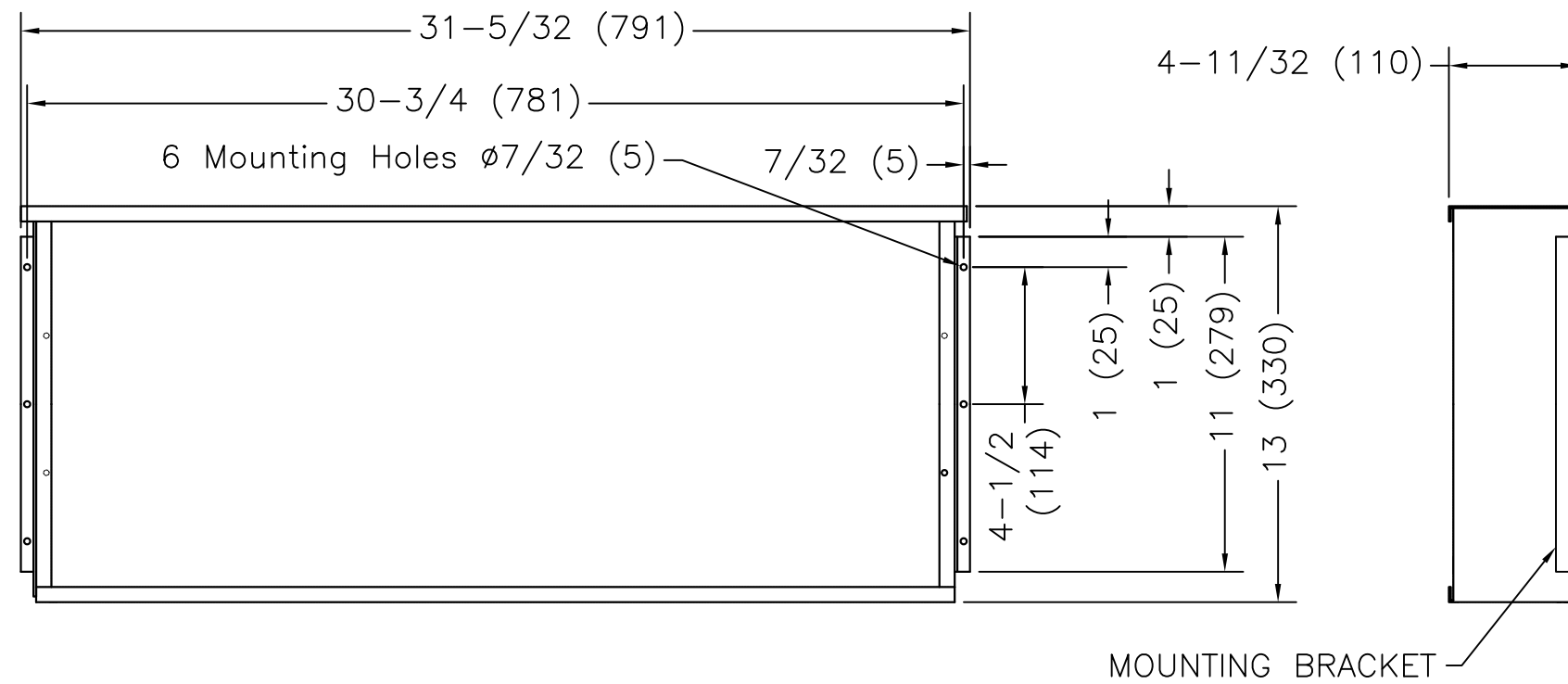
- Select Product 1 (Type 1).
- Set the price to 123.4.
 - Check the displayed price on both sides;
- Set the price to 567.8.
 - Check the displayed price on both sides.
- Repeat for all Product / Types (Type 2 through Type 6).



TRANSLUCENT OR OPAQUE VYNIL
 APPLIED ON SIGN FACE (NOT SUPPLIED BY NOVYC)

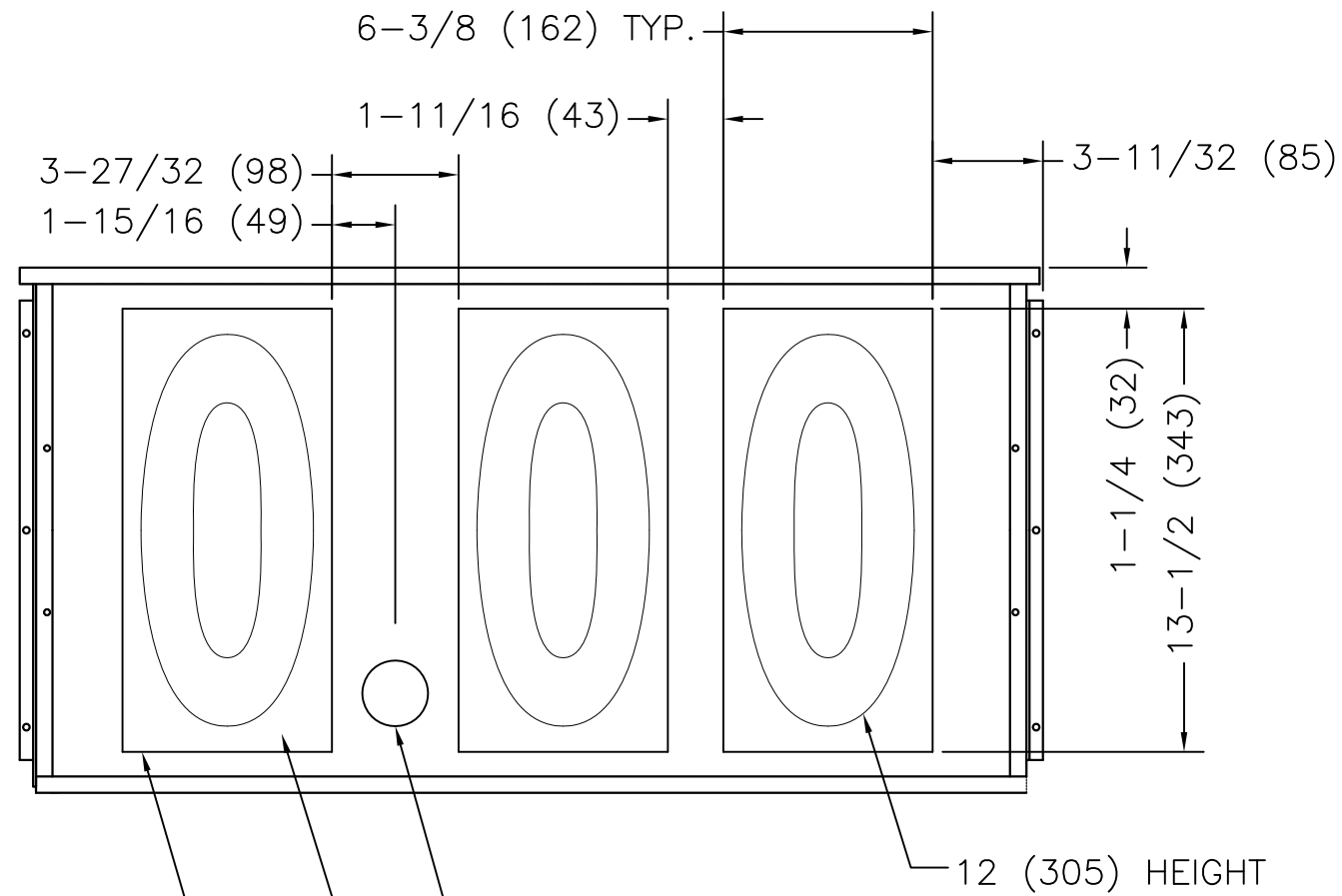
NOTE: All dimensions are in in. (mm)

novyc inc.		2300 Chemin St-François Dorval, Québec H9P 1K2 Tél.:(514) 683-0300 Fax:(514) 683-0068
SIGN FACE WINDOW POSITIONS		
DESSINE PAR: P.SARTI	APP. PAR:	DESSIN NO.: ROS2-D309UI
ECH.:	DATE: 2008/09/16	PAGE: 1/2



NOTE: All dimensions are in in. (mm)

novyc inc.		2300 Chemin St-François Dorval, Québec H9P 1K2 Tél.: (514) 683-0300 Fax: (514) 683-0068
SCROLL DISPLAY, 3 DIGITS, 9"		
DESSINE PAR: P.SARTI	APP. PAR:	DESSIN NO.: ROS2-D309UI
ECH.:	DATE: 2008/09/16	PAGE: 2/2



DOT ON SIGN FACE

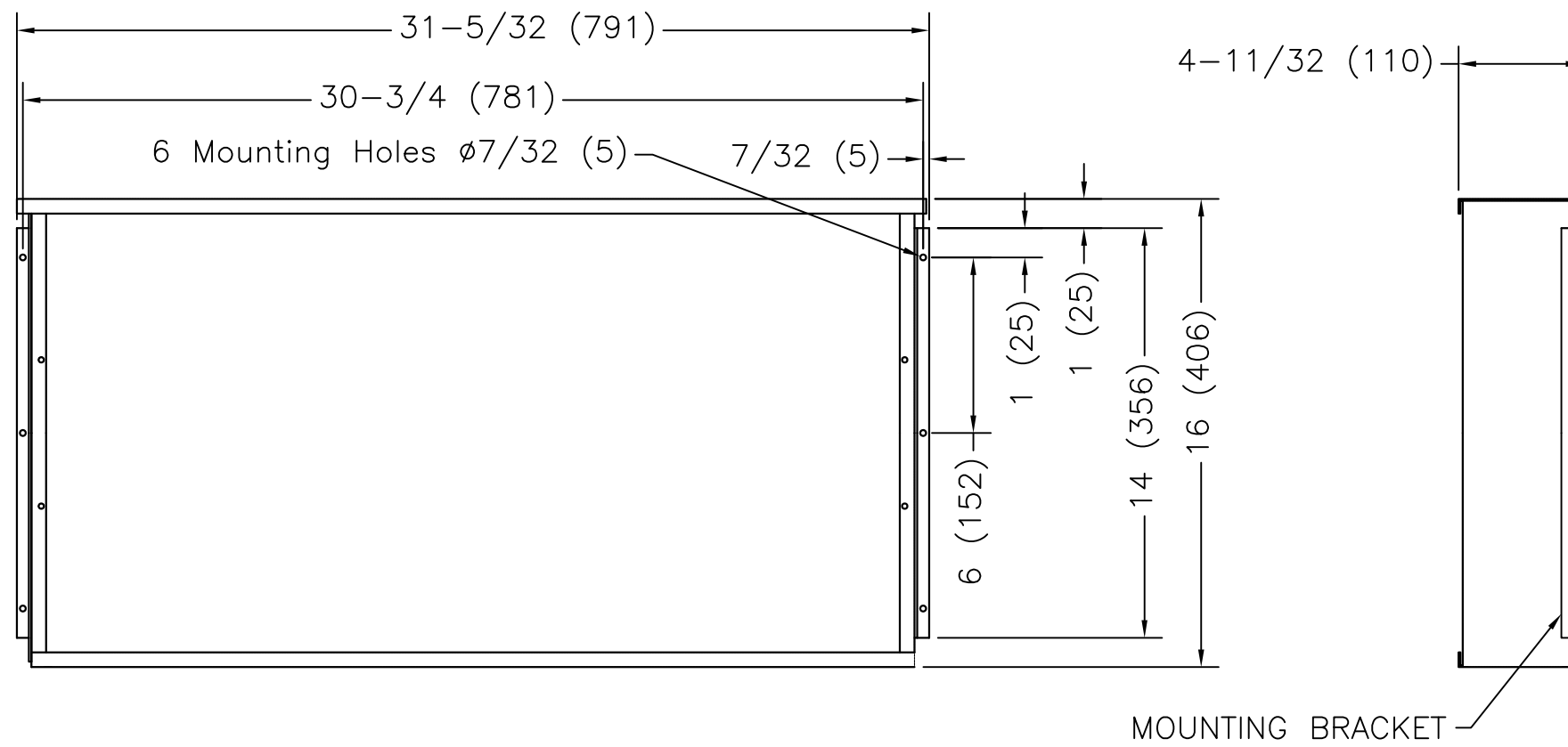
CLEAR SEE THROUGH WINDOW

SIGN FACE CUT-OUT

TRANSLUCENT OR OPAQUE VYNIL
APPLIED ON SIGN FACE (NOT SUPPLIED BY NOVYC)

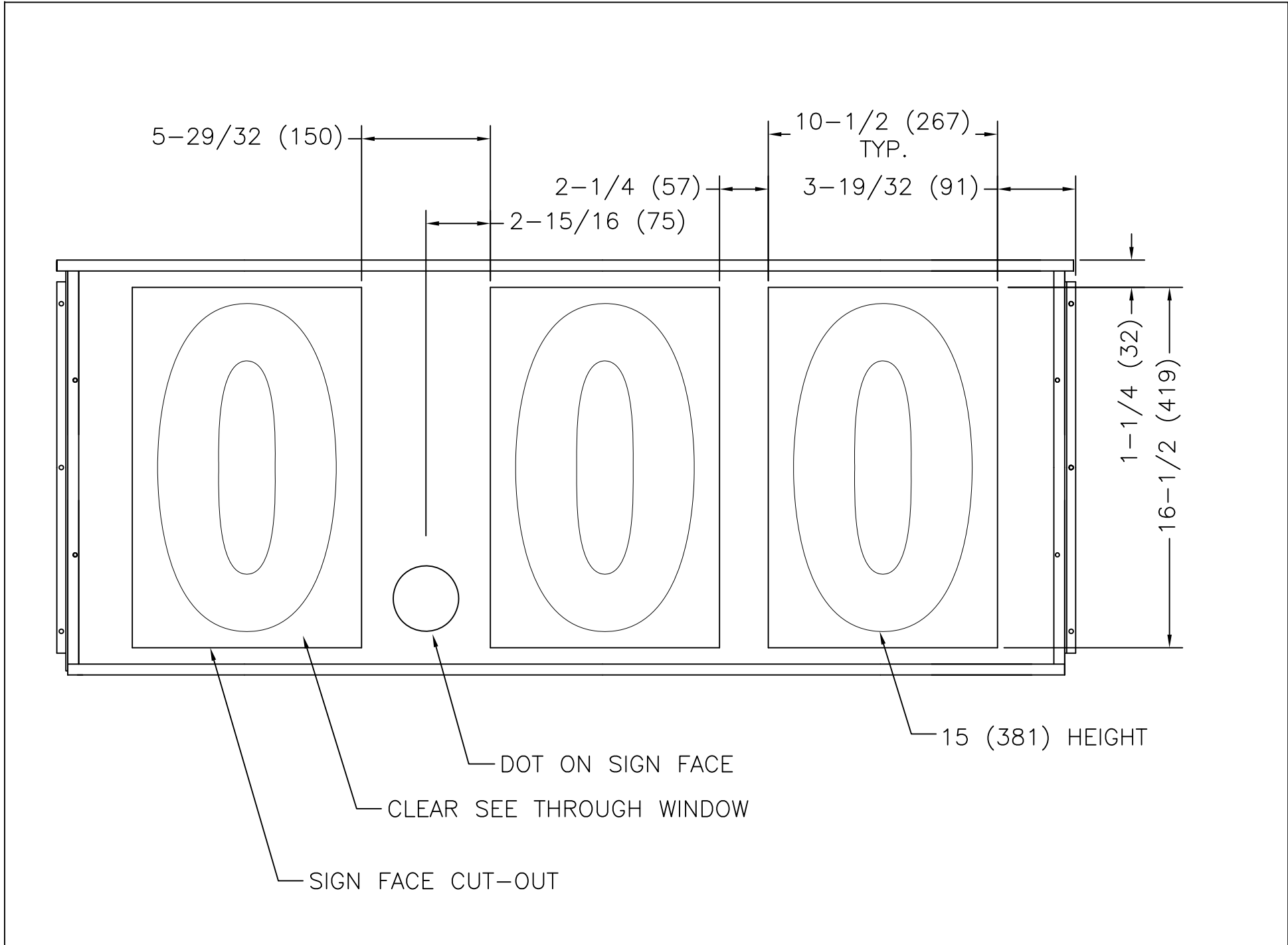
NOTE: All dimensions are in in. (mm)

novyc inc.		2300 Chemin St-François Dorval, Québec H9P 1K2 Tél.: (514) 683-0300 Fax: (514) 683-0068
SIGN FACE WINDOW POSITIONS		
DESSINE PAR: P.SARTI	APP. PAR:	DESSIN NO.: ROS2-D312UI
ECH.:	DATE: 2008/09/16	PAGE: 1/2



NOTE: All dimensions are in in. (mm)

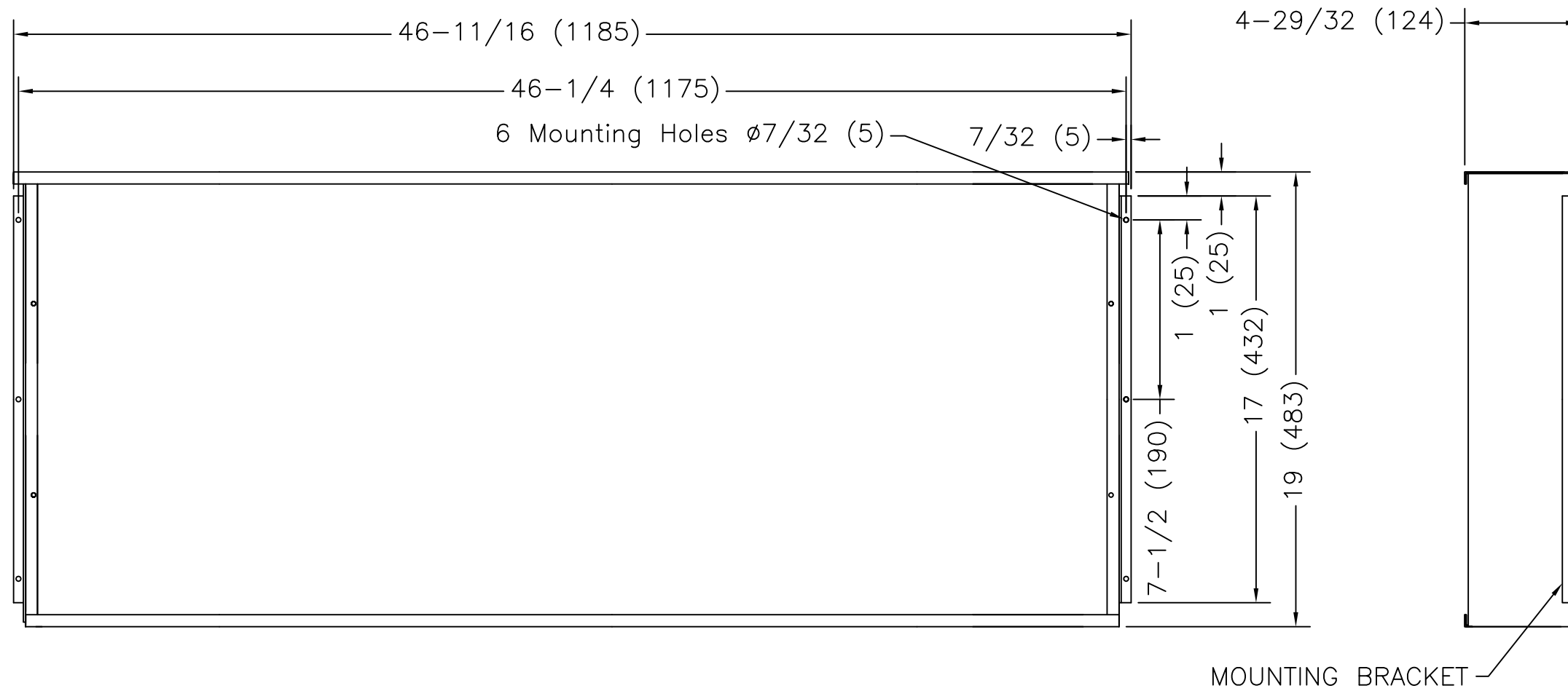
novyc inc.		2300 Chemin St-François Dorval, Québec H9P 1K2 Tél.: (514) 683-0300 Fax: (514) 683-0068
SCROLL DISPLAY, 3 DIGITS, 12"		
DESSINE PAR: P.SARTI	APP. PAR:	DESSIN NO.: ROS2-D312UI
ECH.:	DATE: 2008/09/16	PAGE: 2/2



TRANSLUCENT OR OPAQUE VYNIL
APPLIED ON SIGN FACE (NOT SUPPLIED BY NOVYC)

NOTE: All dimensions are in in. (mm)

novyc inc.		2300 Chemin St-François Dorval, Québec H9P 1K2 Tél.:(514) 683-0300 Fax:(514) 683-0068
SIGN FACE WINDOW POSITIONS		
DESSINE PAR: P.SARTI	APP. PAR:	DESSIN NO.: ROS2-D315UI
ECH.:	DATE: 2008/09/16	PAGE: 1/2

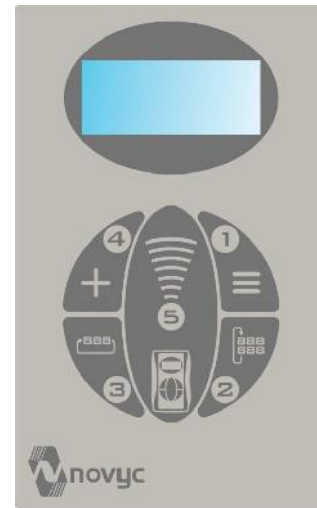
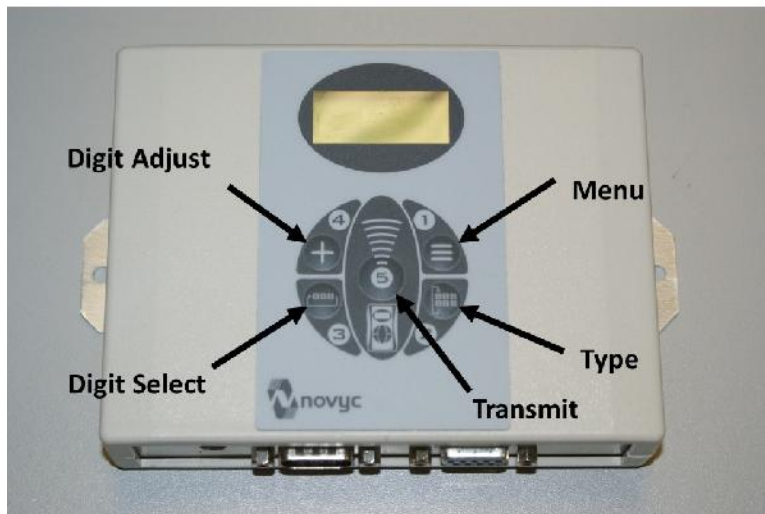


NOTE: All dimensions are in in. (mm)

novyc inc.		2300 Chemin St-François Dorval, Québec H9P 1K2 Tél.: (514) 683-0300 Fax: (514) 683-0068
SCROLL DISPLAY, 3 DIGITS, 15"		
DESSINE PAR: P.SARTI	APP. PAR:	DESSIN NO.: ROS2-D315UI
ECH.:	DATE: 2008/09/16	PAGE: 2/2

EPC-S4 - INPUT CONTROLLER UNIT - OPERATING INSTRUCTIONS

In IDLE mode, the NOVYC message is displayed alternately on line 1 and 2.
Depress the MENU key (1) to view the software version S4Vx.x



TO CHANGE THE PRICE, PROCEED AS FOLLOWS:

1. SELECTING THE TYPE (PRODUCT)

- Depress the TYPE key (2) repeatedly to select the Type (Product) to be changed



2. SELECTING THE DIGIT

- Depress the DIGIT SELECT key (3) repeatedly to select the digit to be changed



3. ADJUSTING THE DIGIT

- Depress the DIGIT ADJUST key (4) repeatedly to adjust the selected digit
- Repeat steps 2 and 3 for all digits



4. SENDING THE NEW PRICE

- Once the new price is set, depress the TRANSMIT key (5) to send the new price to the sign
- Proceed with the next Type (Product)

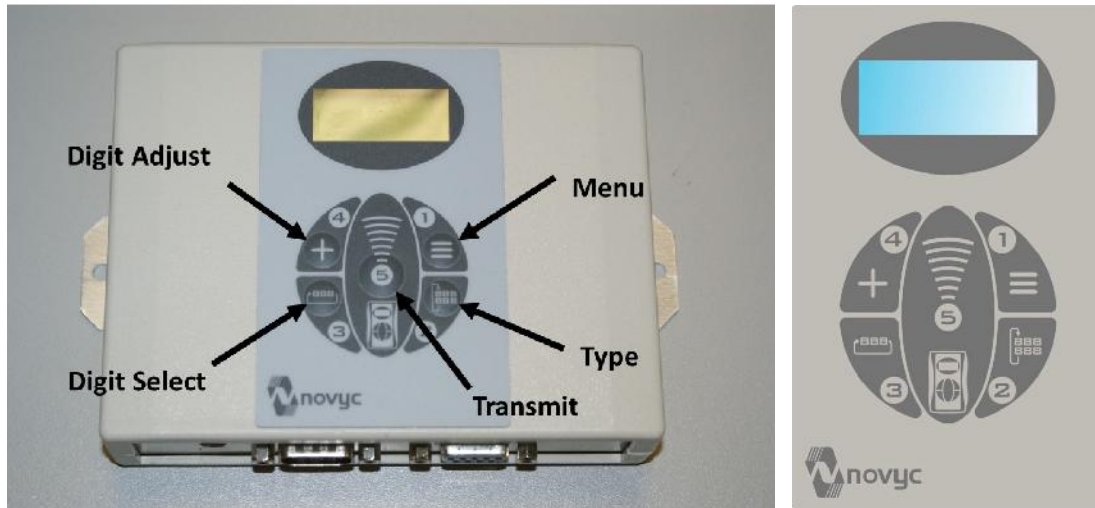


5. RETURNING TO IDLE MODE

- If no key is depressed for 12 seconds, the unit automatically returns to Idle Mode without changing the price at the sign

EPC-S4 - INPUT CONTROLLER UNIT - SETTING INSTRUCTIONS

Software V1.0



1. IDLE MODE

- In IDLE mode, the NOVYC message is displayed alternately on line 1 and 2.
- Depress the MENU key (1) to show the software version S4-Vx.x shows for 2 seconds.
- Refer to the Operating Instruction manual to change the price.

Note: If no key is depressed for 12 seconds, the unit will automatically return to IDLE mode.

2. AUTO PAIRING MODE

The AUTO PAIRING of the Input Controller unit must be initiated within 10 seconds after the Display Interface unit is powered up.

To activate the AUTO PAIRING mode:

- Depress and release the TRANSMIT key (5) and then depress and release the MENU key (1).



- The message "AUTO -1- PAIRING" will show.
- The message "AUTO -2- PAIRING" will follow if the Input Controller (EPC-S2) is set for 2-pylon operation.
- The messages "PAIRED" or "PAIRING FAILED" will show the success of pairing.
- The Auto pairing is completed.
- After the AUTO PAIRING the Input Controller will automatically go to the OPTION menu. Refer to Section 3 OPTION menu.

3. OPTION MENU

Note 1: If no key is depressed for 12 seconds, the unit will automatically return to IDLE mode.

Note 2: To access the OPTION menu, the Input Controller needs to go through the AUTO PAIRING mode.

3.1 To enter the Option Menu:

- Depress and release the TRANSMIT (5) key and then depress and release the MENU key (1).



- The AUTO PAIRING messages will show, wait until they disappear.

OPTION MENU

- The message PASSWORD ???????? will follow.

- Wait until the message PASSWORD ???????? disappears and depress the TYPE key (2) within one (1) second.



- The message PASSWORD ???????? will show again.

- Wait until the message PASSWORD ???????? disappears.

- The message S4-Vx.x OPTIONS will show.

3.2 Parameters Selection

- Depress the DIGIT SELECT key (3) to scroll through the OPTION menu.



- Depress the DIGIT ADJUST (4) key to change the parameters.



- Depress the TYPE key (2) to save the parameters.



3.3 Parameters

Length (number of digits)

- Select the number of displayed digits from 3 to 6.
 - 888
 - 8888
 - 88888
 - 888888

DP (Decimal Point Position)

- Select the position:

- All DPs	8888	Decimal point 'ON' at all positions
- Place DP	888.8, 88.88, 8.888	Decimal point 'ON' at selected position
- No DP	8888	Decimal point 'OFF'

Digit 1:

- Set the first digit to 1 or 8
 - 1888 First digit of the Display unit is 1 or blank
 - 8888 Full first digit

US Mode:

- Set the last digit to 9 or 8
 - 8889 Last digit of the Display unit is fixed 9 (US MODE)
 - 8888 Full last digit

Sign

- Set the number of signs

- 1-Sign	Price return checked for Sign 1
- 2-Sign	Price return checked for Sign 1 and Sign 2
- 0-Sign	Price return not checked

S1 Types

- Select the installed price levels (Type) at Sign 1 from Type 1 to Type 8

S2 Types

- Select the installed price levels (Type) at Sign 2 from Type 1 to Type 8

- Depress the DIGIT ADJUST key (4) to select the Price Level



- Depress the TRANSMIT key (5) to activate / deactivate the Price Level



Example

Sign 1	1234	Type 1 to Type 4 installed at Sign 1
Sign 2	12_4	Type 1, 2 and 4 installed at Sign 2

Flashing Mode

- Set the FLASHING MODE to "ON" or "OFF".

Transmit Mode

- Select "1-Type" to transmit only one price at the time when the "Transmit Key" is depressed.
- Select "All-Type" to transmit the price of all "Types" when the "Transmit Key" is depressed.

Led Check

- Set the time interval in minutes between LED Check (EPC-NDO only):
 - 1, 2, 4, 8, 16, 32, 64 minutes
 - Select "0" to disable the LED Check

Contrast Adjust

- Repeatedly depress the DIGIT ADJUST key (4) to adjust the contrast of the LCD Display on the Input Controller unit.



3.3 Saving the programmed parameters

- Depress the TYPE key (2) to save the parameters.



4. PAIRING RESET

To erase all previously learned addresses,

- Depress and release the TRANSMIT key (5) and then depress and maintain the MENU key.



- The message **PAIRING?** Will show.
- Maintain depressed the **MENU** key (1) until the message **RESET PAIRING** appears.
- A continuous beep is heard for 12 seconds.
- Multiple beeps confirm the pairing reset.



*Fabricant de
systèmes d'affichage électronique*

*Electronic Display Systems
Manufacturer*

NOVYC PRICE CHANGERS SYSTEMS

EPC-S4 / EPC-DI3

PAIRING PROCEDURE

REV 1.1



*Fabricant de
systèmes d'affichage électronique*

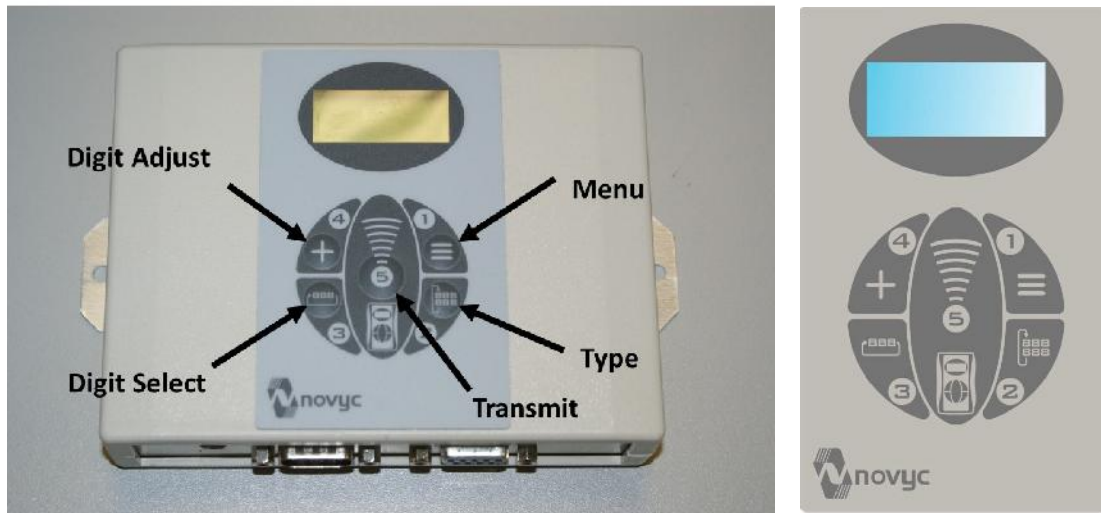
*Electronic Display Systems
Manufacturer*

CONTENT

1. EPC-S4 INPUT CONTROLLER	3
2. EPC-DI3 DISPLAY INTERFACE	4
3. AUTOMATIC PAIRING PROCEDURE	5
4. VERIFICATIONS	6

The Input Controller (EPC-S4) and the Display Interface (EPC-DI3) need to be paired in order to recognize each other. Only paired units can communicate together and data from any other unit will be ignored.

1. EPC-S4 INPUT CONTROLLER



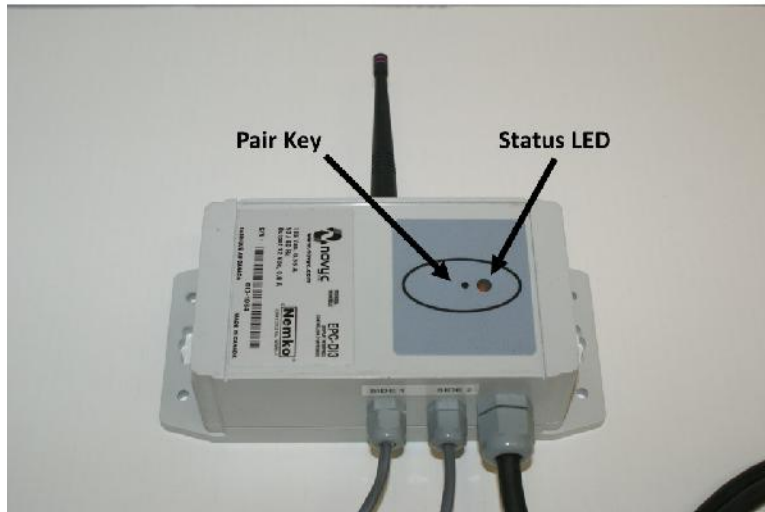
To activate the Auto Pairing Mode:

- Depress and release the TRANSMIT key (5) and then depress and maintain the MENU key (1).



- The message "AUTO -1- PARING" will show.
- The message "AUTO -2- PAIRING" will follow if the Input Controller (EPC-S4) is set for 2 pylon operation.
- The message "PAIRING FAILED" will show if there is no communication from the Display Interface (EPC-DI3).
- The message "PASSWORD ????????" will follow.
- Depress any key to return to "Idle Mode".

2. EPC-DI3 - DISPLAY INTERFACE



TRANSMIT MODE

- Depress the "Pair Key" for 1 second to transmit.
- The status LED will flash 1 time.

PAIRING MODE

- Depress the "Pair Key" for 3 seconds to activate the "Pairing Mode".
- The status LED will turn and remain on for a maximum of 10 seconds or until the unit is paired.
- When the unit is paired, the status LED will flash 3 times.
- The "Pairing Mode" is also automatically activated for 10 seconds after power on of the Display Interface (EPC-DI3). This feature allows the pairing of the Display Interface when the "Pair Key" is not accessible (i.e.: units installed in the sign).

RESET

- To erase all previously learned addresses, depress the "Pair Key" for 15 second.
- The status LED will flash for a few seconds when the "PAIR Key" is released.

3. AUTOMATIC PAIRING PROCEDURE

DISPLAY INTERFACE (EPC-DI3)

The "Pairing Mode" of the Display Interface (EPC-DI3) is activated upon power up.

- Turn off the power of the sign
- Wait for 15 seconds.
- Turn on the power of the sign

The "Pairing Mode" remains active for 10 seconds after powering up of the Display Interface (EPC-DI3).

This feature allows the pairing of the Display Interface (EPC-DI3) when not accessible (i.e.: unit installed in the sign).

INPUT CONTROLLER (EPC-S4)

The Auto Pairing must be initiated within 10 seconds after the Display Interface (EPC-DI3) is powered-up.

- To activate the Auto Pairing Mode:

- Depress and release the TRANSMIT key (5) and then depress and maintain the MENU key (1).



- The message "AUTO -1- PARING" will show.

- The message "AUTO -2- PAIRING" will follow if the Input Controller (EPC-S4) is set for 2-pylon operation.

-The messages "PAIRED" or "PAIRING FAILED" will show the result of pairing.

-The Auto pairing is completed.

For a 2-pylon site, the two Display Interface (EPC-DI3) must be paired simultaneously.



*Fabricant de
systèmes d'affichage électronique*

*Electronic Display Systems
Manufacturer*

4. VERIFICATIONS

Communication between the Input Controller (EPC-S4) and the Display Interface (EPC-DI3) through the RF Communication.

- Select Type 1 on the Input Controller (EPC-S4).

- The Price Return message should appear:

TYPE 1	1234	(Price set at the sign)
TYPE 1	====	(Defective LED Display unit)
TYPE 1	====	(LED Display unit not connected)
TYPE 1	****	(No communication)